



MORE LIGHT

Annual Report 2021

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Jenoptik at a glance

	Jan. – Dec. 2021	Jan. – Dec. 2020	Change in %
Revenue – continuing operations (in million euros)	750.7	615.5	22.0
Revenue – group (in million euros)	895.7	767.2	16.8
EBITDA – continuing operations (in million euros)	155.7	92.8	67.9
EBITDA – group (in million euros)	177.2	111.6	58.7
EBITDA margin – continuing operations (in %)	20.7	15.1	
EBITDA margin – group (in %)	19.8	14.6	
EBIT (in million euros)	108.1	47.4	128.2
EBIT margin (in %)	14.4	7.7	
Earnings before tax (in million euros)	102.5	42.3	142.7
Earnings after tax (in million euros)	92.9	34.0	172.8
EPS – group (in euros)	1.43	0.73	96.3
Dividend (in euros)	0.25	0.25	0
Free cash flow before income taxes (in million euros)	43.2	52.5	-17.7
Cash conversion rate (in %)	27.7	56.6	
Net debt (in million euros)	541.4	201.0	169.4
Equity ratio (in %)	44.4	51.5	
Order intake – continuing operations (in million euros)	936.7	594.2	57.6
Order intake – group (in million euros)	1,073.6	739.4	45.2
	31/12/2021	31/12/2020	Change in %
Order backlog (in million euros)	543.5	299.8	81.3
Frame contracts (in million euros)	135.1	21.5	527.6
Employees – continuing operations (head count)	4,205	3,697	13.7
Employees – group (head count)	4,905	4,472	9.7

Continuing operations – include the divisions Light & Optics (incl. BG Medical – Jenoptik Medical since January 2022 – and the SwissOptic Group), Light & Production and Light & Safety.

Due to the signing of the contract for the sale of VINCORION, this division is presented as a discontinued operation in accordance with IFRS 5.

Group – includes the continuing operations and VINCORION as discontinued operation.

Due to the classification of VINCORION as a discontinued operation in the fiscal year 2021, the earnings figures for the prior year were adjusted accordingly. For this reason, the earnings figures reported for the comparative period deviate from the figures in the annual report for the prior year. The classification of VINCORION as a discontinued operation is only taken into account in the fiscal year 2021 for balance sheet items. In the prior year, the order backlog and the frame contracts relate to the continuing operations in order to show the development of these figures transparently.

Unless explicitly stated, the values in the table include the continuing operations.

More Value

This is the motto of our Strategy 2025. With the new “More Value” growth agenda, we want to accelerate the transformation of Jenoptik into a pure, globally leading photonics group.

Focussing on the three high-growth markets of the future – semiconductor & electronics, life science & medical technology and smart mobility – is the core of the “More Value” agenda.

We expect this to generate substantial organic revenue growth which will be supplemented by further acquisitions, but does also not exclude possible divestments.

By 2025, we plan to increase revenue to around 1.2 billion euros and the EBITDA margin to around 20 percent.

With this positive development, we want to create “more value” for all our stakeholders.

The online report is available at:
www.jenoptik.com/annual-report

About Jenoptik

Optical technologies are the very basis of our business. Our customers are leading companies in industries such as semiconductor equipment, automotive and suppliers, mechanical engineering, medical technology and traffic.

The Jenoptik Group is headquartered in Jena (Thuringia). In addition to several major sites in Germany, Jenoptik is represented worldwide, for example with production and assembly sites in the US, France, the United Kingdom, China, and Switzerland.

As a globally operating technology group Jenoptik is active in the two photonics-based divisions Advanced Photonic Solutions and Smart Mobility Solutions. The business activities, which are focused in particular on the automotive market are managed as independent brands within the Jenoptik Group.

Management

» In short «

With our products and solutions
we contribute as

“enabler”

to increase the efficiency and precision of
our customers' products and processes as well as to a
better conservation of resources and more
sustainability.

Jenoptik is thus making an important contribution
to meet social and climatic challenges.



Interview with the Executive Board

The year 2021 has pointed the way for Jenoptik in many respects. For example, the company has taken significant steps in its transformation into a pure, globally leading photonics group through the acquisition of BG Medical and the SwissOptic Group, the signing of a contract for the sale of VINCORION and of further non-core activities. In future, the focus will be even more on the growth markets of semiconductor & electronics, life science & medical technology, and smart mobility. As part of the “More Value” strategic agenda communicated at the end of November 2021, new medium-term goals were defined for the period up to 2025, which envisage a revenue target of around 1.2 billion euros based on growth of around 8 percent per year including divestments and acquisitions. At the same time, profitability is to be raised to an EBITDA margin of around 20 percent. This development is accompanied by a clear commitment to sustainability. This is documented, among other things, by the target to reduce CO₂ emissions by 30 percent by 2025. The members of the Jenoptik Executive Board, Dr. Stefan Traeger and Hans-Dieter Schumacher, explain the details of these topics in this interview.

2021 was a year of groundbreaking steps for Jenoptik, but it also continued to be influenced by the Covid-19 pandemic. Looking back, how do you sum it up?

Stefan Traeger: 2021 was both an eventful and very successful year for Jenoptik. In terms of revenue and profitability, it was another record year for Jenoptik. We have made decisive progress towards our goal of becoming a pure, globally leading photonics group. We have further strengthened our portfolio through acquisitions, disposed of non-core activities and concluded an agreement to sell our mechatronics business. More strongly than ever before, we have documented our social responsibility with respect to the defining issue of the coming decades – sustainability – through specific targets against which we can measure ourselves. And despite the continuing global burdens resulting from the Covid-19 pandemic, we have achieved a very

good result. As can be seen from our “More Value” growth agenda communicated at the end of November 2021, this will by no means be the end of the road. For this outstanding result, I would first like to thank all our employees for their great dedication!

Before we go into the details of the future strategy, which key figures do you use as a basis for the success you mentioned?

Hans-Dieter Schumacher: We had already announced significant improvements in revenue and earnings in the last Annual Report. Our key figures then developed better than we had expected at the beginning of the year, and we were therefore able to raise our outlook during the year. At the end of the year, we reported an increase in group revenue, i.e. including VINCORION, from 767.2 million euros to 895.7 million euros and EBITDA growth from 111.6 million euros to 177.2 million

The EBITDA margin is to be improved to ~20% by 2025

euros, as well as an EBITDA margin, including one-off effects, of 19.8 percent. Jenoptik is also very well positioned financially thanks to a free cash flow of 62.8 million euros and an equity ratio of 44.4 percent. We have sufficient financial firepower available for the future growth planned.

For the future, you have defined a new growth agenda up to 2025 with “More Value”. What is this based on?

Stefan Traeger: “More Value” stands for value enhancement for all stakeholders in our company. The key aspect of the agenda is the company’s focus on the three high-growth markets of semiconductor & electronics, life science & medical technology, and smart mobility. From this, the Group expects substantial revenue growth averaging around 8 percent per year to around 1.2 billion euros by 2025. This revenue increase is based on significant organic growth, which is complemented by targeted acquisitions. But possible divestments, such as VINCORION, also have to be taken into account. Focusing on a few highly attractive markets and an improved product mix should raise Jenoptik’s profitability to an EBITDA margin of around 20 percent.

Step by step, what will Jenoptik look like in the future and will your reporting structure also change?

Hans-Dieter Schumacher: Our structure will simplify. Jenoptik is developing from a diversified group into a pure photonics player that will generate approximately three quarters of its revenue in the Advanced Photonic Solutions division in 2025. To do this, we are merging the two former Light & Optics and Light & Production divisions and separating the non-photonics activities – particularly in the automotive sector. In the Advanced Photonic Solutions division, we are bundling our activities in the areas of semiconductor & electronics, life science & medical technology as well as optical metrology. By then, we want to generate around one quarter of our revenue in the Smart Mobility Solutions division, which is responsible for the B2G business and corresponds to the former Light & Safety division. We see significant growth potential for revenue and earnings in both divisions. At the same time, this set-up will allow us to achieve a better balance between cyclical and less cyclical operations. We are combining our non-photonics activities, especially in the automotive sector, and managing them as independent brands under the Non-Photonics Portfolio Companies.

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Does the Advanced Photonic Solutions division also include the 2021 acquisition of BG Medical and the SwissOptic Group?

Stefan Traeger: Correct. Following the very successful acquisition of TRIOPTICS in 2020, we announced further acquisitions in growth areas. Since December 1, 2021, BG Medical, now called Jenoptik Medical, and the Swiss-Optic Group have strengthened our activities in the areas of medical technology and metrology as well as in semiconductor equipment. For 2022, we expect additional revenue of around 130 million euros from the acquisition, and this with attractive margins. The companies are expanding our global production network, for example in China. For future revenue growth, we expect an annual increase in the low double-digit percentage range.

However, you did not just expand your portfolio in 2021, you also completed or announced divestments. Why?

Stefan Traeger: We are not concerned solely with revenue growth. In the future, we want Jenoptik to be known worldwide for its technological excellence in the photonics world, its strong growth and high profit levels. And we want to become a pure photonics group. Consequently, some divisions are simply no longer a fit for us and will be better off with other companies. Accordingly, in 2021 we divested smaller non-core activities such as non-optical metrology for grinding machines or the crystal growth business and also found a new owner for VINCORION, our mechatronics and defense technology business. In total, these three divestments generated revenue of around 150 million euros.



“Jenoptik is very well equipped financially to be able to finance its ambitious growth targets from its own resources.”

Hans-Dieter Schumacher

“In 2021, Jenoptik took a big step closer to its goal of becoming a globally leading and high-growth pure player in the photonics sector.”

Dr. Stefan Traeger



Much has also happened at Jenoptik in 2021 when it comes to sustainability...

Stefan Traeger: Definitely. Our previous ambitions are acknowledged, on the one hand by positive ESG ratings, and on the other hand by awards from customers. For example, at the end of 2021 we received a Sustainability Excellence Award from ASML, our customer in the semiconductor equipment sector. We were delighted by this and it encourages us to do more. Also in 2021, on the subject of what

contribution Jenoptik can make to the goals of the Paris Climate Accord, we defined clear goals against which we can be measured. By 2025, we intend to cut our CO₂ emissions by 30 percent compared to the base year of 2019. The savings will come from direct emissions released by Jenoptik itself and indirect emissions from purchased energy. This will involve a large number of actions and investments, but they will be worth every euro. And we joined the UN Global Compact.

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Are sustainability components also playing an increasingly important role when it comes to financing?

Hans-Dieter Schumacher: Yes. In March 2021, we successfully placed debenture bonds with sustainability components. At the end of the year, we also expanded our scope for further investment by refinancing and increasing our syndicated loan to 400 million euros at favorable market conditions, with an option to increase it by additional 200 million euros. We aligned the structure of the loan to verifiable goals with regard to sustainability in the supply chain, the group-wide share of green electricity and the diversity of management. At Jenoptik, economic success goes hand in hand with responsible environmental action.

Where is the road heading in the new 2022 fiscal year?

Stefan Traeger: 2021 has proven how successfully and robustly Jenoptik is positioned, even in times of an unprecedented global pandemic. As we have further optimized our portfolio, we also see good opportunities in 2022 for further growth in revenue and the EBITDA margin of the continuing operations, i.e. excluding VINCORION. We want to increase revenue by at least 20 percent and improve the EBITDA margin to around 18 percent. We have, of course, to keep an eye on the development of the pandemic and the effects of the war in Ukraine.

Why is Jenoptik still an attractive investment after the significant share price increase in 2021?

Hans-Dieter Schumacher: Naturally, we were pleased with the share price increase of almost 50 percent in 2021, as the capital market positively acknowledges our strategic development. We know that we have to deliver and we will do so. Then our shares also promise further potential. What our analysts like about us is that we are one of the market and technology leaders in growth sectors such as the semiconductor equipment industry, medical technology and smart mobility.

Dr. Traeger, Mr. Schumacher, thank you for talking to us!

Supervisory Board Report

Honored Shareholders,

One year ago, we reported that the Executive and Supervisory Boards were consequently implementing measures to counter the Covid-19 pandemic and that we were confident Jenoptik would emerge stronger from the crisis. We are pleased to announce that we were successful in our efforts: Jenoptik closed the 2021 year with very good revenue, order intake, and EBITDA figures. In acquiring together BG Medical Applications GmbH and the SwissOptic Group, the company again made a landmark acquisition for the Jenoptik Group. These, together with the contract to sell VINCORION signed in November 2021, are allowing Jenoptik to continue with its ongoing strategic focus on the high-growth industries of the future in the photonics sector.

Cooperation between the Executive and Supervisory Boards

In the year covered by the report, the Supervisory Board stringently fulfilled its duties as stipulated in law, the Articles of Association, the Rules of Procedure, and the German Corporate Governance Code (the "Code") and both monitored and advised the Executive Board in its management of the company. We were fully involved in all decisions of fundamental importance to Jenoptik at an early stage. We were also regularly presented with comprehensive information by the Executive Board, both verbally and in written form, on issues pertaining to corporate planning, on business development and profitability trends, on matters involving risk position and risk management, on compliance issues, and on the general economic situation. We dealt intensively with the reports submitted, especially regarding transactions of significance to Jenoptik, and reviewed them for plausibility. Meetings of the Supervisory Board were in part prepared separately by shareholder representatives and employee representatives.

On occasions where, in accordance with the provisions of the German Stock Corporation Act (AktG), the Articles of Association, and the Rules of Procedure, the Executive Board required the agreement of the Supervisory Board before undertaking certain actions, we granted approval after thorough examination and consultation. During the past fiscal year, the Supervisory Board focused on a range of acquisition and divestment projects, as well as measures to further develop the corporate strategy. This, in particular, included the joint acquisition of BG Medical Applications GmbH and the SwissOptic Group, and the sale of VINCORION. In the event that the business development deviated from the established plans, the Executive Board notified us, explaining the reasons in detail. The Executive Board thus completely fulfilled its reporting obligations as stipulated in § 90 AktG and the Code.

Attendance at Meetings of the Supervisory Board and its Committees

The Supervisory Board convened five regular meetings and two extraordinary meetings during the reporting year. Even though the Code suggests that videoconferencing and conference calls should not predominate, the Supervisory Board still felt compelled to hold three of its meetings in virtual form due to the ongoing effects of the Covid-19 pandemic. One further in-person meeting took place; the other three were mixed, i. e., with some persons physically, some persons virtually present.

In addition, resolutions were adopted by means of a written circular resolution four times. Agenda items relating to personnel matters on the Executive Board were in part addressed without the presence of the members of the Executive Board. Over the past fiscal year, the Supervisory Board saw a consistently high participation rate: No active members of the Supervisory Board or its committees attended half or fewer than half of the meetings in 2021. On average, attendance at Supervisory Board meetings was 98 percent. There were also five meetings of the Audit Committee, three meetings of the Personnel Committee, six meetings of the Investment Committee, and one meeting of the Nomination Committee. Only the Nomination Committee meeting was held in person. The other committee meetings were conducted either in virtual or mixed form. Attendance at Audit Committee and Nomination Committee meetings was 100 percent, at the Investment Committee meetings 97 percent, and at the Personnel Committee meetings 94 percent. In most cases, members who were unable to attend a meeting participated in the resolutions by means of voting in absentia. Detailed information on members' attendance at meetings can be found in tabe T01 on page 12.

The Executive Board and Supervisory Board always cooperated in an open and trusting atmosphere. The Chairman of the Supervisory Board and the Chairman of the Audit Committee also maintained regular contact with the Executive Board in between the meetings. The Chairman of the Supervisory Board consulted with the Executive Board on current business performance, in particular, but also on planning, the risk situation, risk management, and compliance measures within the company. In addition, the Executive Board promptly informed the Chairman of the Supervisory Board, either verbally or in writing, about important issues of key relevance to assessing the situation, development, and management of Jenoptik. It informed the Supervisory Board of these issues without delay and at the next meeting by the very latest.

Particular Subjects discussed by the Supervisory Board

At all its regular meetings, the Supervisory Board dealt with the detailed reports of the Executive Board on the progress of business, particularly with regard to the current development of revenue and earnings, the position of the company, and the financial and risk situations, in particular with regard to potential impacts arising from the Covid-19 pandemic. This included a comprehensive examination and discussion of the corresponding quarterly and monthly reports. Recurring issues at several meetings included explanations and discussions on a range of acquisition and divestment projects, in particular the joint acquisition of BG Medical Applications GmbH and the SwissOptic Group in October, and the sale of VINCORION in November 2021.

The members of the Supervisory Board adopted their report for the 2021 Annual General Meeting and approved the Corporate Governance Statement by separate **written circular resolutions in February 2021**. They also approved the start of negotiations with banks regarding new debenture bonds with ESG components. In addition, the CVs of Supervisory Board members were compared against the competency profile adopted by the Supervisory Board, updated, and published on the JENOPTIK AG website. By means of a written circular resolution, the shareholder representatives on the Supervisory Board objected in September to the overall fulfillment of the statutory gender quota with regard to the Supervisory Board elections due in June 2022. Following several detailed discussions, a further circular resolution in November concerned the sale of VINCORION.

The focus of the **balance sheet meeting on March 24, 2021** was the audit of JENOPTIK AG's Annual Financial Statements, the Consolidated Financial Statements, and both the Combined Management Report for JENOPTIK AG and the Group and the Non-Financial Report for the past 2020 fiscal year. Two representatives of the auditor reported on the results of the audit. After a thorough review, and on the recommendation of the Audit Committee, the Supervisory Board approved the Annual and

Consolidated Financial Statements. The Annual Financial Statements were thus adopted. Following in-depth discussions, the Supervisory Board also approved the Executive Board's proposal for the appropriation of profits, providing for a year-on-year increase of 12 cents in the dividend, to 0.25 euros per qualifying no-par value share. Another issue at this meeting was the approval of the agenda for the Annual General Meeting on June 9, 2021. The Supervisory Board approved the settlement of the 2020 target agreements for the members of the Executive Board, as well as the target-based payments of components of their long-term variable compensation, and adopted the new target agreements for 2021. The Supervisory Board also adopted the remuneration system for the members of the Executive Board presented to the Annual General Meeting in June 2021, and approved the conclusion of new debenture bonds, the acquisition of a site for the construction of a new factory in Dresden, and the issuance of a group guarantee for a project in the Light & Safety division. The Executive Board informed the Supervisory Board about various potential acquisition and divestment projects, as well as the progress made with the structural and portfolio measures approved in 2020.

At its **meeting on June 8, 2021**, the Supervisory Board, in addition to dealing with recurring topics, was given updated information relating to the Annual General Meeting to be held the following day, as well as on ongoing M&A projects. It again dealt with the progress made with the structural and portfolio measures and commissioned an external consultant to update its competence and requirements profile.

At the **meeting on September 14, 2021**, the Supervisory Board first discussed the regular submissions with the Executive Board. The Executive Board informed the Supervisory Board about a project to advance the Jenoptik strategy and provided detailed information about ongoing acquisition and divestment projects, in particular the project to acquire BG Medical Applications GmbH and the SwissOptic Group. In view of the Supervisory Board elections to be held in June 2022, the Supervisory Board discussed succession planning for the Supervisory Board. Prof. Dr. Tünnermann declared his intention to resign his seat on the Supervisory Board, after 13 years of service, with effect from December 31, 2021. Prof. Dr. Ursula Keller, Professor of Physics at ETH Zurich, introduced herself personally to the Supervisory Board as a candidate to succeed him. The Supervisory Board decided to propose Prof. Dr. Keller as a candidate to be appointed by court order in January 2022. Finally, the Supervisory Board approved the construction of a new cleanroom facility for JENOPTIK Optical Systems GmbH at the Dresden site.

T01 Participation of the individual Supervisory Board members in meetings

	Astrid Biesterfeldt	Evert Dudok	Elke Eckstein	Thomas Klippstein	Dörthe Knips	Dieter Kröhn
7 Supervisory Board Meetings	●●●●●●●	●●●●●●●	●●●●●●●	●●●●●●●	●●●●●●●	●●●●●●●
5 meetings of the Audit Committee	●●●●●	-	-	●●●●●	-	-
3 meetings of the Personnel Committee	-	-	-	●●●	-	-
6 meetings of the Investment Committee	-	-	●●●●●●	-	●●●●● ○	●●●●●●
1 meetings of the Nomination Committee	-	-	-	-	-	-

● Participation ○ No participation

At its **extraordinary meeting on October 7, 2021**, the Supervisory Board again discussed the acquisition projects and the current status of the project to potentially sell VINCORION. It approved the submission of a binding offer and, if accepted, the signing of a purchase agreement for the acquisition of BG Medical Applications GmbH and the SwissOptic Group. The meeting also dealt with a project for the further development of the Jenoptik strategy and the planning assumptions for 2022.

In a further **extraordinary meeting on November 9, 2021**, the Supervisory Board dealt in detail with the sale of VINCORION and, following separate consultation of the shareholder representatives, finally approved the conclusion of a purchase and share transfer agreement with a fund managed by STAR Capital Partnership, LLP by means of a circular resolution in late November 2021. A further topic at the meeting on November 9, 2021 was the conclusion of a new syndicated loan agreement with ESG components worth 400 million euros. During the two-day **strategy meeting on November 24/25, 2021**, the Supervisory Board was joined by the Executive Board to discuss in detail the new group strategy 2025, "More Value," with a focus on the three high-growth semiconductors/ electronics, life science/medical technology, and smart mobility markets.

At the final **meeting** in the year covered by the report, **on December 14, 2021**, the Supervisory Board approved the corporate planning for the 2022 fiscal year following in-depth discussion. After reviewing a corporate governance checklist, the Supervisory Board and the Executive Board approved the Declaration of Conformity in accordance with § 161(1) of the Stock Corporation Act (AktG) for the 2021 fiscal year. The Supervisory Board discussed the efficiency of its work over the past year, dealt with the outcomes of the updated competency and requirements profile, and initiated some preparatory action with regard to the departure of Professor Tünnermann on December 31, 2021 and the Supervisory Board election for shareholder representatives to be held in June 2022. The Executive Board also presented an update on Jenoptik's sustainability management and the current Group Risk and Opportunity Report.

Doreen Nowotne	Heinrich Reimitz	Stefan Schaumburg	Frank-Dirk Steininger	Prof. Dr. Andreas Tünnermann (until 31.12.2021)	Matthias Wierlacher	Total attendance in percent
●●●●●●●●	●●●●●●●●	●●●●●●●●	●●●●●●●●	●●●●●●●●	●●●●●●●●	98%
○			○			
●●●●●●	●●●●●●	-	-	-	-	100%
-	●●●	●●●	●●●	●●	●●●	94%
				○		
●●●●●●●●	-	●●●●●●●●	-	-	●●●●●●●●	97%
-	●	-	-	●	●	100%

Work in the Committees

The Supervisory Board has established five committees to help perform its tasks with greater efficiency. To the extent permissible by law, these committees make decisions in individual cases in place of the Supervisory Board and prepare topics that are then addressed by the Supervisory Board. The chairmen on the committees provided in-depth information on the content and outcomes of each committee meeting at the following meetings of the Supervisory Board. With the exception of the Audit Committee, chaired by Heinrich Reimitz, the committees are led by the Chairman of the Supervisory Board. Information on the individual members of each committee can be found in the Group Notes appended to the Annual Report, from page 242 on, or in the Corporate Governance Statement, from page 26 on.

During the reporting period, the [Audit Committee](#) headed by Heinrich Reimitz convened five times. Both members of the Executive Board, the Executive Vice President Corporate Controlling & Accounting, and the Head of Group Accounting were present at all meetings; the heads of relevant departments attended as required for individual topics. The auditor's representatives also attended the meeting in March 2021. The primary duties of the Audit Committee were in-depth audits of the Annual and Consolidated Financial Statements, the Consolidated Management Report for JENOPTIK AG and the Group, the Non-Financial Report, and detailed discussions of the quarterly statements and the half-yearly report prior to their publication. In addition, particular attention was paid to the effectiveness and further development of the risk management system, the internal control and compliance management system, and current topics and projects of relevance to Internal Audit and Compliance.

During a **conference call on February 9, 2021**, the Executive Board presented the committee members with the provisional figures in the 2020 Consolidated Financial Statements, which were published the day after.

The main issue at the **balance sheet meeting on March 10, 2021**, with the auditor present, was an in-depth discussion of the Annual and Consolidated Financial Statements, the Consolidated Management Report, the Non-Financial Report, and the Executive Board's proposal for the appropriation of profits. As a result of these discussions, the Audit Committee recommended to the Supervisory Board that the Annual Financial Statements be adopted. The Audit Committee also dealt with the quality of the audit. Another issue at the meeting was the recommendation by the Audit Committee to the Supervisory Board that Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart ("EY"), be proposed to the Annual General Meeting as the auditor for the fiscal year 2021. EY had previously confirmed the absence of circumstances that could compromise its independence as auditor. The Audit Committee also looked at the current Group Risk and Opportunity Report and the performance of the Jenoptik share on the capital market.

The Financial Statements for the first quarter, the current forecast for the 2021 fiscal year, and an update on sustainability management and current topics in Internal Audit were the priorities at the **Audit Committee's meeting on May 10, 2021**.

At its **meeting on August 10, 2021**, the Audit Committee discussed the Mid-Year Financial Statements with the Executive Board prior to their publication. The Audit Committee set out the main points for the audit of the Annual Financial Statements in the fiscal year 2021, reviewed the fee agreement with EY, and addressed the issue of monitoring the independence of the auditor. To this end, it reviewed the non-audit services provided in 2020, and updated the catalog of permissible non-audit services it approved to reflect the new regulatory requirements of the Financial Market Integrity

Strengthening Act (FISG). The Audit Committee then appointed EY to audit the Annual and Consolidated Financial Statements for the fiscal year 2021 and carry out a substantive audit of the 2021 Remuneration Report in accordance with the shareholder resolution at the Annual General Meeting. A further topic of the meeting was the current Group Risk and Opportunity Report.

At its last **meeting** of the year **on November 9, 2021**, the Audit Committee examined the Quarterly Statement as of September 30, 2021, and the current forecast. Other priorities at the meeting included a presentation of the Jenoptik cybersecurity strategy by the company's Chief Information Security Officer and an update on sustainability reporting, in particular with regard to EU taxonomy and the Supply Chain Due Diligence Act.

The **Personnel Committee** met three times in the past fiscal year. The purpose of the sessions in February and March was the settlement of the target agreements with the members of the Executive Board for 2020, in particular to define the multiplier for calculating the variable remuneration, and the settlement of LTIs. In addition, the performance criteria for variable remuneration for the target agreements for the fiscal year 2021 were proposed. The Personnel Committee also prepared the adoption of the remuneration system for the Executive Board members, which was updated to reflect the new legal requirements of the Act Implementing the Second Shareholder Rights Directive (ARUG II) and submitted to the Annual General Meeting in June for approval.

The **Investment Committee** met six times in the past fiscal year to deal with various acquisition and divestment projects, in particular the projects to sell VINCORION and acquire both BG Medical Applications GmbH and the SwissOptic Group.

The **Nomination Committee** met once and dealt with succession planning on the Supervisory Board in view of the Supervisory Board elections to be held in June 2022. To this end, it prepared a proposal by the Supervisory Board for the election of shareholder representatives to the Supervisory Board.

The **Mediation Committee** established on the basis of § 27 (3) of the Codetermination Act (MitbestG) did not meet in the year covered by the report as there was no reason for it to do so.

Corporate Governance

The Supervisory Board continued to focus on the principles of good corporate governance and regulatory changes in corporate governance over the past fiscal year. At its meeting in June, the Supervisory Board commissioned an external consultant to update and supplement its requirements and competency profile, also with regard to the independence of the shareholder representatives. The results of the review were discussed at the December meeting, when preparations were made with regard to the Supervisory Board election of shareholder representatives to be held in June 2022. The December meeting also saw the Supervisory Board review its checklist on the German Corporate Governance Code and, together with the Executive Board, adopt the Declaration of Conformity in accordance with § 161(1) AktG. This and prior declarations extending back to 2004 are permanently available to shareholders on the Jenoptik website.

The Supervisory Board regularly reviews the efficiency of its work in accordance with the Code's recommendations. Following the most recent efficiency review carried out with the assistance of an external expert in 2020, the Supervisory Board undertook an internal self-assessment in the past fiscal year. The review gave a positive picture of the work of the Supervisory Board and its committees. No efficiency shortcomings were identified. The next external efficiency review is scheduled to take place in 2023.

Individual members of the Supervisory Board exercise an executive role at other companies with which Jenoptik has a business relationship. All of these business transactions, which are not of significant relevance to Jenoptik, were conducted under the same conditions as would have been maintained with third-party companies. Neither the Executive Board nor the Supervisory Board effected any transactions that would have required approval or a duty to publish under the provisions of ARUG II ("related party transactions"). More information on business transactions by the Executive Board or Supervisory Board with related parties can be found in chapter 8.5 of the Group Notes on page 237. In the past fiscal year, there were no conflicts of interest that would have required reporting to the Annual General Meeting with this report.

Members of the Supervisory Board are independently responsible for undergoing the training and professional development measures necessary for their tasks. The company offers selected internal or external information events for targeted professional development, if required. All members are regularly notified of new regulatory requirements. New members are also supported by the company during their inductions. Professor Keller took the opportunity to personally acquaint herself with the Executive Board, the members of the Supervisory Board, and the way they work together prior to her appointment by court order.

Further detailed information on corporate governance can be found in the Corporate Governance Statement beginning from page 26 on of the Annual Report.

Annual Financial Statements and Consolidated Financial Statements

After an in-depth preliminary review and on the basis of the resolution by the Annual General Meeting on June 9, 2021, the Audit Committee appointed EY as auditor for the fiscal year 2021 in its meeting on August 10, 2021. EY has acted as the JENOPTIK AG and Group auditor of the Annual and Consolidated Financial Statements since 2016. The lead audit partner is Steffen Maurer, who is exercising this role for the third time. EY audited the Annual Financial Statements prepared by the Executive Board according to the provisions of the German Commercial Code (HGB), the Consolidated Financial Statements prepared according to § 315e HGB and on the basis of International Financial Reporting Standards (IFRS), and the Consolidated Management Report, and issued its unqualified approval. The audit of the Non-Financial Report in the form of a limited assurance engagement was also issued with unqualified approval by PWC. Within the scope of its duties, EY also checked whether the Executive Board had adopted suitable measures to ensure that developments that may endanger the continued existence of the company are identified in good time. The auditor undertook its audit according to § 317 HGB, giving consideration to the generally accepted German audit principles defined by the Institute of Public Auditors in Germany (IDW). In addition to the formal audit required by law, EY also carried out a substantive audit of the content of the Remuneration Report, as commissioned to do so by the Audit Committee at its meeting on August 10, 2021. You can find the Remuneration Report, including the audit opinion, from page 40 on.

On completion, the audit reports, the Annual Financial Statements, the Consolidated Financial Statements, the Executive Board's proposal for the appropriation of profits, the Combined Management Report, and the Non-Financial Report were dispatched to all members without delay and, together with the documents submitted by the Executive Board, discussed in great detail by the Audit Committee and the Supervisory Board at their March meetings. Both also dealt extensively with the key audit matters.

Representatives of auditor EY and of audit firm PWC, which was appointed by the Audit Committee to conduct an audit review of the Non-Financial Report, reported on the key outcomes of their audits at the two meetings, in the presence of the Executive Board during the relevant agenda items, and were also available to respond to any further queries. The Supervisory Board is of the opinion that the participation of the Executive Board is a valuable addition to Supervisory Board discussions and completion of auditing of the Annual and Consolidated Financial Statements, at which auditor EY is in attendance, and therefore considers it necessary that the Executive Board continues to participate in the future. If a member wishes to have a discussion with the auditor without the participation of the Executive Board, the Chairman of the Supervisory Board or the Committee will agree to this. EY also provided information on services rendered in addition to the financial statement audit services. Detailed information can be found in the Notes in chapter 10.3. According to EY, there were no circumstances that gave rise to a concern of impartiality. No major weaknesses in the risk early warning system or the accounting-related internal control system were reported. The Chairman of the Audit Committee also reported in detail to the Supervisory Board on the examination of the statements carried out by the Audit Committee.

Following its own comprehensive examination and discussion, the Supervisory Board concurred with the findings submitted by the auditor and the Audit Committee's recommendation, and raised no reservations about the results of the audit. It approved the Annual Financial Statements and Consolidated Financial Statements submitted by the Executive Board, thus adopting the Annual Financial Statements in accordance with § 172 (1) AktG. The Supervisory Board discussed in detail with the Executive Board the proposal for the appropriation of accumulated profits, providing for payment of a dividend of 0.25 euros per qualifying no-par value share, and also agreed to this following its own review.

Changes on the Supervisory Board and Executive Board

Prof. Dr. Andreas Tünnermann stepped down from the Supervisory Board with effect from December 31, 2021. Prof. Dr. Tünnermann was the technology expert on the Supervisory Board and provided outstanding service in promoting the expertise of the entire board, particularly in the key areas for Jenoptik of optical technologies, digitization, strategy, and growth planning. We thank him for his valuable assistance and years of service on the Supervisory Board of JENOPTIK AG. To succeed Prof. Dr. Tünnermann, Prof. Dr. Ursula Keller, Professor of Physics at ETH Zurich, was appointed to the Supervisory Board by court order, with effect from January 21, 2022, for a limited period until the expiry of Prof. Dr. Tünnermann's remaining term of office, i.e., until the end of the Annual General Meeting in 2022. Mr. Dudok was elected as a member of the Personnel, Mediation, and Nomination Committees.

There were no personnel changes on the Executive Board in 2021.

The Supervisory Board would like to thank the members of the Executive Board and all the employees for their exceptional performance and great commitment throughout the fiscal year, as well as our shareholders for the trust they have shown in us.

Jena, March 2022

On behalf of the Supervisory Board



Matthias Wierlacher
Chairman

Highlights 2021

Commitment to sustainability

By joining the UN Global Compact, the United Nations' network for corporate responsibility, Jenoptik commits to full compliance with the principles relating to human rights, labor standards, environmental protection, and universal anti-corruption. Jenoptik also defines a further ESG objective: By 2025, the Group intends to cut its CO₂ emissions by 30 percent compared to 2019.

Greater sustainability for speed cameras

Thanks to a cooperation agreement with SFC Energy, Jenoptik can supply speed measurement systems with green energy based on fuel cell technology. The TraffiPole housing system also promotes sustainability with its reduced power consumption, operation with autonomous batteries or solar panels, and fully recyclable materials. The new housing design wins two design awards.

Sustainability award from ASML

The Dutch semiconductor equipment manufacturer ASML presents Jenoptik with the ASML Sustainability Excellence Award for its sustainability strategy. The Light & Optics division impressed with its targets of reusing and recycling components and ensuring business continuity. The prize money is donated to the non-profit organization "Kindersprachbrücke Jena".

Group financing arrangements successfully renewed

Jenoptik places sustainability-linked debenture bonds worth 400 million euros on the capital market in the spring. More than 250 institutional investors thus demonstrate their confidence in the company. An ESG syndicated loan worth 400 million euros is also signed at the end of the year.

New Jenoptik canteen

Jenoptik starts construction of an 11.9-million-euro canteen on the Jenoptik campus in Jena-Göschwitz for catering, meetings, and work breaks. Groundbreaking for this investment in a pleasant working environment takes place in June.

Greater capacity for the micro-optics business

Jenoptik will invest around 70 million euros in a highly functional cleanroom facility in "Silicon Saxony". After acquiring the site in the spring, planning starts for the fab, where micro-optics and sensors for semiconductor equipment are due to be produced starting in 2025.

Mars rover with Jenoptik lens assemblies

As a partner on the "Mars 2020" mission, Jenoptik contributes to the first images of Mars transmitted by the "Perseverance" rover, which are taken by optical systems developed, assembled, and tested by Jenoptik in Florida.



© NASA/JPL-Caltech



Focus on core photonic business

In Summer 2021, Jenoptik sells its crystal growth business in Eisenach to Hellma Materials GmbH. Jenoptik also sells its non-optical measuring technology business for grinding machines to Marposs Group. In November, Jenoptik signs an agreement to sell VINCORION to STAR Capital Partnership LLC.

New growth strategy

With its new Agenda 2025, "More Value", which was announced in November, Jenoptik is accelerating its transformation into a pure and globally leading photonics group and is focusing on lasting profitable growth in the core photonic markets – semiconductor/electronics, life science/medical technology, and smart mobility.

Acquisition of BG Medical and SwissOptic

Jenoptik acquires all shares in BG Medical Applications GmbH and the SwissOptic Group. With that, the Group boosts its global photonics business and significantly expands the strong semiconductor equipment business as well as, in particular, the highly attractive medical technology business.

Traffic safety technology for North America

The Group receives orders for traffic safety systems in the US and Canada. The equipment will be used for speed and red light monitoring, license plate recognition, and section control.

New technology for tire production

In cooperation with 4JET Group, Jenoptik is revolutionizing prototype production of car tires: The new "JENscan Tire" laser technology makes the creation of tread patterns and designs significantly easier and more efficient.

Automation orders

In the spring, Jenoptik reports new automation orders from the US and Canada. Its automation solutions will be used to produce structural assemblies for major car manufacturers.

Rising star of the year in the Women's Career Index (FKi)

Actions to improve diversity, such as specific targets for the Group's diversity rate and the signing of the "Diversity Charter," are paying off: From all the audit participants, Jenoptik is named "Rising Star of the Year" by the FKi for the greatest improvement in diversity.

The Jenoptik Share

Stock Markets

The 2021 stock market year was again dominated by the coronavirus pandemic. Vaccination programs and the hope to overcome the coronavirus crisis and a return to normalcy in economic activity saw prices rise in the first half-year 2021. In the second half of the year, however, this upward trend leveled off due to new virus variants, ongoing problems in global supply chains, shortages of key products such as semiconductors and electronic components, and fears of possible interest rate hikes. The economy was further burdened by significantly higher inflation.



The latest information on the Jenoptik share and the development of the Jenoptik Group can be found at www.jenoptik.com/investors

At the end of the year, Germany's benchmark index, the Dax, was at 15,884.86 points, an increase of 15.7 percent in 2021. The TecDax, Germany's technology index climbed to 3,920.17 points by the end of December, up 20.8 percent for the year. On the last day of trading in 2021, the SDax was up 10.5 percent, at 16,414.67 points.

Jenoptik Share Trends

The Jenoptik share price rose more strongly than the indices in the period covered by the report. Starting the first day of trading in 2021 with a closing price of 25.00 euros, the price mostly moved sideways in the first few months of the year. The share closed at 22.36 euros on May 12, its lowest level in the past year. Until the beginning of July, the share underperformed the above-mentioned indices. It recovered on the announcement of a raised forecast for the fiscal year 2021 in mid-July, and then increased in price over the following weeks. Both the combined acquisition of BG Medical and the Swiss-Optic Group in early October, and the signing of an agreement to sell VINCORION in late November produced significant price gains. The strategic agenda, "More Value" and the new medium-term guidance were also received positively by the capital market. In early December, the share attained its highest closing price of 37.60 euros. The share ended trading on December 30 at 37.14 euros, a strong annual gain of 48.6 percent. Jenoptik's total shareholder return, i. e.,

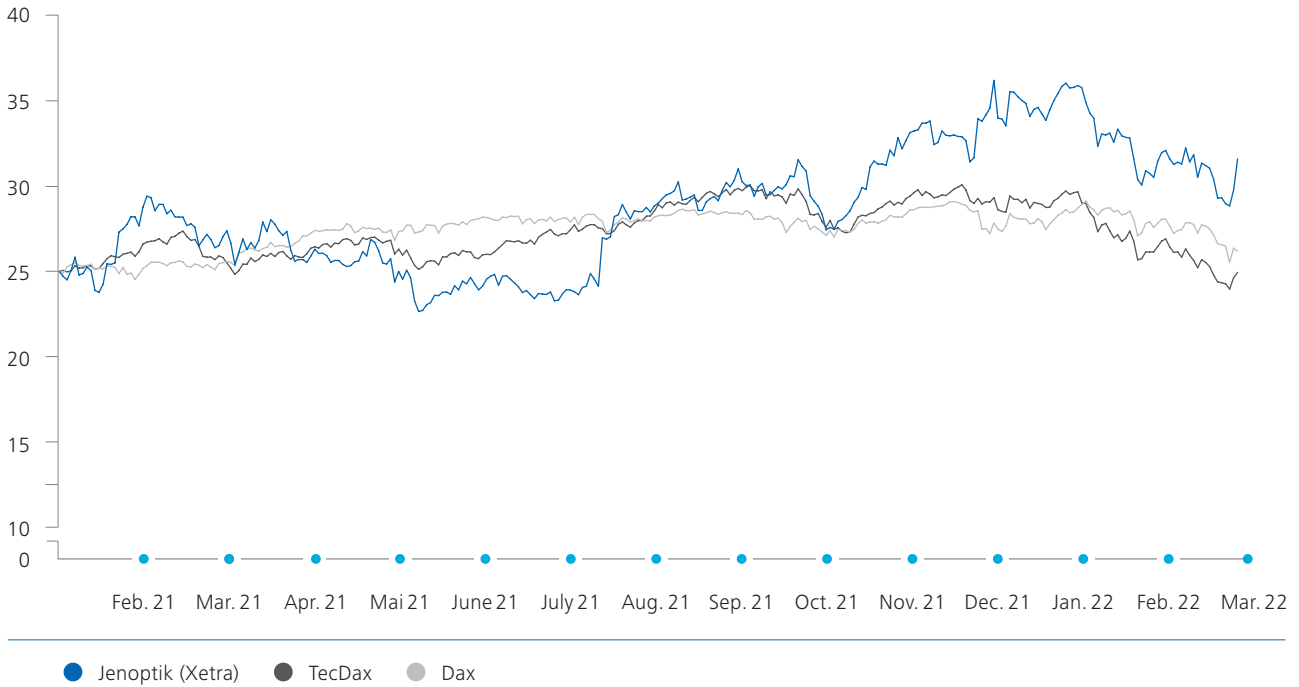
share price development accounting for dividends paid in the fiscal year, came to 49.6 percent in 2021 (prior year: minus 3.1 percent). At 57,238,115 shares issued, market capitalization amounted to 2,125.8 million euros at the end of the year (prior year: 1,437.82 million euros).

In particular the Ukraine conflict but also fears of interest rate hikes weighed on the stock markets in January and February 2022. The Dax but also TecDax and SDax fell. The Jenoptik share was unable to escape this trend and exited trading on February 28 at 32.42 euros. This corresponded to a market capitalization of 1,855.66 million euros.

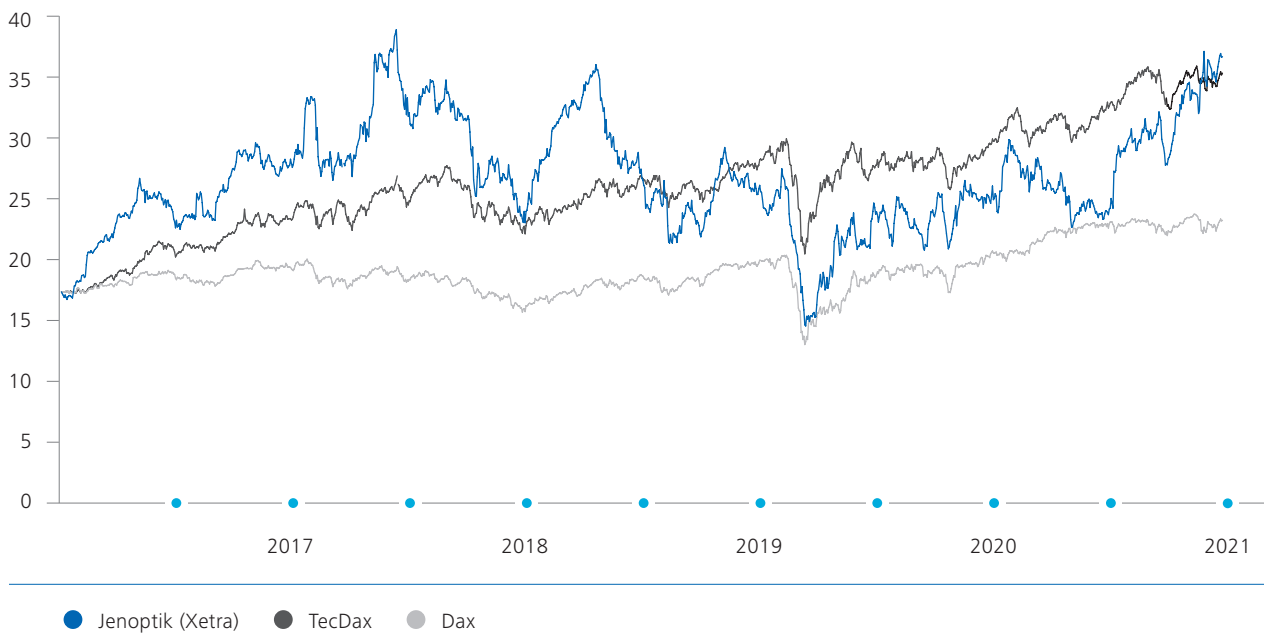
Compared to the prior year, investor trading saw a slight downturn. The average number of Jenoptik shares traded per day on Xetra, in floor trading, and on Tradegate was 179,374 in 2021, 6.0 percent less than in the prior year (prior year: average 190,855 shares).

In the TecDax ranking compiled by Deutsche Börse Group, the Jenoptik share improved to 20th place in terms of free float market capitalization in December, up from 23rd in the prior year. Of the 70 stocks on the SDax, JENOPTIK AG was up to the 3rd place in free float market capitalization (prior year: 11th) at the end of the year.

G01 Share performance January 4, 2021 through February 28, 2022 (indexed in euros)



G02 Share performance 2017 through 2021 (indexed in euros)



Shareholder Structure

At the end of the fiscal year, the company's free float was unchanged at 89 percent.

Throughout 2021, we received several voting right notifications from institutional investors on the purchase or sale of larger long stock positions; these were published by the company.



For more information, see the Notes in the Equity chapter and the Investors/Share/Voting rights announcements section at www.jenoptik.com

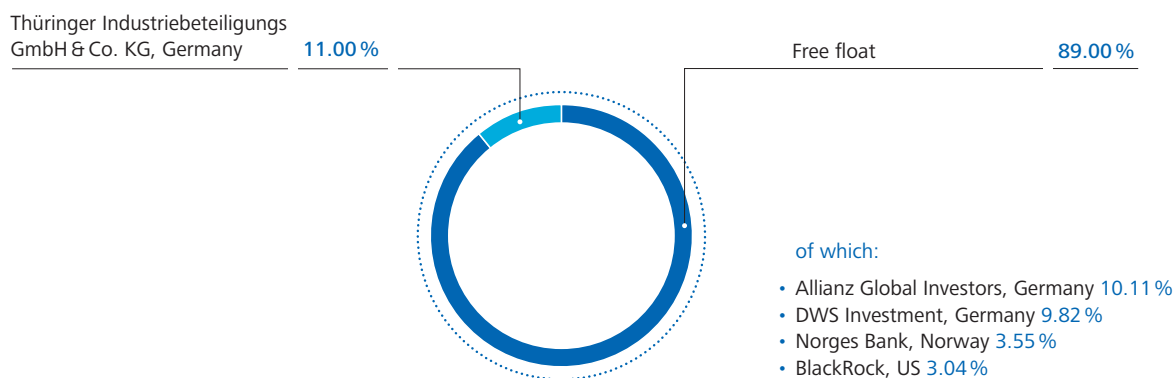
Dividend

The Jenoptik management aims to pursue a policy of dividend reliability and continuity in which shareholders receive payment of a dividend in line with the company's success. At the same time, sufficient cash and cash equivalents are required to finance Jenoptik's operating business and strategic investment to assist its transformation into a globally leading, pure photonics group. This, together with the use of further acquisition opportunities, is key to the sustainable and successful growth of the company and thus also in the interests of shareholders.

The Executive and Supervisory Boards of JENOPTIK AG therefore review their dividend recommendation with considerable prudence every year. In the past fiscal year, Jenoptik paid a dividend of 0.25 euros per share (prior year: 0.13 euros) to its shareholders for 2020.

Based on the very good results for fiscal year 2021 on the one hand, and recognizing the increasing uncertainty triggered among other things by the Ukraine-Russia conflict in conjunction with a possibly prolonged phase of rising inflation rates and associated cost increases for interests and future investments in further growth on the other hand, the Executive Board and Supervisory Board will propose to the 2022 Annual General Meeting, as in the previous year, to pay a dividend of 0.25 euros per share for fiscal year 2021. The management is thus pursuing the goal of offering shareholders an appropriate share in the company's success while at the same time enabling further investments in growth in a highly volatile market environment.

G03 Shareholder structure (as of February 28, 2022)*



* Based on received voting right notifications

Capital Market Communications

We are committed to making sure our communications with shareholders, analysts, and institutional investors are open, transparent, and reliable. We believe it is important to achieve a high level of transparency and boost trust in Jenoptik by engaging in ongoing dialog. For us, this includes reporting comprehensive and up-to-date information on the development of our business, while also seeking an active exchange with others.

At the end of 2021, a total of 49,995 shareholders (prior year: 45,173) were entered in the share register, of which 588 were institutional investors (prior year: 478) and 49,407 private investors (prior year: 44,695). Institutional investors held 78.23 percent of the company's share capital, virtually unchanged on the prior year (prior year: 78.99 percent), private investors 21.77 percent (prior year: 21.01 percent).

T02 Key figures of the Jenoptik share

	2021	2020	2019	2018	2017
Closing price (Xetra end-year) in euros	37.14	25.12	25.48	22.78	27.55
Highest/lowest price (Xetra) in euros	37.60/22.36	27.44/13.82	36.45/21.00	39.48/22.78	29.68/16.11
Absolute performance in euros/relative in percent	12.60/50.40	-1.06/-4.05	1.74/7.33	-5.02/-18.1	10.78/64.28
Issued no-par value shares (31/12) in millions	57.24	57.24	57.24	57.24	57.24
Market capitalization (Xetra end-year) in million euros	2,125.8	1,437.8	1,458.4	1,303.9	1,576.9
Average daily trading volume ¹ (shares)	179,374	190,855	152,355	167,748	152,928
P/E ratio (basis highest price)/P/E ratio (basis lowest price)	26.3/15.6	37.6/18.9	30.9/17.8	25.8/14.9	23.4/12.7
Free cash flow per share in euros	1.10	1.09	1.35	1.89	1.26
Group earnings per share in euros	1.43	0.73	1.18	1.53	1.27

¹ Source: Deutsche Börse; includes trading on the Xetra, in Frankfurt, Munich, Berlin, Düsseldorf, Hamburg, Hannover, Stuttgart and on Tradegate

T03 Dividend key figures

	2021	2020	2019	2018	2017
Dividend per share in euros	0.25	0.25	0.13	0.35	0.30
Payout amount in million euros	14.3	14.3	7.4	20.0	17.2
Dividend yield ¹ in %	0.7	1.0	0.5	1.5	1.1
Payout ratio ² in %	17.5	34.2	11.0	22.9	23.7
Total shareholder return in %	49.6	-3.1	7.9	-17.0	65.8

¹ based on year-end closing price

² based on earnings attributable to shareholders

Jenoptik took first place in the SDax in the “German Investor Relations Award 2021” and is thus one of the best communicators on the German capital market. The German investor relations association DIRK, the publishing house Institutional Investor, which specializes in finance, and the magazine WirtschaftsWoche have been awarding the prize since 2001 for outstanding achievements in the field of investor relations. The winners are determined on the basis of Institutional Investor’s Developed Europe Executive Team Survey. Every year, the survey obtains an independent assessment of the IR work of listed companies from thousands of buy and sell experts worldwide.

The 23rd Annual General Meeting of JENOPTIK AG was for the second time held in purely virtual form due to the coronavirus pandemic on June 9, 2021. At around 65 percent, the proportion of capital represented was virtually unchanged. By a large majority, the shareholders formally approved the actions of the Executive Board and Supervisory Board, elected the auditor, and agreed to payment of the proposed dividend, to the remuneration system for the Executive and Supervisory Boards, to authorizing the issue of convertible bonds and/or warrants, and to the creation of conditional capital.

In November 2021 Jenoptik held a virtual Capital Markets Day. The Executive Board and management informed the capital market about the strategic Agenda 2025, “More Value” and the new medium-term targets for the fiscal year 2025. Focusing on the three high-growth markets semiconductors/electronics, life science/medical technology, and smart mobility – is the core of the agenda “More Value”. As a result, the Group expects to generate substantial organic revenue growth, which will be supplemented with further acquisitions. 

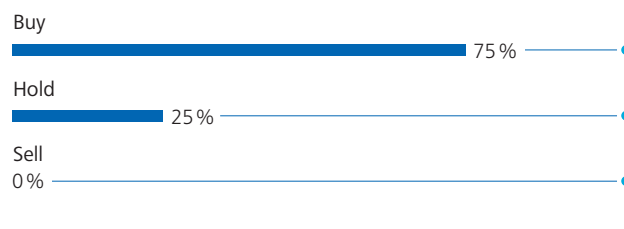


More information on the strategic Agenda “More Value” and the medium-term targets can be found in the Targets and Strategies chapter from page 93 on

Over the fiscal year 2021, Jenoptik was also represented at numerous investor conferences, roadshows, and sales force briefings, almost all of which were conducted virtually due to the pandemic. During conference calls on the publication of the annual and quarterly financial statements and in numerous individual conversations, the Executive Board and the investor relations team explained the development of business, key figures, and strategy to institutional investors, analysts, and journalists.

Over the course of 2021, 12 (prior year: 12) analysts published recommendations on the Jenoptik share: Baader Helvea, Bankhaus Metzler, Deutsche Bank, DZ Bank, Hauck & Aufhäuser, HSBC, Independent Research, Kepler Cheuvreux, LBBW, and Warburg Research; new analysts in 2021 were Berenberg and STIFEL; Commerzbank and Bankhaus Lampe have discontinued its coverage. On December 31, 2021, the average target price of the Jenoptik share as assessed by our analysts was 38.32 euros (prior year: 26.88 euros). G04

G04 Analyst recommendations (as of December 31, 2021)



Corporate Governance

» In short «

The current declaration of conformity
in accordance with

§ 161

Stock Corporation Act was issued jointly
by the Executive Board and the Supervisory Board
in December 2021.

Information and Notes relating to Takeover Law
as well as the Corporate Governance Statement are part
of the Combined Management Report.

Corporate Governance Statement

The Corporate Governance Statement is in accordance with §§ 289 f, 315 d of the German Commercial Code (HGB). It is an unaudited part of the Combined Management Report. In the Corporate Governance Statement, the Executive Board and Supervisory Board also report on the company's corporate governance.

The JENOPTIK AG Executive Board and Supervisory Board affirm their commitment to responsible corporate governance and control, geared towards lasting value creation. They see good corporate governance as the foundation for sustained corporate success and, at the same time, an important contribution to strengthening the trust in Jenoptik on the part of shareholders, business partners, employees, and the general public.

Corporate Governance

In the reporting year, the Executive Board and Supervisory Board again dealt in detail with corporate governance issues. The Executive and Supervisory Boards issued the current Declaration of Conformity in adherence with § 161 of the German Stock Corporation Act (AktG) in December 2021. It is permanently available to shareholders on the company's website. If, in the future, changes arise at Jenoptik which have an impact on conformity, the Declaration of Conformity will be updated during the year. 



The Corporate Governance Statement as well as the current Declaration of Conformity, and those of previous years, are permanently accessible on our website at www.jenoptik.com under the category Investors/Corporate Governance

Declaration of Conformity by the Executive Board and Supervisory Board of JENOPTIK AG in the Fiscal Year 2021

According to § 161 (1) (1) of the German Stock Corporation Act, the Executive and Supervisory Boards of a listed company are required to issue an annual declaration that the recommendations of the "Government Commission on the German Corporate Governance Code" as published by the Federal Ministry of Justice in the official section of the Federal Gazette [Bundesanzeiger] have been and are complied with, or to indicate which recommendations have not been or are not applied and why not.

The Executive and Supervisory Boards of JENOPTIK AG support the recommendations of the "Government Commission on the

German Corporate Governance Code," and state that, pursuant to § 161 (1) (1) of the German Stock Corporation Act:

Since the last declaration of conformity as of December 2020, the recommendations of the "Government Commission on the German Corporate Governance Code" in the version dated December 16, 2019 have been complied with and will be complied with in the future with the following exception:

In accordance with the recommendation C.4 of the Code, a Supervisory Board member who is not a member of the Executive Board of a listed company shall not accept more than five Supervisory Board mandates at non-group listed companies or comparable functions, with an appointment as Chair of the Supervisory Board being counted twice.

Our Supervisory Board member, Doreen Nowotne, is also Chairwoman of the Supervisory Boards of Franz Haniel & Cie. GmbH (not listed on the stock exchange) and Brenntag AG (listed company) and is a member of the Supervisory Board of Lufthansa Technik AG (not listed on a stock exchange). If the mandate at Jenoptik, which from Jenoptik's point of view is an internal mandate, is counted in addition to the mandates according to C.4 Ms. Nowotne has in total six Supervisory Board mandates. Therefore, a deviation has been declared purely as a precautionary measure. The Supervisory Board has made sure that Ms. Nowotne has sufficient time available to discharge her duties.

In the interest of transparent communication, we hereby inform you that the current remuneration system for the Executive Board members, which was adjusted by the Supervisory Board and was approved by the Annual General Meeting on June 9, 2021, fully complies with all the recommendations of Chapter G of the Code.

December 14, 2021 | JENOPTIK AG

For the Executive Board

For the Supervisory Board

Dr. Stefan Traeger
President & CEO


Matthias Wierlacher
Chairman of the
Supervisory Board

Information on methods of Corporate Governance

Code of Conduct, Opportunity and Risk Management, Compliance


We see success in business and responsibility for our actions as being inseparable goals. Respect, fairness and openness as well as compliance with statutory provisions and internal group regulations are essential factors for responsible conduct with all stakeholders. In order to guarantee the high level of integrity as well as ethical and legal standards within the Jenoptik Group, the most important principles of conduct have been compiled in a Code of Conduct which is equally binding on all employees, managers and the Executive Board of the Jenoptik Group. It sets out minimum standards and general rules for our actions within the company as well as towards external partners and the public. In the event of questions regarding the Code of Conduct or suspected illegal or unlawful matters, all Jenoptik employees may speak in confidence to their respective manager or the contact persons named in the Code of Conduct. All employees may also use the whistleblowing system on the Jenoptik intranet, by telephone or via email to report significant violations that must be handled confidentially. 

The Code of Conduct for Suppliers to the Jenoptik Group applies to all suppliers worldwide. Jenoptik has also signed the Diversity Charter and joined the UN Global Compact in the fall of 2021.

For Jenoptik, good corporate governance also includes comprehensive risk management based on an interactive and management-oriented approach. This enterprise risk management (ERM) takes into account both risks and opportunities and has been implemented throughout the organization with the aim of supporting the implementation of the group strategy and defining actions which create an optimal balance between growth and return targets on the one side and the associated risks on the other. 

An integral part of our risk prevention and the processes of the Jenoptik Compliance Management System (CMS) is the observance of nationally and internationally recognized compliance requirements. The CMS is based on the Jenoptik values, the Code of Conduct, and various group guidelines and process descriptions from Jenoptik, compliance with which is a fundamental requirement for maintaining the trust of our business partners, shareholders, and the public in the performance and integrity of Jenoptik. The CMS is continuously developed and adapted in line with changing conditions. On the Executive Board, Dr. Stefan Traeger is responsible for the central Compliance & Risk Management department. Global compliance activities are coordinated by the center of excellence in Germany and supported by local colleagues in the North America and Asia/Pacific regions.

With group guidelines for key business processes, the Jenoptik Group has a globally uniform framework. Central departments, divisions, and regions can reinforce this set of rules with more detailed regulations in accordance with their respective requirements. The guidelines are regularly reviewed, and extended or updated as necessary. This system of processes and controls enables any possible deficits in the company to be identified at an early stage and appropriate actions to be taken to minimize or eliminate them.

In order to familiarize employees with these topics and to improve employee awareness, regular online training courses and classroom events on subjects relevant to compliance, such as anti-corruption, anti-trust law, export control, IT security as well as data protection, are regularly held at both the German and foreign business units. The aim of this is to create company-wide uniform understanding of our compliance standards. In addition to the main training courses offered as part of onboarding training for new employees, all employees are also required to participate in mandatory e-learning refresher courses. The aim is to provide them with the content of important compliance topics on a continuous basis, and to then verify this with a test. In addition, employees can contact the central Compliance & Risk Management department with any questions relating to compliance or risk issues at Jenoptik as well as use a help desk on the intranet or an app on their smartphones. 



The Code of Conduct can be found at www.jenoptik.com, under the category Investors/Corporate Governance/Code of Conduct



Detailed information on enterprise risk management can be found in the Risk and Opportunity Report from page 141 on



Further information on compliance and supplier management can also be found in the chapter "Non-financial Report"

Sustainability

Jenoptik's understanding of sustainability is based on the conviction that the economic goals of the company and thus lastingly profitable growth can only be achieved by behaving responsibly in line with the environment and society. Together with our customers, we create forward-looking trends in the fields of digitization, healthcare, mobility, and smart manufacturing. The separate Combined Non-financial Report from page 62 on of the Annual Report contains detailed information on Jenoptik sustainability management in the areas of employee and environmental matters, human rights, anti-corruption and the supply chain, quality as well as social commitment of the Group.

Composition and Mode of Operations of the Executive Board, Supervisory Board and its Committees



Further information on the members of the Executive Board as well as details on the allocation of responsibilities can be found in the section "Further Information" on page 248 of the 2021 Annual Report as well as on the Internet at www.jenoptik.com in the category About Jenoptik/Management

JENOPTIK AG is a stock corporation under German law with a dual management system, comprising the Executive Board and Supervisory Board. Their tasks and powers as well as structure and working methods are essentially determined by the German Stock Corporation Act, the Articles of Association of JENOPTIK AG and the Rules of Procedure. The Executive Board runs the company on its own responsibility and in the interests of the company and with the goal of sustainably increasing the value of the company. It takes into account the concerns of all stakeholders, in particular shareholders and the Group's employees. The Supervisory Board advises and monitors the Executive Board in its management of the company and is involved in decisions of fundamental importance to the company. The Executive Board agrees with the Supervisory Board on the strategic orientation of the company and discusses the status of strategy implementation with it at regular intervals. The Executive and Supervisory Boards work closely together for the good of the company.

Executive Board

The members of the JENOPTIK AG Executive Board are appointed by the Supervisory Board. In accordance with the Articles of Association, the Executive Board shall comprise at least two persons. The Board currently has two members. They share common responsibility for the overall management of the Group, work cooperatively and confidently together, and decide on primary matters of group corporate policy, its management, corporate strategy (including the sustainability strat-



Further information about the function and structure of the Executive Board can be found in the Executive Board's rules of procedure at www.jenoptik.com in the category About Jenoptik/Management


egy) as well as planning. The Executive Board has not set up any committees. It is supported in the management of the company by the Executive Management Committee (EMC), which, as of December 31, 2021, comprised the members of the Executive Board, head of Personnel, the head of Group Controlling, the heads of the North America and Asia/Pacific regions as well as the heads of the divisions. At monthly meetings, this committee provides the Executive Board with information on all relevant events for the company and the economic situation of the divisions.

The Executive Board ensures compliance with statutory provisions and internal corporate guidelines and is responsible for the preparation of interim reports and statements, the Consolidated and Annual Financial Statements, and for establishing a control and risk management system and a compliance management system tailored to the company's risk situation. The specific allocation of responsibilities and tasks within the Executive Board (including the responsibility for sustainability topics (environment, social, governance)) is regulated in business allocation plan.

The members of the Executive Board continually update one another on important activities and events within their assigned areas. Executive Board meetings take place at least once a month. The Executive Board's rules of procedure regulate which actions are of major importance for the Jenoptik Group and thus require the approval of the entire Executive Board or the Supervisory Board. In addition, the rules of procedure also set out in greater detail the internal working procedures of the Executive Board and the methods of reporting to and coordinating with the Supervisory Board.

The Executive Board continually informs the Supervisory Board in a timely and comprehensive manner, and in both written and spoken communication, on all matters relevant to the current development of the Group's business and finances, corporate planning including financial, capital expenditure and human resource planning, the profitability of the company, essential strategic issues, the risk situation, risk management and compliance. The Chairman of the Executive Board coordinates the cooperation of the Executive Board with the Supervisory Board. The Supervisory Board is required to give its approval on decisions or actions which may involve considerable changes to the company's assets, finances or earnings. Members of the Executive Board are required to disclose conflicts of interest to the Supervisory Board without delay and to inform the other members of the Executive Board of this.

Supervisory Board

With equal representation in accordance with the German Codetermination Act, the Supervisory Board of JENOPTIK AG consists of twelve members, six of whom are elected by the shareholders at the Annual General Meeting and six of whom are nominated by employees in accordance with the Codetermination Act. The Supervisory Board is composed in such a way that, as a whole, it is endowed with the knowledge, abilities, and professional experience necessary to carry out its tasks in an orderly manner. Each member shall ensure that they have sufficient time available to perform their duties. Five of its twelve members, three shareholder and two employee representatives, are female, in line with the requirement of § 96 (2) (1) of the German Stock Corporation Act. With the exception of Prof. Dr. Ursula Keller, who was appointed by the court on January 21, 2022 to replace Prof. Dr. Andreas Tünnermann who retired on December 31, 2021, the remaining shareholder representatives were individually elected at the 2017 Annual General Meeting to serve until the conclusion of the 2022 Annual General Meeting. The diversity policy pursued with respect to the composition of the Supervisory Board is described in the "Diversity Policy" section of this declaration. 

The Chairman of the Supervisory Board is elected by its members. They coordinate the work of the Supervisory Board, preside over its meetings and represent the body externally. The Chairman maintains regular contact with the Executive Board, which provides the Supervisory Board Chairman with immediate information on important events which are of crucial importance to the position and development of the company. In the event of a tied vote by the Supervisory Board, a second round of voting is conducted in which the board chairman casts two votes, insofar as this is permitted by law. The Chairman of the Supervisory Board also chairs the Personnel, Mediation, Investment and Nomination Committees, but not the Audit Committee.

The Supervisory Board meets at least four times a year, but as a rule meets five times a year because of the Supervisory Board's strategy meeting which takes place in the fall. Extraordinary meetings are called for major events that cannot be delayed or a resolution is adopted by written consent. Taking into account the results of the audit and the recommendations of the Audit Committee, the Supervisory Board examines and approves the Financial Statements and Consolidated Financial Statements, the Non-financial Report, the Combined Management Report for JENOPTIK AG and the Group and adopts the Annual Financial Statements. Ernst & Young GmbH, Wirtschaftsprüfungsgesellschaft, Stuttgart, was appointed to audit the Annual and Consolidated Financial Statements for the 2021 fiscal year.

The Supervisory Board also resolves on the Executive Board's proposal for the appropriation of accumulated profits. It decides and regularly reviews the system for the remuneration of Executive Board members. Together with the Executive Board, the Supervisory Board is also responsible for preparing the Remuneration Report.

The Supervisory Board carries out a review of the efficiency of its activities at regular intervals. The Supervisory Board has decided to have the efficiency externally evaluated every three years. In the intervening period, it will be discussed and reviewed internally on an annual basis. Following the most recent external efficiency review in 2020, with the review producing a positive picture of the work of the Supervisory Board and its committees – also in benchmarking – an internal self-assessment was carried out in fiscal year 2021. The review did not reveal any fundamental need for change. The results confirm professional cooperation within the Supervisory Board and with the Executive Board.

The members of the Supervisory Board are independently responsible for completing the professional training necessary for their duties and are supported in doing so by the company.

Supervisory Board members are to disclose any conflicts of interest to the Supervisory Board without delay. No conflicts of interest arose for Supervisory Board members in the fiscal year 2021.

The Supervisory Board has adopted rules of procedure which govern important aspects of its internal cooperation and collaboration with the Executive Board. The rules also mandate the creation of committees as a means of improving efficiency of the Supervisory Board work when it comes to complex topics.



The Supervisory Board currently has five committees that, with the exception of the Nomination Committee, which is composed only of shareholder representatives, are made up of equal numbers of shareholder and employee representatives. The candidates' professional and personal expertise is taken into account in the formation of committees.

The committees prepare decisions for the Supervisory Board and may, in individual cases, make decisions in place of the Supervisory Board insofar as this is permitted by law. The respective committee chairmen report to the Board on the content discussed and the resolutions and recommendations approved no later than at the next Supervisory Board meeting.



Further details on the composition of the Supervisory Board and its committees can be found in § 11 of the Articles of Association of JENOPTIK AG, in the Report of the Supervisory Board from page 10 on and in the Group Notes of the 2021 Annual Report from page 242 on



The Rules of Procedure of the Supervisory Board can be found at www.jenoptik.com under the heading "About Jenoptik"

The **Audit Committee** meets at least four times each year. Its key tasks are monitoring accounting as well as the accounting process, and dealing with auditing of the financial statements, with particular reference to the independence of the auditor, the non-audit services provided by the auditor and the determination of the main points of the audit. After obtaining a declaration of independence, it prepares the Supervisory Board's recommendation to the Annual General Meeting for appointment of the auditor and grants the audit assignment. It also regularly assesses the quality of the auditing. On the basis of the auditor's reports, and following its own review, the Audit Committee submits proposals for the adoption of the Annual Financial Statements of JENOPTIK AG and for the approval of the Consolidated Financial Statements by the Supervisory Board. The Audit Committee's duties also include the monitoring of sustainability issues (ESG), so it also prepares the Supervisory Board's decision on the Combined Non-financial Report. It also reviews the effectiveness and further development of the compliance and risk management systems as well as the internal control system. Jenoptik's Internal Audit reports regularly to the Audit Committee.

As Chairman of the Audit Committee, Mr. Heinrich Reimitz, has expert knowledge and experience of accounting principles and internal control procedures and is, in the opinion of the Supervisory Board, an independent member (for further detailed information, please refer to the section "Diversity concept for the Supervisory Board"). He is not a former member of the Executive Board of JENOPTIK AG. In accordance with the requirements of the Financial Market Integrity Strengthening

Act (FISG), Mr. Reimitz has expertise in both accounting and auditing. Ms. Doreen Nowotne, as Deputy Chair of the Audit Committee, also has expertise in the areas of accounting and auditing in accordance with the requirements of the FISG.

The **Personnel Committee** convenes at least once a year. It deals with the long-term succession planning for the members of the Executive Board and prepares their appointment by the Supervisory Board. The Personnel Committee regularly reviews the remuneration system for the members of the Executive Board, which is then approved by the Supervisory Board. The Personnel Committee has only a preparatory and advisory function. The remuneration system and the specific determination of remuneration must, in principle, be approved by the full Supervisory Board. The remuneration system is also submitted to the Annual General Meeting for approval in the event of any significant changes. The Personnel Committee also prepares the conclusion and settlement of the target agreements for the short-term and long-term variable remuneration for the Executive Board members. If necessary, the Personnel Committee is supported by external, independent consultants.

The **Nomination Committee** proposes to the Supervisory Board suitable candidates for election to the Supervisory Board at the Annual General Meeting and meets only when required. Proposals are developed taking into account the requirements and skills profile for the Supervisory Board as well as the Diversity Statement (see in detail under "Diversity concept for the Supervisory Board").

T04 Committee memberships of the Supervisory Board members

Member of the Supervisory Board	Astrid Biesterfeldt (since 2014)	Evert Dudok (since 2015)	Elke Eckstein (since 2017)	Prof. Dr. Ursula Keller (since 21/1/2022)	Thomas Klippstein (since 1996)	Dörthe Knips (since 2017)
Member of	• Audit Committee	• Personnel Committee (since 1/1/2022) • Mediation Committee (since 1/1/2022) • Nomination Committee (since 1/1/2022)	• Investment Committee		• Personnel Committee • Audit Committee	• Investment Committee

The **Investment Committee** supports the Supervisory Board in investment and divestment decisions requiring approval in accordance with the Executive Board’s rules of procedure, in particular with the preparation and operational implementation of resolutions on the acquisition or sale of equity interests in companies or parts of companies.

The **Mediation Committee**, which deals with matters relating to § 31 (3) (1) of the Codetermination Act, only meets when necessary.

Further details on the activities of the Supervisory Board and its committees in the fiscal year 2021 (as well as the individual attendance at meetings) can be found in the Supervisory Board Report on pages 10 on.

Remuneration of the Executive Board and Supervisory Board

The remuneration for the members of the Executive and Supervisory Boards is described in the Remuneration Report from page 40 on. The last vote on the adjusted remuneration system for the members of the Executive Board was made by the Annual General Meeting on June 9, 2021, which approved the remuneration system with 75.96 percent. The resolution on the approval of the remuneration and on the remuneration system for the members of the Supervisory Board at the 2021 Annual General Meeting was approved by 99.58 percent.

The Remuneration Report of the Executive Board and Supervisory Board for the last fiscal year, the auditor's report on the audit of the Remuneration Report and the applicable remuneration system in accordance with § 87a (1) and (2) (1) of the German Stock Corporation Act (AktG) and the last remuneration resolution as per § 113 (3) AktG are also available on the Internet at www.jenoptik.com under the categories Investors/Corporate Governance and Annual General Meeting.

Specifications for Promoting the Participation of Women in Management Positions/Targets for the Proportion of Women

In accordance with § 111 (5) and § 96 (2) of the German Stock Corporation Act, the Supervisory Board at Jenoptik must be comprised of at least 30 percent women and 30 percent men. A total of five women sit on the Supervisory Board – Doreen Nowotne, Elke Eckstein, and Prof. Dr. Ursula Keller on the shareholder side, and Astrid Biesterfeldt and Dörthe Knips on the employee side. This equates to 42 percent.

According to § 76 (4) of the German Stock Corporation Act, Jenoptik is also required to determine targets for the proportion of women on the Executive Board as well as at both management levels below the Executive Board and to report on whether the targets have been achieved during the reporting

Dieter Kröhn (since 2010)	Doreen Nowotne (since 2015)	Heinrich Reimitz (since 2008)	Stefan Schaumburg (since 2012)	Frank-Dirk Steininger (since 2020)	Prof. Dr. Andreas Tünnermann (2007 until 31/12/2021)	Matthias Wierlacher (since 2012)
<ul style="list-style-type: none"> • Investment Committee • Mediation Committee 	<ul style="list-style-type: none"> • Audit Committee (Vice Chairman) • Investment Committee 	<ul style="list-style-type: none"> • Audit Committee (Chairman) • Personnel Committee • Nomination Committee 	<ul style="list-style-type: none"> • Personnel Committee • Investment Committee • Mediation Committee 	<ul style="list-style-type: none"> • Personnel Committee 	<ul style="list-style-type: none"> • Personnel Committee (until 31/12/2021) • Mediation Committee (until 31/12/2021) • Nomination Committee (until 31/12/2021) 	<ul style="list-style-type: none"> • Personnel Committee (Chairman) • Investment Committee (Chairman) • Nomination Committee (Chairman) • Mediation Committee (Chairman)

period. As the Jenoptik Executive Board consists of only two persons, the Supervisory Board resolved at its meeting on June 8, 2020, to maintain a quota of zero percent until June 30, 2023. The requirements of the German Stock Corporation Act as amended by the Second Management Positions Act do not apply to a two-member Executive Board. However, the Supervisory Board has reserved the right to decide anew on the quota as soon as the Executive Board is composed of more than two persons. Due to the extension of the appointment of Dr. Stefan Traeger until June 30, 2025, and the appointment of Hans-Dieter Schumacher until March 31, 2023, no short-term change in the composition of the Executive Board is to be expected. Therefore, the actual quota – as specified – is currently zero percent. In the case of Jenoptik's current two-member board consisting of Dr. Traeger and Mr. Schumacher, setting a higher quota would also necessarily mean that, in the event of a vacancy, a woman would always have to be appointed. The Supervisory Board would, however, like to be able to make appointments giving due consideration to the professional expertise and personal integrity of who is, in its opinion, the most suitable candidate, irrespective of their gender. This would no longer be possible if the Supervisory Board were to set a target of more than zero percent with a male two-person Executive Board.

For the first management level below the Executive Board, the JENOPTIK AG Executive Board has decided on a target of 16.7 percent with a deadline of June 30, 2022. This corresponds to a participation of at least 2 women in 12 positions at the first management level below the Executive Board. As of December 31, 2021, the proportion of women in the 1st management level below the Executive Board was 25 percent, therefore, the target is currently significantly exceeded. The Executive Board will decide on a new target by June 2022. A target for the second management level has not been set because JENOPTIK AG as a Corporate Center has flat management structures and therefore has no continuous second management level. At the end of 2021, women made up 55.3 percent of all employees in the Corporate Center. The diversity rate, which is calculated from the average percentage of managers with an international background and female managers, is to increase to 30 percent by 2022 and 33 percent by 2025. To further accelerate this change in corporate culture, numerous measures have been implemented in the Jenoptik Group. For example, there are internal and external recruitment campaigns, women's networks, and regular (online) events for the mutual exchange of ideas. In the fall of 2020, a "Jenoptik Diversity Council" was also established as an internal contact for questions relating to diversity within the company.

Description, Goals, and Implementation of Diversity Policy with Results Achieved

1. Diversity Policy for the Executive Board

The diversity policy for the Executive Board should facilitate an orderly selection process for the appointment of new Executive Board members. The aim is to fill the Executive Board in such a way that it has the knowledge, skills, and professional experience which, when taking into account the statutory framework, are necessary for the proper performance of the Executive Board's duties, and essential for the activities of the Jenoptik Group.

For this purpose, the Supervisory Board has developed a requirements and skills profile with the support of the Personnel Committee and an external, independent personnel consultant. This is an integral element of the diversity policy and defines various criteria which must be fulfilled, such as age, education, professional background, current position as well as the personality requirements of the candidate. It also takes into account the specifications of the Supervisory Board's rules of procedure with regard to the appointment of Executive Board members. For example, a maximum age limit for the appointment of Executive Board members is 65 years at the time of the appointment.

With the current composition of the Executive Board, the requirements and skills profile are met in full. There were no changes to the existing diversity policy in the fiscal year 2021. Information on the CVs of the members of the Executive Board can be found on our website at www.jenoptik.com/about-jenoptik/management.

The Personnel Committee of the Supervisory Board also deals with the long-term succession planning for the Executive Board, partially in conjunction with the Executive Board. When doing so, the Personnel Committee and the Supervisory Board are supported by independent, external experts as required. The Personnel Committee bases its long-term succession planning on the requirements and skills profile which has been developed and is continuously being refined. It ensures that the abilities, knowledge and experience of the members of the Executive Board are balanced.


2. Diversity Policy for the Supervisory Board

The diversity policy for the Supervisory Board should ensure an orderly selection process for the appointment of new Supervisory Board members for JENOPTIK AG. The aim here is also to fill the Supervisory Board in such a way that, as a whole, it has the necessary knowledge, skills and professional experience to perform its duties. This ensures qualified control by the Supervisory Board, in accordance with the German Stock Corporation Act, the German Corporate Governance Code, the Articles of Association and the Rules of Procedure of the Supervisory Board of JENOPTIK AG.

The diversity policy is implemented in the election of shareholder representatives. In its search for candidates, the Nomination Committee of the Supervisory Board takes into account the objectives for the composition of the Supervisory Board, which follow the Diversity Statement, the requirements of the German Stock Corporation Act (AktG) and the German Corporate Governance Code. In doing so, it also takes into account the existing skills and abilities of the elected employee representatives. The Nomination Committee then submits to the Supervisory Board suitable candidate proposals for the election of shareholder representatives to the Supervisory Board to the Annual General Meeting. The Supervisory Board ensures that the respective candidates have the necessary time to perform their duties.

In the past fiscal year, with the support of an external consultant, the requirements profile drawn up by the Supervisory Board detailing the necessary abilities and skills required for the Supervisory Board was updated and further developed with a view to the election of new Supervisory Board members representing the shareholders by the Annual General Meeting in

June 2022. According to this profile, the essential skills considered necessary are specified in the three different categories in the table 05.

It is the opinion of the Supervisory Board that, with the current composition, the specified abilities, experience and skills are fulfilled for the most part. Due to the resignation of Prof. Dr. Andreas Tünnermann as of December 31, 2021, Prof. Dr. Ursula Keller was appointed to the Supervisory Board by the court with effect from January 21, 2022. Prof. Dr. Keller complements the expertise of the entire board, particularly in the key areas of expertise for Jenoptik of optical technologies, digitization, and markets & international expertise. Details can be found in the CVs of the individual Supervisory Board members. 

In accordance with its **Diversity Statement**, the Supervisory Board includes at least four members with extensive international experience.

Furthermore, the Supervisory Board should include at least four women. With three women on the shareholder side and two women on the employee side, the quota of at least 30 percent required by the German Stock Corporation Act is exceeded with a current figure of 42 percent.

With regard to the length of service, the Supervisory Board has decided not to establish a regular limit applicable to all members because there is no compelling link between the length of service and the independence of the member concerned. It is the view of the Supervisory Board that an across-the-board limit does not take into account individual factors that may justify a longer length of service for individual Supervisory Board members with continued independence. The Supervisory Board can benefit significantly from individual members with a long



The CVs of the Supervisory Board members, including the allocation of the competencies to the individual members, can be found at www.jenoptik.com/about-jenoptik/management

T05 Requirements and skills profile in the Supervisory Board

Governance-specific skills	Functional/structural skills	Strategic and company-related skills
<ul style="list-style-type: none"> Independence Availability, number of positions held Corporate governance experience (Supervisory Board or CEO) experience in listed companies CFO experience in comparable companies Financial and business skills 	<ul style="list-style-type: none"> Personnel expertise, co-determination and social matters Sales and marketing skills Operational expertise 	<p>In the following areas:</p> <ul style="list-style-type: none"> Digitization, innovation, IT Technology Strategy and growth/M+A/portfolio management Markets and internationality Entrepreneurship/management Capital markets Specific industry/sector experience ESG expertise

length of service, in particular from their experience and in-depth knowledge of the company, which promotes the quality of the work of the entire board.

No member of the Supervisory Board takes either an advisory or an executive role with customers, suppliers, creditors or other business partners of JENOPTIK AG, which leads to a significant and not merely temporary conflict of interest.

In accordance with the specifications of the rules of procedure, all members are under 70 years of age not only at the time of their respective election but also at the beginning of 2022. Four members are between 61 and 69 years of age, six members between 50 and 60 years of age and two members between 40 and 50 years of age, which means that different age groups are adequately represented on the Supervisory Board.

It is the view of the Supervisory Board that all shareholder representatives are independent. They are Matthias Wierlacher, Elke Eckstein, Prof. Dr. Ursula Keller, Doreen Nowotne, Evert Dudok, and Heinrich Reimitz. It is the opinion of the Supervisory Board that Mr. Reimitz, who has been a member of the Supervisory Board for 13 years, continues to be as independent as Mr. Dudok, despite the recommendation of Section C.7 of the Code.

Mr. Reimitz is the financial expert on the Audit Committee and has special knowledge, experience and expertise in the areas of accounting, auditing and internal control processes. As a result of his many years of service, he is particularly familiar with the processes of preparing and reviewing Jenoptik's financial information and monitoring the independence of the auditor. The quality of the work of the Audit Committee and the Supervisory Board as a whole is particularly enhanced by this expertise. This in no way detrimental to his independence from the company.

The Supervisory Board is also of the opinion that Mr. Dudok's activity as Executive Vice President of Connected Intelligence at Airbus Defense & Space is not detrimental to his independence, especially as a contract was concluded in November 2021 for the sale of Jenoptik's VINCORION division, which, in addition to Light&Optics has business relationships with the Airbus Group. Furthermore, none of the transactions between VINCORION, Light&Optics and Airbus concerned the business unit for which Mr. Dudok is responsible at Airbus. All transactions with the Airbus Group are not material for the Jenoptik Group as revenue in fiscal year 2021 amounted in total to 17.9 million euros (of which 16.5 million euros by VINCORION and 1.4 million euros by Light&Optics), and was therefore less than 2 percent of Jenoptik group revenue.

Further information on the Executive Board and Supervisory Board, in particular on their working methods, including work in the committees, participation in meetings, and other mandates held by members, can be found in the Supervisory Board Report from page 10 on and in the Notes from page 242 on.

Further Information on Corporate Governance


Annual General Meeting

JENOPTIK AG shareholders exercise their rights at the Annual General Meeting which takes place at least once a year. Each share is accorded one vote – there are no special voting rights. The shares of JENOPTIK AG are registered shares. The holders of the shares must be entered in the share register of JENOPTIK AG and disclose the information required by law and the Articles of Association. Only shareholders recorded in the share register are entitled to vote at the Annual General Meeting. They may either participate directly in the Annual General Meeting, or exercise their voting rights via a company-nominated proxy who is bound by the shareholder's instructions, via postal voting, or by authorizing a person of their choice. The shareholders are adequately supported by the company in this process. The use of electronic means of communication, in particular the Internet, makes it easier for shareholders to participate in the Annual General Meeting. The documents and information required by law for the Annual General Meeting are available on our website www.jenoptik.com in the category Investors/Annual General Meeting. The speech by a representative of the Executive Board and, after the Annual General Meeting, the attendance and voting results are also published there.

As a result of the coronavirus pandemic and the associated restrictions on meetings, the Executive Board, with the approval of the Supervisory Board, decided to hold the Annual General Meeting in the fiscal year 2021 as a virtual AGM, i.e. without the physical presence of shareholders or their proxies. Consequently, the shareholders were given the opportunity to cast their votes, in particular by means of electronic communication, e.g. via the Internet-based shareholder portal available on the Jenoptik website, and to follow (video and audio) the Annual General Meeting there. The speech by the Executive Board was published in advance on the website and broadcast live on the Internet.


Transparent information

As part of our investor relations work, we report comprehensively on the position and development of the company. In doing so, we follow the principle of providing the participants in the capital market as well as the general public with equal, continual, and current information in order to guarantee as much transparency as possible. We use the Internet in particular for this purpose and information is made available at www.jenoptik.com in the Investors category. Together with the Executive Board, the investor relations team maintains a regular and intensive exchange with participants in the capital market at roadshows, capital market conferences, and other events.

We use the financial reports and releases to provide extensive information about the Group's earnings, assets, and finances four times a year. In addition, important events and current developments are reported in press releases. In accordance with the statutory requirements of the Regulation on Market Abuse, insider information is published immediately and simultaneously worldwide in German and English, insofar as JENOPTIK AG is not, in individual cases, exempt from this publication. These documents, presentations, the financial calendar, the Articles of Association and further information are also available in German and English on the Jenoptik website at www.jenoptik.com. 

Jenoptik immediately publishes major changes to its shareholder structure when it is informed that reportable voting rights targets have been achieved, missed or exceeded. All publications are available on the JENOPTIK AG website under www.jenoptik.com in the category Investors/Share/Voting rights announcements. Further information can also be found in the Notes in the section on Equity.

Directors' dealings

In the 2021 fiscal year, none of the members of the Executive Board or the Supervisory Board or persons closely related to them disclosed any reportable securities transactions pursuant to Article 19 of the EU Market Abuse Regulation. 

Accounting and auditing

Jenoptik prepares the Consolidated Financial Statements as well as Consolidated Interim Financial Statements in accordance

with the International Financial Reporting Standards (IFRS) and the additional requirements of commercial law according to § 315e (1) of the German Commercial Code (HGB), as they are to be used in the European Union. JENOPTIK AG's Financial Statements, which are decisive for the dividend payment, are compiled in accordance with the requirements of the German Commercial Code (HGB) and the German Stock Corporation Act. The Consolidated Financial Statements and the Annual Financial Statements, including the Combined Management Report, are examined by the auditor. On June 9, 2021, the Annual General Meeting selected Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart ("EY") as the auditor for fiscal year 2021 on the recommendation of the Supervisory Board. EY was initially appointed in the 2016 fiscal year following an external tender. The position of responsible auditor for the auditing of the Consolidated Financial Statements and the Financial Statements as well as the Combined Management Report was taken on for the third time by Steffen Maurer. In 2021, the auditor's report is signed by Steffen Maurer and Uwe Pester. In 2019 and 2020 it was signed by Michael Blesch and Steffen Maurer, and from 2016 to 2018 by Michael Blesch and Uwe Pester. The statutory provisions and rotation obligations have been fulfilled.

The Supervisory Board has agreed with the auditor that he shall inform the Supervisory Board Chairman of all important events and findings that emerge during the audit. This includes occasions when inaccuracies are detected during the audit in the Declaration of Conformity submitted by the Executive Board and Supervisory Board in accordance with § 161 of the German Stock Corporation Act.

Before submitting the proposal for the election of the firm to the Annual General Meeting, the Supervisory Board received a declaration of independence from the auditing firm, stating that there were no employment, financial, personal or other links between EY, its board members and audit managers on the one side and the company and its board members on the other, that could give rise to doubts about the independence of the auditor. EY also reported in its declaration on the scope of the non-audit services have been provided for Jenoptik over the past fiscal year or which have been contractually agreed for the current year. In the summer of 2021, the Audit Committee reviewed EY's non-audit services provided in the past year and adapted the catalog of approved, predefined non-audit services to the new regulatory requirements of the Financial Market Integrity Strengthening Act (FISG).



For further information on investor relations activities, please refer to the section "The Jenoptik share"



Directors' Dealings reports from prior years can be found at www.jenoptik.com under the category Investors/Corporate Governance/ Directors' Dealings

Information and Notes Relating to Takeover Law

Explanatory Report in accordance with § 176 (1) (1) of the German Stock Corporation Act (AktG) and Reporting on § 289 a and § 315 a of the German Commercial Code (HGB) in accordance with the German Takeover Directive Implementation Act

This information is part of the Combined Management Report.

1. Composition of the share capital

As of the balance sheet date on December 31, 2021, the subscribed capital totaled 148,819 thousand euros (prior year: 148,819 thousand euros). It is divided into 57,238,115 no-par value registered shares (prior year: 57,238,115). Each share is therefore worth 2.60 euros of the nominal capital.

The same rights and obligations apply to all the shares of the company. Each share represents one vote at the Annual General Meeting and is the determining factor for the shareholders' proportion of company profits (§ 58 (4), § 60 of the German Stock Corporation Act (AktG)). The shareholders' rights also include the subscription right to shares in the event of increases in capital (§ 186 of the German Stock Corporation Act). In addition, the shareholders are entitled to administrative rights, e.g. the right to participate in the Annual General Meeting and the authority to put forward questions and motions and to exercise their right to vote. The shareholders' additional rights and duties are defined in the German Stock Corporation Act, in particular in § 12, 53 a ff., § 118 ff., and § 186. Under § 4 (3) of the Articles of Association, any claim by a shareholder to the securitization of their shares is excluded.

2. Restrictions relating to voting rights or the transfer of shares

In accordance with § 136 (1) of the German Stock Corporation Act, legal restrictions affecting voting rights exist with respect to votes for annual approval of the actions regarding shares which are held directly or indirectly by members of the Execu-

tive and/or Supervisory Boards. Violations of reporting obligations as specified in § 33 (1) or (2) and § 38 (1) or § 39 (1) of the German Securities Trading Act may nullify voting rights, at least temporarily, in accordance with § 44 of this Act.

Pursuant to § 67 (2) of the German Stock Corporation Act, rights and obligations arising from shares shall exist in relation to JENOPTIK AG only for and against those persons entered in the share register. To be recorded in the share register, shareholders must provide JENOPTIK AG with the information required by law (name or company name, address, registered office if applicable, email address, date of birth and number of shares they hold). Also to be disclosed in accordance with the Articles of Association is the extent to which the shares are owned by the person who is recorded as the holder in the share register. Shareholders who do not comply with these disclosure obligations may not exercise their voting rights pursuant to § 67 (2) (2) and (3) of the German Stock Corporation Act.

In connection with Article 19 (11) of the EU Market Abuse Regulation (EU 596/2014) and due to internal group requirements, certain restraints of trade shall apply to members of the Executive and Supervisory Boards and to certain employees in connection with the publication of quarterly statements and reports, preliminary figures as well as the Annual and Consolidated Financial Statements.

3. Direct or indirect participations in the capital exceeding 10 percent of the voting rights

Information on direct or indirect investments in capital which exceed 10 percent of the voting rights can be found in the Group Notes under item 5.16, "Equity", from page 211 on.

4. Holders of shares with special rights conferring controlling powers

There are no shares of JENOPTIK AG that entail special rights.

5. Form of controlling voting rights if employees own shares and do not directly exercise their control rights

There are no employee shareholdings and therefore no resultant control of voting rights.

6. Statutory regulations and provisions of the Articles of Association relating to the appointment and dismissal of Executive Board members and changes to the Articles of Association

The appointment and dismissal of Executive Board members is carried out exclusively in accordance with the statutory regulations of § 84 and § 85 of the Stock Corporation Act and § 31 of the Codetermination Act. In accordance with this, the Articles of Association stipulate in § 6 (2) that the appointment of members to the Executive Board, the revocation of their appointment and the conclusion, modification and termination of contracts for services with members of the Executive Board shall be carried out by the Supervisory Board. In accordance with § 31 (2) of the Codetermination Act, a majority of at least two thirds of the members of the Supervisory Board is required for the appointment of Executive Board members. Revocation of appointment as a member of the Executive Board is only possible for serious due cause (§ 84 (3) of the Stock Corporation Act).

§ 6 (1) (1) of the Articles of Association stipulates that the Executive Board of JENOPTIK AG must comprise at least two members. In the absence of a required Executive Board member, in urgent cases the court must appoint the member on the application of a stakeholder (§ 85 (1) (1) of the Stock Corporation Act). The Supervisory Board can appoint a Chairman of or Spokesperson for the Executive Board (§ 84 (2) of the Stock Corporation Act, § 6 (2) (2) of the Articles of Association).

In accordance with § 119 (1) (5), § 179 (1) (1) of the Stock Corporation Act, changes to the content of the Articles of Association are passed by the Annual General Meeting. However, changes relating purely to the wording of the Articles of Association may be passed by the Supervisory Board in accordance with § 179 (1) (2) of the Stock Corporation Act in conjunction with § 13 (3) of the Articles of Association. This also includes the corresponding adaptation to the Articles of Association following the utilization of the Authorized Capital

2019 and of the Conditional Capital 2021. According to § 24 (1) of the Articles of Association, resolutions by the Annual General Meeting require a simple majority of the votes cast unless stipulated otherwise by law. In those cases in which the law requires a majority of the nominal capital represented for a resolution to be passed, a simple majority of the nominal capital represented is sufficient, unless specified otherwise by the law.

7. Authority of the Executive Board to issue and buy back shares

In accordance with § 4 (5) of the Articles of Association, the Executive Board is authorized until June 11, 2024, with the consent of the Supervisory Board, to increase the nominal capital of the company by up to 44.0 million euros through one or multiple issues of new, no-par value registered shares against cash and/or contribution in kind ("Authorized Capital 2019"). With the consent of the Supervisory Board, the Executive Board is authorized to preclude subscription rights for shareholders in certain cases: a) fractional amounts; b) capital increases against contributions in-kind in particular also within the framework of business combinations or the acquisition of companies, units of companies or investments in companies (including increasing existing investments) or other contributable assets in conjunction with such an intended acquisition as well as claims against the entity; c) capital increases against cash contributions, under the condition that the percentage of any new shares in the share capital does not in total exceed 10 percent of the share capital at the time the authorized capital is registered or in total 10 percent of the share capital at the time the new shares are issued, taking into consideration resolutions of the AGM or the use of other authorizations to preclude subscription rights in a direct or corresponding application of § 186 (3) (4) of the German Stock Corporation Act since the effective date of this authorization and the issuance price of the new shares is not to be significantly lower than the stock market price; d) issuances of new shares to employees of the entity and to associates in which the entity holds a majority interest.

All aforementioned authorizations to exclude subscription rights are limited to a total of 10 percent of the share capital available at the time this authorization becomes effective – or, if this value is lower – to 10 percent of the share capital at the time this authorization is exercised. This limit of 10 percent includes shares that (i) are issued for the purpose of servicing

warrants and/or convertibles that were or could still be issued during the period of validity of the authorized capital to the exclusion of subscription rights or (ii) are sold by the entity as treasury shares during the period of validity of the authorized capital to the exclusion of subscription rights. Decisions on the details of the issuance of new shares, in particular their conditions and the content of rights of the new shares, are taken by the Executive Board, with the consent of the Supervisory Board. The Authorized Capital 2019 has not yet been utilized.

A shareholder resolution passed at the Annual General Meeting on June 9, 2021, empowered the Executive Board, with the consent of the Supervisory Board, to issue warrants and/or convertible bonds with a maximum total nominal value of 300 million euros. In order to grant shares to the holders/creditors of such option and/or convertible bonds, the company's nominal capital is conditionally increased by up to 14.95 million euros through the issue of up to 5,750,000 million no-par value registered shares ("Conditional Capital 2021") in accordance with § 4 (6) of the Articles of Association. The conditional capital increase will be implemented only to the extent that

- creditors or holders of option and/or conversion rights arising from option and/or convertible bonds issued by the entity, or by a domestic and/or foreign corporation in which the entity either directly or indirectly holds a majority interest, make use of their option or conversion rights by June 8, 2026 as resolved by the shareholders in their Annual General Meeting resolution dated June 9, 2021, and/or
- the creditors of the issued convertible bonds obliged to exercise their conversion rights issued by the company or a domestic or foreign company in which the company has a direct or indirect majority stake, on the basis of the resolution of the Annual General Meeting on June 9, 2021, fulfill their conversion rights by June 8, 2026 and/or the shares are tendered

and neither treasury shares are used nor payment is made in cash. The new shares participate in profits from the start of the fiscal year for which, on the date of their issue, no resolution has yet been passed by the Annual General Meeting in respect of the appropriation of profits. To the extent legally permissible, the Executive Board may, with the consent of the Supervisory Board, determine the profit participation in deviation from this and also from Section 60 (2) AktG, including for a fiscal year that has already passed.

The Executive Board is authorized, with the consent of the Supervisory Board, to exclude the subscription rights of shareholders to the bonds under certain circumstances. Authorization to exclude subscription rights is limited in the sense that the pro rata amount of share capital corresponding to those shares that must be issued after exercising warrant and/or conversion rights/obligations may not account for more than 10 percent of the share capital existing at the time this authorization takes effect or – if the figure is lower – at the time use is made of the authorization. This 10 percent limit also applies to the sale of treasury shares that are excluded from subscription rights during the period of this authorization, and to shares issued during the period of this authorization under authorized capital and for which subscription rights are excluded.

The Executive Board is authorized to set out the further details relating to the conditional capital increase (e. g. terms of the bonds, interest rate, form of interest, specific period, denomination, issue price, option/conversion price, option/conversion period) in the bond terms and conditions.

Further details regarding the resolved authorization can be found in agenda item 8 in the invitation to the 2021 Annual General Meeting, accessible on our website at www.jenoptik.com in the category Investors/Annual General Meeting. The authorization to issue option and/or convertible bonds has not yet been utilized.

According to a resolution passed by the Annual General Meeting on June 5, 2018, the Executive Board is authorized up to June 4, 2023 to purchase treasury no-par value shares not exceeding a proportion of 10 percent of the nominal capital existing at the time the resolution is adopted or – if this amount is lower – at the time of exercising the resolution for purposes other than trading in its own shares. The purchased treasury shares together with treasury shares that the entity had already purchased and still holds (including the attributable shares in accordance with §§ 71a ff. AktG) may not exceed 10 percent of the share capital of the entity. The authorization may be exercised in whole or in part, on a one-off or repeat basis and for one or more authorized purposes. The purchase and sales of treasury shares may be exercised by the entity or, for specific authorized purposes, also by dependent companies, by companies in which the entity holds a majority interest, or by third parties for its or their account. At the decision of the Executive Board, acquisition is, subject to compliance with the principle of equal treatment (§ 53a of the Stock Corporation Act), by purchase via the stock exchange or by means of a public offering

or a public invitation to the shareholders to submit an offer for sale. For the purpose of protecting shareholders against a dilution of their shares, the proposed resolution expressly provides for a restriction of the use of acquired treasury shares in such a way that the total of the acquired shares together with shares issued or sold by the Company during the term of this authorization under another authorization to the exclusion of shareholders' subscription rights or which enable or oblige the subscription of shares is limited to a total of 20 percent of the nominal capital at the time the authorization becomes effective or – if the following value is lower – at the time this authorization is exercised. Further details regarding the buyback of shares are described in agenda item 9 in the invitation to the 2018 Annual General Meeting, accessible on our website at www.jenoptik.com in the category Investors/Annual General Meeting. As of December 31, 2021, the company had no treasury shares.

8. Key agreements in the event of a change of control resulting from a takeover bid

Clauses in contracts concluded by JENOPTIK AG, which apply in the event of a change in control within the ownership structure of JENOPTIK AG following a change of control, exist for the financing agreements described below with a total utilized volume as of December 31, 2021 of approximately 549.6 million euros (prior year: 190.5 million euros).

The conditions for accepting a change in control are formulated differently in each of the loan agreements. For the debenture bond with a total utilized volume of 456.8 million euros (prior year: 69 million euros), a change in control gives the lenders the right to demand the immediate repayment of the loan amount plus the interest accumulated until repayment. For a part of the debenture bond with a total utilized volume of 55 million euros, a change of control applies if one or more persons acting in concert, with the exception of the existing main shareholders on the date the contract is concluded, acquire more than 50 percent of the outstanding nominal capital or more than 50 percent of the voting rights, directly or indirectly at any time. This shall also apply for the new debenture bonds with a utilized volume of 401.8 million euros, whereby voting rights are attributed in accordance with the provisions of § 30 of the Securities Acquisition and Takeover Act (WpÜG).

Under the revolving syndicated loan, every change in the current shareholder base of JENOPTIK AG, under which at least 50 percent of the shares or voting rights are held by one or several persons acting in concert as described in § 2 (5) of the Securities Acquisition and Takeover Act, results in the possibility that lenders (i) may refuse to participate in further disbursements and (ii) terminate loan commitments, in full or in part, and declare due and payable any disbursements executed, in full or in part, including accrued interest. The syndicated loan has a total volume of 400 million euros, of which 92.9 million euros had been utilized by December 31, 2021 (prior year: 121.5 million euros).

9. Compensation agreements by the company with Executive Board members or employees in the event of a change of control

No right to give notice of termination in the event of a change of control, i. e. the acquisition of at least 30 percent of voting rights by a third party, has been agreed with the members of the Executive Board. In such cases, they also have no claim to any severance payment. If the premature termination of an Executive Board role is agreed with an Executive Board member due to a change of control, the amount of a severance payment is limited to a maximum of two years' annual compensation in accordance with the respective recommendations of the German Corporate Governance Code as amended on December 16, 2019. Under no circumstances, however, may the severance payment be greater than the compensation due for the remaining term of the service contract.

Remuneration Report

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- B. Supervisory Board remuneration

With this report, the Executive Board and Supervisory Board are reporting for the first time, according to the new requirements of the Second Shareholder Rights Directive Implementation Act (ARUG II) in accordance with § 162 AktG, on the remuneration granted and owed to the current and former members of the Executive Board and Supervisory Board of JENOPTIK AG and companies of the Jenoptik Group for the fiscal year 2021, including a comparative presentation of the annual change in remuneration for the members of the Executive Board, the development of the company's earnings and the average remuneration of the employees. The Executive Board and Supervisory Board have decided to subject this remuneration report not only to the formal completeness check required by law but also to a substantive review. The Audit Committee commissioned Ernst & Young Wirtschaftsprüfungsgesellschaft GmbH, Stuttgart, to carry out this audit at its meeting on August 10, 2021.

In terms of revenue and profitability, the fiscal year 2021 was another record year for Jenoptik. Even with the inclusion of VINCORION, the Group performed excellently, with revenue growth of 16.8 percent compared with the prior year and an EBITDA margin of 19.8 percent. Compared to the prior year, revenue from the continuing operations even grew by 22.0 percent. At the same time, these segments achieved an EBITDA margin of 20.7 percent. Even excluding one-off effects in connection with the acquisitions of Trioptics and Interob, the EBITDA margin for the continuing operations was, at 16.7 percent, higher than that of the prior year (15.1 percent). In line with the "Pay for Performance" principle, this performance by Jenoptik is also reflected in the variable remuneration for the Executive Board.

A Remuneration for the Executive Board

I. Executive Board remuneration system

Following preparation by the Personnel Committee, the Supervisory Board is responsible for specifying the remuneration system and determining the total remuneration for the individual Executive Board members. The criteria for defining the appropriateness of the individual total remuneration are primarily the respective tasks and areas of responsibility of the members of the Executive Board, their personal performance, as well as the economic situation, the success of the company and its future prospects. Standard practice within the comparative environment and in relation to established comparative groups within the company is another factor in the remuneration.

Jenoptik’s corporate strategy focuses on its core expertise in photonics and optics, combined with increased investment in research and development and an active portfolio management. At the same time, Jenoptik wants to grow globally. It is the aim of the remuneration system for members of the Executive Board to provide incentives for implementing this corporate strategy by setting ambitious targets in line with the strategic objectives. In a similar way to the control system, the remuneration system is geared toward the long-term corporate strategy and is also aligned with the Group’s short to medium-term objectives. The company control system’s performance criteria are used to assess the performance of the Executive Board. The long-term targets are in line with envisaged business performance and shall enable a clear assessment of its attainment. A multi-year variable remuneration component and a consideration of sustainability criteria (environmental, social, governance – ESG criteria) in the one-year variable remuneration shall promote Jenoptik’s long-term and sustainable development.

G05 An overview of the remuneration system

Relative share of total target remuneration	Remuneration components	Description
35%–40%	Basic salary	<ul style="list-style-type: none"> - Scheme type: Target bonus model - Limit: max. 200% of target amount - Performance criteria: <ul style="list-style-type: none"> • 40% revenue growth • 40% EBITDA margin • 20% cash conversion rate • Multiplier (0.8 to 1.2) to assess individual and collective performance of the Executive Board and ESG targets
<2%	Fringe benefits	
12%–15%	Company pension plan	<ul style="list-style-type: none"> - Scheme type: Virtual performance share plan - Performance period: Four years - Limit: <ul style="list-style-type: none"> • Target attainment: max. 150% per target • Payout: max. 200% of target amount - Performance criteria: <ul style="list-style-type: none"> • 30% return on capital employed (ROCE) • 70% relative total shareholder return (TSR) compared to TecDax
17%–23%	One-year variable remuneration	
25%–30%	Multi-year variable remuneration	<ul style="list-style-type: none"> - Opportunity to reduce one-year variable via the multiplier in the sense of a malus - Right of the company to repayment of the multi-year variable (clawback)
	Malus & clawback	
	Maximum remuneration pursuant to § 87a(1)(2) AktG	<ul style="list-style-type: none"> - Chairman of the Executive Board: 2,550,000 euros p.a. - Ordinary member of the Executive Board: 1,800,000 euros p.a.

If the targets set are not met, the variable remuneration may be reduced to zero. At the same time, if the targets are exceeded, it can only increase up to a clearly defined upper limit (“cap”) in terms of amount, thereby avoiding an incentive to take excessive risks.

The system of remuneration applicable for the Executive Board in fiscal year 2021 was decided by the Supervisory Board with the assistance of an independent external remuneration advisor and approved at the Annual General Meeting on June 9, 2021 with a majority of 75.96 percent of the votes. The remuneration system is published on the Jenoptik website at www.jenoptik.com/about-jenoptik/management/executive-board-and-executive-management-committee-emc. Chapter A. III. 4 of this remuneration report makes reference to the planned renewed revision of the remuneration system.

Moreover, for Hans-Dieter Schumacher, the remuneration system applicable until 2017 will continue to have consequences, as the virtual shares allocated to him from 2015 to 2017 will be paid out in the years 2020 to 2022. Further details can be found on page 46 of the 2017 Annual Report.

II. Fixing of total target remuneration, appropriateness of Executive Board remuneration

The Supervisory Board has determined the amount of the total target remuneration for the members of the Executive Board in accordance with the remuneration system for Executive Board members. The remuneration for the Executive Board members for 2021 is in line with the remuneration system approved by the 2021 Annual General Meeting. The total target remuneration for Dr. Stefan Traeger increased by 75,000 euros in fiscal year 2021, of which 50,000 euros are for the fixed remuneration, 10,000 euros for the bonus and 15,000 euros for the multi-year variable remuneration. The total target remuneration of Hans-Dieter Schumacher remained unchanged.

T06 Target remuneration for the 2021 fiscal year in euros

	Dr. Stefan Traeger President & CEO			Hans-Dieter Schumacher Executive Board member		
	Target remuneration	Min.	Max.	Target remuneration	Min.	Max.
Non-performance-related remuneration						
Fixed remuneration	650,000	650,000	650,000	450,000	450,000	450,000
Fringe benefits	18,250	18,250	18,250	21,532	21,532	21,532
Pension contribution	200,000	200,000	200,000	160,000	160,000	160,000
Total	868,250	868,250	868,250	631,532	631,532	631,532
Performance-related remuneration						
One-year variable remuneration (bonus for fiscal year 2021)	320,000	0	640,000	200,000	0	400,000
Multi-year variable remuneration						
of which performance shares 2021	430,000	0	860,000	300,000	0	600,000
Total	750,000	0	1,500,000	500,000	0	1,000,000
Total remuneration	1,618,250	868,250	2,368,250	1,131,532	631,532	1,631,532

Maximum remuneration. The maximum remuneration (including pension contributions and fringe benefits) set by the 2021 Annual General Meeting for members of the Executive Board is 2,550,000 euros per fiscal year for the Chairman of the Executive Board and 1,800,000 euros for ordinary members of the Executive Board. The basic remuneration is a fixed value. The upper limits for the one-year and multi-year variable remuneration granted and owed in 2021 – as shown in table T12 – were not reached. Although achievement of the performance targets for the 2021 installment of performance shares will not be measured until the first quarter of 2025, it is already certain that, even if the maximum target is achieved in 2025, the fixed maximum remuneration for the fiscal year 2021 will be met.

Customary level of the specific total remuneration in comparison with other companies and within the company. The review of the appropriateness of the remuneration was conducted by comparing the customary level of remuneration with companies listed on the TecDax and SDax that are comparable in terms of country, size, and sector with Jenoptik. In addition, a vertical review was also undertaken with the remuneration of managers and the workforce as a whole.

III. Specific configuraion of the remuneration system

The remuneration for the Executive Board of Jenoptik consists of non performance-related and performance-related components.

1. Non-performance-related remuneration components

Fixed remuneration. The non-performance-related basic salary is paid on a pro rata basis each month. In 2021, it totaled 650,000 euros for Dr. Stefan Traeger (prior year: 600,000 euros) and 450,000 euros for Hans-Dieter Schumacher (prior year: 450,000 euros).

Retirement benefits. Agreements relating to occupational retirement benefits were concluded with the members of the Executive Board. The pension commitment is based on a pension fund reinsured by a life insurance policy. This is a defined contribution scheme within the framework of a provident fund. The annual and the long-term costs for Jenoptik are clearly defined. On reaching retirement age, the payouts will no longer affect Jenoptik – with the exception of a possible subsidiary liability. In 2021, the contributions for the provident fund totaled 200,000 euros for Dr. Stefan Traeger and 160,000 euros for Hans-Dieter Schumacher. They have remained unchanged for Dr. Stefan Traeger since he joined in 2017 and for Hans-Dieter Schumacher since he joined in 2015. The surrender value of the pension commitment in accordance with § 169 of the German Insurance Contract Act (VVG) amounted to 895,746 euros for Dr. Stefan Traeger and 1,072,198 euros for Hans-Dieter Schumacher as of December 31, 2021.

Fringe benefits. There is accident insurance and directors' and officers' liability insurance for the members of the Executive Board. The latter comprises the contractual obligation to pay a deductible amounting to 10 percent of the loss per claim, however up to a maximum sum of 150 percent of the fixed remuneration of the respective Executive Board member. Executive Board members are also entitled to the private use of a company vehicle.

2. Performance-related remuneration components

The **variable remuneration** of the Executive Board is based on target agreements concluded with the respective member of the Executive Board in the first quarter of each calendar year. Jenoptik's long-term and sustainable development is thereby promoted by a multi-year variable remuneration component and a consideration of sustainability criteria (environmental, social, governance – ESG criteria) in the one-year variable remuneration. The same targets are agreed upon with both members of the Executive Board, as the Executive Board functions as a team and implements the targets together.

The variable remuneration comprises two components:

The (one-year) **bonus** (approx. 40 percent of the variable remuneration) is based on the achievement of certain targets within a fiscal year and is paid in the subsequent year.

The second part of the variable remuneration (approx. 60 percent of the variable remuneration) is granted in the form of so-called **performance shares**. To this end, virtual shares are allocated to the members of the Executive Board on an annual basis. For each installment of performance shares granted, the target attainment is determined at the end of a four-year performance period and the amount resulting from a predefined calculation method is paid out.

The total variable remuneration for 2021 may fall between 0 euros and a maximum of 1,500,000 euros for Dr. Stefan Traeger and between 0 euros and a maximum of 1,000,000 euros for Hans-Dieter Schumacher. The value of 0 euros results when less than 50 percent of all targets are achieved. For the respective maximum amount, 200 percent of the targets for one-year variable remuneration and 150 percent of the targets for multi-year variable remuneration must be achieved.

a) Bonus.

(i) **System of bonuses.** 40 percent of the bonus is dependent on the Group's revenue growth: 75 percent of this target (i.e. 30 percent of the bonus) is reached at 100 percent if the revenue growth from the annual plan adopted by the Supervisory Board for the Jenoptik Group is achieved for the corresponding year without taking into account companies or parts of companies acquired or sold. 25 percent of the revenue growth target (i.e. 10 percent of the bonus) is reached at 100 percent if a certain level of revenue attributable to new acquisitions is achieved (regardless of the acquisition date in relation to the entire fiscal year). 40 percent of the bonus is calculated on the basis of the EBITDA margin contained in the annual plan. The third sub-target, with a 20 percent share of the bonus, is reached at 100 percent if the ratio of free cash flow to EBITDA for the year in question (the so-called "cash conversion rate") reaches the value from the annual plan approved by the Supervisory Board, adjusted for cash effects from special projects not included in the plan.

The yardstick for determining the degree of target attainment does not need to be linear. This means that a target attainment of 200 percent does not necessarily require a doubling of the initial value of the financial key indicator, in the same way as a 50 percent target attainment does not necessarily have to be achieved at half of the originally defined financial baseline for 100 percent. The precise calibration of the targets is based on historical experience and future expectations, as well as the adopted budget of the respective year.

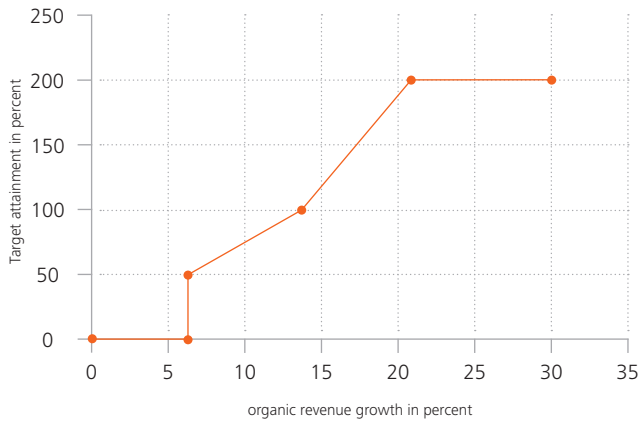
(ii) **Targets for 2021.** The financial targets agreed with the members of the Executive Board for 2021 were:

T07 Financial targets agreed for 2021

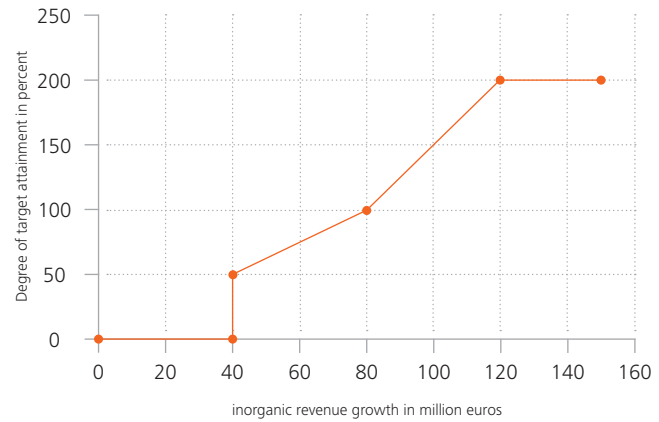
Target	Weighting with target attainment of 100%	Targets for 2021 in %		
		100	50 (lower Cap)	200 (upper Cap)
Organic revenue growth in % (acquisitions and divestments are deducted in 2020 and 2021)	30%	13.7	6.9	20.6
Inorganic revenue growth in million euros (with regard to the complete calendar year)	10%	80.0	40.0	120.0
EBITDA margin in %	40%	16.4	11.0	21.0
Cash conversion rate (excluding cash effects from special projects not included in planning)	20%	55.7	25.0	80.0

The following charts illustrate the target attainment curves for the 2021 bonuses:

G06 Organic revenue growth

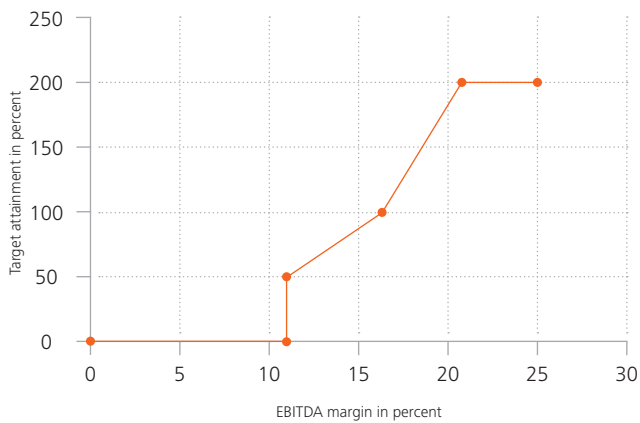


G07 Inorganic revenue growth

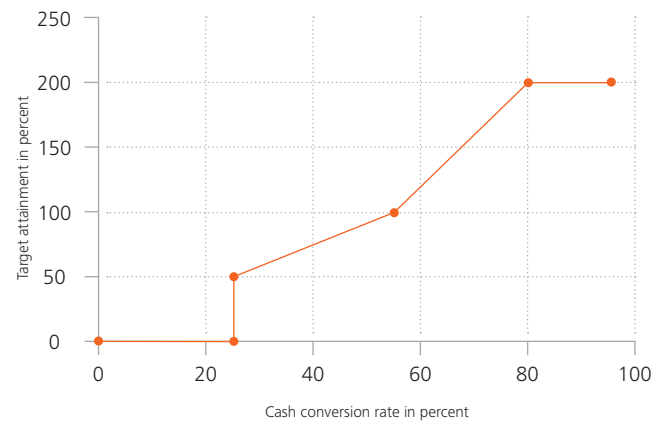


Corporate Governance
25
60

G08 EBITDA margin



G09 Cash conversion rate



To take account of non-financial aspects, the bonus amount for the respective Executive Board member resulting from the target attainment is then multiplied by a performance factor, the so-called multiplier. Its value can be between 0.8 and 1.2. The multiplier is determined on the basis of the individual performance of the Executive Board member, the collective performance of the Executive Board as a whole and the non-financial targets. These targets are derived from the Jenoptik Group's ESG road map described in the Sustainability Report and published on our website at www.jenoptik.com/sustainability/sustainability-targets. They correspond with the ESG targets agreed as part of group financing. The non-financial targets agreed for 2021 and their attainment are shown in table T09.

The Supervisory Board can use the multiplier to reduce the variable bonus in the sense of a malus arrangement by up to 20 percent even if the financial targets are met or exceeded, if, for example, the behavior of the Executive Board member strongly warrants it, but is not serious enough to justify termination or liability due to breach of duty or a reduction in remuneration in accordance with § 87 (2) of the German Stock Corporation Act (AktG) is not possible.

With 100 percent target attainment and a multiplier of 1.0 for the fiscal year, Dr. Stefan Traeger receives a bonus of 320,000 euros and Hans-Dieter Schumacher of 200,000 euros. In each case, the bonus for 2021 for Dr. Stefan Traeger is limited to a maximum of 640,000 euros, and for Hans-Dieter Schumacher to 400,000 euros. The bonus is paid in cash with the payroll after the target settlement and adoption of the annual financial statements.

G10 One-year variable remuneration (bonus)

		12 months				
Target	Target attainment (0% – 200%)				Payout (cap 200% of the target)	
	×	Financial targets	×	Multiplier (0.8 – 1.2)		=
		30 % organic revenue growth	+	Individual performance		
		10 % revenue of newly acquired companies	+	Collective performance of the Executive Board		
		40 % EBITDA margin	+	ESG targets		
	20 % cash conversion rate	+				

(iii) **Target attainment 2021.** On the basis of its assessment, and taking into account all relevant aspects for the fiscal year 2021, the Personnel Committee of the Supervisory Board has decided to propose to the Supervisory Board that a multiplier of 1.15 be used for both members of the Executive Board. When doing so, particular account was also taken of the fulfillment of the non-financial targets shown in table T09, but also of the individual contributions to the strategic further development of Jenoptik. These include the conclusion of new group financing with ESG components with a volume of up to 1 billion euros, the acquisition of BG Medical Applications GmbH and the SwissOptic Group, as well as the signing of a contract to sell VINCORION. Added to this is the further development and adoption of the Group's new "More Value" strategy.

The actual target attainment of the one-year variable remuneration for 2021 and the resulting payments for the fiscal year 2021 are as follows:

T08 Target attainment of the one-year variable remuneration for 2021 and payment in euros

Indicator	Fiscal year 2021 Actually attained	Target attainment in %	Payment to Dr. Stefan Traeger	Payment to Hans-Dieter Schumacher
Organic revenue growth in % (acquisitions and divestments are deducted in 2021)	16.6	142.35	136,659	85,412
Inorganic revenue growth in million euros (with regard to the complete calendar year)	123.8	200.00	64,000	40,000
EBITDA margin in %*	16.7	106.91	136,843	85,527
Cash conversion rate (excluding cash effects from special projects not included in planning)	42.9	79.21	50,696	31,685
Subtotal			388,198	242,624
Multiplier			1.15	1.15
Total			446,428	279,017

* Total Group including VINCORION and without one-off effects in connection with the acquisition of TRIOPTICS and INTEROB

T09 Target attainment of non-financial objectives

		2021 target	Target attainment
Diversity rate	Increase in diversity: Number of managers with an international background and female managers Calculation: $\sim \emptyset$ (proportion of international managers + proportion of female managers)	29%	29%
Vitality Index	Increase in innovative strength: percentage of revenue generated by products and services developed within the last 3 years	18.5%	19%
CSR rate	Increased transparency in the supply chain to protect human rights and the environment: CSR rate: the percentage of suppliers of production materials with an annual purchase volume in excess of 200,000 euros for which full CSR self-assessments are available.	Switch to platform solution "Integrity Next", where all suppliers with a purchase volume of more than 200,000 euros are taken into account	achieved
Green electricity rate	Active reduction of the CO₂ emissions: Green electricity share as a proportion of the total electricity demand used by the main production sites	66.5%	76%
Employee satisfaction	Global Engagement Score: Commitment of our employees, i.e. 76% of our employees identify positively with their duties at Jenoptik in 2021 and are active participants.*	>76%	72%

* The main reason for the Global Engagement Score falling short of the target value are the personnel adjustments in the Light & Production division in Germany and the US

b) Performance shares.

(i) **System of the performance shares.** Based on a value of 430,000 euros for Dr. Stefan Traeger and 300,000 euros for Hans-Dieter Schumacher (“initial value” for 2021), performance shares are to be provisionally allocated to the member of the Executive Board in the first quarter of each fiscal year, usually at the balance sheet meeting of the Supervisory Board in the second half of March.

In order to calculate the provisional number of performance shares to be allocated, the initial value with effect from the 2021 installment is divided by the volume-weighted average price (“VWAP”) of the Jenoptik share on the last 60 trading days of the fiscal year preceding the provisional allocation (up to and including the 2020 installment on the 20 trading days following the announcement of the preliminary annual figures for the fiscal year preceding the provisional allocation). The VWAP for the specified 2021 period was 24.114 euros. Consequently, Dr. Stefan Traeger was provisionally allocated a total of 17,832 performance shares and Hans-Dieter Schumacher 12,441 for the 2021 installment. Long-term performance targets are agreed for each installment, the achievement of which is measured at the end of each four-year “performance period”. For the performance shares provisionally allocated in 2021, the measurement will take place at the beginning of 2025.

The performance shares not yet paid out are:

T10 Performance shares

Installment	Number of provisionally allocated performance shares		Payout year
	Dr. Stefan Traeger	Hans-Dieter Schumacher	
2018	14,202	10,652	2022
2019	12,512	9,384	2023
2020	18,933	13,687	2024
2021	17,832	12,441	2025

(ii) **Targets for the 2021 installment.** The performance targets to be attained over the performance period are the return on capital employed (ROCE) with a weighting of 30 percent and the total shareholder return (TSR) of Jenoptik compared with the TecDax with a weighting of 70 percent.

An average ROCE of 14 percent (16 percent up to and including the 2020 installment) is currently set as the target value for the ROCE target. A target attainment of 50 percent is achieved for the ROCE target if the average ROCE achieved over the performance period is 5 percentage points below the target (“lower cap”). If the average ROCE achieved is more than 5 percentage points below the target value, target attainment is 0 percent. The target attainment for the ROCE target can be a maximum of 150 percent. This is achieved if the average ROCE over the performance period is 5 percentage points or more above the target value (“upper cap”). Exceeding the ROCE target value by more than 5 percentage points does not result in a higher target attainment

The ROCE is calculated by dividing EBIT by the average capital employed. The average capital employed comprises non-current non-interest-bearing assets (e.g., intangible assets including goodwill, property, plant, and equipment, and investment properties) and current non-interest-bearing assets (essentially made up of inventories, receivables from the operating business, and other current receivables), less non-interest bearing borrowings (e.g., provisions – excluding pensions and taxes –, liabilities from the operating business, and other current liabilities). The calculation of averages uses the twelve month-end balances in the period under review and the opening balance at the start of the year.

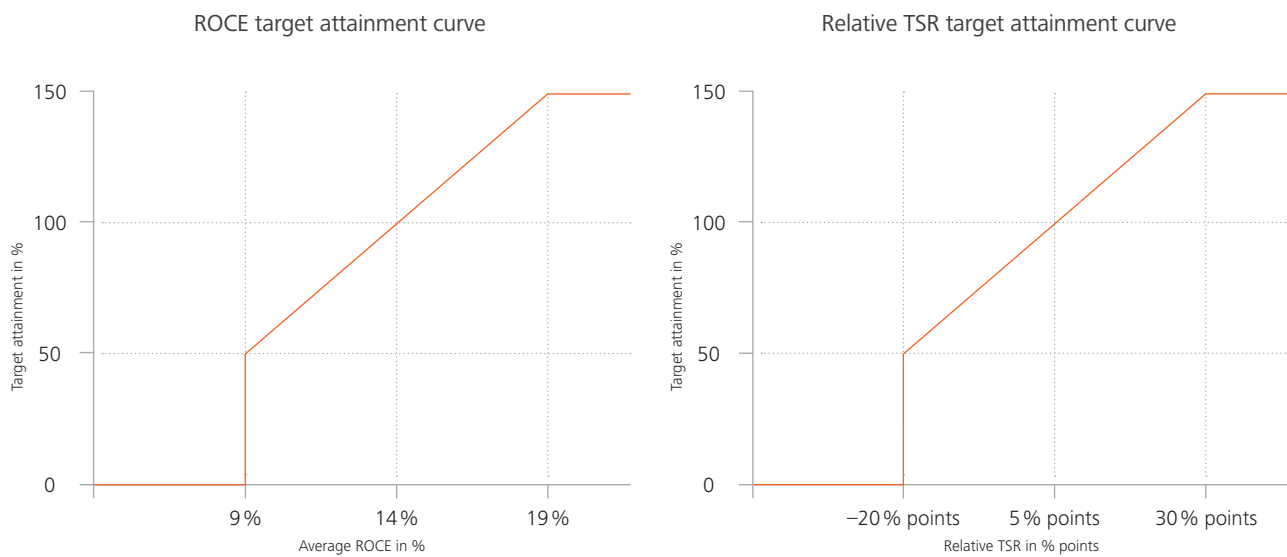
A relative TSR of plus 5 percentage points is set as the target value for 100 percent target attainment of the TSR target, i.e., the performance of the Jenoptik share price, including dividend, over the performance period exceeds the performance of the TecDax by 5 percentage points. A relative TSR of minus 20 percentage points equates to a target attainment of 50 percent (“lower cap”).

If the relative TSR is lower than minus 20 percentage points, target attainment falls to 0 percent. Similarly, target attainment is capped at an upper limit of 150 percent, and is achieved with a relative TSR of plus 30 percentage points or more (“upper cap”).

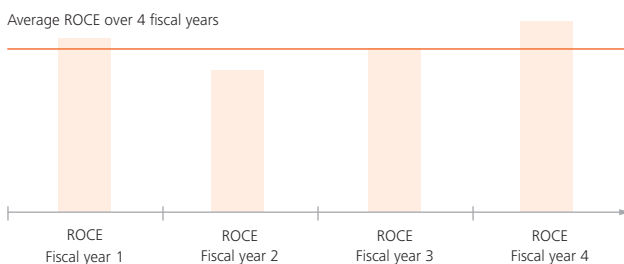
The relative TSR is determined as the difference in percentage points between the change in the Jenoptik share price including reinvested dividends and the change in the TecDax performance index.

Again, the yardstick for determining the degree of target attainment does not need to be linear here.

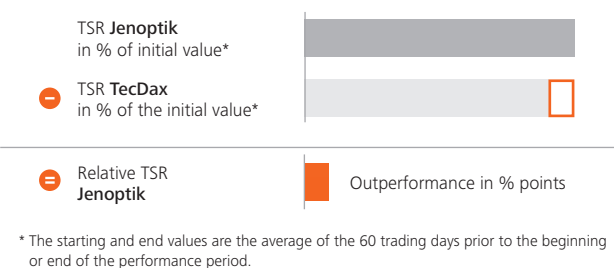
G11 The multi-year variable remuneration – target attainment curves



Calculation of the ROCE



Calculation of the relative TSR



(iii) Calculation of the payout amount for the 2021 performance share installment in 2025. Depending on the level of target achievement, the number of performance shares to be finally allocated is determined at the end of the four-year performance period. It is limited to one and a half times the number of provisionally allocated performance shares (“allocation cap”). If the level of target attainment is less than 50 percent, the entitlement to final allocation of performance shares shall no longer apply.

The number of finally allocated performance shares is multiplied by the VWAP of the Jenoptik share on the last 60 trading days of the last fiscal year of the performance period (“payout rate”). The resulting amount shall be paid after the adoption of the annual

financial statements. The payout amount is limited to a maximum of 200 percent of the initial value, i.e. 860,000 euros for Dr. Stefan Traeger for the 2021 installment and 600,000 euros for Hans-Dieter Schumacher ("payout cap").

In the event of termination of the Executive Board mandate, performance shares which have not yet been allocated finally, but only provisionally, shall not be prematurely finally allocated and paid out, but evaluated, allocated and then paid out in accordance with the regular procedure at the end of the respective performance period. Should JENOPTIK AG terminate the employment relationship for a good reason for which the member of the Executive Board is responsible, all provisionally allocated performance shares for which the performance period has not yet expired shall be forfeited without substitution or compensation.

The Executive Board service contracts contain provisions for capital and conversion measures and the event of a delisting, which are aimed at ensuring that the performance shares are financially equivalent to real shares.

(iv) **Calculation of the payout amount for the 2018 performance share installment and the 2017 LTI installment (for Hans-Dieter Schumacher):** The fiscal year 2021 was the last year of the performance period of the performance shares provisionally allocated to the members of the Executive Board in 2018 (2018 installment). The long-term variable remuneration is deemed to be granted and owed in the final year of the performance period. The relevant share price for determining the number of performance shares to be provisionally allocated in 2018 was 28.165 euros, so Dr. Stefan Traeger and Hans-Dieter Schumacher were provisionally allocated 14,202 and 10,652 performance shares respectively for the 2018 installment. Of these, 4,261 shares in the case of Dr. Stefan Traeger and 3,196 shares in the case of Hans-Dieter Schumacher related to the ROCE target (30 percent) and 9,941 shares or 7,456 shares respectively to the TSR target (70 percent).

The arithmetic mean of the ROCE achieved for the 2018 to 2021 performance period was 14.9 percent, which, using the target achievement curve (linearly interpolated), corresponded to a target attainment of 89 percent, as the ROCE target for the 2018 installment was 16 percent and the lower cap was 11 percent. Thus, a total of 3,792 performance shares were finally allocated to Dr. Stefan Traeger and 2,844 to Hans-Dieter Schumacher for the performance shares allocated to the ROCE target. The amount to be paid out thereafter was then calculated by multiplying the number of performance shares finally allocated by the volume-weighted average price on the last 60 trading days of the last fiscal year of the performance period ("payout rate"), i.e. 2021. The payout price calculated in this way was 33.906 euros. In 2022, Dr. Stefan Traeger will therefore be paid 128,571.62 euros (equivalent to 3,792 shares * 33.906 euros) and Hans-Dieter Schumacher 96,428.71 euros (equivalent to 2,844 shares * 33.906 euros) for the ROCE sub-target.

As the relative TSR target attainment level in the relevant measurement period was minus 25.4 percentage points (and therefore less than minus 20 percentage points), target attainment was 0 percent. Therefore, no payout was made for the performance shares provisionally allocated in 2018 for the relative TSR target.

T11 Performance share installment 2018

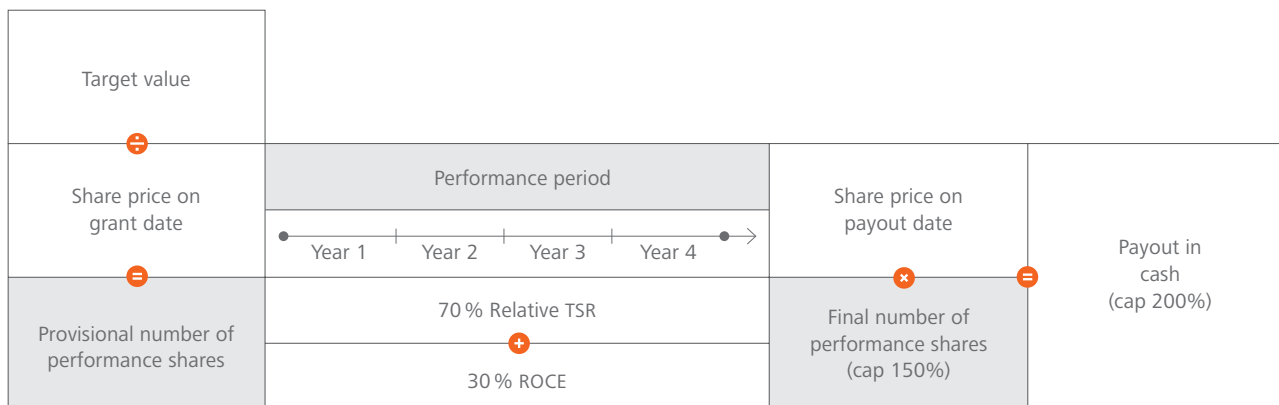
	Number of performance shares provisionally allocated for the 2018 installment (allocation price: 28.165 euros).	ROCE target value for 100 percent target attainment	TSR target value for 100 percent target attainment	ROCE value achieved in % = target attainment	TSR value achieved in % = target attainment	Number of finally allocated performance shares	Payout amount in euros with payout price of 33.906 euros
Dr. Stefan Traeger	14,202, of which 4,261 for ROCE target and 9,941 for TSR target	16 percent	+5 percent	14.9 = 89 percent	-25.4 = 0 percent	3,792	128,571.62
Hans-Dieter Schumacher	10,652, of which 3,196 for ROCE target and 7,456 for TSR target	16 percent	+5 percent	14.9 = 89 percent	-25.4 = 0 percent	2,844	96,428.71

For Hans-Dieter Schumacher, the remuneration system applicable until 2017 will continue to apply, as the virtual shares allocated to him in 2017 will be paid out at the end of the fourth subsequent year after allocation in fiscal year 2022. Hans-Dieter Schumacher was allocated 14,819 virtual shares for 2017 (see Annual Report 2017, p. 50). In the years 2018 to 2021, 563 so-called “dividend shares” were allocated, so a total of 15,382 virtual shares were paid out in 2022. The payout rate corresponds to the volume-weighted average closing price of the Jenoptik share in XETRA trading on the Frankfurt Stock Exchange for the full 2021 year and amounts to 28.151 euros. This resulted in a payout amount of 433,018.68 euros (corresponds to 15,382 shares * 28.151 euros).

(v) **Summary.** The system of remuneration with performance shares is summarized as follows:

- Year 1: Agreement of a performance target for the year 1 installment (“installment 1”) with the member of the Executive Board; provisional allocation of performance shares for installment 1; calculation of the provisional number by dividing the initial value by a VWAP of the last 60 trading days of the prior year.
- Years 1–4: Performance period for installment 1.
- Year 5: Measurement of target attainment, from which determination of the number of final performance shares to be allocated for installment 1, taking into account the allocation cap; multiplication of this final number by a VWAP of the last 60 trading days of year 4. Payout of this amount to the member of the Executive Board, taking into account the payout cap.

G12 Multi-year variable remuneration



3. Other agreements.

Clawback. The company has a right to repayment of the multi-year variable remuneration (so-called clawback) if, within three years after payout of the multiple variable remuneration, it becomes apparent that one of the audited and approved consolidated financial statements during the four-year performance period was objectively incorrect, and therefore had to be subsequently corrected in accordance with the relevant accounting standards. In addition, the Supervisory Board has the option to reduce the one-year variable remuneration by selecting a low multiplier if there are significant reasons relating to the behavior of a member of the Executive Board in addition to any statutory claims for damages under § 93(2) of the AktG or a reduction in remuneration under § 87(2) of the AktG. Should JENOPTIK AG terminate the employment relationship for a good reason for which the member of the Executive Board is responsible, all provisionally allocated performance shares for which the performance period has not yet

expired shall be forfeited without substitution or compensation. There was no reason to exercise this option in the fiscal year 2021, i.e. no variable remuneration components were clawed back.

Third-party benefit commitments. In the past fiscal year, no benefit commitments were promised or granted to any Executive Board member by a third party with regard to his activity as a member of the Executive Board.

Benefit commitments in the event of regular termination of employment. Dr. Stefan Traeger and Hans-Dieter Schumacher are not entitled to payment of bridging payments following their regular departure from the company. Nor was any right of termination agreed with them in the event of a change of control.

Benefits in the event of the premature termination of employment. In the event of a member of the Executive Board being dismissed in accordance with § 84(3) AktG in conjunction with the relevant provisions of the German Codetermination Act, the rights under the employment contract shall remain unaffected. In this case, however, the member of the Executive Board is entitled to terminate the employment relationship extraordinarily and with immediate effect. At the same time, Jenoptik is entitled to release the Executive Board member from his obligation to render services.

In the event that the appointment as member of the Executive Board and the employment contract end prematurely without good cause within the meaning of § 626 BGB, a severance payment may be agreed. This amounts to a maximum of two years' remuneration (plus fringe benefits) or the remuneration due for the remaining term of the service contract, whichever is lower ("severance payment cap"). The annual remuneration comprises the basic remuneration, the variable remuneration components, and the annual pension contribution. For the one-year variable remuneration, a target attainment of 100 percent and a neutral multiplier of 1.0 are assumed. Virtual performance shares that have already been provisionally allocated but whose performance period has not yet expired are not forfeit in the event of premature termination. They are valued in accordance with the normal procedure at the end of the performance period depending on the attainment of the performance criteria, allocated, and paid out.

However, should, the company terminate the employment relationship for a good reason for which the member of the Executive Board is responsible, as per § 626 BGB, all provisionally allocated virtual performance shares for which the performance period has not yet expired shall be forfeited without substitution or compensation.

Non-competition clause. A post-contractual non-competition clause was agreed with Dr. Stefan Traeger for a period of one year following the end of his contract of employment. An amount of 50 percent of the annual remuneration including variable remuneration (with a target attainment level of 100 percent) and pension contributions has been agreed as compensation for the non-competition clause. Any severance payment shall be offset against the compensation. Prior to termination of the employment relationship, Jenoptik may also waive the post-contractual non-competition clause by means of a written declaration.

Ancillary activities. The acceptance of seats on a supervisory board, advisory board or comparable supervisory bodies of companies outside the Group requires the approval of the Supervisory Board.

Rejection of the remuneration system. Should the Annual General Meeting reject the remuneration system and/or the remuneration report, the members of the Executive Board have committed themselves to enter into discussions on an adaptation of the remuneration system.

4. Proposed renewed revision of the remuneration system

As described in the chapters A. III. 2 a) (ii) and (iii), the one-year variable remuneration already provides for a clear reference to ESG targets via the multiplier. Against the background of recent developments with respect to Executive Board remuneration, the Supervisory Board is conscious that the ESG reference of the remuneration should be further expanded and, in future, also become a component of the multi-year variable remuneration.

The multi-year variable remuneration in the current remuneration system is already very strongly linked to the development of the Jenoptik share price via the (virtual) performance share system. However, the remuneration system does not currently allow for any obligation on the part of the members of the Executive Board to hold Jenoptik shares. Here, too, the increasing implementation of share ownership guidelines has resulted in new developments in the area of Executive Board remuneration systems, which the Supervisory Board would like to address within the context of a revision of the remuneration system.

The planned revision of the remuneration system is to be carried out by the newly constituted Supervisory Board following the 2022 Annual General Meeting. Waiting until the Annual General Meeting in 2023 also offers the opportunity to take account of current developments in the area of Executive Board remuneration by the end of 2022 following the last revision in 2020/2021.

IV. Detailed presentation of the total remuneration for the members of the Executive Board.

Table T12 below contains a list of the remuneration components granted and owed to Dr. Stefan Traeger and Hans-Dieter Schumacher for the past fiscal year. In this context, remuneration granted and owed is understood to mean remuneration paid for professional activities performed in the fiscal year 2021, irrespective of whether payout takes place in 2021 or later. The multi-year variable remuneration is deemed to be granted and owed in the last year of the performance period, even if payout is made in the following year, because only then can it be determined that all performance criteria were fulfilled.

T12 Remuneration granted and owed in the 2020 and 2021 fiscal years

	Dr. Stefan Traeger President & CEO				Hans-Dieter Schumacher Executive Board member			
	2021		2020		2021		2020	
	in euros	in %	in euros	in %	in euros	in %	in euros	in %
Non-performance-related remuneration								
Fixed remuneration	650,000	45.0	600,000	49.7	450,000	31.3	450,000	36.5
Fringe benefits	18,250	1.3	18,517	1.5	21,532	1.5	21,008	1.7
Pension contribution	200,000	13.9	200,000	16.6	160,000	11.1	160,000	13.0
Total	868,250	60.2	818,517	67.8	631,532	43.9	631,008	51.1
Performance-related remuneration								
One-year variable remuneration (bonus for 2021 fiscal year)	446,428	30.9	n. a.		279,017	19.4	n. a.	
One-year variable remuneration (bonus for 2020 fiscal year)	n. a.		301,600	25.0	n. a.		194,580	15.8
Multi-year variable remuneration (performance shares 2018 and LTI 2017*)	128,572	8.9	n. a.		529,447	36.7	n. a.	
Multi-year variable remuneration (performance shares 2017 and LTI 2016*)	n. a.		86,624	7.2	n. a.		408,484	33.1
Total	574,999	39.8	388,224	32.2	808,465	56.1	603,064	48.9
Total remuneration	1,443,249	100	1,206,741	100	1,439,997	100	1,234,072	100

* Payout of 2017 and 2016 installments of the LTI model applicable for Hans-Dieter Schumacher until 2017

V. Comparative presentation of the annual change in remuneration, the company's development of earnings as well as the average remuneration for employees considered over the last five fiscal years

The table T13 below presents the total remuneration granted and owed to the members of the Executive Board and the Supervisory Board in the years 2017 to 2021.

The total remuneration of the Executive Board comprises the fixed remuneration, the one-year and multi-year variable remuneration, fringe benefits and pension contributions. Should a member not have worked for Jenoptik for the full calendar year, the amount is extrapolated to a full 12 months. The former Executive Board member Dr. Michael Mertin left the company in 2017 and, in this context, received his virtual shares, which had not yet been paid out, and parts of a contractually agreed transitional allowance. The payments received by him in 2017 are shown as a total amount.

The total compensation of the Supervisory Board comprises the fixed compensation paid for 2021 for membership of the Supervisory Board and its committees as well as the attendance fees for meetings held in 2021.

Also presented is the average remuneration for the total workforce and of employees paid in accordance with collective agreements in Germany over the last five fiscal years. The total workforce includes all employees below Executive Board level (including non pay-scale employees and senior executives) with the exception of employees of VINCORION which is shown as discontinued operation in the Consolidated Financial Statements 2021. The table also shows the average remuneration for all pay-scale employees in Germany. Pay-scale employees are salaried employees covered by collective bargaining agreements and employees on a par with the collective bargaining agreement but not bound by it. In addition to the basic salary, the average remuneration for the total workforce and pay-scale employees include bonuses, special payments, variable remuneration for the year in question (for the year 2021 the provision amount) and the employer's share of social security contributions, but not any severance pay or sign-on bonuses. Should an employee not have worked for Jenoptik for the full calendar year, the amount is extrapolated to a full 12 months. Due to differing salary levels worldwide, the presentation is restricted to employees working in Germany, particularly as both members of the Executive Board are also employed and based in Germany.

The company's development of earnings is presented on the basis of the Jenoptik' performance indicators of revenue, EBITDA and free cash flow of the Jenoptik Group. The overview was supplemented by a comparative presentation of the development of the annual net profit of JENOPTIK AG as per the HGB.

T13 Comparative presentation of the change in remuneration for the Executive Board, the employees, the company's development of earnings and the Supervisory Board

	2021		2020		2019		2018		2017
Remuneration in euros	2021 Amount	Change in %	2020 Amount	Change in %	2019 Amount	Change in %	2018 Amount	Change in %	2017 Amount
Development of earnings (in million euros)¹									
Revenue	895.7	16.7	767.2	-10.3	855.2	2.5	834.6	11.6	747.9
EBITDA	177.2	58.8	111.6	-16.7	134.0	5.1	127.5	19.3	106.9
Free cash flow (before income taxes)	62.8	0.8	62.3	-19.3	77.2	-28.7	108.3	50.0	72.2
JENOPTIK AG annual net profit as per German Commercial Code	16.0	-56.9	37.2	-33.2	55.6	-29.6	79.0	12.2	70.4
Average remuneration for employees²									
Combined workforce in Germany (excluding the Executive Board)	80,000	5.3	76,000	4.1	73,000	1.4	72,000	2.9	70,000
Pay-scale employees in Germany	71,000	1.4	70,000	7.7	65,000	3.2	63,000	1.6	62,000
Remuneration granted and owed to the Executive Board									
Dr. Stefan Traeger ³	1,443,249	19.6	1,206,741	20.2	1,003,786	-24.9	1,336,620	19.9	1,114,676
Dr. Michael Mertin ⁴									8,234,320
Hans-Dieter Schumacher ⁵	1,439,997	16.7	1,234,072	-9.5	1,363,020	41.4	963,613	19.1	809,161
Remuneration granted and owed to the Supervisory Board⁶									
Matthias Wierlacher	121,000	19.2	101,500	-8.6	111,000	4.4	106,308	-3.8	110,500
Stefan Schaumburg	79,500	57.5	50,470	-6.5	54,000	8.0	50,000	-6.5	53,500
Astrid Biesterfeldt	58,000	11.5	52,000	-14.1	60,500	1.7	59,500	9.8	54,171
Evert Dudok	44,000	14.3	38,500	-15.4	45,500	0	45,500	1.1	45,000
Michael Ebenau (until October 15, 2020)	/	/	57,536	-28.5	80,500	4.7	76,904	7.6	71,500
Elke Eckstein (since June 8, 2017)	52,500	11.7	47,000	-9.6	52,000	3.2	50,404	88.9	26,685
Brigitte Ederer (until June 7, 2017)	/	/	/	/	/	/	/	/	19,315
Thomas Klippstein	64,500	5.7	61,000	-11.6	69,000	3.0	67,000	-2.9	69,000
Dörthe Knips (since June 8, 2017)	53,000	10.4	48,000	-10.3	53,500	5.1	50,904	90.8	26,685
Dieter Kröhn	53,500	12.6	47,500	-10.4	53,000	4.1	50,904	-4.6	53,329
Sabine Löttsch (until June 7, 2017)	/	/	/	/	/	/	/	/	19,815
Doreen Nowotne	69,500	8.6	64,000	-11.1	72,000	3.0	69,904	5.9	66,000
Heinrich Reimitz	79,000	14.5	69,000	-11.5	78,000	2.6	76,000	-8.4	83,000
Frank-Dirk Steininger (since October 16, 2020)	50,500	517.6	9,757	/	/	/	/	/	/
Prof. Dr. Andreas Tünnermann	57,000	21.3	47,000	-11.3	53,000	2.9	51,500	-13.4	59,500

¹ Key figures for revenue, EBITDA and free cash flow on a group-wide basis (including VINCORION)

² Personnel expenses including employer share of social security contributions without severance pay and sign-on bonuses

³ 2017 normalized to 12 months

⁴ Payout of all outstanding virtual shares and a transitional allowance – see Annual Report 2017, pages 49f













⁵ In the case of Hans-Dieter Schumacher, from 2019 including LTI payouts under the LTI model applicable until 2017 (for the last time in 2021)

⁶ In the Corona year 2020, the members of the Supervisory Board waived 10 percent of their fixed compensation

B Supervisory Board Remuneration

Current remuneration for the members of the Supervisory Board is governed by § 19 of the Articles of Association of JENOPTIK AG and was approved by the Annual General Meeting on June 7, 2017.

G13 Supervisory Board Remuneration

Basic remuneration for the Supervisory Board					
					
					
Chairman of the Supervisory Board	Deputy		Member		
80,000 €	60,000 €		40,000 €		

Additional remuneration for committee work				
in euros	Audit Committee	Personnel Committee	Investment Committee	Nominations Committee
Chairman	20,000	10,000	10,000	10,000
Deputy	15,000			
Member	10,000	5,000	5,000	5,000

Each member of the Supervisory Board receives a fixed annual remuneration of 40,000 euros for their services. No variable remuneration is provided. This way, an independent control of the Executive Board by the Supervisory Board can be ensured. The Chairman of the Supervisory Board receives double and his deputy one-and-a-half times this amount.

In addition, each member of a committee receives an annual remuneration in the sum of 5,000 euros per year. The Chairman of the committee receives double this amount. The annual remuneration for members of the Audit Committee, whose duties are particularly labor- and time-intensive, is 10,000 euros. The Chairman of the Audit Committee receives double and their deputy one-and-a-half times this amount. These allowances are intended to take account of the particular responsibility and greater time commitment associated with individual roles on the Supervisory Board. This also implements the recommendation of Point G.17 of the German Corporate Governance Code.

Members of committees that have not met during the fiscal year receive no remuneration. Members of the Supervisory Board who have only served on the Supervisory Board or a committee for part of the fiscal year receive a pro rata temporis payment. All the aforementioned remuneration is payable on expiry of the fiscal year.

The members of the Supervisory Board are paid a meeting allowance of 1,000 euros for attending a meeting. Half of this amount is paid for participation in conference calls. The same applies from the second meeting on any day on which several meetings are convened. Verified expenses incurred in connection with a meeting are reimbursed in addition to the meeting allowance, but limited to an amount of 1,000 euros for meetings held in Germany. JENOPTIK AG also reimburses the members of the Supervisory Board for any value added tax applicable to the payment of their expenses.

The members of the Supervisory Board are covered by directors' and officers' liability insurance.

There are no further remuneration-related agreements between the company and the members of the Supervisory Board which go beyond the provisions of § 19 of the Articles of Association. In particular, in the event of a member leaving the Supervisory Board, there is no provision granting remuneration to the members of the Supervisory Board after the end of their term of office.

Jenoptik did not pay any other remuneration or benefits to the members of the Supervisory Board for services rendered personally by them, in particular consulting and intermediary services.

The following table T14 shows the remuneration granted and owed to the members of the Supervisory Board of JENOPTIK AG for the fiscal year 2021 in accordance with § 162 (1) (1) AktG:

T14 Supervisory Board Remuneration

	Total remuneration in euros	in %	Fixed remuneration 2021 in euros	in %	Remuneration for committee work in euros	in %	Meeting allowances in euros	in %
Matthias Wierlacher (Chairman)	121,000	100	80,000	66.1	30,000	24.8	11,000	9.1
Stefan Schaumburg	79,500	100	60,000	75.5	10,000	12.6	9,500	11.9
Astrid Biesterfeldt	58,000	100	40,000	69.0	10,000	17.2	8,000	13.8
Evert Dudok	44,000	100	40,000	90.9			4,000	9.1
Elke Eckstein	52,500	100	40,000	76.2	5,000	9.5	7,500	14.3
Thomas Klippstein	64,500	100	40,000	62.0	15,000	23.3	9,500	14.7
Dörthe Knips	53,000	100	40,000	75.5	5,000	9.4	8,000	15.1
Dieter Kröhn	53,500	100	40,000	74.8	5,000	9.3	8,500	15.9
Doreen Nowotne	69,500	100	40,000	57.6	20,000	28.8	9,500	13.7
Heinrich Reimitz	79,000	100	40,000	50.6	30,000	38.0	9,000	11.4
Frank-Dirk Steininger (since October 16, 2020)	50,500	100	40,000	79.2	5,000	9.9	5,500	10.9
Prof. Dr. rer. nat. habil. Andreas Tünnermann	57,000	100	40,000	70.2	10,000	17.5	7,000	12.3
Total	782,000		540,000		145,000		97,000	

At regular intervals and at the latest every four years, the Supervisory Board reviews whether the remuneration received by its members is appropriate in view of their duties and the company situation. Due to the special nature of the Supervisory Board's work, a vertical comparison with the remuneration paid to company employees is not generally used when reviewing Supervisory Board remuneration. The Executive Board and Supervisory Board submitted the remuneration system, unchanged since 2017, to the Annual General Meeting on June 9, 2021 for approval, where it was confirmed by a majority of 99.58 percent. The remuneration system for the Supervisory Board can be found on our website at www.jenoptik.com/investors/corporate-governance under the heading Supervisory Board.

The intention is to propose an increase in the fixed remuneration and an adjustment to the meeting allowance for meetings held in person and remotely to a uniform level for resolution at the 2022 Annual General Meeting.

March 25, 2022



Dr. Stefan Traeger
President & CEO



Hans-Dieter Schumacher
Chief Financial Officer



Matthias Wierlacher
Chairman of the Supervisory Board

Independent auditor's report

To JENOPTIK AG

We have audited the attached remuneration report of JENOPTIK AG, Jena, prepared to comply with Sec. 162 AktG ["Aktiengesetz": German Stock Corporation Act] for the fiscal year from 1 January to 31 December 2021 and the related disclosures.

Responsibilities of the executive directors and the supervisory board

The executive directors and supervisory board of JENOPTIK AG are responsible for the preparation of the remuneration report and the related disclosures in compliance with the requirements of Sec. 162 AktG. In addition, the executive directors and supervisory board are responsible for such internal control as they determine is necessary to enable the preparation of a remuneration report and the related disclosures that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on this remuneration report and the related disclosures based on our audit. We conducted our audit in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report and the related disclosures are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts in the remuneration report and the related disclosures. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the remuneration report and the related disclosures, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the preparation of the remuneration report and the related disclosures in order to plan and perform audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the accounting policies used and the reasonableness of accounting estimates made by the executive directors and supervisory board, as well as evaluating the overall presentation of the remuneration report and the related disclosures.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, on the basis of the knowledge obtained in the audit, the remuneration report for the fiscal year from 1 January to 31 December 2021 and the related disclosures comply, in all material respects, with the financial reporting provisions of Sec. 162 AktG.

Other matter – formal audit of the remuneration report

The audit of the content of the remuneration report described in this auditor's report comprises the formal audit of the remuneration report required by Sec. 162 (3) AktG and the issue of a report on this audit. As we are issuing an unqualified opinion on the audit of the content of the remuneration report, this also includes the opinion that the disclosures pursuant to Sec. 162 (1) and (2) AktG are made in the remuneration report in all material respects.

Limitation of liability

The "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms]" as issued by the IDW on 1 January 2017 are applicable to this engagement and also govern our responsibility and liability to third parties in the context of this engagement (www.de.ey.com/general-engagement-terms).

Stuttgart, 25 March 2022

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Maurer

Bartsch

Wirtschaftsprüfer
[German Public Auditor]

Wirtschaftsprüfer
[German Public Auditor]

Combined Non-financial Report

» In short «

By joining the UN Global Compact in 2021 – the world's largest initiative for responsible corporate governance – Jenoptik is committed to the ten principles in the areas of human rights, labor standards, environmental protection, and anti-corruption.

The Combined Non-financial Report meets the requirements of the
CSR Directive Implementation Act.


Combined Separate Non-financial Report in Accordance with the CSR Directive Implementation Act

Position and Business Model

Jenoptik sees its entrepreneurial activity as more than purely the realization of commercial objectives; it is equally a commitment to society and the environment. Together with our customers, we create forward-looking trends in the fields of healthcare, the environment, mobility, and safety. As an international photonics group, innovation is our driving force and the basis of our success in business. Innovation and responsibility also form the core of our sustainability strategy. With our expertise and innovative products, Jenoptik is making an important contribution as an “enabler” to overcoming social and climate challenges and enabling customers worldwide to contribute more efficiently and sustainably to greater resource conservation and climate protection.

Jenoptik provides the majority of its products and services to the photonics market and is a supplier of high-quality capital goods. The Group is thus primarily a technology partner to industrial companies and public sector contractors. The contract signed in November 2021 to sell VINCORION is a further milestone on the path to transformation into a pure and globally leading photonics group. The 2021 non-financial KPIs still include the VINCORION division which is held for sale. The companies acquired at the end of 2021, BG Medical Applications GmbH and the SwissOptic Group, will be included in the non-financial reporting from 2022 onwards.

According to the current SPECTARIS Trend Report, photonic solutions can make a significant contribution to reducing greenhouse gas emissions due to their properties, applications and effects. For example, light-based solutions facilitate resource-conserving production processes, material savings and reduced energy consumption. According to SPECTARIS, the use of photonic technologies will reduce global greenhouse gas emissions by at least 11 percent by 2030.

Thanks to the product portfolio and sustainable internal company processes, Jenoptik is making a significant contribution to achieving the UN Sustainable Development Goals (SDGs). 

In 2021, Jenoptik joined the UN Global Compact – the world’s largest initiative for responsible corporate governance – committing itself to comprehensively complying with the ten principles in the areas of human rights, labor standards, environmental protection, and anti-corruption.

Our Take on Sustainability

Our understanding of sustainability is based on the conviction that we can only achieve our economic goals, thereby sustaining profitable growth, by behaving responsibly towards the environment and society. To satisfy this demand, the issue of sustainability is within the responsibility of the Chairman of the Executive Board. The Investor Relations & Communications department is responsible for group-wide sustainability management at Jenoptik. The Executive Board and Supervisory Board are regularly updated on current projects. An ESG Committee, comprising representatives from the Human Resources, Environment Health and Safety, Corporate Real Estate, Quality Management, Purchasing, Compliance & Risk Management, Investor Relations & Communications departments as well as representatives from the divisions regularly discusses relevant cross-cutting issues and investigates the implementation of new regulations, for example.

What follows is information on sustainability issues which are essential to a better understanding of our business performance and the company’s development in the future.

The separate Combined Non-financial Report published here serves the purpose of fulfilling the requirements of the CSR Directive Implementation Act (CSR-RL-UG) in accordance with §§ 289b (3) and 315b (3) of the German Commercial Code (HGB). The reporting requirements pursuant to Article 8 of the EU Taxonomy Regulation relating to the disclosure of environmentally sustainable business activities also apply. The report covers the key issues in the areas of employees, the environment, social commitment, human rights and anti-corruption for both our external stakeholders and the company in the fiscal year 2021. The information in the non-financial report applies equally to the Group and JENOPTIK AG; any information that differs is indicated. The description of the approaches set out here is guided by Standard 103 of the Global Reporting Initiative (GRI). This means that Jenoptik presents components such



More information on the business model and markets can be found on page 89 of this Annual Report

as goals, existing guidelines, responsibilities, but also specific measures such as projects, programs and initiatives within the scope of the description. The GRI standard served as an orientation aid for the selection of key figures, but was not used for further detailing. This includes information on the number of employees, employees on parental leave or the fluctuation rate. The materiality analysis and the risk assessment were prepared in accordance with the requirements of CSR-RL-UG. In accordance with § 315b (1) (3) of the German Commercial Code, reference is occasionally made to other information available in the Group Management Report. The list below shows all the relevant passages in the Management Report that are relevant to the separate Combined Non-financial Report.

- Business model page 89
- Strategy from page 93 on
- R+D/Innovation management from page 103 on
- Risk & opportunities from page 141 on
- Diversity policy from page 32 on

Information on the EU Taxonomy Regulation

With the taxonomy regulations, the EU Commission has defined uniform standards for ecological management and indicates, among other things, when an economic activity is to be classified as ecologically sustainable. The aim is to increase the transparency of the sustainability level of companies and to direct the flow of more money into so-called green technologies in order to achieve climate neutrality by 2050. In accordance with Article 8 of the EU Taxonomy Regulation, the Jenoptik Group also fulfills the transparency requirements to ensure transition to a climate-

neutral, resource-efficient and circular economy for the long-term competitiveness of the EU.

We are making use of the exempting provision for the fiscal year 2021. Accordingly, only the taxonomy-eligible business activities related to the first two environmental goals are to be reported for 2021. Reporting on taxonomy-aligned activities is not required under the exempting provision. Jenoptik is also exercising of an option and has not taken joint ventures into account.

With regard to the disclosure of environmentally sustainable business activities, a screening of all significant activities of the Jenoptik Group was carried out in 2021 in conjunction with Financial Controlling in a joint project with regard to the environmental objectives "climate protection" and "adaptation to climate change" regulated in Article 9. As a result, it was determined that the business activities conducted by Jenoptik are not regulated in the EU taxonomy and that the NACE codes as well as the activities of both Annexes I and II do not apply. As a technology group, Jenoptik's business activities – like those of other suppliers – do not fall within the sectors regulated in the EU taxonomy. Consequently, Jenoptik does not generate any revenue associated with environmentally sustainable business activities as defined in the EU taxonomy.

Even if, as a result, no capital and operating expenditure was incurred in such ecologically sustainable business activities in 2021, Jenoptik is nevertheless investing in sustainability and is making a contribution to environmental protection and the conservation of resources. Jenoptik also makes use of the option not to include joint ventures in the consideration. Table T15 shows an overview of the KPIs to be disclosed.

T15 KPIs to be disclosed according to EU taxonomy

KPI	Total amount (in million euros)	Proportion taxonomy-eligible (in %)	Proportion not taxonomy-eligible (in %)
Revenue*	895.7	0	100
Capital expenditure** (CapEx)	192.3	<1	>99
Operating expenditure (OpEx)	65.1	1	99

* Revenue 2021 incl. VINCORION see Consolidated Statement of Income and Notes 4.13

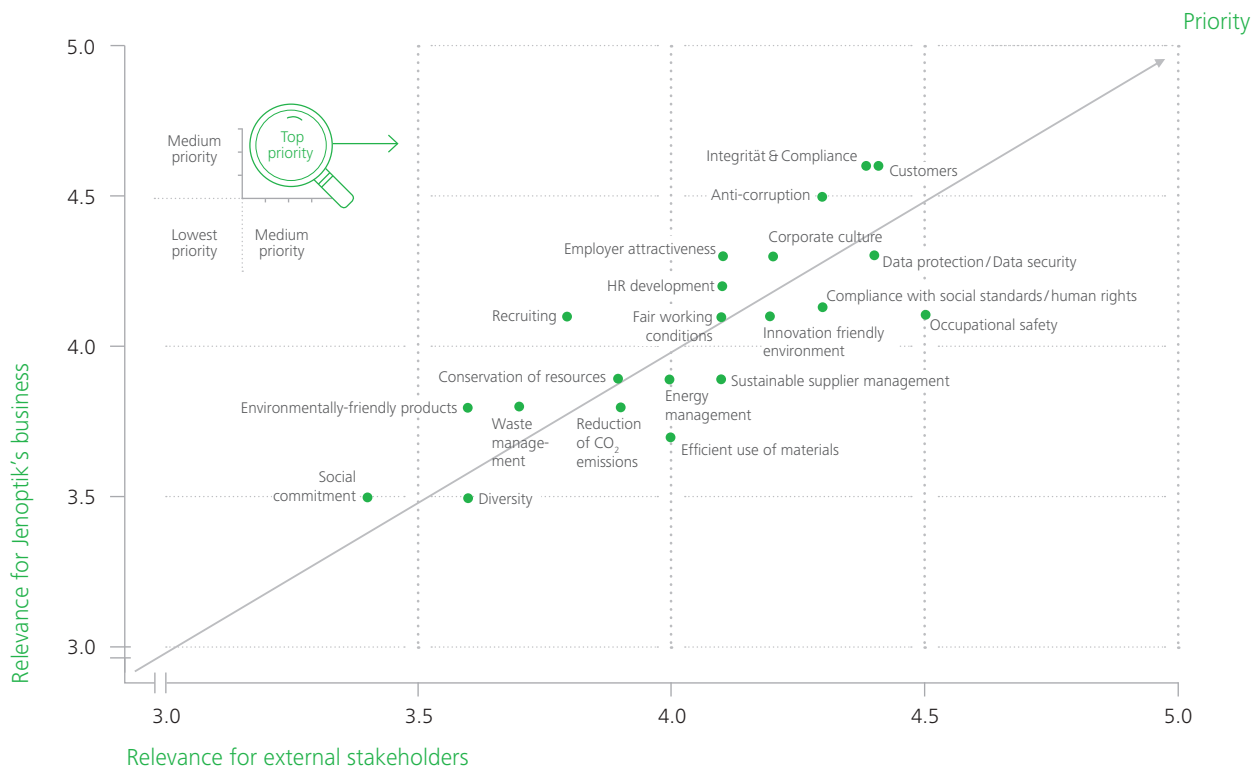
** Capital expenditure 2021 see Additions in Group Notes, points 5.1 and 5.2

The information provided in Annex 1 of the Delegated Regulation on Article 8 on **capital expenditure** (CapEx) shall apply in item 1.1.2. In order to determine Jenoptik's taxonomy-eligible capital expenditure, we first analyzed the additions to property, plant and equipment and intangible assets in the reporting year to determine what proportion of these relate to the acquisition of products from taxonomy-eligible business activities and individual measures through which the target activities are carried out in a low-carbon manner or the emission of greenhouse gases is reduced (numerator). It was explicitly pointed out in the dialog with the responsible persons that double counting must be avoided. In the case of investment that could not be clearly allocated, the taxonomy-eligible capital expenditure was determined using suitable allocation models. The taxonomy-eligible capital expenditure determined in this way was set in proportion to the total capital expenditure reported in the Notes (denominator).

Specifically, the investment of the Jenoptik Group in the acquisition of products from taxonomy-compliant business activities and individual measures through which greenhouse gas emissions are reduced, totaled 0.5 million euros in 2021. This includes, for example, investment in energy-efficient equipment, the overall energy performance of buildings, charging stations for electric vehicles and renewable energy technologies.

With regard to **operating expenditure** (OpEx) in accordance with Article 8 (2) of the regulation, Jenoptik only reports operating expenditure for the acquisition of products from taxonomy-aligned business activities and individual measures through which the emission of greenhouse gases is reduced, in the same way as for capital expenditure. In order to determine Jenoptik's taxonomy-eligible operating expenditure, we first analyzed the expenses in the reporting year to determine what proportion of

G14 Materiality matrix



these related to direct, non-capitalized costs relating to research and development, building refurbishment measures, short-term leasing, maintenance and repair as well as all other direct expenses in connection with the day-to-day maintenance of assets in property, plant and equipment (numerator). In the case of expenses that could not be clearly allocated, the taxonomy-eligible operating expenditure was determined using suitable allocation models. The taxonomy-eligible operating expenditure determined in this way was set in proportion to the operating expenditure covered by the taxonomy (denominator). These amounted to a total of 0.3 million euros in 2021.

Materiality Analysis

Jenoptik maintains ongoing dialog with all of its stakeholders. In 2020, an update of the materiality analysis took place in the form of an online survey by means of an independent assessment of all non-financial aspects which are essential for sustainable business development – both from Jenoptik’s perspective and from the perspective of the respective external target groups (customers and business partners, suppliers, employees, shareholders, investors, and the general public). The results of the overall assessment are summarized in the materiality matrix G14 and, as a rule, are reviewed every two years. Topics in the upper right quadrant are particularly essential to the Group’s business development from the perspective of both Jenoptik and our stakeholders. Topics such as sustainable supplier and energy management and the reduction of CO₂ emissions have become increasingly important. The Jenoptik materiality matrix forms the basis of all our long-term ESG activities and is incorporated into the corporate strategy. The key non-financial topics are explained in detail in the sections below.

The following overview reveals where Jenoptik sees its specific priorities for action in the value chain.

Non-financial Objectives

The transformation of the corporate culture to a more open, agile and less complex company whose employees contribute to success with commitment and motivation is in full progress. Sustainability plays a crucial role here and is firmly anchored in the Group’s corporate strategy. Management’s clear commitment to greater sustainability is evident in the wide range of sustainability objectives, some of which are also reflected in remuneration for the Executive Board and group financing. Both the debenture bonds placed in March and the syndicated loan of 400 million euros that followed in December 2021 are aligned to the ESG targets – diversity rate, green electricity rate, and the Group’s CSR rate.

As an “enabler”, Jenoptik enables its customers to contribute to greater resource conservation and environmental protection through its products and photonic solutions. The Group’s sustainability targets cover all ESG areas.

In order to support the goal of international climate policy and to limit global warming, Jenoptik wants to make an active contribution to reducing CO₂ emissions, even though the technology group does not belong to one of the most energy-intensive sectors. Jenoptik has set itself the goal of reducing CO₂ emissions by 30 percent by 2025 compared to the base year 2019. The savings will come from direct emissions released by Jenoptik itself (Scope 1) as well as the indirect emissions from purchased energy (Scope 2). Specific measures include further

T16 Jenoptik's key topics

Employees	Environment	Social commitment	Human rights	Anti-corruption	Other topics
Corporate culture	Energy management	Social commitment in science, education, art & culture as well as social projects	Compliance with human rights and social standards in the supply chain	Responsible business relationships and fair business practices	Innovation: Environmentally friendly products and efficient use of materials
HR development	Reduction of CO ₂ emissions		Sustainable supplier management	Integrity and compliance	Innovation-friendly environment
Recruiting and employer attractiveness	Water management			Data protection	Customer satisfaction
Fair working conditions	Protection of resources			Data security	
Occupational safety					

expanding the proportion of green electricity used group-wide and various energy efficiency measures at Jenoptik sites world-wide. The proportion of green electricity used at the main sites is to increase to 70 percent by 2022 and to 75 percent of

total electricity requirements by 2025, the vehicle fleet is to be expanded to include vehicles with alternative drives, and an appropriate infrastructure for charging all battery-powered vehicles is to be provided at the sites.

T17 Non-financial targets and key performance indicators

Aspects	Aspiration	Performance indicators	Status 2020	Status 2021	Target
Employees	We want to increase the satisfaction and commitment of the employees and want to increase the attractiveness of Jenoptik as an employer	<ul style="list-style-type: none"> Fluctuation (attributable to employees) Engagement Score Sick leave 	3.1 %	5.4 %	<5 %
	We want to increase our diversity and employ more women and employees of international origin in management positions	<ul style="list-style-type: none"> Diversity rate * 	27.8 %	28.6 %	30 % by 2022 33 % by 2025
	We want to fill more internal vacancies with by Jenoptik	<ul style="list-style-type: none"> Training ratio Number of trainees taken on (hiring ratio) 	4.2 % 79 %	4.0 % 97 %	>4 % 100 %
Innovation	Securing and boosting competitiveness, revenue and earnings through successful innovations				
	<ul style="list-style-type: none"> We want to increase our R+D output including customer-specific developments We want to increase the share of revenue generated with products and platforms which have been developed in the last three years 	<ul style="list-style-type: none"> R+D output Vitality Index 	9 % 17.1 %	9 % 19.1 %	10 % by 2022 20 % by 2022 22 % by 2025
Environment	Reduction in CO ₂ emissions:				
	<ul style="list-style-type: none"> We want to increase the proportion of green electricity used at our main production sites We want to reduce our CO₂ emissions We want to expand our fleet of vehicles with alternative drive technologies and create an appropriate infrastructure 	<ul style="list-style-type: none"> Proportion of green electricity at the main production sites CO₂ reduction (Scope 1+2) compared to base year 2019 (10.161 t) Number of vehicles with alternative drive technologies in the fleet Number of charging stations/ points 	70.7 % 9.5 % 6 *** 17 ***	76.4 % 24.1 % 16 27 points	70 % by 2022 75 % by 2025 30 % by 2025 Increase Increase
	Suppliers	We want to increase transparency in our supply chain in order to guarantee the protection of human rights and the environment	<ul style="list-style-type: none"> CSR rate ** 	–	38.0 %

* Diversity rate: Average percentage of the number of managers with an international background as well as female managers

** CSR rate: Corporate Social Responsibility Rate: average percentage of all suppliers of production materials with an annual purchasing volume of more than 200,000 euros for which complete CSR self-assessments and self-assessments considered non-critical are available

*** Minimal deviations from the figures published in the 2020 Annual Report due to corrections


In HR work, initiatives to increase the diversity of our employees and the attractiveness of Jenoptik as an employer are a key issue. Increasing the diversity rate, calculated as the average percentage of managers with an international background and female managers, to 30 percent by 2022 and to 33 percent by 2025 is therefore a key objective of the Group.

In addition, we want to implement the increasing transparency requirements regarding human rights in the supply chain and our goal is to meet the higher standards of due diligence through sustainable supplier management and to increase transparency in the supply chain.

The promotion of good framework conditions for more innovations and greater investment in research and development ensure substantial growth and play a decisive role in our future performance. In addition to the already defined goal of increasing our R+D performance, including customer-specific developments, to 10 percent of revenue by 2022, we therefore want to continuously increase the share of revenue generated by products and platforms that have been developed in the last three years. The so-called Vitality Index increased to 19.1 percent in the reporting year (prior year: 17.1 percent). By 2022, revenue from new products is expected to increase to 20 percent, and 22 percent by 2025. 

The non-financial objectives are described in detail in the respective chapters on the following pages and are summarized in table T17.

The group-wide recording of all sustainability key performance indicators (KPIs) for non-financial reporting has been carried out since 2021 as part of the existing LucaNet financial reporting system. The creation of a uniform reporting process guarantees the provision of regular information to the boards as well as the management of these KPIs. The 2021 non-financial KPIs still include the VINCORION division which is held for sale. The companies acquired at the end of 2021, BG Medical Applications GmbH and the SwissOptic Group, are not yet part of the non-financial reporting, but will be from 2022 onwards. As a result of the acquisitions made and the signing of a contract to sell VINCORION (mechatronic business for the defense sector, among others), the Jenoptik Group will focus even more strongly on its core business of photonics in the future and will therefore also become more interesting for ESG investors.

Corporate governance, compliance and adherence to stringent quality criteria are of key importance to Jenoptik. We are as committed to law-abiding and compliant conduct with respect for human rights as we are to ensuring the above-average quality of our products and services. As a responsible and socially committed company, Jenoptik considers it its duty to play an active role in shaping its environment. Commitment to our region is also another high priority. 

Risks in Connection with Non-Financial Aspects

Weighing up corporate risks and opportunities is one of Jenoptik's principles of responsible corporate governance. The Group maintains a risk manual and a system of guidelines, thus providing a reliable reference framework for all employees worldwide. Our group guidelines structure reduces the scope of content regulated at group level and provides a globally uniform framework which can be supported with more detailed regulations. The guidelines are reviewed annually, and extended or updated as necessary.


In two risk periods per year, Compliance & Risk Management identifies all risks within the Group and discusses the top issues – set in net terms – with the Executive Board and the Audit Committee of the Supervisory Board. Our processes for the identification, management and control of risks involve non-financial environmental, social and corporate governance risks, including climate-related risks in the form of physical risks and transition risks. Physical climate risks result from the physical effects of climate change, e.g. plant damage due to extreme weather events or losses due to long periods of drought. Transition risks are the risks for business models resulting from decarbonization and the transition to CO₂-free economic structures. They are divided, for example, into political/regulatory risks (e.g. rising prices for CO₂ emissions), legal risks (e.g. liability suits for climate damage), market risks (e.g. falling demand for fossil fuels), technology or competitive risks (e.g. outdated environmental technology), and risks to reputation (e.g. changing consumer preferences) in response to climate change. For risks associated with the coronavirus pandemic, refer to the Risk and Opportunity Report from page 141 on.



Further information on the corporate strategy can be found in the section on Targets and Strategies



For more on the topic of innovation and IP management, see R+D chapter from page 103 on

The net analysis did not identify any risks that are very likely, now or in the future, to have a serious negative impact on the specified key non-financial aspects. 



Detailed information on our risk management system and major risks, including in connection with non-financial aspects, can be found in the Risk and Opportunity Report from page 141 on

Employee Matters

With their experience and knowledge, our employees are absolutely essential to the Jenoptik Group's business success. Future-oriented HR work and the responsible and modern approach to working conditions are therefore among our most important tasks.

HR at Jenoptik covers all employee-related operating and strategic measures for the implementation of the Group's objectives and is thus an essential component of the overall leadership and management process. HR delivers local service on site in the respective country for all employees and managers, supports division-specific projects and offers expert knowledge in the areas of recruiting, employer branding, HR development, labor law and remuneration. HR reports directly to the Chairman of the Executive Board, who is also HR Director, via the function Head of Global HR.

The first point of contact for all HR-related issues in day-to-day business concerning the Group's employees and managers are our colleagues from HR Operations. Each division has an HR Business Partner who is part of the management team. Working with Division Management, the HR Business Partners develop and implement HR strategic topics. 2021 saw the global launch of our "Introduction of SAP Success Factors" project to digitize and standardize all HR processes. It will be completed module by module by the first quarter 2023.

Alongside an appealing corporate culture, we see our employees' efforts, expertise, experience, and commitment to the company as key value contributions. This was also confirmed by the results of the materiality analysis, which in Human Resources in particular point to topics such as corporate culture, HR development and employee satisfaction.

With the implementation of the group strategy, the focus is on establishing a dialog-based **corporate culture** characterized by initiative, respect for diversity and equal opportunities. The basis for this is formed by our Jenoptik values – **open, driving, confident**. We believe that committed and curious people always perform outstandingly. We value new ideas and develop

them further in an open dialog. In order to achieve our targets, we encourage employees who drive things forward and who have the will to succeed.

In 2021, the focus was on **diversity**. The diversity rate (for definition, see section on Non-financial Objectives) is to increase to 30 percent by 2022 and 33 percent by 2025. In the fiscal year 2021, the diversity rate has already increased to 28.6 percent (prior year: 27.8 percent). Detailed information on gender equality and targets for the proportion of women on the Supervisory Board, Executive Board and the management level below the Executive Board can be found in the Corporate Governance Statement.

The diversity rate and other non-financial KPIs are reported quarterly in the Executive Management Committee (EMC). Closely related to this is the adaptation of our recruitment strategy to increasingly appeal to and hire applicants with diverse profiles. As part of our voluntary commitment to the Diversity Charter, which promotes a prejudice-free working environment, we held an international Diversity Day in May. Our global Diversity Council, an internationally diverse body, supported our activities and promoted their implementation in the countries. The ten members come from seven countries and include Stefan Traeger (CEO), Maria Koller (Head of Global HR) and Thomas Klippstein (Chairman of the Group Works Council). For external benchmarking, we took part in the Women's Career Index (FKI) audit in 2020. In the overall index, we scored 79 points, two points above the industry average. In March 2021, Jenoptik was even named "Rising star of the Year". Focus on all these topics will continue in 2022.

Jenoptik is modern and flexible in terms of leadership culture. Key to this are the promotion of respectful behavior towards one another in the workplace, balancing of career and family, flexible working hours, and a healthy work environment. In particular, the introduction of remote working in 2019 has helped us to cope well with the challenging conditions created by Covid-19.

We have measured the satisfaction and commitment of our employees via an employee survey. This is conducted globally. When completing the survey, employees evaluate the various facets of the corporate and leadership culture. The commitment of our employees (so-called Engagement Score) and the recommendation rate (so-called Net Promoter Score) are also measured.

A total of 69 percent of our employees took part in the 2021 survey (prior year: 58 percent). The engagement score was 72 percent, i.e. 72 percent of the employees who took part in the survey positively identify with their duties at Jenoptik and actively contribute (prior year: 76 percent). With a “Net Promoter Score” of 69 percent (prior year: 74 percent) more than two thirds of the participating employees would recommend Jenoptik as a good employer. Our managers communicated the results of the employee survey to their teams and developed measures in a joint workshop. The main reasons for the decrease in the Engagement Score compared to the prior year are the adjustments to personnel levels we had to make in the Metrology area with a focus on the USA and Germany. We will conduct a further global employee survey in 2022.

Jenoptik is family-friendly and responds to the needs of its employees with flexible working hour models. Flexitime, part-time work, and flexible parental leave all make it easier for our employees to strike their own balance between family and working life. In 2021, 177 employees made use of parental leave in Germany (prior year: 159 employees). The number of part-time contracts in Germany rose to 11.7 percent in 2021 and, globally, 9.3 percent of our employees are part-time workers (prior year: 10.9 percent in Germany and 8.9 percent worldwide). The global employee fluctuation rate in 2021 was 5.4 percent (prior year: 3.1 percent). One of the most important preconditions for balancing career and family is the availability of childcare. For several years, Jenoptik has been investing in daycare centers at the Jena, Wedel, and Monheim sites, as well as in flexible childcare models. This means that our employees are assured a place at the daycare centers.

HR development is a key factor that determines the future viability of the company and the commitment of our employees. To help promote them in line with their potential and interests, the development needs are analyzed in regular staff appraisals. In our employee survey, we verified whether staff appraisals are held at all sites. In 2021, Jenoptik invested around 2.6 million euros (prior year: 2.2 million euros) in the professional development of its employees. This includes both the costs for trainees and students at the Cooperative State Universities and the costs for further training for our employees.


Learning at Jenoptik is structured according to the 70:20:10 principle: as employees and their supervisors are the experts for their own further development, 70 percent of learning takes place in the workplace and 20 percent through learning from others. Classroom or online training makes up 10 percent.

We have also been following the 70:20:10 learning principle in the development of our managers: there are three target-group specific programs aimed at high-potential employees, new managers and experienced managers. Our managers are key drivers of a uniform leadership culture at Jenoptik and thus of our corporate success. They are responsible for motivating the employees and have a direct influence on their satisfaction. In 2021, the restrictions imposed by Covid-19 meant that all three programs were held online. For our experienced managers, so-called “learning journeys” on the topics of change management and new leadership took place in 2021.

HR Recruitment

Jenoptik’s HR requirements are guided by the Group’s international growth strategy, resulting in a greater need for recruitment in Asia, Canada and the USA. However, experts and managers are also being sought in Germany. The audiences addressed by recruitment and thus also HR marketing are primarily specialists and skilled workers in the natural and engineering sciences as well as experts with business management and legal backgrounds.

In order to fill more vacant positions with internal specialists trained at Jenoptik, the training ratio was increased, taking into account the retirement of employees in the context of succession planning. In the reporting period, the training ratio was 4.0 percent (prior year: 4.2 percent). Thus, at the end of 2021, a total of 177 trainees were employed by the Group worldwide (prior year: 189 worldwide). The retention rate for trainees who successfully completed their vocational training in 2021 was 97.4 percent (prior year: 78.6 percent). These trainees were taken on for an unlimited period by the company.

Specific support for school students, university students and graduates forms part of the Group’s expertise strategy, ensuring early loyalty to the company and thus simplifying the recruitment process. A selection of targeted initiatives and cooperation arrangements is shown in table T18. 



Increasing **attractiveness as an employer** is the focus of employer branding at Jenoptik. Clear and distinctive positioning as an attractive employer should support recruitment and develop a positive and unmistakable employer image as a future-oriented, innovative high-tech company in the photonics industry. The definition of the employer brand and the development of the associated values (Employer Value Proposition) were carried out on the basis of the Jenoptik Strategy 2022 under the motto "More Light". The focus was once again on target-group oriented communication using social media channels in 2021. Numerous vocational training and university fairs were held online.

Occupational health and safety are also key topics affecting the basic needs of our employees and their satisfaction in the workplace. They are firmly anchored in the Group's operating processes and aim to minimize risks arising in the work environment that may endanger employees. The Jenoptik companies are each responsible for applying the law on all aspects of occupational health and safety. Occupational Safety, Health and Environmental Protection (OSHEP) is part of Corporate Real Estate Management, falling within the remit of the Chief Financial Officer. It provides advice to all companies, coordinates tasks and supports the Executive Board in implementing measures. Occupational health and safety committee meetings are held in all divisions each quarter. In addition, all employees are briefed on issues relating to health and safety at work at least once a year. At all the German locations, around ten percent of the workforce are trained as first-aiders. The number of reportable **workplace and commuting accidents** in Germany fell in 2021 to 9.1 per 1,000 employees (prior year: 11.4). The rate for the Group as a whole was 9.5. Compared to the other

members of the ETEM trade association (Energy, Textile, Electronics and Media Products), Jenoptik is still significantly below the average figure of 19.5 in 2020.

In the interests of our employees' health and performance, the Group offers regular medical examinations by a company physician. In 2021, the focus continued to be on managing the pandemic. With the help of a pandemic plan and hygiene concept at all sites, it was possible to prevent the spread of infection at the operating facilities while maintaining the ability to work in all areas. The fast and regular exchange of information between all the coronavirus task forces set up and the provision of information to employees, but in particular the rapid introduction, implementation and consistent enforcement of hygiene measures, vaccination offers and the opportunities for remote working have made a significant contribution to the success. Despite all this, it was not possible to prevent 165 employees across the Group from contracting Covid-19 in 2021. However, with the exception of eight cases in three clusters, these infections can be exclusively attributed to private leisure activities outside Jenoptik's operating facilities.

Company health management at Jenoptik in Germany is centrally managed by the HR department in the Corporate Center. Despite the pandemic, the cooperation agreement with the Techniker Krankenkasse (TK) health insurance fund and the establishment of local "health steering groups" to support the implementation of on-site activities made it possible to carry out employee offerings as part of our "Move It!" project. The workshops to develop improvement measures from our "Healthy Work" project were also continued.

T18 Initiatives and cooperations (selection)

Jenoptik supports

- career guidance projects at schools, also offering their students the opportunity to complete an internship
- young researchers in Thuringia as a longstanding state-level corporate sponsor of the "Jugend forscht" initiative
- various industry organizations to promote professional development activities
- students in the form of degree theses, internships, and scholarships

Jenoptik works with

- selected universities around the world with regards to HR marketing and recruitment, for research purposes, and to foster the professional development of its employees
 - selected universities around the world via projects and is active through a range of committees and networks in an advisory capacity
-

Environmental Matters

Protection of our environment is of high priority to us. We see it as our corporate responsibility to grow sustainably in harmony with the environment and society and to use resources efficiently at all our sites worldwide. In order to also actively contribute to climate protection, the Group has set itself the target of reducing CO₂ emissions (Scope 1+2) by 30 percent by 2025 compared to the base year 2019 and is taking various measures to achieve the target (see section Non-financial Objectives).

2021 has already seen the second group-wide sustainability competition focusing on environmental protection. The numerous project entries from our employees clearly indicate the level of commitment which will contribute to greater sustainability at Jenoptik. An independent jury evaluated the project entries, and the winners were awarded prizes at the beginning of 2022.

Projects from the 2021 sustainability competition:

- With a great deal of commitment, Jenoptik employees planted 1,000 trees, together making a contribution to climate protection and “more green” in Jena.
- At the Monheim site, the useful life of furniture was extended, significant waste was avoided, and costs were saved.
- With TraffiPole, our developers at Light & Safety succeeded in creating an environmentally friendly and sustainable traffic monitoring solution. With a housing made of fully recyclable materials, reduced power consumption and the elimination of cooling, it can also be operated self-sufficiently with batteries or solar panels.
- By clearing up an old scrap yard on the production site in Jupiter, Florida, and then recultivating it as an outdoor fitness area, nature was restored and long-term health benefits were created for our employees.
- The JENvelt® system developed by the Light & Optics division in cooperation with Prozessfabrik Berger allows for “exchange instead of scrap” and is used by our customers in laser processing machines. A complex component no longer has to be disposed of in its entirety as a result of a defective subcomponent.
- Every Friday, a mobile organic farm shop supplies employees with regional and seasonal products in front of the production buildings in Jena.

Environmental management is a key part of our business practices. We comply with national and international statutes and set standards in resource conservation and energy efficiency with respect to the manufacture of our products. However we also require our suppliers and contractual partners to comply with relevant laws to minimize environmental risks. As a manufacturing company, we set our focus on efficient resource management to reduce energy consumption and greenhouse gas emissions to the best of our ability, use commodities and materials in a safe and resource-saving manner and to largely avoid producing hazardous waste. We pay attention to good environmentally friendly design and the economical use of resources as early as in the development stage, while minimizing the impact on people, the environment and nature through regulated recycling and disposal. In line with their environmental relevance, selected Jenoptik companies are certified in accordance with the ISO 14001 environmental management standard, which sets out globally recognized requirements for an environmental management system. 

In December 2021, Jenoptik received the ASML Sustainability Excellence Award. The Light & Optics division was particularly persuasive with regard to its sustainability goals “Increase Re-use” and “Business Continuity”. By increasing the re-use and recycling of electronic components through highly standardized repair processes, thousands of ASML modules can now be repaired and the special electronics reused instead of being disposed of as scrap. For Jenoptik, the award is both a confirmation and an incentive to continue along this path. The award comes with prize money, which is matched by an equal amount from Jenoptik. The total amount will be donated to the non-profit organization Kindersprachbrücke Jena for use in various projects.

Occupational Safety, Health and Environmental Protection (OSHEP) topics are part of Corporate Real Estate Management and fall within the remit of the Chief Financial Officer. The Jenoptik companies are each responsible for applying the law on all aspects of environmental protection. The central environmental protection officer from Safety, Occupational and Environmental Protection is available to provide assistance where required and, for example, reviews all group capital expenditure projects with regard to their environmental relevance. Waste officers take care of all matters relating to the prevention, accrual, recycling, and disposal of hazardous and non-hazardous waste.



See section on quality management in the Non-financial Report, from page 78 on

Jenoptik continues to implement and, in part, exceed statutory requirements relating to nature conservation and environmental protection for new buildings, extensions and the modernization of production facilities. For example, state-of-the-art technologies for saving resources and protecting the environment are utilized when fitting out production facilities. The new building for the Light& Production division at the Villingen-Schwenningen site complies in full with the environmental protection standards introduced at Jenoptik. For example, it was equipped with modern insulation, roof greening, sensor-controlled LED lighting and energy-saving heating and air conditioning technology. In addition, several charging stations for electric mobility have already been installed. The construction of the new conference center including an employee restaurant in Jena proceeded at a rapid pace in 2021, and its opening is scheduled for mid-2022. The company's values and strategy are at the heart of the 10 million euro investment. For example, an internationally recognized sustainability certification will be pursued as per LEED (Leadership in Energy and Environmental Design), which highlights environmental and social aspects. This includes the installation of a PV system, heat recovery in the ventilation system, e-charging stations, covered bicycle racks, low-emission interior materials or measures for reduced water consumption. In addition, Jenoptik's open culture is reflected in the spatial design and furniture structures, along with the future orientation in the use of modern materials (e.g. Alubond and glass façades or metal grids as privacy screens).

The conversion of existing lighting to LED lighting is being examined and successively implemented at several sites worldwide in ongoing reconstruction measures taking into account cost and environmental aspects. In 2021, for example, the outdoor facilities at the Triptis site were converted to LED so that

75 percent less electricity is consumed with a greater light yield. Electrical energy in Germany is already provided almost exclusively from green electricity. The successive development of an e-charging network – especially at the headquarters in Jena and beyond – created the basis for a vehicle fleet utilizing alternative drive technologies in 2021.

Greenhouse gases: As a technology company, Jenoptik generates only small volumes of emissions within its plants. The majority of its pollutant emissions is attributable to procured and externally purchased energy from electricity, gas or district heating. Jenoptik is reporting its CO₂ emissions for the past fiscal year for the first time, with the values stated being based on existing invoices and meter readings as well as estimated values, and is disclosing these separately according to Scope 1 and Scope 2 emissions. We only use very low amounts of other greenhouse gases in our production processes, so we do not report them for reasons of materiality.

The group-wide total energy consumption is shown in table T19 and is largely derived from electricity, gas and district heating. At 62,221 MWh, this was reduced in 2021 compared with the prior year due to energy savings and efficiency improvements as well as the sale of the crystal growth business in July 2021 (2020: 64,817 MWh).

In addition to absolute energy consumption, we are also reporting the energy consumption in relation to revenue, thus making the development of energy efficiency in our production transparent. In 2021, the total energy consumption of 70.22 MWh per 1 million euros of group revenue (including VINCORION) was below the level of the prior year (2020: 84.49 MWh per 1 million euros group revenue).

T19 2021 Energy consumption by energy source (in MWh)

	Electricity	Gas	Wood pellets	District heating	Heating oil	Diesel/petrol	Energy consumption
Germany	31,808	6,060	500	8,620	625	1,156	48,769
Europe	797	40	-	-	-	111	948
Americas	8,212	3,744	-	-	-	198	12,154
Asia/Pacific	349	-	-	-	-	-	349
Total	41,166	9,844	500	8,620	625	1,465	62,220

Throughout Germany, Jenoptik has used the targeted purchase of renewable energies to source almost exclusively green electricity, backed by certificates of origin, from European hydro power. Our international sites are also gradually converting to renewable energy sources. These measures have enabled us to significantly increase the share of green electricity used in the last two years. In the reporting year, we have therefore already achieved our target of increasing the share of green electricity used at our main sites to 70 percent of total electricity requirements by 2022 and to 75 percent by 2025. In 2021, the share of renewable energies in total electricity requirements increased to 76.4 percent due to the conversion of further sites to green electricity (2020: 70.7 percent). However, due to the portfolio change at the end of 2021 – both the sale of VINCORION and the acquisitions made are not yet reflected in the non-financial KPIs for 2021 – this figure may change in subsequent years and the target values already achieved may be undershot again.

The consumption of the various media (electricity, district heating, gas, heating oil, wood pellets) at all major sites was used to determine the CO₂ emissions. The group-wide CO₂ emissions were reduced by 16.1 percent to 7,713 tons (2020: 9,194 tons). Relative to the base year 2019, CO₂ emissions in 2021 have thus already been reduced by 24.1 percent (2020: reduction by 9.5 percent). This was mainly attributable to a higher proportion of green electricity and the sale of the crystal growth business in Eisenach in July 2021, as well as lower gas consumption at the American sites and by VINCORION. The direct emissions from gas, heating oil, diesel and gasoline (Scope 1) amounted to 3,072 tons (prior year: 3,261 tons), while indirect emissions from electricity and district heating totaled 4,642 tons in 2021 (prior year: 5,935 tons).

Water: Jenoptik does not require large volumes of water for its manufacturing processes. Water is only used as a coolant, as a process medium and for sanitary purposes and comes primarily from the public drinking water supply and from groundwater. Nevertheless, as part of our water management, we take care to keep water consumption as low as possible at all our sites. For the current reporting year 2021, reporting on water consumption and waste quantities is based as far as possible on available invoices throughout the year and valid estimates of the remaining consumption. In 2021, 72,009 m³ of water were consumed at our main sites (prior year: 69,758 m³). The increase resulted mainly from increased water consumption at the Jupiter, Florida site and at VINCORION.

Due to low volumes of water required for production processes, we do not see ourselves encountering any key risks in this area. Conservation regulations are also of only very minor significance to the Group, in view of its business purpose and the location of its sites outside of conservation areas.

T21 Water consumption (in m³)

	2021	2020	2019
Total	72,009	69,758	72,117

T20 Energy consumption and CO₂ emissions at major Jenoptik sites (in MWh and t)

	Energy consumption		CO ₂ emissions	
	2021	2020*	2021	2020*
Germany	48,769	50,672	3,504	4,742
Europe	948	1,211	57	106
Americas	12,154	12,487	3,916	4,040
Asia/Pacific	349	448	237	306
Total	62,221	64,817	7,713	9,194
of which Scope 1			3,072	3,261
of which Scope 2			4,642	5,935

* Values not comparable with prior year due to higher number of Jenoptik sites included

Waste: Increasing the reusability or recycling of electronic components, for example, plays an important role in product development at Jenoptik, contributing to a reduction in avoidable waste. In December 2021, Jenoptik received the ASML Sustainability Excellence Award for this achievement (see section Environmental Management).

Within the scope of our business activities, however, hazardous waste is also generated to a small extent in a few production processes, for example, adhesive residues or solvents. Our goal is to avoid producing such waste as is generated during production as far as possible or to recycle it and, if this is not possible, to dispose of it properly in order to minimize negative effects on the environment. In the production of semiconductor lasers in Berlin-Adlershof, for example, a new process has reduced the solvents used. Volumes sent for recovery or recycling are recorded locally and we distinguish between hazardous and non-hazardous waste within these categories.

In Germany, waste types in all divisions are systematically recorded, categorized and their quantities calculated. The waste volumes are reported group-wide for all main sites. The volume of hazardous waste disposed of at treatment and disposal facilities amounted to 114 tons in 2021 (prior year: 122 tons**). The quantity of non-hazardous waste fell slightly to 1,240 tons (prior year: 1,439 tons). In general, Jenoptik recycles its waste through certified waste management companies. Through continuous waste separation and training of the employees on waste prevention, the amount of residual waste was again further reduced. At the Triptis site, for example, more plastic materials are being channeled back into the recycling process, thereby conserving resources, avoiding expenditure on waste disposal and even generating income.

As a high-tech company, Jenoptik is dependent on different **raw materials**. In the face of an increasing scarcity of resources,

Jenoptik is committed to making sparing use of the materials it requires. Supply bottlenecks in connection with the coronavirus pandemic were offset by targeted supplier management measures such as weekly coordination and planning meetings with critical suppliers as well as supporting suppliers in the procurement of critical components. We comply with the applicable regulations, for example the requirements of the European chemicals regulation REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) and the European RoHS directive (Restriction of certain Hazardous Substances), and are involved on associated committees. In order to implement efficient processes for collecting relevant data, the Product Compliance project was also continued in 2021. In the future, declarations from suppliers, raw material and chemical data can be systematically and automatically evaluated and the respective declarations issued. The objective of our purchasing processes is to meet all regulations relating to conflict minerals in compliance with the Dodd-Frank Act and the EU Conflict Minerals Regulation. Our Code of Conduct requires that our suppliers do not supply products that violate these requirements. To minimize risks, we have been using a central digital platform to query the relevant suppliers since 2021. This platform is used to obtain the standardized form (CMRT) of the Responsible Minerals Initiative. The information provided by the suppliers is checked for possible risks and measures to minimize them are derived.

Resource Management

Many innovative Jenoptik products and solutions contribute to the efficient and responsible use of resources and support the UN's Sustainable Development Goals (SDGs). As an "enabler", we enable our customers to design production processes and products more efficiently, thereby saving energy and resources. The table T23 provides an overview of the contribution selected Jenoptik products make to resource conservation.

T22 Hazardous and non-hazardous waste (in t)

	2021	2020	2019
Non-hazardous waste	1,240	1,439	1,327*
Hazardous waste	114	122**	160*

* Values in the 2019 Annual Report are only for Germany: 1,100 t of non-hazardous waste and 179 t of hazardous waste (deviation due to change in fractionation made by the changeover to group-wide recording)

** Deviation from the value published in the 2020 Annual Report in the amount of 106 t results from actual settlements now available

T23 Contribution of our products to resource conservation

Jenoptik Products/Solutions

Jenoptik diode lasers and laser systems

for a wide range of applications, e.g. in the automotive industry

or in medical technology for the treatment of glaucoma in ophthalmology

Optical systems and components

for semiconductor equipment or information and data transfer

... for medical diagnostics

... sensor solutions for the automotive industry in the field of autonomous driving or traffic monitoring

Metrology-systems and equipment

for checking shape and roughness, particularly in the automotive industry, stabilize production processes and reduce failure rates

Traffic monitoring systems

check the compliance with current road traffic regulations and improve traffic flow

Cooperation agreement with SFC-Energy to increase traffic safety with environmentally friendly technologies

Green cameras

improve the air quality

Toll payment monitoring systems

on federal highways

Contribution to resource conservation, environmental and health protection

- Most efficient available light sources with an efficiency of up to 70 percent conserve resources and enable efficient production, especially in comparison with conventional processing methods, when machining high-strength steels with a lower weight
- Increasing health and well-being through minimally invasive surgical methods, e.g. in ophthalmology
- Ongoing development toward ever-smaller crystalline structures in semiconductor production opens up a growing number of new uses
- Customized measurement solutions from TRIOPTICS check the image quality of smartphone camera lenses, for example, helping to reduce waste
- Improving communication options and extending Internet access to remote regions
- Efficient and time-saving production processes conserve resources and improve, for example, the data volumes while simultaneously reducing production costs, waste and power consumption
- Thermography solutions facilitate the monitoring and optimization of solar power panels
- Optical systems improve imaging and diagnostics in real-time disease detection, enhancing health and well-being
- Imaging technology is enabling advances in autonomous driving, for example, improving traffic flow and reducing emissions
- The results are more precise surfaces and tighter tolerances in engine components (downsizing) and thus vehicles requiring less fuel and generating fewer emissions
- More complex transmissions for hybrid vehicles in the field of electromobility demand the increased use of metrology
- Flexible design and long service life, often in excess of 10 years, allow upgrades and overhauls for a long time, thus conserving resources
- Increased safety on the roads and in public squares through reduction of accidents and resilient infrastructures
- Improvement of living conditions through reduced noise pollution and environmental pollution
- Traffic monitoring with TraffiPole as a sustainable and environmentally conscious solution with reduced power consumption and elimination of cooling due to special design, housing made entirely of recyclable materials, with option for self-sufficient operation using solar panels
- SFC fuel cell technology reliably supplies Jenoptik speed monitoring systems with green energy
- Average speed cameras not only improve compliance with speed limits and traffic flow, but also deliberately reduce emissions in so-called "clean air zones"
- Installation at the side of the road limits interference in the environment (no installation of monitoring gantries)

Social Commitment/Corporate Citizenship

Supporting young people in their education and scientific activities, as well as in social projects, is at the heart of our social commitment. Jenoptik supports a whole range of non-profit projects, organizations and initiatives and is chiefly involved in the following three funding areas:

- A commitment to the younger generation with projects in **science, education, and in the social arena**.
- **Art and cultural projects** to lend an attractive design to our company locations.
- Creation of conditions to improve our employees' work/life balance.
- A commitment to **integration and internationality** to strengthen the foundations of business and society in the future.

As a responsible and socially committed company, we want to play an active role in shaping our own environment, relying here on close and long-term partnerships that go beyond purely financial aspects. With our commitment to society, we

want to strengthen the confidence placed in Jenoptik and boost the employees' sense of identification with the company. We also expect this to have a positive effect on our brand image, reputation and our attractiveness as an employer.

The duties of Corporate Citizenship are the responsibility of Investor Relations & Communication. Group-wide guidelines govern the principles of a structured and standardized approach to defining "Jenoptik as a Corporate Citizen" and ensure a standardized method of handling donations and sponsorship queries, as well as carrying out sponsorship projects.

Our commitment to our region is of particular relevance. Since 1996, the Group has supported the Adult Initiative for Children with Cancer Jena e. V. Donations both made by Jenoptik and collected from partners as well as the organization of diverse events help to support children with cancer and their parents. In 2021, the group-wide program "Mitarbeiter*innen im Ehrenamt" (Employees and Volunteering) entered its third round as a further pillar of social commitment. Volunteering is an important link in society. Many Jenoptik employees around the world are committed to this and are supported by Jenoptik in doing so.

T24 Social commitment – exemplary projects 2021

Social	Jenoptik supports	<ul style="list-style-type: none"> • Summer camps for children of Jenoptik employees and children of recognized refugee families • Promotion of "Mitarbeiter im Ehrenamt" • Thanksgiving food collections for the needy in Jupiter and Rochester Hills • Blood donation campaigns for One Blood in Jupiter
Science & Education	Jenoptik is a partner for	<ul style="list-style-type: none"> • Experimentarium Imaginata Jena e.V. • The Thuringian young researchers competition "Jugend forscht" and "Schüler experimentieren" • Applied Photonics Award • Improving the conditions for home schooling for needy families • Lothar Späth Award for Outstanding Innovations in Science and Business • Global competition "SPIE Startup Challenge"
Art & Culture	Jenoptik supports cultural projects with partners	<ul style="list-style-type: none"> • Light art on the facade of the Ernst Abbe high-rise • Own series of "tangente" art exhibitions • Summer concert series at the Thalbürgel monastery church • Open-air Cultural Festival "Kulturarena" organized by the city of Jena • Easter charity concert by the International Young Orchestra Academy on behalf of the Elterninitiative für krebskranke Kinder Jena e.V. (did not take place in 2021 due to corona)

As a member of the “Familienfreundliches Jena e.V.” Förderkreis, the Group works with numerous partners to support projects conducted by the “Jenaer Bündnis für Familie” (Jena family alliance) and models of family-friendly childcare: the “Saaleknirpse” in Jena, the “Wasserstrolche” in Wedel and the “Talentschuppen” in Monheim. Once again there was a joint summer camp for the children of Jenoptik employees and children from refugee families.

2021 too was shaped by the global coronavirus pandemic, which was once again reflected in our social commitment. Some projects that Jenoptik traditionally supports could not take place in the usual way due to the pandemic. Consequently, Jenoptik redirected some of its commitment to the promotion of pandemic-related and environmental projects. For example, Jenoptik followed up on the 2020 fundraising campaign to finance mobile devices for students of needy families for home schooling, supported the purchase of an air filter for an elementary school, and initiated a group-wide fundraising campaign to help people affected by the flood disaster in the Ahr Valley. In the USA, Jenoptik employees supported the “One Blood” organization with blood donation drives as well as people in need with various initiatives.

Since 2021, Jenoptik has been the main sponsor of Imaginata Jena, an experimentarium for the senses and an extraordinary learning and events venue. The aims of Imaginata, to increase young people’s awareness of science and technology at an early age, fit in very well with one of the central issues of Jenoptik’s social commitment – encouraging young people socially and in education.

In 2021, Jenoptik created the technical prerequisites for a contemporary video mapping projection on the Ernst-Abbe high-rise building in Jena, enriching the cultural offerings of Jena, the City of Light.

Responsible Corporate Governance

In a globalized market environment, Jenoptik is fully committed to responsible corporate governance and law-abiding, compliant conduct. We make our business decisions with this in mind and always work to ensure that our actions are in accordance with regulations, laws and our values. Compliance & Risk Management therefore lies within the remit of the Chairman of the Executive Board and reports directly and regularly to him. The Director of Compliance & Risk Management is in close contact with all employees throughout the organization and controls the Group’s enterprise risk management system in close cooperation with the central divisions and the divisions’ risk officers. Our compliance organization comprises a central Compliance Competence Center with specialist responsibility for compliance, risk management, data protection as well as customs and export control. In the North America and Asia/Pacific regions, the team is strengthened by regional compliance officers.

Respect for human rights is a high priority for Jenoptik, especially in the supply chain. Jenoptik is committed to internationally recognized standards of human rights and does not tolerate any form of slavery, forced labor, child labor, human trafficking or exploitation in its own business operations or those of its supply chain. We also expect our suppliers to comply with and respect internationally recognized human rights standards, e.g. the Slavery and Human Trafficking Statement. Separate codes of conduct for both sales partners and for suppliers define the Jenoptik Group’s requirements for our business partners and require them to comply with nationally and internationally applicable statutes, regulations and standards. In order to identify violations and high-risk business partners in good time, a platform for group-wide supplier screening regarding compliance with all sustainability criteria was launched. Cooperation only takes place with those business partners who accept Jenoptik’s compliance declaration. Jenoptik is currently actively working to fulfill the requirements of the German Supply Chain Due Diligence Act (LkSG).

Anti-corruption: Jenoptik fights all forms of active and passive corruption and expects all its business partners to do the same. For detailed information on Jenoptik’s compliance management system, the company guidelines and codes of conduct for employees, suppliers and sales partners, our online training, and our whistleblower system, we refer you to the Corporate Governance Statement from page 26 on and the Risk and Opportunity Report from page 141 on.

Supplier management: As one of our most important resources, our supplier base has a significant influence on the value contribution of our products, but also on sustainability and environmental protection. We partner with our suppliers all along the value chain on a long-term basis. When selecting our business partners and when working together, we take into account their performance in terms of safety, health, the environment, social standards and fair business practices in order to further develop an integrated supplier management system.

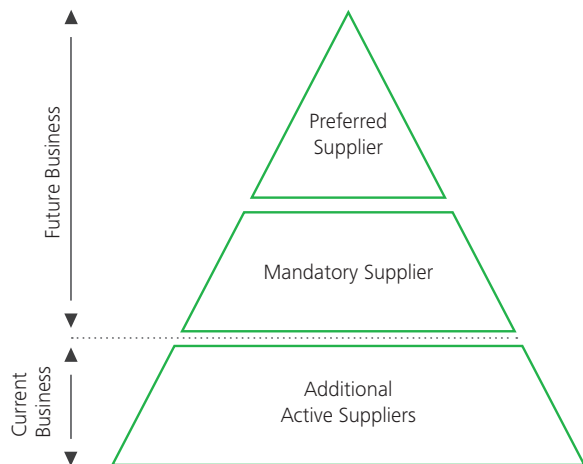
Our business partners are classified and assigned to the different phases of the supplier life cycle. Our Preferred Suppliers are of strategic importance for our future business. They are qualified according to uniform criteria applying group-wide. We hold a strategic meeting with our Preferred Suppliers at least once a

year at which we discuss supplier assessment and their development. We use a scorecard to help set targets and measures relating to quality, logistics, technology, costs, and sustainability.

Irrespective of procurement volume, our Code of Conduct for Suppliers or the mutual recognition of equivalent codes serves as the basis for contractual relationships. Our Code of Conduct – or what is recognized as its equivalent – contains as a minimum topics such as compliance with laws and regulations, respect for human rights, the prohibition of forced and child labor, the responsible handling of conflict materials and the obligation to protect the environment. In order to further increase transparency in the supply chain, Jenoptik implemented a central platform for the global monitoring of suppliers with respect to compliance and sustainability. In this context, a new indicator, the so-called Corporate Social Responsibility rate (CSR), was introduced in 2021, which indicates the percentage of suppliers of production materials with an annual purchasing volume in excess of 200,000 euros for which complete CSR self-assessments assessed as non-critical exist. In the form of questionnaires, these cover the topics of environmental protection, compliance management, human rights and the prohibition of child labor, ensuring health and safety, as well as anti-corruption and sustainability in the supply chain. The survey will be managed via the sustainability and compliance platform implemented in 2021. If self-assessments are not completed in full or are rated as deficient, the cause is determined in dialog with the supplier and joint measures are initiated to improve the assessment. Ultimately, a termination of the supplier relationship cannot be ruled out. In 2021, the CSR rate was 38.0 percent. The CSR rate is to be 40 percent by 2022 and 50 percent by 2025.

Purchasing in the Jenoptik Group is globally positioned and responsible for all procurement activities and the supply chain management. The various purchasing categories and product groups are controlled and managed by commodity managers worldwide. The Vice President for Corporate Supply Chain Management & Procurement reports directly to the CFO of JENOPTIK AG, Hans-Dieter Schumacher.

G15 Classification of suppliers



Quality Management

Quality Management

The key to Jenoptik’s success as a technology company primarily lies in the quality of its components, products and solutions. Longstanding collaborations with key customers, sometimes

in the form of development partnerships, and the confidence placed in us by our partners are proof that our products and solutions are convincing in their quality worldwide. As a quality leader, we are proactively committed to ensuring that the quality of our products and services is above average in many of our product areas. For more than 30 years, Jenoptik has been a member of the German Association for Quality (DGQ e.V.).

Quality management at Jenoptik is managed locally in the business units and falls within the responsibility of the division managers. Each division applies individual customer and market-related quality indicators. The following overview summarizes essential Key Performance Indicators (KPIs) for quality management in the Jenoptik Group.

One measure to ensure and further improve our quality are our process optimizations (Plan-Do-Check-Act (PDCA) and lean cycles), which have an impact on all areas of the business – from the development of new products via quality planning to the quality of the finished product (safe launch). Topics such as international quality and occupational health and safety as well as environmental protection programs were developed on the basis of the Jenoptik and divisional strategies. In 2021, further

modules of the Computer Aided Quality System (CAQ system) were implemented for more efficient planning, execution and evaluation of business processes and a module for the risk assessment of products and processes (FMEA) was successfully started. For example, in 2021, the Light & Safety division set up a “Supplier Quality Development Area” to establish an independent quality check for incoming goods inspections and the qualification of suppliers.

In addition to certifications, further issues in quality management at Jenoptik include standardization, process improvements, tests as well as continuous dialog with customers, e.g. analyses of customer satisfaction. Our group companies comply with the requirements of the ISO 9001 quality management standard. All manufacturing facilities are certified to ISO 9001 worldwide. Selected companies also meet the requirements of the ISO 14001 environmental management system.

The table T26 shows a selection of group certifications and the actions undertaken in 2021. The Light & Optics division has successfully passed the multi-site certification in accordance with the ISO 9001 and ISO 14001 international standards for quality and environmental management for several sites. Successfully audited were the implementation of the environmental management standard ISO 14001:2015 (in Wedel and Essen), the ISO TS 22163 (in Altenstadt) and compliance with the industry-specific standard EN 9100:2018 (in Wedel and Essen). In all audits, the auditors from the DQS (Deutschen Gesellschaft zur Zertifizierung von Managementsystemen) and TÜV Rheinland positively highlighted the further development of the quality and environmental management system, the high degree of integration of environmental topics into company processes, and the large number of improvement measures planned and implemented in particular. In addition, they certified that the employees receive a very high level of qualification. In the fall, the Automotive division’s production area at the Shanghai site successfully passed an ISO 9001 audit by the DQS.

In the fiscal year 2021, VINCORION successfully completed the ISO 27001 certification. This is the first matrix certification for VINCORION valid for the two companies with their three sites Wedel, Essen and Altenstadt. VINCORION also received the first certification for the environmental management system in 2021. In 2022, the company will continue to integrate its management systems and merge the previously separate ISO 14001 certifications. VINCORION is also expanding its information security management system towards CMMC certification, as required by the US market.

T25 Examples of the divisions` KPIs

Criterion	Examples for KPIs of the divisions
Quality from a customer perspective	<ul style="list-style-type: none"> • Customer satisfaction • Complaints costs ratio • Warranty and guarantee costs
Quality as an internal operations partner	<ul style="list-style-type: none"> • Internal audits (number of improvements) • Measures in the process of continual improvement (number) • Process and product quality <ul style="list-style-type: none"> - Production yield/quality level - Reworking costs - Scrap costs • Policy Deployment Matrix (PDM)
Quality from the supplier’s perspective	<ul style="list-style-type: none"> • External supplier audits (number of improvements) • Suitable suppliers (number) • Complaints ratio • Complaints costs • Guarantee and warranty costs

T26 Certification within the Group (selection)

Certification	Description	2021 actions
ISO 9001	Certification of quality management processes	<ul style="list-style-type: none"> Matrix certification of all German Light & Optics sites incl. TRIOPTICS Successful surveillance audit at the Shanghai site Matrix certification of all Light & Production sites except for Spain Matrix certification of Light & Safety sites in German and Austria VINCORION certifications: Successful surveillance audit at JENOPTIK Power Systems GmbH
EN 9100	Certification of quality management processes specific to the aerospace and defense industries	<ul style="list-style-type: none"> Re-certification/surveillance audit at VINCORION Re-certification/surveillance audit of the Light & Safety sites in Germany, Switzerland, Austria and the Netherlands
ISO 13485	Certification for the medical market with respect to the design, development and manufacture of medical products	<ul style="list-style-type: none"> Certification in the Light & Optics division: Expansion audit for the biophotonics production and development area
ISO 14001	Certification of the environmental management system	<ul style="list-style-type: none"> Matrix certification of German Light & Optics sites: Expansion of the scope for the Berlin-Adlershof site within the framework of the existing multi-site certification Re-certification in the Light & Production division: Successful certification of the Bayeux site (France) Re-certification at VINCORION
ISO 27001	IT security and compliance certification	<ul style="list-style-type: none"> Initial certification as matrix certification at VINCORION
ISO 45001	Certification of the occupational health and safety management system	<ul style="list-style-type: none"> Successful certification of the Light & Production site in Bayeux (France)
IATF 16949	Certification for the automotive industry	<ul style="list-style-type: none"> Surveillance audit and special audit at the Triptis site
ISO/TS 22163	Quality management system for the rail industry	<ul style="list-style-type: none"> VINCORION: Successful re-certification audit
IRIS	International Railway Industry Standard	<ul style="list-style-type: none"> Certification at VINCORION
ILO-OSH-2001 / OHSAS 18001 bzw. DIN ISO 45001	Certification of occupational safety and health management	<ul style="list-style-type: none"> Re-certification in Light & Production Re-certification at VINCORION
AQAO 2110/2210	NATO quality assurance system	<ul style="list-style-type: none"> Renewal of certification at VINCORION

Independent Practitioner's Report on a Limited Assurance Engagement on Non-financial Reporting¹

To JENOPTIK AG, Jena

We have performed a limited assurance engagement on the Combined Separate Non-financial Report of JENOPTIK AG, Jena, (hereinafter the "Company") for the period from 1 January to 31 December 2021 (hereinafter the "Combined Separate Non-financial Report").

Not subject to our assurance engagement are the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report.

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Combined Separate Non-financial Report in accordance with §§ (Articles) 315c in conjunction with 289c to 289e HGB ("Handelsgesetzbuch": "German Commercial Code") and Article 8 of REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020 on establishing a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (hereinafter the "EU Taxonomy Regulation") and the Delegated Acts adopted thereunder, as well as for making their own interpretation of the wording and terms contained in the EU Taxonomy Regulation and the Delegated Acts adopted thereunder, as set out in section "Information on the EU Taxonomy Regulation" of the Combined Separate Non-financial Report.

This responsibility includes the selection and application of appropriate non-financial reporting methods and making assumptions and estimates about individual non-financial disclosures of the Company that are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal controls as the executive directors consider necessary to enable the preparation of a Combined Separate Non-financial Report that is free from material misstatement whether due to fraud or error.

¹ PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the Combined Separate Non-financial Report and issued an independent practitioner's report in German language, which is authoritative. The following text is a translation of the independent practitioner's report.

The EU Taxonomy Regulation and the Delegated Acts issued thereunder contain wording and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. Therefore, the executive directors have disclosed their interpretation of the EU Taxonomy Regulation and the Delegated Acts adopted thereunder in section “Information on the EU Taxonomy Regulation” of the Combined Separate Non-financial Report. They are responsible for the defensibility of this interpretation. Due to the imminent risk that indeterminate legal terms may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties.

Independence and Quality Control of the Audit Firm

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors (“Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer”: “BS WP/vBP”) as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis – IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Responsibility of the Assurance Practitioner

Our responsibility is to express a conclusion with limited assurance on the Combined Separate Non-financial Report based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the Company’s Combined Separate Non-financial Report, other than the external sources of documentation or expert opinions mentioned

in the Combined Separate Non-financial Report, are not prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section “Information on the EU Taxonomy Regulation” of the Combined Separate Non-financial Report.

In a limited assurance engagement the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgement of the assurance practitioner.

In the course of our assurance engagement, we have, amongst other things, performed the following assurance procedures and other activities:

- Gaining an understanding of the Company’s sustainability organization and stakeholder engagement
- Inquiries of the executive directors and relevant employees involved in the preparation of the Combined Separate Non-financial Report about the preparation process, about the internal control system relating to this process and selected disclosures in the Combined Separate Non-financial Report
- Identification of likely risks of material misstatement in the Combined Separate Non-financial Report
- Analytical procedures on selected disclosures in the Combined Separate Non-financial Report
- Reconciliation of selected disclosures with the corresponding data in the consolidated financial statements and group management report
- Evaluation of the presentation of the Combined Separate Non-financial Report
- Evaluation of the process to identify taxonomy-eligible economic activities and the corresponding disclosures in the Combined Separate Non-financial Report

In determining the disclosures in accordance with Article 8 of the EU Taxonomy Regulation, the executive directors are required to interpret undefined legal terms. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of their interpretation and, accordingly, our assurance engagement thereon are subject to uncertainties.

Assurance Opinion

Based on the assurance procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Combined Separate Non-financial Report of the Company for the period from 1 January to 31 December 2021 is not prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section “Information on the EU Taxonomy Regulation” of the Combined Separate Non-financial Report.

We do not express an assurance opinion on the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report.

Intended Use of the Assurance Report

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company about the results of the limited assurance engagement. The report is not intended for any third parties to base any (financial) decision thereon. Our responsibility lies only with the Company. We do not assume any responsibility towards third parties.

München, 16 March 2022

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Hendrik Fink ppa. Thomas Groth
Wirtschaftsprüfer
[German public auditor]

Combined Management Report

» In short «

In 2021, the continuing operations
generated revenue growth of

22.0 %

not least due to the continuing high
demand in the semiconductor equipment industry and
the first full-year contribution from TRIOPTICS.

The Information and Notes relating to Takeover Law
as well as the Corporate Governance Statement (see Corporate Governance chapter)
are part of the Combined Management Report.

General Group Information

Group Structure

Legal and organizational structure

As the corporate center and strategic holding company of the Group, JENOPTIK AG, based in Jena, performs top-level functions including strategic corporate development, innovation management, and key tasks in controlling, corporate development (strategy, mergers and acquisitions, innovation), corporate real estate management, finance, internal audit, investor relations and communications, human resources, accounting, legal and IP, compliance and risk management, taxes, and treasury. It further pools the central functions of IT and data security, purchasing, safety, occupational health and safety, and environmental protection.

Jenoptik's operating business is the responsibility of the divisions and largely focused on the growth market of photonics, which, according to a study conducted by Triton Market Research, is expected to see annual average growth of 8.0 percent in the years 2021 through 2028.

In 2021, the photonics business was organized into the three photonics divisions, Light & Optics (OEM business), Light & Production (industrial customer business), and Light & Safety (business with public sector contractors). The three divisions build on common core competencies in the field of photonics, including expertise in the fields of optics, sensors, imaging, robotics, and data analysis. Work based on mechatronic technologies is managed under the VINCORION brand.

The three photonics divisions represent the segments as defined in IFRS 8. G16

For VINCORION, which sells mechatronic products, in particular for the security and defense technology, aviation, and rail and transport industries, a sale agreement with a fund managed by STAR Capital Partnership LLP was signed in November 2021, with closing expected in 2022. VINCORION is shown as a discontinued operation in accordance with IFRS 5.

In the fall of 2021, Jenoptik boosted its global photonics business with the acquisition of BG Medical Applications GmbH (BG Medical, since January 13, 2022 JENOPTIK Medical GmbH) and the SwissOptic Group. Jenoptik acquired from Berliner Glas GmbH, a wholly-owned subsidiary of ASML Holding N.V., 100-percent stakes in

- BG Medical Applications GmbH, a supplier of high-precision components for the medical technology industry based in Berlin,
- SwissOptic AG, a specialist in the development and manufacture of optical components and assemblies, primarily for the medical technology, semiconductor, and metrology industries based in Heerbrugg/Switzerland, and
- Chinese company SwissOptic Co., Ltd., based in Wuhan/China incl. Berliner Glas Wuhan Trading Co., Ltd. (together with SwissOptic AG, SwissOptic Group).

G16 Organizational structure of the Jenoptik Group in 2021

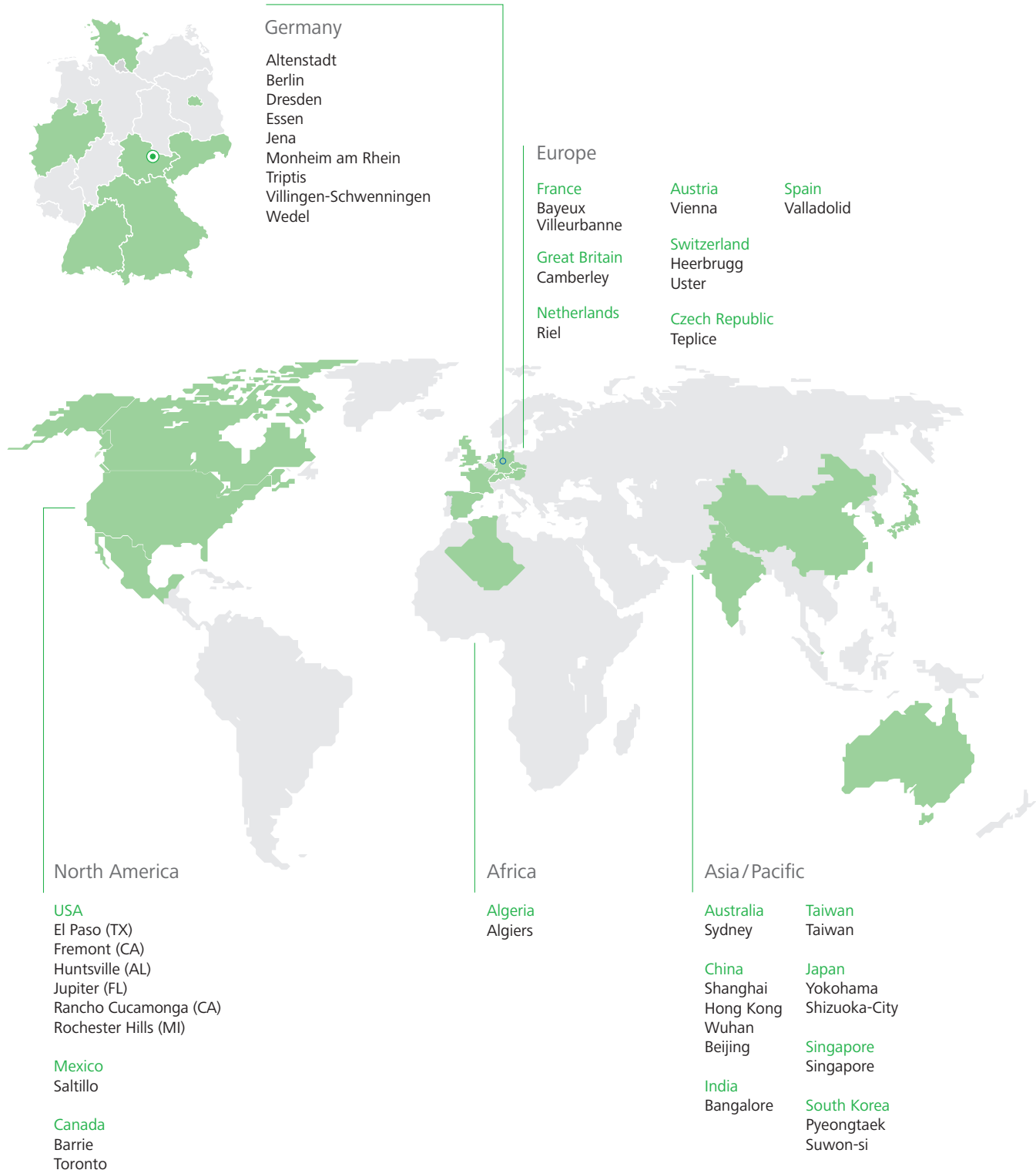
Photonics			Mechatronics
Light & Optics OEM business	Light & Production B2B business	Light & Safety B2G business	
Optical products and key technologies for the markets of the digital world and healthcare	System solutions for more efficiency of products and production processes	Systems and services for safer roads and cities around the world	Mechatronic products and solutions for more security in the civil and military area

* A contract to sell was signed in November 2021

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G17 Key locations of the Jenoptik Group



The closing date was November 30, 2021. The acquired companies are being integrated into the Light & Optics division. In addition to accelerating growth and sharpening Jenoptik's focus on photonics, the acquisition will enable the Group to expand its global presence, especially in the semiconductor and medical technology industries, and boost its product and technology portfolio.

On the closing date of September 24, 2020, Jenoptik completed the acquisition of an initial 75-percent stake in Trioptics GmbH. Based on the existing control, the company was already consolidated at 100 percent of the shares, and a purchase price liability was recognized. Jenoptik acquired the remaining 25 percent from the owners now also legally on December 31, 2021. The TRIOPTICS business was integrated into the Light & Optics division.



For shareholdings of the Jenoptik Group, see page 245 / 246

As it continues to focus its business on photonic applications, Jenoptik concluded an agreement on the sale of its crystal growth business to Hellma Materials GmbH in early July 2021. The closing date was August 31, 2021.

Also in July 2021, Jenoptik reported the sale of its non-optical process measuring technology business for grinding machines to the Italian Marposs Group. The closing date was July 30, 2021.

In recent years, Jenoptik has continued to expand its international business and the structures associated with it. The US holding company at the Jupiter location in Florida is responsible for steering the overall strategy and coordinating financial activities for the American market. The administrative functions for Asia as a whole are managed from Shanghai, China. The operating business in Europe is coordinated at the main locations in Germany and Great Britain.


Key Locations

Jenoptik is represented in over 80 countries worldwide, with a direct presence in 19 of them, e.g., through its own companies, investments, or affiliated firms. The majority of the Group's products are manufactured in Germany, followed by the US and China. The Group's Jena headquarters is primarily home to the activities in the Light & Optics division. Other major German sites are at Wedel near Hamburg (Light & Optics and VINCORION), Monheim near Düsseldorf (Light & Safety), Villingen-Schwenningen (Light & Production), Berlin, Dresden, and Triptis (Light & Optics), and Essen and Altenstadt (VINCORION).

Outside Germany, Jenoptik maintains sites or is represented by subsidiaries or affiliated firms in the following countries: Algeria, Australia, Austria, Canada, China, the Czech Republic, France, Great Britain, India, Japan, Korea, Mexico, the Netherlands, Switzerland, Singapore, Spain, Taiwan, and the US. G17


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Business Model and Markets

Jenoptik is a globally operating photonics group that provides the majority of its products and services to the photonics market. Photonics covers the basics and areas of use of optical methods and technologies that address the generation, transmission, shaping, and measurement of light. Controllable light sources such as LEDs and lasers, together with suitable optical devices and sensors, make it possible to transmit data, analyze materials, create micro-optical components, and perform non-contact precision measurements. Self-driving cars that have to find their way around independently are practically inconceivable without LiDAR (light detection and ranging) technology. Photonics is also critical to efficient data exchange. In the process, it uses the special physical properties of light quanta (photons) in place of electrons or also combines optics and electronics. 

As a supplier of innovative capital goods for these markets, Jenoptik is primarily a technology partner to industrial companies. Its range of products comprises OEM or standard components, modules and subsystems through to complex systems and production lines for numerous sectors. The range also includes total solutions and full-service operator models. Alongside industry, key customers include public sector contractors, especially in the Light & Safety division and VINCORION.

Jenoptik competes with its product range with a wide range of internationally operating companies predominantly specializing in only one or a few of the product areas and markets listed above. Differing service ranges are only comparable to a limited extent, and thus make it difficult to provide definite market share estimates.

Research and development occupy a key position in Jenoptik's work, with the customer at the center of everything we do. Technology-intensive products and systems are often created in close collaboration with customers. Lasting and successful arrangements with key customers are therefore an important factor of Jenoptik's success. This demands a spirit of mutual trust together with knowledge of our partners' requirements, and is reflected, for example, in the costs for developments on behalf of customers, amounting to 20.3 million euros in the fiscal year 2021. 

The Jenoptik Divisions

Light & Optics

The acquisition of BG Medical and the SwissOptic Group in late 2021 allows Jenoptik to significantly expand its semiconductor equipment and, in particular, its medical technology business. Both, BG Medical (medical technology) and the SwissOptic Group (medical technology/life science, semiconductors, measuring technology (OEM business, optical and optomechanical assemblies, primarily for geodesy)) are being integrated into Light & Optics.

The Light & Optics division is a global supplier of solutions and machinery based on photonic technologies. Within it, Jenoptik possesses engineering expertise in a wide range of technologies in the fields of optics, micro-optics, laser technology, digital imaging, optoelectronics, sensor technology, and optical test and measurement systems. The division's customers include leading machine and plant manufacturers in the semiconductor, laser material processing, medical technology and life science, industrial automation, automotive, and security industries. As a development and production partner, the division uses its expertise in key technologies to fulfill customers' demanding requirements. Its systems, modules, and components help customers meet their future challenges with the help of photonic technologies.

In the Semiconductor & Advanced Manufacturing area, the Light & Optics division develops and produces optical and micro-optical systems as well as precision components to the highest quality standards. This includes complete systems and modules, all the way to special optical components and custom solutions for wavelengths from the far infrared (FIR) to the extreme ultraviolet (EUV) region. These products are used, for example, in both lithography and inspections within the semiconductor equipment industry. The division cooperates with leading international manufacturers in this field. SwissOptic Group's semiconductor business further rounds off the division's product portfolio with a complementary range, enabling it to offer existing and new customers an even broader product spectrum.

With its innovative, in part software-assisted optical and micro-optical solutions, Jenoptik is also in a position to exploit further potential for growth in the field of digitization, for



Detailed information on the course of business in the divisions can be found in the Segment Report from page 130 on; see the Forecast Report from page 153 on for information on the development of the divisions



Information on our extensive product range can be found at www.jenoptik.com/products



For more information on the development of the photonics market, see the "Macro-economic and Sectoral Developments" chapter from page 110 on



Examples of innovative products can be found in the "Research and Development" chapter from page 103 on

example in the market for information and communication technology, and increasingly also in the laser material processing market. For information and communication technology, the company supplies in particular components and modules for use in optoelectronic transceiver modules and in systems for free-space optical data transmission, and optoelectronic probe cards for industrial testing of photonic integrated circuits. In the laser material processing market, customers including system integrators and manufacturers of laser production equipment are supplied with components, modules, and smart system solutions.

In the field of biophotonics, the division offers applications for bio-imaging and laser-based therapy. Based on its core expertise in laser and LED-based beam sources, optical components and modules, sensors, digital imaging, and system integration, the division develops OEM solutions and products for the medical technology/life science industry. OEM laser solutions are based on diode and disk laser technologies, and are used in ophthalmology, dermatology/aesthetics, and in surgery. The division also develops and produces optical and optoelectronic modules and subsystems for digital imaging and microscope cameras for applications in the medical field. The JENOPTIK SYIONS miniaturized microscopy subsystem for digital imaging, which can be configured according to customer requirements, is integrated into laboratory equipment for diagnostics and analytics. The imaging unit allows manufacturers in the life science and healthcare sectors to integrate optical evaluation processes into their end devices, even without their own optics expertise, thereby expanding their product/feature portfolio.

Jenoptik acquired a complementary product portfolio in the areas of dentistry (e. g., intraoral scanners) and robot-assisted surgery (e. g., components for minimally invasive surgical devices) in 2021 through the acquisition of BG Medical. Through the activities of the SwissOptic Group, which was also newly acquired, the Group is strengthening its own business in the areas of ophthalmology and life science. The acquisition will enable Jenoptik to roughly double the size of its medical technology business.

Biophotonics customers include national and international medical technology companies, in particular OEMs in ophthalmology, dentistry, diagnostics suppliers, and companies involved in DNA sequencing.

For the field of industrial solutions, Jenoptik supplies high-power optoelectronic components and modules as well as integrated solutions that combine optics, laser technology, sensors, and digital imaging as required. In addition to complex components for head-up displays, lenses for driver assistance systems, and laser optical systems for particle sensors, the company also produces polymer optics for machine vision applications. Sensor products cover such things as infrared and thermographic camera systems, polymer and infrared optics, and laser range-finders, where the company focuses on applications in the fields of industrial automation, mobility, security, and industrial applications.

The acquisition of Trioptics GmbH in 2020 allowed the Jenoptik Group to considerably expand its testing and measurement product range, gain access to new markets, e.g., for smartphones, and significantly expand its reach in Asia. TRIOPTICS supplies an extensive range of optical measurement, testing, and production technology for development, quality assurance, and production worldwide. Its expertise ranges from testing individual optical components to the assembly and testing of complex camera systems. These systems help to accelerate and improve the development, quality control, and production of lenses, objectives, and camera modules. Customers include smartphone and camera manufacturers, and their suppliers. We are also targeting other markets, such as those for new virtual and augmented reality applications in the industrial and consumer segments, the optical industry, or the automotive industry. Products and services are marketed worldwide through a network of subsidiaries and sales partners, with local service centers available in key markets.

The Optical Test & Measurement area also has optical testing systems for product inspection and process optimization, as well as complex imaging systems for applications in the field of parts measurement, surface testing, and position detection. The main customers come primarily from the automotive, stamping, and glass industries, as well as from the machine and equipment construction sector.

Key sales regions of the Light & Optics division are in Europe and North America, as well as in Asia/Pacific. The core markets in which Jenoptik supplies specific market segments are the semiconductor equipment, medical technology/life science, information and communication technology, show and entertainment, metrology, automotive, virtual and augmented reality, industrial automation, and the security technology industries.

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Light & Optics’ competitive environment is in part heavily fragmented, with a limited number of larger suppliers with which the division competes. For some products, the division is the sole supplier. Competitors include MKS/Newport, Excelitas/Qioptiq, IDEX, OptoAlignment Technologies, and Optikos.

Light & Production

The Light & Production division is a global specialist in the optimization of manufacturing processes.

With many years of experience and expertise in industrial metrology and optical inspection, laser-based material processing, and highly flexible robot-based automation, the division develops manufacturing solutions for customers in the automotive, aerospace, and other manufacturing industries. Jenoptik supports industrial customers in making their production processes more effective and efficient through the use of optical and photonic technologies.

The product portfolio in the Light & Production division includes 2D and 3D laser machines (e.g., for airbag perforation) that are integrated into customers’ production lines as part of process optimization and automation. They are used to machine plastics, metals, and leather at high speed and with accurate contours, and are thus both efficient and precise.

In the Automation & Integration area, automated production lines are planned and integrated into customers’ production environments. Solutions, products, and services related to process engineering and implementation include plant layouts, simulation, machine control and software design, robot handling systems, and transport devices.

The metrology portfolio includes high-precision contact and non-contact production metrology with a resolution in the nanometer range for pneumatic, tactile, and optical inspection of roughness, contour, shape, and the determination of dimensions at every stage of the production process and in the inspection room. A wide range of services such as in-depth advice, training, service, and long-term maintenance agreements are also all provided.

The Light & Production division is active around the world and, in addition to Germany, also operates development and production facilities in the US, Canada, France, Spain, and China. It also has numerous sales and service offices located on three continents, and so Light & Production is present in the centers of the global automotive and automotive supplier industries in Europe, North America, and Asia. Companies such

as Marposs, Mahr, and ViciVision compete with Jenoptik’s metrology operations, Trumpf, Prima Power, and others with our laser machine business, and firms such as Centerline Automation in Canada and Serra in Spain with our automation business.

Light & Safety

In the field of smart mobility, the Light & Safety division operates in the following areas of business: traffic law enforcement/road safety, civil security, road user charging, emission control, and traffic management. Jenoptik develops, produces, and sells photonics-based components, systems, and services for customers in the public sector (local and central government, police and regulatory authorities, and both public and private organizations), which are used to monitor compliance with applicable road traffic regulations and thus make roads and cities safer worldwide.

With its range of sensor-based traffic cameras and automatic license plate recognition (ANPR/ALPR), the division focuses on technologies for traffic monitoring. The solutions offered by Light & Safety cover a wide range of stationary and mobile applications, which also make use of video analytics and artificial intelligence. Examples include vehicle monitoring and classification, speed and red light monitoring, illegal turning maneuvers, average speed determination, civil security, road user charging, and emission control.

As an end-to-end provider, Light & Safety also supports its customers with a combination of equipment business and services, known as Traffic Service Provision. Here, Jenoptik covers the entire supporting process chain – from system development, construction, installation, and maintenance of the monitoring structure, to capturing images of traffic violations and their automated back-office processing. The division is also increasingly offering its customers software-as-a-service (SaaS) business models, e.g., in the UK or Australia, in response to demands for greater flexibility and less upfront investment by customers.

The sales activities in the Light & Safety division are subdivided into five regional units: America, Middle East/Africa, Great Britain, Europe, APAC/Australia. The Light & Safety division’s regional areas of focus are also primarily determined by customers. The division thus has a strong local presence in Germany, Great Britain, the Netherlands, Switzerland, Austria, North America, and Australia, and continues to expand its sales activities on the basis of the above structure.

In addition to international companies such as Verra Mobilty/ Redflex, Sensys Gatso Group, Idemia, and Vitronic, the Light & Safety division also competes with a large number of locally operating companies.

Traffic safety systems in Germany are tested and certified by the Physikalisch-Technische Bundesanstalt (PTB) in Braunschweig, thereby obtaining proof of their measuring accuracy. Foreign deliveries are subject to controls by national institutes, although various countries also partially or fully recognize the German PTB test certificate or licenses from other leading European licensing authorities.



Further information on the development of the sectors and markets can be found in the Macroeconomic and sectoral developments section from page 110 on

VINCORION

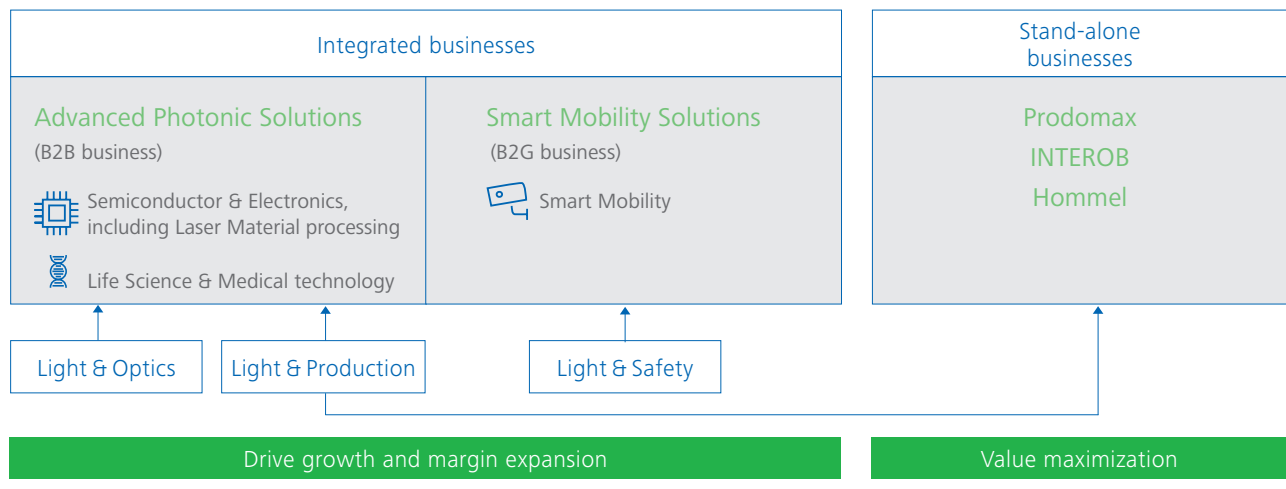
VINCORION develops, produces, and sells mechatronic products for civil and military markets, in particular for the security and defense technology, aviation, and the rail and transport industries. Its portfolio ranges from individual assemblies through to systems that customers integrate into their own systems. VINCORION does not manufacture components or systems for controversial or internationally outlawed weapons. The division specializes in energy systems, drive and stabilization systems, and aviation systems.

In November 2021, an agreement was signed with a fund managed by STAR Capital Partnership LLP to sell VINCORION, with closing expected in 2022. VINCORION is shown as a discontinued operation in accordance with IFRS 5.

New group structure in first quarter 2022

Jenoptik's new growth agenda, "More Value," is set to accelerate the company's transformation into a pure, globally leading photonics group. As part of its new organizational set-up, the Group is consolidating its core photonics business in two new divisions, Advanced Photonic Solutions (industrial customer business) and Smart Mobility Solutions (business with public sector contractors). The former Light & Optics and Light & Production divisions will be merged into the new Advanced Photonic Solutions division, while non-photonics activities, particularly for the automotive market, will be separated and operated as independent brands (incl. Hommel, Prodomax, and INTEROB) within the Jenoptik Group's Non-Photonics Portfolio Companies. The former Light & Safety division will become the Smart Mobility Solutions division. These two new divisions will focus on the three core markets of semiconductors and electronics, life science and medical technology, and smart mobility. The new structure will take effect in the first quarter of 2022. G18

G18 Organizational structure of the Jenoptik Group as of the first quarter 2022



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Targets and Strategies

Strategic orientation of the group

As already noted in the chapter “Business Model and Markets”, Jenoptik’s range of services is predominantly based on optical methods and technologies. High-precision, flexible photonics methods and processes will continue to enjoy an increasing share in industrial value creation as so-called “enabler” technologies.

With a greater focus on photonics growth markets, we are on our way to becoming a pure and globally positioned photonics company.

With the Strategy 2022 announced in 2018, Jenoptik has focused on its core areas of expertise around optical and photonic technologies. In implementing this strategy, the Group has also concentrated on the building blocks of internationalization and innovation along with focusing on its core areas. The goal was to target markets where technological expertise justifies a price premium. Our solutions contribute to increased efficiency and precision of our customers’ products and processes as well as to improved resource conservation and more sustainability.

With regard to the strategic goals defined in 2018 for 2022, we believe Jenoptik is already very well positioned at the end of 2021 both in quantitative terms – achieving the stated ambitions for growth, profitability, and financial strength – as well as

in terms of qualitative goals. Activities that were key to the Strategy 2022 have been implemented:

- a focus on our core areas of expertise in photonics and optics,
- reorganization and simplification of our corporate structure,
- active portfolio management with a view to additional purchases as well as transformatory acquisitions and selective divestments,
- further internationalization in conjunction with greater vertical integration and customer proximity in our growth regions,
- driving innovation and becoming an innovation leader in our markets,
- contributing to greater sustainability and resource conservation with our photonic products and solutions, as well as helping to achieve global sustainability targets,
- expansion of our system and application expertise and development as a solution provider,
- promoting active cultural change within the company, and
- further strengthening our financial resources.

These strategic building blocks – further, consistent focus on high-growth target markets, expansion of international activities for more regional value creation and customer proximity, as well as strengthening the range of services by means of innovative solutions in the environment of photonic technologies – will also continue to play a fundamental role in achieving the strategic goals in the future.

G19 Strategy of the Jenoptik Group until 2022

Group strategy 2022

Strategic building blocks	More Focus	More Innovation	More International
Strategic targets	Quantitative long-term targets: Growth Profitability R + D ratio Strengthening financial power		Qualitative long-term targets: Cultural change Employee satisfaction Headquarters of the divisions International value creation

Agenda 2025 “More Value”

We intend to systematically continue focusing on photonic growth markets with our strategic Agenda 2025 “More Value”. However, significantly changed conditions in some of the market segments targeted by Jenoptik, combined with achievement of the most important goals of the Strategy 2022, have prompted us to further sharpen Jenoptik’s strategic ambitions.

With its Agenda 2025, Jenoptik is focusing on sustainable profitable growth in the market segments. The transformation into a globally leading, pure photonics group is to be continued and accelerated. We are focusing on three attractive core markets: semiconductor & electronics, life science & medical technology, and smart mobility. We expect substantial organic growth from this, to be complemented by acquisitions.

In order to create more value for all our stakeholders with our Agenda 2025, we want to:

- accelerate the transformation of Jenoptik into a globally leading, pure photonics group,
- focus on attractive core markets,
- drive organic and inorganic growth,
- increase profitability and
- strengthen financial power for further acquisitions.



Information on the previous and new Group structure can be found in the “Business Model and Markets” chapter on page 89

Accelerated transformation into a pure photonics group

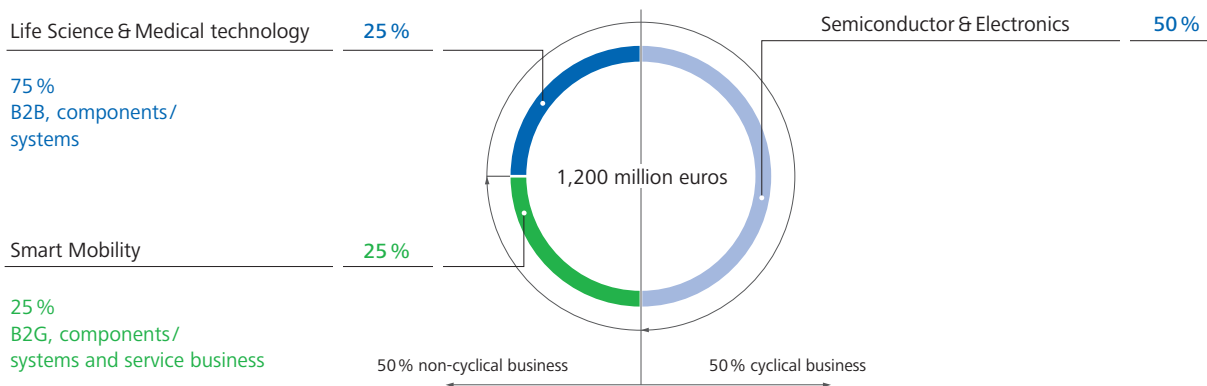
In recent years, Jenoptik has already aligned its product portfolio with the core photonics markets. This is evidenced by the acquisitions of TRIOPTICS, BG Medical and the SwissOptic Group, but also by the divestment of non-core activities (non-optical measurement technology for grinding machines and crystal growing). The signing of the contract for the sale of VINCORION is a significant milestone in the transformation towards a pure, globally leading photonics group. It is expected that this transaction will be completed in 2022.

In the future, Jenoptik will manage its core photonics business in the two new divisions, Advanced Photonic Solutions and Smart Mobility Solutions. Our focus in these areas will be on further profitable growth. Activities focused on the automotive market will in future be managed as separate brands within the Jenoptik Group (Hommel, Prodomax, INTEROB). Here we will focus our activities on maximizing value.

Focusing on three core markets

For us, the three core markets of semiconductors & electronics, life science & medical technology and smart mobility are markets that are not only characterized by growth, but also by technological differentiation potential. With our range of services, we help our customers to solve complex photonic challenges, and thus have a decisive influence on the perfor-

G20 2025 – Jenoptik focuses on 3 core markets



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mance of their products. This enables us to achieve price premiums. In 2025, we want to generate around 50 percent of group revenue in the semiconductor & electronics market, with around 25 percent in each of the life science & medical technology and smart mobility markets.

At the same time, we want to position ourselves in such a way that our business remains resilient to market fluctuations. By 2025, we want to generate around 50 percent of our group revenue in markets that are less cyclical; this relates to our business in the life science & medical technology and smart mobility markets. The other 50 percent of revenue is expected to be generated from market segments that are significantly more cyclical, such as the semiconductor equipment industry.

Jenoptik benefits in particular from the global trends in digitalization, health and mobility, and is increasingly establishing itself as a strategic systems partner for international customers, with whom it works to design forward-looking solutions.

The planned profitable growth will be further supported by efficiency measures, the realization of economies of scale, and increasingly also by the further expansion of the service business.

2025 targets

We plan to increase revenue to around 1.2 billion euros, with an EBITDA margin of around 20 percent, by 2025. This includes further acquisitions and one or more divestments. In 2025, we want to generate three quarters of our revenue in the photonics business in our Advanced Photonic Solutions division, and the remaining 25 percent in the Smart Mobility Solutions division.

Through Jenoptik's focus on the three high-growth future markets mentioned, we expect substantial organic revenue growth, which is to be supplemented by further acquisitions. Taking into account divestments which have already been made or are still possible (including VINCORION) and acquisitions, we want to achieve average annual revenue growth of around 8 percent by 2025. An improved product mix with a gradual increase in the number of higher-margin products will help to achieve a further profitability boost.


As part of the new Agenda 2025 "More Value", we want to further strengthen our financial power over the coming years and see ourselves as very well positioned to achieve our scheduled profitable growth, which also includes potential acquisitions. In addition, we will focus more on the return on capital employed (ROCE). ROCE (excluding goodwill) is expected to increase to more than 20 percent by 2025.

Innovation

As an innovative high-tech company, it will remain vital for Jenoptik to identify customer needs and trends early on, to align with them our strategic actions and business activities to derive appropriate technology and product developments and to help drive developments forward. That is why we are focusing even more on research and development – both our own innovative products and joint developments with our customers. This enables us to achieve competitive advantages which determine our performance and thus our economic success.

We will continue to expand our software expertise and our knowledge in the field of artificial intelligence in order to supply technological solutions for new requirements with interdisciplinary teams. In addition, we will push ahead with the expansion of our technology platforms at Smart Mobility Solutions in order to better utilize synergies.

With a medium and long-term time frame, we are dealing with market segments that are currently still relatively small, but where we see (1) enormous potential for market growth and (2) the major influence of high-performance optical technologies. This applies, among other things, to the topics of virtual and augmented reality as well as quantum technology.

As a system partner, Jenoptik is constantly looking for new solutions in conjunction with customers. Our customers are often already involved in the very early stages of the development processes. This enables us to strengthen our relationships and steadily boost value creation. At the same time, we also want to drive our own innovation forward independently of customer-related orders. 



Further information can be found in the "Research and Development" section, from page 103 on

Internationalization

Due to the continuing strengthening of domestic industrial production in connection with demographic development in the Americas and Asia/Pacific regions, we continue to see particularly great potential for future growth in these regions. The further expansion of on-site value creation should help to better address local customer needs, providing support through regional service.

The acquisition of BG Medical and the SwissOptic Group will enable us to further expand our global presence and the production network in strategically important markets with attractive locations. The acquisition significantly expands Jenoptik's global production network, including modern clean room capacities. The production facilities are located in two photonics centers in Europe (Berlin & Heerbrugg) and in China (Wuhan). With the more extensive production network, Jenoptik will be able to better manage utilization of the separate sites and thus generate additional growth potential. Furthermore, in addition to providing better access to Asian customers, the site in Wuhan will also facilitate the production of high-quality optical components for the global market.

In the future, Jenoptik will also continue to invest in the organization and expansion of new and existing sales and service structures. We rely both on our own direct distribution channels and on dealer structures.


Active portfolio management to support the group strategy

In implementing the Agenda 2025, we will focus on substantial organic growth and further acquisitions to optimize our portfolio. We also intend to further expand our market and customer reach through targeted acquisitions – not only in Europe, but also in America and Asia in particular. We intend to round off our portfolio through forward integration and additional systems expertise. According to the assessment of the Executive Board, the acquisition of TRIOPTICS was an important step in Jenoptik's strategic focus on being a leading company in the field of photonics. It will enable us to tap into technological growth markets such as virtual and augmented reality applications in the industrial and consumer segments, and expand the Group's presence in Asia. The strategic acquisition of BG

Medical and the SwissOptic Group will boost our global and rapidly growing photonics business and, in addition to the strong semiconductor equipment business, also allow us to significantly expand the highly attractive medical technology business. In the future too, every acquisition must be a strategic fit for us and fulfill the criteria for increasing corporate value as well as integration. The renunciation of existing business activities or the sale of parts of companies is also continuously reviewed against the backdrop of the intended focus on a photonic core expertise.

Employees – our most important resource

In order to maintain lasting profitable growth, we must attract highly qualified and capable employees and ensure their long-term retention in the company. Structured HR planning is necessary to achieve this in an environment which is becoming increasingly demanding from a demographic viewpoint. Jenoptik wants to position itself as an attractive employer by utilizing targeted HR marketing activities. Personnel development measures, an interdisciplinary and intercultural work environment as well as an open and dialog-oriented corporate culture should help to strengthen employees' loyalty to the company. The basis for this are our values – open, driving, confident – which help to bring Jenoptik's employees closer together across different cultural and legal systems. As part of our personnel work, the anchoring of the values in everyday corporate life is therefore a further focal point in the realization of our strategic objectives. As we are convinced that more diversity in the company leads to greater innovation and creativity, we have set ourselves diversity targets and defined measures to implement them. The diversity ratio, which is calculated from the average proportion of managers with an international background and female managers, is to increase to 30 percent by 2022 and 33 percent by 2025. The top four management levels are significant here. In the past fiscal year 2021, the diversity rate already increased to 28.6 percent (prior year: 27.8 percent).


We want to continue the cultural change in the years to come. Since we have made good progress in establishing a more open corporate culture, our main focus through 2025 will be on the "driving" and "confident" values, embodied in our slogan "Driving Confident Performance". Our values "open, driving, confident" will continue to play a key role in helping us to achieve the Strategy 2025. 



Further information on the subject of personnel and corporate culture can be found from page 62 on of the Non-financial Report

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Sustainability is part of our corporate strategy

For us, our corporate activities are not only aimed at achieving economic goals but also meeting an obligation to the environment and society. Consequently, the subject of sustainability is firmly rooted throughout the entire Jenoptik organization. As a so-called “enabler” we want to make an important contribution with our innovative products and solutions to tackling societal and climate challenges and enable our customers worldwide to contribute more efficiently and sustainably to greater resource conservation and climate protection. We have also taken numerous measures to improve resource and energy efficiency, to broaden diversity, strengthen our social commitment, further improve corporate governance and increase transparency in our supply chain. We have set ourselves specific goals for this, which are set out on page 66 of the Non-financial Report. We are also breaking new ground when it comes to “green finance” and placed debenture bonds and a syndicated loan with a “green component” in 2021. 

Priorities for strategy implementation 2021 and 2022

We had set ourselves two subjects as strategic priorities for 2021:

- strengthening innovation,
- and anchoring sustainability even more securely within the Group.

As already described, innovation is of key importance to Jenoptik as a technology group. In the past fiscal year, we therefore focused our attention even more strongly on our innovative strength. In the fall of 2021, the Innovation Workshop took place in cooperation with the local optics association Optonet e.V., the co-working space Kombinat01 and the Leipzig Graduate School of Management (HHL). Eight innovative concepts in the three subject areas of quantum technology, sustainability and digitization were developed by Jenoptik employees, scientific experts and high-potential students. In addition, we measure the success of innovation activities with the Vitality Index, which indicates the share of revenue generated by products and platforms developed in the last three years in relation to group revenue. In 2021, this figure increased to 19.1 percent compared with the prior year (prior year: 17.1 percent).

In order to anchor sustainability even more firmly in our group strategy and in all areas involved, such as in our supply chain and in product development, measures and initiatives were continued in 2021. In order to support the goal of international climate policy and to limit global warming, Jenoptik wants to make an active contribution to reducing CO₂ emissions and has set itself the goal of reducing CO₂ emissions by 30 percent by 2025 compared to the base year 2019. In 2021, Jenoptik joined the UN Global Compact, thereby committing itself to fully complying with the ten principles in the areas of human rights, labor standards, environmental protection, and anti-corruption. Some of the sustainability objectives that we have set ourselves are also reflected in remuneration for the Executive Board and group financing. Both the debenture bonds placed in March 2021 and the syndicated loan of 400 million euros that followed in December 2021 are aligned to the ESG targets – diversity rate, green electricity rate, and the Group’s CSR rate.

In line with the “More Value” strategy, we intend to address the following key areas in 2022:

- adaptation of the organizational structures to the new positioning of the Group,
- integration of Jenoptik Medical and the SwissOptic Group into the Jenoptik Group structure,
- expansion of our business in the Smart Mobility Solutions area,
- continuation of the integration of our “Optical Test & Measurement” businesses (including TRIOPTICS) and consistent addressing of the growth regions.

Future strategic orientation of the operating business

The Group’s photonics divisions are interconnected in many ways to ensure the transfer of technology or expertise between the divisions. Infrastructures and cross-section functions are also increasingly used jointly, for example for global procurement or in the expansion of the international sales network. Common locations and the shared use of infrastructure facilitate market entry, enable the company to achieve critical mass more quickly in key regions around the world, and help to optimize the cost base through the leverage of synergies. Cost benefits are realized and currency risks minimized through global sourcing and production.



Further information on sustainability can be found from page 62 on of the Non-financial Report

The previous Light & Optics and Light & Production divisions will be merged into the [Advanced Photonic Solutions](#) division and the non-photonic activities, particularly those geared towards the automotive market, will be separated. In the future, the latter will be managed more independently under their respective brand names and within the Non-Photonic Portfolio Companies segment.

The business activities of the Advanced Photonic Solutions division will focus on the semiconductor & electronics and life science & medical technology markets. Here we use our expertise in photonics as a key technology and want to support our customers in improving their competitiveness and environmental sustainability (Jenoptik as an “enabler”).

With the takeover of BG Medical and the SwissOptic Group in 2021, we have strengthened our global photonics business and, in addition to the semiconductor equipment business, are noticeably expanding the medical technology business in particular. The acquisition has significantly expanded the global production network, including modern clean room capacities. By expanding the production network with the locations in Berlin, Heerbrugg and Wuhan (China), the division will be able to better control the utilization of the individual locations in the future, realize additional growth potential and gain better access to Asian customers and suppliers.

We are continuing to consistently focus our optical and micro-optical systems business in the semiconductor & advanced manufacturing area on the “digitization” mega trend, which according to market assessments, such as those from SEMI, is set to intensify. On the basis of our optical and micro-optical solutions, we aim to target further markets in the digital world in addition to the semiconductor equipment sector. Jenoptik is already positioning itself in the market for optical information and communication technology, where we predict further growth. In order to also successfully target these high-tech markets in the future, innovation, technological development, and differentiation remain key issues. This will also require targeted investment, e.g. in a new electron beam lithography system. Due to the expected further increase in demand for chips and thus also for the equipment for their production, Jenoptik will, over the coming years, invest a total of around 70 million euros in a highly functional clean room factory, in which micro-optics and sensors for the semiconductor equipment will be manufactured. Production is scheduled to begin in early 2025.

Ongoing internationalization, including in Asia, expansion of the systems business, focus on key customers as well as the use of economies of scale should form the basis for sustainable profitable growth. The semiconductor business of the SwissOptic Group, acquired in 2021, further rounds off the product portfolio in the semiconductor equipment sector with a complementary range, allowing us to offer existing and new customers an even broader range of solutions. In the long term, we also want to position ourselves even more strongly as a system-relevant supplier to our customers.

In the Biophotonics sector, we are focusing on the “health” mega trend. Based on beam sources that use lasers and LEDs, optical precision components and digital imaging, we want to increasingly position ourselves as one of the leading and profitably growing partners for the development of modules and system solutions for diagnostics, analysis, screening, and therapy in the healthcare and life science industries. In doing so, we are focusing both on the development of customer-specific products and on unique selling points. With the complementary product portfolio of BG Medical in the areas of dentistry (intraoral scanners) and robot-assisted surgery, we will continue to expand the range and strengthen our own business in the areas of ophthalmology and life sciences through the activities of the SwissOptic Group.

However, we are also participating in the trend for more mobility and efficiency with innovative industrial applications. One focus of business activities is on expanding volume business with optoelectronic and polymer optical high-performance components and modules. In addition, we are continuing to pursue promising growth options with technologies for innovative applications centered on our core areas of expertise, such as driver assistance systems or technologies for autonomous driving (LiDAR). We also want to become an internationally operating supplier in these fields.

In the area of Optical Test & Measurement, we believe that combining the expertise in optics and industrial imaging will allow us to further expand a technologically leading position and to gain associated market shares. We see important potential here, for example, in the growing markets for new virtual and augmented reality applications in the industrial and consumer segments. With its strong presence and the established access to key TRIOPTICS customers in Asia, Jenoptik wants to expand its existing market share in strategically important markets

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such as China, Japan, and Korea. In addition, by expanding our range of services, we expect to further strengthen our position in North America, particularly with regard to local customers in the digital and communications sectors.

Another part of the Advanced Photonic Solutions division is the laser material processing area. In the context of smart manufacturing, we focus on the automated processing of plastics and metals. According to our assessment, our solutions can make a contribution to optimize production steps, thereby creating more efficiency for our customers.

In the **Smart Mobility Solutions** division (previously “Light & Safety”), we are pursuing two further future trends with the focus on mobility and public safety. In the field of traffic monitoring systems, we continue to support our customers – primarily public-sector customers (B2G) – in achieving their targets to improve traffic safety with complete solutions. Urbanization and digitization of smart cities lead to a moderate but sustainable growth in demand for traffic regulation and control. The pandemic and climate change have also intensified discussions about traffic management in inner cities, congestion charges and clean air zones.

In the coming years, the Smart Mobility Solutions division wants to continue to grow organically and inorganically, increasing revenue to around 300 million euros by 2025. The expansion of the value chain and customer relationships, especially in North America, should contribute to the organic growth. We also want to establish a product portfolio with a platform approach. We want to offer entry-level products for newly industrialized countries and high-end solutions for developed, homologated markets with more applications/functionalities and a higher information density per surveillance system. To do this, we want to expand our technology and software expertise and make greater use of ANPR. Possible acquisitions should help to expand the market share and share in the value chain, for example in North America and Europe, or to expand the technologies or the product range.


In the global traffic safety technology market, we are also observing a trend towards larger projects with a combination of equipment business and services, known as Traffic Service Provision. Therefore, we are focusing on strengthening this profitable service business. Alongside the traffic safety sector, the market for civil safety is also gaining in importance. Based

on the existing systems and software applications, the division aims to develop into an integrated solution provider for civil security and future smart cities, while at the same time positioning itself for a future in which autonomous driving is part of everyday life. In the future, we want to continue to develop new technologies and solutions which are optimized for emerging sectors such as connected and autonomous vehicles. Both of the above-mentioned business models should help to increase the share of recurring revenue to around 50 percent of division revenue by 2025.

With the merger of the previous Light & Optics and Light & Production divisions, the non-photonic activities will be separated and managed under the **Non-Photonic Portfolio Companies** as independent companies under their own brands – Prodomax, INTEROB and Hommel – and can therefore operate more independently.

With the Non-Photonic Portfolio Companies, we are, as a supplier of products, automation solutions and services for industrial customers (B2B), primarily addressing the trend towards more flexibility and efficiency in production processes, particularly in the automotive industry.

In the Automation & Integration area, we want to be able to offer everything for efficient production environments from a single source, from in-house products and systems to automated system concepts and complete process solutions.

Jenoptik’s use of inspection and production metrology allows to focus, above all, on the need to reduce fuel consumption and CO₂ emissions, particularly in combustion engines. However, the business is significantly influenced by the current trend in the automotive industry towards more and more e-mobility. Actions have already been taken to bring the business back on track for sustainable growth and to significantly increase profitability, with success already apparent in 2021 (see chapter Earnings Position). We will continue to focus on the development of applications outside the automotive industry, for example in production metrology for machining processes. 



Further information on the segments can be found in the Segment Report from page 30 on and the “Business Model and Markets” chapter on page 89

Strategy development and processes

Jenoptik's Corporate Development department supports the Executive Board in implementing an optimum strategic market alignment of the Group with its units and foreign locations. The Corporate Strategy team supports the development and the implementation of the strategy. The department reports directly to the Chairman of the Executive Board.

Strategy development for the Group and the divisions – as most recently in 2021 with the further development from “More Light” to “More Value” – is followed by a phase of strategy implementation lasting several years. Corporate Development and the divisions work closely together on strategic planning and the implementation of measures. The focus is primarily on the key points for underpinning the Group's growth targets.

The Corporate Development department is also responsible for organizing the annual strategy reviews with the Executive Management Committee and the Supervisory Board. Here, on the one hand, the strategic orientation is validated on the basis of current market developments, with adjustments being made to the strategic road map in certain cases. On the other hand, current focal points are discussed and approved, which underpin the strategic goals and further advance active portfolio management. In addition to targeted investment in organic growth, this may also be supported by company acquisitions.

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Control System

The company control system is geared toward the long-term corporate strategy and, in addition, is consistently aligned with the Group’s short to medium-term objectives. The Executive Board is responsible for overall planning and thus for achieving the stated objectives as part of the strategic corporate development.

With the support of the Executive Management Committee (EMC), the Executive Board uses a strategy process to steer the development of the business units. It monitors the implementation of defined measures at quarterly business reviews. On the basis of global trends, growth paths are defined, opportunities and risks are evaluated, portfolio decisions are made, and the focuses of in-house research and development are determined using technology roadmaps at annual strategy meetings. Strategy and planning meetings provide a planning basis for the following year and in medium-term group planning.

A planning forecast for the coming year and a five-year period is made annually on the basis of the long-term corporate strategy, and is guided by the market-driven strategic planning of the key indicators. Planning is carried out using the


“counter flow method” (bottom up – top down). In the course of a fiscal year, the planning for that year is updated in several forecast cycles.

Monthly results are discussed at the EMC meetings, and are used for operational control. At these meetings, the division heads/regional managers report to the Executive Board on the economic situation, the development of customer relationships, the competitive situation, and any special business transactions. Their reports employ standardized reporting methods and ad hoc analyses largely involving performance indicators, information parameters, and qualitative assessments, which are then used to define further operating and strategic measures to achieve the objectives in case of planning deviations. The internal reports for the monthly Executive Board meetings provide aggregated financial and non-financial information on the divisions and the Corporate Center, which is essential to managing the Group on a global level, allocating resources in a targeted manner, and passing resolutions by the Executive Board.

A business intelligence environment enables and supports continuous improvement in business development analysis, reporting, and planning processes.

G21 Performance indicators for corporate management

Key performance indicators	Growth	Revenue, order intake, capital expenditure		
	Liquidity	Cash conversion rate		
	Return	EBITDA margin		
Information parameters	Growth	Order backlog, frame contracts	Environment	Green electricity ratio, CO ₂ reduction
	Return	ROCE	Employees	Diversity ratio, engagement score
		EBIT margin	Suppliers	CSR rate (sustainable supply chain)
	Liquidity	Net debt, working capital	Innovation	Vitality index
		Financial indicators		Non-financial indicators


The indicator system used in internal reports and to manage the business units in 2021 comprises the “key performance indicators” (high-priority performance indicators). It also covers other financial and non-financial information parameters. All the indicators focus on shareholder value, the interests of our stakeholders, the requirements of the capital market, and the corporate strategy. The key indicators are shown in the chart G21. 



For the development of key performance indicators see Forecast Report from page 153 on



For more information on the non-financial information parameters, see the Non-Financial Report from page 62 on

Information parameters such as order backlog, number of employees, or non-financial indicators are used for management purposes at business unit level. The most important non-financial information parameters (sustainability indicators) are taken into account in Executive Board remuneration and group financing and are assigned to the categories (Environment, Employees, Suppliers, and Innovation) in the summary. Alongside quarterly forecasts, a rolling three-month forecast for revenue and order intake updated monthly is used to manage the company’s development. 

Explanation of the indicator base

EBITDA means earnings before interest, taxes, depreciation, and amortization, including impairment losses and reversals. The EBITDA margin is the ratio measuring EBITDA to revenue.

EBIT means earnings before interest and taxes. The EBIT margin is the ratio measuring EBIT to revenue.

The **free cash flow** is calculated from the cash flows from operating activities before tax payments, less capital expenditure and receipts from the sale of intangible assets and property, plant, and equipment.

The **ROCE** (return on capital employed) is calculated by dividing EBIT by the average tied operating capital. The average tied operating capital comprises non-current non-interest-bearing assets (e.g., intangible assets including goodwill, property, plant, and equipment, and investment property) and current non-interest-bearing assets (essentially made up of inventories, receivables from the operating business, and other current receivables), less non-interest bearing borrowings (e.g., provisions – excluding pensions and taxes –, liabilities from the operating business, and other current liabilities). The calculation of averages uses the twelve month-end balances in the period under review and the opening balance at the start of the year.

The **cash conversion rate** is the ratio measuring free cash flow to EBITDA.

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Research and Development

As a technology group, research and development (R+D) is of key importance to Jenoptik. Our products and services give us competitive advantages which determine our performance and thus our economic success. One of our key strategic aims is therefore to expand our innovative capabilities in the photonics growth markets and to be a driver of innovations. We also develop products and platforms in line with market requirements and with unique selling points, protecting them where possible by means of industrial property rights. With our products and solutions, we do not only want to improve our customers' performance and profitability, but also contribute to greater energy efficiency and the responsible use of resources. In doing so, Jenoptik acts as a so-called "enabler".

Innovation management is an important tool used by Jenoptik to systematically identify and implement promising ideas. With networked processes, its primary intention is to generate capital from knowledge by objectively uniting market and company viewpoints. Our innovation management has a uniform group-wide process landscape, which is adapted within the divisions to meet the requirements of the respective industry. These framework conditions help to drive developments forward in order to make positive value contributions for the entire Group. Innovation management at Jenoptik lies within the remit of the Chairman of the Executive Board. In innovation management, the focus on photonics is further being strengthened by the instruments of continuous improvement (kaizen) as well as procedural anchoring. The innovation team therefore works closely with various areas of the company, such as controlling and investment management, and is intensively involved in the roll-in strategy and planning processes.

Innovation process

Innovation, development and operational excellence in bringing conceptualized new products to market are one of the pillars of the Strategy 2025. The first stage of the Jenoptik innovation process involves identifying growth potential based on a strategic analysis of global trends and the requirements of our customers. Innovation projects are then created in line with our core areas of expertise and often with the direct cooperation of key customers. Strategic development projects are planned in roadmaps on the basis of corresponding milestones. This applies to product, technology and process innovations. An accelerated implementation of innovation projects is now already noticeable in the early stages of development, allowing innovative solutions to reach the market earlier.

For strategic comparison, project portfolio meetings are held twice a year to report on the status of the most important development projects. With the introduction of the JBS, a standardized product planning group will be established at the operational level on a multi-year basis in addition to the strategic portfolio meeting. This will make it even easier to prioritize projects in a targeted manner, adapt products to market needs, and continuously fill the product pipeline.

In addition, the success of innovation activities is measured with the aid of the "Vitality Index", which indicates the share of revenue generated by products and platforms developed in the last three years in relation to total revenue. In the past fiscal year, this figure increased to 19.1 percent for the Group including VINCORION in comparison with the prior year (prior year: 17.1 percent). In order to be viable on the market and to target new markets, we must rely both on our own developments and on those with external cooperation partners in order to produce more agile innovations. By 2025, the Vitality Index should increase to 22 percent.

Innovation culture

In addition to the creation of an optimal process-based innovation landscape, strengthening the innovation culture also plays an important role in exploiting the full potential of our company. Communication, networking and the transfer of knowledge are the key means of doing this. Examples include best practice communities, creative co-working and employee podcasts for technology and innovation.

One such highlight in the fall of 2021 saw the Innovation Workshop take place in cooperation with Optonet e.V., the local optics trade association, the Kombinat01 co-working space and the Leipzig Graduate School of Management (HHL). With international participation, eight innovative concepts in the three topics of quantum technology, sustainability and digitization were developed by Jenoptik employees, scientific experts and high-potential students from Leipzig Graduate School of Management and Ernst-Abbe-Hochschule Jena. The results were presented and judged in the form of an investor pitch to a panel of internal and external experts. The overall winner of the Innovation Workshop 2021 was a team of students from HHL, who were able to convince the jury with a cloud-based after-sales service for the EVIDIR infrared camera. In addition to the winning idea, other promising ideas are to be validated and followed up if necessary. As well as generating new innovative ideas, the Innovation Workshop helped to identify intrapreneurs (i.e. entrepreneurs within the company) as well

as future talents for Jenoptik. Our fields of technology were also further analyzed this year. The emerging technology field of quantum technology, in which photonic components play an essential role, deserves special mention. With areas of application such as quantum computing, quantum communication and quantum sensing & imaging, numerous disruptive applications are expected to emerge here in the future. With its photonic expertise, Jenoptik is already supplying components to companies and the scientific community at this early stage. To generate further stimulus, innovation management allocates additional innovation budget for promising but also more risky projects with cooperation partners. There are plans to fund further projects in 2022.

Employees in research and development

The experience and expertise of our employees are essential to the success of our research and development work, and the qualification standards we expect of them are correspondingly high. Their knowledge is used both for specific tasks and across all divisions in corresponding development projects. In 2021, a total of 599 employees worked in research and development in the continuing operations (prior year: 582 employees). In the Group, including VINCORION, 704 employees worked in R+D (prior year: 692 employees). T27

T27 Employees in R+D

	2021	2020
Number of employees in R+D	599*	582*
Percentage of overall workforce (%)	14.2	15.7

* Methodology differs from that used in the 2020 Annual Report as it does not include inactive employment relationships

Memberships in associations

Jenoptik procures additional external expertise with the help of targeted cooperation arrangements. Through research cooperations, projects can be realized in a market-driven manner, development times can be reduced and specialist expertise can be successfully built up. Jenoptik works with both universities and non-university research institutions as well as with industrial partners and key customers.

Jenoptik is also active in numerous industry and technology-oriented associations. Examples include the Optonet Photonics Network at regional level, SPECTARIS at national level and the European Photonics Industry Consortium (EPIC) at European level. Here, the Group is committed to creating an innovation-friendly environment and promoting the image of photonic technologies. Examples of this are the activities on the Management Board of the Photonics division at SPECTARIS and within Optonet. In addition to active membership, the future aim is to interact more closely with the above networks in order to exploit the range and cooperation potential for disruptive innovations.

Development output

The information provided in this section relates to Jenoptik's continuing operations. The prior year's figures for 2020 have also been adjusted for VINCORION.

At 63.6 million euros, the R+D output including developments on behalf of customers was up on the prior year (prior year: 56.9 million euros). At 38.9 million euros, the R+D costs were around the same as those of the prior year (prior year: 39.4 million euros). The costs for developments on behalf of customers increased to 20.3 million euros, primarily due to the contribution of the Light & Optics division in the field of biophotonics, and are apportioned to the cost of sales (prior year: 13.5 million euros). Development services including patents were capitalized in 2021 in the amount of 4.4 million euros (prior year: 4.0 million euros). The capitalization rate, i.e. capitalized development costs divided by total R+D costs, increased to 11.3 percent in 2021 (prior year: 10.1 percent). Information on the amortization of internally generated intangible assets can be found on page 197 of the Notes.

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As shown in table T28, R+D output is distributed among the divisions.

R+D output in the **Light & Optics division** includes expenses arising from developments on behalf of customers in the amount of 17.2 million euros (prior year: 9.3 million euros), which were significantly above the previous year's value, especially in the biophotonics area. The R+D expenses in 2021 amounted to 18.2 million euros (prior year: 19.7 million euros).

The R+D output of the **Light & Production division** included developments on behalf of customers of 2.6 million euros (prior year: 3.6 million euros). The R+D expenses came to 6.3 million euros (prior year: 6.7 million euros).

In the **Light & Safety division**, the R+D output in 2021 was 15.0 million euros (prior year: 13.8 million euros). Of this, 0.6 million euros were developments on behalf of customers (prior year: 0.6 million euros).

Patents

Our R+D capital expenditure is protected via central IP management in close cooperation with the operating areas. We are increasingly focusing on high-quality applications and interna-

tionalizing these in important dynamic growth markets such as China and the US. In 2021, a total of 25 new first-time patent applications were filed by Jenoptik subsidiaries in the continuing operations (prior year: 35 patents) and a further 35 international subsequent applications were made. The focus of these continued to be in the area of Optical Components and Optical Modules. The number of patents does not include registered designs, utility models or brand registrations. For competition reasons, Jenoptik does not publish information on the receipt and issue of licenses.

Key projects and results

Our aim is to offer our customers the very best solutions. We do this by combining our comprehensive expertise with a broad wealth of experience in managing innovation in photonic technologies to the benefit of our customers. The following solutions are some of those developed and placed on the market by Jenoptik in 2021:

In the **semiconductor equipment** area, the focus of development activities was on expanding the customer-specific portfolio of products for use in semiconductor lithography and inspection machines.

In addition to the development and introduction of the next generations of products, new customer-specific products from new product categories, such as highly integrated light sources, were added to the portfolio. Accelerated by the enormous market growth in semiconductor equipment, it was possible to further increase the production capacity due to specific product and technology optimization as well as an increase in the performance of assembly and measurement technologies.

T28 R+D output by segment (in million euros)

	2021	2020	Change in %
Continuing operations	63.6	56.9	11.8
Light & Optics	39.7	32.8	21.2
Light & Production	8.9	10.3	-13.6
Light & Safety	15.0	13.8	8.6

T29 R+D output (in million euros)

	2021	2020	2019	2018	2017
R+D expenses	38.9	39.4	44.1	47.4	43.1
Capitalized development costs including patents	4.4	4.0	4.0	1.5	1.4
Developments on behalf of customers	20.3	13.5	20.4	20.2	22.2
R+D output	63.6	56.9	68.4	69.2	66.6
R+D ratio 1 (R+D output/revenue) in %	8.5	9.2	8.0	8.3	8.9
R+D ratio 2 (R+D expenses/revenue) in %	5.2	6.4	5.2	5.7	5.8

¹ Figures for the years 2017 to 2019 are data for the Group including VINCORION

In order to keep pace with the constantly increasing demands on quality and performance of high-precision micro-optical products for use in lithography machines in the DUV and especially EUV wavelength range, significant investment was made in the further development of existing production technologies and process modules, including coating and micro-structuring. In this context, cooperation with research institutes and technology partners was also further expanded.

For the characterization of complex optical systems, innovative test optics were developed that combine conventional optical concepts with freeform and diffractive optical concepts. The solution enables greater accuracy of characterization with simultaneously increased compactness of the test optics compared to common approaches. Thanks to its powerful portfolio of optical and micro-optical manufacturing technologies, Jenoptik will increasingly use such hybrid optical concepts in the future.

In the [information and communications technology](#) area, the performance parameters and modularity of the UFO Probe TM Ultra-Fast Opto-electronic Probecard for parallel testing of photonic integrated circuits (PIC) at wafer level have been significantly increased, so that this product platform can now cover a wide range of industrial applications. Particular mention should be made of the repeatability of the optical measurement achieved when using the probecard within an existing test environment for conventional integrated circuits (IC), which was demonstrated in high-volume tests on series products.

With the development of a powerful combination of new design approaches and expanded options for creating photolithographic structures, optically functional nanostructures on quartz glass can now be fabricated at a very high quality even in medium to high volumes. Nanostructures produced in this way are already being used, for example, in diffractive optical elements (DOE) for beam shaping in laser material processing and, in the future, they will also be used as optical meta-structures, for example, in meta-lenses or hybrid optical systems.

In the field of [ophthalmology](#), we continued to implement our forward integration strategy and acquired new business for laser-based retinal treatments based on our OEM laser systems. In the area of electron beam microscopy, we succeeded in expanding our business by improving the performance of our detectors and cameras. Using our expertise in the development and production of detectors, a new resolution record was achieved in the imaging of atoms.

A pioneering trend in the cell phone market is the zoom capability of cameras. With the ImageMaster® PRO ST, TRIOPTICS relies on ultra precise measurement of the smallest fields of view (FOV) using innovative single telescope measurement technology. With this MTF (Modulation Transfer Function) tester for the zoom lenses in smartphones we have a production system on the market that offers a particularly narrow field of view (FOV) with an extremely high density of measuring points. In the growth market of extended reality, waveguides are an important optical component of augmented reality near-eye displays. The ImageMaster® PRO AR with wafer handler enables a fully automated workflow for the optical testing of waveguides in production. Maximum performance is ensured by robot handling of the wafers, a software-controlled automated measuring process and the support for various wafer carriers.

Camera technology in miniature format represents a particular challenge to suppliers in this field when it comes to aligning camera modules. With the ProCam® Lab, Jenoptik masters the challenge of active alignment and enables the assembly of ultra-precise camera modules in small quantities. This makes it much easier to start camera production and the prototypes can be optimized for the later series production. In addition to the entry-level model ProCam® Basic for active alignment, TRIOPTICS also offers a complete package for setting up a full assembly line.

In the [laser material processing](#) market, the JENvelt (JENOPTIK Vision-enhanced Laser Tool) system platform with integrated image processing and intelligent software was transferred to pilot systems for specific applications in close cooperation with the first customers. The automatic position recognition and on-axis image capture of the component to be processed enables the customer to directly increase the production yield and, at the same time, to reduce waste and save considerable time when setting up the process for laser microprocessing. In parallel with this, industrialization of the system platform continued, with the goal of being able to cover the widest possible range of applications by means of only individual, ideally software-based adaptations to the existing system platform, while at the same time maintaining a high level of maintainability and system availability.

In the **automotive industry**, a new sensor is being used which extends the Visionline portfolio for drill inspection equipment up to 70 mm, and was developed in cooperation with a truck manufacturer. The development was completed within a narrow window of time with the help of an existing platform technology and has been available in a first in-line testing facility since 2021. The development of the three-dimensional tactile sensor in the Opticline product line proved to be a particularly important step. Major manufacturers in the field of electric motor production received automated measuring machines equipped with this additional sensor technology, which, together with two additional axes, is ideally suited for measuring keyways in shaft-shaped components.

For contour and roughness measurement technology, which is combined under the Waveline product line, the focus of R+D activities was on expanding the modular system for automated solutions. For example, additional axes are now available for automatic loading and optimal presentation of the workpiece. The Evovis software has been further developed to meet the requirements of the new DIN EN ISO 21920 standard, which is currently being adopted.

Last but not least, the pneumatic measuring technology can rely on a new TPE 100 transducer that has been optimized with respect to cost, flexibility and performance.

In the **Traffic Solutions** area, a new functional research and development department was established as part of a successful restructuring, allowing for a transparent and efficient form of cooperation in development. This resulted in immediate successes for the Deep Learning ANPR engine – better reading performance for low-height number plates, faster object tracking (“plate tracking”) and, overall, greater detection performance.

In the smart camera product line – the foundation of our traffic control systems – the switch to modern CMOS sensors (complementary metal-oxide-semiconductor) has increased performance and processing capability parameters. The first major orders of smart cameras have already been delivered for the North American market. For traffic monitoring in the Middle East, TraffiPole was developed and delivered as an award-winning design and environmentally friendly solution for traffic monitoring with improved ergonomic construction and reduced power consumption. In addition to the modern optical design, the product impresses with improved heat dissipation, possible self-sufficient operation via batteries or solar panels, optimized construction costs and a housing made entirely from recyclable materials.

The new GardoVia and NexoVia products have been developed for the global low and medium-entry markets for traffic control, civil security and road user charging. These new small, dynamically designed, sophisticated and feature-rich devices, including the powerful hardware platform and a choice of optics, are scheduled to be presented to first customers at the prestigious Intertraffic event in March 2022.

In addition to product development, a successful proof of concept for cell phone and seat belt detection was demonstrated in the UK. The proven ability to detect and identify drivers using a mobile device or not wearing a seatbelt while driving is a novelty in the field of road safety.

In the field of connected and autonomous vehicles (CAV), development could be accelerated for 2021. The Light & Safety team successfully developed a first Vehicle-to-Infrastructure (“V2X”) protocol that enables communication to/from autonomous vehicles for critical incident reporting between vehicle and infrastructure. Further tests continue with industry and universities, including SMLL (“Smart Mobility Living Labs”), a London-based research consortium specializing in autonomous vehicle safety. In 2022, LiDAR technology will be introduced to support CAV development with better situational awareness and object tracking.

Employees

Development of employee numbers

The information provided in this section relates to the continuing operations. In the interests of comparability, the previous year's figures are stated as if VINCORION had already been classified as a discontinued operation in the prior year.

As of December 31, 2021, with 4,205 employees (incl. trainees), Jenoptik recorded growth in its workforce of 13.7 percent (31/12/2020: 3,697 employees). Including VINCORION, the Group as a whole had 4,905 employees as of December 31 (prior year: 4,472 employees). The number of Jenoptik employees abroad rose by 38.0 percent to 1,525 employees (31/12/2020: 1,105 employees). At 36.3 percent, the proportion of employees working abroad thus increased slightly compared to the prior year (31/12/2020: 29.9 percent).

Temporary workers were also employed in the past fiscal year to cover production peaks and short-term order intakes as well as for major projects. They were employed mainly in the operating areas, and the number fluctuated during the year. On the reporting date of December 31, 2021, 130 temporary workers were employed by Jenoptik (31/12/2020: 39).

At 274.4 million euros, personnel expenses in 2021 (wages, salaries, social security contributions, costs for retirement provision) were up 18.6 percent compared with the prior year's figure of 231.4 million euros. The increase resulted primarily from the growth in employment, especially in the Light & Optics division, as well as the first-time inclusion of TRIOPTICS in the full year 2021.

T30 Employees by region (incl. trainees)

	31/12/2021	31/12/2020	Change in %	Absolute change
Germany	2,680	2,592	3.4	88
Germany in %	63.7	70.1		-6
Abroad	1,525	1,105	38.0	420
Abroad in %	36.3	29.9		6
Europe (excl. Germany)	544	280	94.3	264
Americas	569	554	2.7	15
Asia/Pacific	412	271	52.0	141

Revenue per employee (including temporary employees) measured in full time equivalent rose by 20.4 percent to 199.2 thousand euros in the fiscal year 2021 (prior year: 165.4 thousand euros).

The employee age distribution, as can be seen in table T32, is balanced. The figures are largely unchanged compared with the prior year.

The proportion of women in the Group (in Germany and abroad) was 28.4 percent on December 31, 2021, a slight increase in comparison with the prior year (31/12/2020: 27.3 percent).

At 4.6 percent, the absenteeism rate among Jenoptik employees in Germany in 2021 was down on the level of the prior year despite the ongoing pandemic (prior year: 5.0 percent). The fluctuation rate increased to 5.9 percent compared to the prior year (prior year: 3.4 percent). The fluctuation rate is calculated by dividing the number of employees leaving the company in the fiscal year by the number of employees as of the reporting date of the prior year plus those who joined the company in the fiscal year. Temporary workers are not included in the calculation.

T31 Revenue per employee (in thousand euros)

	2021	2020	Change in %
Revenue per employee (including temporary employees)	199.2	165.4	20.4

T32 Age distribution (in percent)


	31/12/2021	31/12/2020
Under 30 years	14.7	14.9
30–39 years	28.0	28.7
40–49 years	24.1	23.9
50–59 years	23.3	23.4
60–65 years	7.8	7.7
Over 65 years	2.2	1.4

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Training and HR development

As of December 31, 2021, 152 trainees and students of the Cooperative State Universities were employed in the continuing operations (31/12/2020: 138). Of these, 36 were new hires. At the same time, 25 trainees and students of the Cooperative State Universities successfully completed their training in the reporting year.

At the Villingen-Schwenningen, Jena, and Triptis sites, the new trainees receive job-specific training for optical, precision engineering, electronic, and commercial occupations in training centers. Jenaer Bildungszentrum gGmbH – Schott, Zeiss, Jenoptik – in which Jenoptik is a partner, has now established itself as a training center for optics and photonics at a national level.

In 2021, Jenoptik invested around 1.9 million euros in the professional development of its employees in the continuing operations (prior year: 1.7 million euros). Including the VINCORION division, which is held for sale, the qualification expenses of the entire Group amounted to 2.6 million euros (prior year: 2.2 million euros). These costs include both the expenses for trainees and students at the Cooperative State Universities and the costs for further training of our employees. The overall development needs in the Group are assessed in regular staff appraisals. Suitable qualification measures are then derived from these and implemented. 



Further information on this can be found in the Non-financial Report from page 62 on

Economic Report

Macro-economic and Sectoral Developments

The [global economy](#) in 2021 did not recover to the extent initially forecast by the International Monetary Fund. In spite of a number of positive signs in global trade and industrial production toward the end of the year the dramatic slump in the prior year could not be made up for. According to the IMF, the global economy was primarily affected by the continuing spread of Covid-19 (variants), with resulting travel and shopping restrictions, high inflation, rising energy prices, and problems in global supply chains. Of particular note, China's coronavirus containment strategy, which resulted in production stoppages and the closure of entire factories and ports, placed significant burdens on both the Chinese and the global economy.

From a low prior-year figure, the [Chinese](#) economy grew 8.1 percent in 2021, according to the National Bureau of Statistics of China. Following record growth of 18.3 percent in the first quarter, gross domestic product (GDP) decreased over the course of the year. The economy was bolstered by strong exports, which saw a sharp increase of around 30 percent, according to the Chinese customs authorities. Demand from abroad, especially for electronic products, grew in 2021, but global demand for home office equipment was also largely met by China.

After a slump in the first year of the pandemic, GDP in the [US](#) rose a significant 5.7 percent in 2021, according to initial estimates, the strongest growth recorded in almost 40 years. According to the US Department of Commerce, this growth was driven by higher consumer spending, capital spending, exports, and investment in inventories.

In the [eurozone](#), too, economic recovery was slowed by supply chain problems, high prices, and, in the final quarter, the spread of the Omicron variant. The economy did grow at the end of the year compared to the prior quarter, but this growth was weaker than expected by experts and uneven across the member states, according to the Eurostat statistics authority. Overall, GDP in the eurozone rose in 2021 by 5.2 percent, following the major slump in the prior year.

In [Germany](#), GDP in the final quarter fell 0.7 percent, according to the Federal Statistical Office. Hopes of economic recovery were dashed by a renewed high level of infections, falling consumer spending, supply and material bottlenecks, and inflation. Thanks to good performance in prior quarters, economic output rose 2.8 percent for the full year, not enough to compensate for the slump in the prior year. Foreign trade, by contrast, saw good growth: In 2021, exports were only just down on the level of the pre-crisis year 2019. The end of the year saw an upswing in order intakes in industry.

[Photonics](#), a key enabling technology for many growth markets, weathered the coronavirus pandemic better than many other industries. Many photonics applications have made a significant contribution to containing the pandemic, for example in the field of diagnostics with genome sequencing of the virus and vaccines, with light-based disinfectants or sterilization of medical and protective equipment. Beyond this, they are also playing a key role in the digital transformation. Industry experts see detrimental impacts arising from the pandemic in travel restrictions, disruptions to global supply chains, and the closure of factories. In its initial assessment, the Spectaris industry association has calculated annual revenue for the German photonics industry in 2021 as coming to 45.8 billion euros (prior year: 40.1 billion euros).

[Laser](#) technology is a central segment in the photonics industry. Market researchers at Laser Focus World calculated global industry revenue of 18.5 billion US dollars in 2021, 15 percent higher than in the prior year. Once again, material processing

T33 Change in gross domestic product (in percent)

	2021*	2020
World	5.9	-3.1
US	5.6	-3.4
Eurozone	5.2	-6.4
Germany	2.7	-4.6
China	8.1	2.3
India	9.0	-7.3
Emerging countries	6.5	-2.0

Source: International Monetary Fund, World Economic Outlook (Update), January 2022
 * Estimate

and semiconductor lithography was the largest segment, with a value of 6.9 billion US dollars, while the lasers for analytics, metrology, and sensors segment saw the highest growth rate.

Even though **medical technology** is considered an essential industry, the sector still felt the economic effects of the coronavirus pandemic, as summarized by Spectaris in its 2021/2022 Yearbook. Manufacturers of products related to coronavirus recorded growth, while other companies saw losses due to restricted access to hospitals, postponed surgical procedures, and travel restrictions. Globally, the market volume in 2021 was 446 billion US dollars, according to Frost & Sullivan, which on the basis of their conservative assessment was a 4.2-percent increase on the prior year.

According to VDMA Machine Vision, the **machine vision industry** in Europe achieved strong order intakes in 2021. Despite this, supply and material bottlenecks, especially for electrotechnical and electronic components, meant that manufacturers had difficulty adhering to production schedules. Consequently, the German Mechanical Engineering Industry Association (VDMA) is projecting 7-percent revenue growth in the European machine vision industry for 2021, following a pandemic-related revenue drop of 4 percent in 2020. Away from the factory floor, the industry tapped into further sales markets and application areas in medical technology, security, agriculture, retail, and intelligent traffic systems.

Immense global demand for semiconductors in many industries continued into 2021. According to market researcher IC Insight, global revenue in the **semiconductor industry** increased by 25 percent. The Semiconductor Industry Association (SIA) reported revenue 26.2 percent up on the prior year (440.4 billion US dollars) and thus a new record revenue figure of 555.9 billion US dollars. Significant growth was seen in all major markets and product categories. However, as reported by the German Electrical and Electronic Manufacturers' Association (ZVEI), demand for semiconductors outstrips available production: Factories are running at full capacity, and customers must contend with long delivery times. Measures introduced during the pandemic such as working from home, e-learning, and remote medical care worked to boost demand in the semiconductor industry, e.g., for server space and PC equipment. Compared to strong demand in the consumer electronics sector, car manufacturers reduced their semiconductors requirements in the first year of the pandemic due to production stoppages. Demand, however, picked up again faster than expected,

resulting in a shortage of some semiconductors, in particular for the automotive industry, which chip manufacturers, especially in Asia, were slow to respond to by ramping up their production capacities. Overall, semiconductor equipment manufacturers achieved global revenue of 103 billion US dollars in 2021, according to the year-end forecast of the Semiconductor Equipment and Materials International (SEMI) industry association. This was 44.7 percent higher than the prior year (71 billion US dollars) and thus a new record figure above the 100-billion-dollar mark. China, Taiwan, and South Korea were again the regions with the highest level of investment.

The German **electrical and digital industry** set a new record in 2021 with revenue of 199.5 billion euros, 9.7 percent more than in 2020, according to the ZVEI industry association. Order intakes were 23.9 percent up on the prior year, while production was 8.8 percent up, compensating for losses in 2020.

Following a pandemic-related decline in 2020, order books were well-filled in the German **mechanical and plant engineering industry** in 2021, according to information provided by the VDMA industry association in early February. Order intakes were 32 percent up on the prior year, with domestic orders growing 18 percent, foreign orders 39 percent. Although this gave the industry a record order backlog for almost 11 months, supply bottlenecks mean it will not be able to process these orders quickly. According to the VDMA, the business climate in China deteriorated in the second half of the year, with shortages of raw and other materials more strongly noticeable than in the first six months. Other factors slowing growth in the key Chinese market included power supply shortages, the effects of the coronavirus pandemic (albeit less severe than previously), and personnel shortages, given that the number of foreign employees declined following travel restrictions. For the German **machine tool industry**, the German Machine Tool Builders' Association (VDW) reported a good order situation, but here, too, supply bottlenecks, particularly for electronic components, and rising raw material prices hampered economic recovery because orders could not be translated into deliveries and revenues to the desired extent. In particular, the automotive industry, a key customer, reduced its investment due to the chip shortage.

The order situation and investment climate in the German **robotics and automation industry** improved in 2021, with the VDMA Robotics and Automation sector group expecting 11-percent revenue growth on the prior year. As reported by

the Association for Advancing Automation (A3) in early February 2022, robot sales in North America saw a year-on-year increase of 28 percent in 2021. This growth was primarily the result of rising demand in robotics, including from non-automotive industries such as life sciences or food and consumer goods that are increasingly employing automation to boost productivity and compensate for ongoing labor and skilled worker shortages.

According to the German Association of the [Automotive Industry](#) (VDA), the German car market contracted 10 percent in 2021, with 2.6 million new vehicles. The figures particularly dipped in the second half of the year. By contrast, growth rates at the beginning of 2021 were still good compared to the weak prior-year period that was marked by lockdowns and weak sales. Domestic production of 3.1 million units was at its lowest level since 1975; German exports were clearly down. The international markets, too, after some recovery in the first half of 2021, were increasingly burdened by the lack of semiconductors and other intermediate products and raw materials, together with rising energy and logistics prices. Of the three biggest sales regions, only Europe posted a decline, while sales increased marginally in the US and China. According to the ifo Institute, the situation in the supply chain had improved slightly by the beginning of 2022, but the industry was still constrained by bottlenecks. There were also differences between car manufacturers and automotive suppliers, as the latter were largely unable to pass on price increases to customers.

In the [traffic safety](#) sector, the German Federal Statistical Office's preliminary accident statistics for 2021 indicated that the number of road deaths in Germany was 6 percent lower than last year and 16 percent lower than in 2019. According to Destatis, accidents were impacted by the Corona pandemic, as initial estimates indicate that traffic volumes were significantly lower as a result of lockdowns, home office and homeschooling. The European Transport Safety Council (ETSC) reported similar data for European roads. In the US, the number of road deaths rose sharply since 2019, according to the National Highway Traffic Safety Administration (NHTSA); the highest figures since 2006 were recorded at the end of the first half-year, attributed by the NHTSA to high speeds and other inconsiderate driving behavior. Among manufacturers of traffic safety technology, the US company Verra Mobility merged with the Australian supplier Redflex in May 2021. The UNECE, the economic commission for Europe, and partners such as the World Health Organization (WHO) announced the next Decade of Action for Road Safety in the fall of 2021. This "Decade of Action for Road Safety 2021–2030" aims to largely prevent road traffic deaths and injuries.

Following a major slump in the first year of the pandemic, the [aviation industry](#) saw only a slight recovery, albeit enough to boost demand for new aircraft. Aircraft manufacturer Boeing also benefited from the lifting of grounding restrictions for the 737 Max model, but could not deliver its Dreamliner model due to production shortages. In total, Boeing received 535 net orders, more than the 507 received by European manufacturer Airbus. By contrast, Airbus was again ahead in terms of deliveries, including the last A380 aircraft. The impacts of the pandemic continued to be felt in air traffic: Passenger air travel in 2021 was around 58.4 percent down on the pre-crisis level in 2019 (prior year: minus 65.8 percent).

In the German [security and defense technology industry](#), the new German government extended the ban on armaments exports to Saudi Arabia with the so-called "Yemen clause" in December 2021. It is presently unclear which other countries may be affected by this clause and whether the exemptions on supplies for joint projects with NATO partners will continue to be made. The ban, which has been in effect since 2018, has already been extended several times and aims to prevent deliveries to all countries directly involved in the war in Yemen, specifically Saudi Arabia. According to the German Federal Ministry for Economic Affairs and Energy, armaments exports worth just under 9.4 billion euros were approved in 2021, based on preliminary figures. This new record figure was higher than the previous record in 2019 and considerably up on the prior-year figure of 5.8 billion euros. A large share of these armaments exports approvals were for the maritime sector and air defense systems for Egypt. In December 2021, the Swedish International Peace Research Institute (Sipri) reported that the global armaments industry suffered few, if any, setbacks during the pandemic. In 2020, for example, the 100 largest producers sold armaments worth 531 billion dollars, at 1.3 percent the smallest year-on-year increase in three years, but the sixth year of increases in a row.

Legal Framework Conditions

The [legal framework conditions](#) governing business operations essentially remained constant in 2021 and therefore had no significant impact on the business development of the Jenoptik Group.

Earnings, Financial, and Asset Position

Comparison of actual and forecast course of business

All information in this chapter refers to the Jenoptik Group as a whole, i.e., the sum of its continuing and discontinued operations. Following signing of the contract to sell VINCORION, the division is shown as a discontinued operation in accordance with IFRS 5.

On release of the preliminary results in February 2021, the Jenoptik management forecast further growth for fiscal year 2021 on the basis of good order intake growth in the fourth quarter of 2020, the present order backlog, a well-filled project pipeline, and ongoing promising developments in the semiconductor equipment business. On publication of the final figures on March 25, 2021, the Executive Board confirmed this guidance. For 2021, the Executive Board expected the Group, including TRIOPTICS, to see revenue growth in the low double-digit percentage range. It anticipated strong growth in EBITDA (earnings before interest, taxes, depreciation, and amortization, including impairment losses and reversals) and an EBITDA margin of between 16.0 and 17.0 percent. Due to the uncertainty generated by the Covid-19 lockdown at the beginning of the year and the risk of a third wave of the pandemic, the Executive Board felt that a more precise forecast was not possible at the time. It did, however, endeavor to give a more precise forecast as the year progressed. This outlook was confirmed on publication of the first-quarter earnings 2021.

In the second quarter of 2021, the Jenoptik Group posted very high figures in order intake, revenue, and EBITDA. On the basis of this very good operating performance, the Executive Board assumed in mid-July it would be able to exceed the prior forecast in terms of group revenue and EBITDA margin. At this point, the Executive Board expected group revenue for the fiscal year 2021 of between 880 and 900 million euros, and a group EBITDA margin of between 19.0 and 19.5 percent including a one-off effect of around 16 million euros in connection with the variable purchase price components arising from the acquisition of TRIOPTICS. This forecast was confirmed both on publication of the results for the first half-year 2021 and the nine-month results.

In late November 2021, Jenoptik signed an agreement to sell the VINCORION division. As a result of this, this division is shown as a discontinued operation. Overall, this would not change the 2021 guidance for the continuing and discontinued operations (together the Group).

In the year covered by the report, the Jenoptik Group (incl. VINCORION) generated revenue of 895.7 million euros, which was at the upper end of the expected range.

The EBITDA margin of the Group (incl. VINCORION) rose to 19.8 percent, including the above-mentioned one-off effects (prior year: 14.6 percent), thus exceeding the forecast range of 19.0 to 19.5 percent.

Revenue and EBITDA of the divisions and their forecast development are shown in the following table.

At the beginning of 2021, the Executive Board expected to see order intake growth in the low double-digit percentage range. At the end of the year, the order intake was 45.2 percent up on the prior year's figure.

In the March forecast, a group cash conversion rate of over 50 percent was assumed, but the actual cash conversion rate achieved by the end of 2021 was 35.4 percent (prior year: 55.8 percent), and thus lower than the forecast 50-percent figure.

It was expected that capital expenditure in fiscal year 2021 would be above the level in the prior year. Capital expenditure amounted to 61.3 million euros and was thus up on the 2020 figure. T34

Earnings Position

The tables in the Management Report, which show a breakdown of the key indicators by segment, include the Corporate Center, real estate, and consolidation effects under "Other".

Unless otherwise specified, the following text shows the figures for continuing operations (the Light & Optics, Light & Production, and Light & Safety divisions). VINCORION is included in the disclosures for the Group as a whole.

Sale of the VINCORION division

In November 2021, JENOPTIK AG signed an agreement to sell the VINCORION division to a fund managed by STAR Capital Partnership LLP. Closing of the purchase agreement is still subject to approval by the competent authorities and other standard conditions of closing. Closing is expected in 2022. As a result of this agreement, the division is shown as a discontinued operation in accordance with IFRS 5, and is therefore no longer included in the revenue, EBITDA, order intake, or order backlog disclosures for continuing operations.

T34 Actual and forecast course of business for the Jenoptik Group (in million euros/or as specified)

Indicator ⁵	Year-end 2020	2021 forecast ⁶	Year-end 2021	Change in %
		February: Further growth March: Growth in the low double-digit percentage range (including TRIOPTICS)		
Group revenue	767.2	July: 880–900 million euros	895.7	16.8
Light & Optics	321.4	March: Growth in the clear double-digit percentage range ¹	460.7	43.4
Light & Production	175.5	March: Growth in the high single-digit percentage range ²	176.2	0.4
Light & Safety	114.0	March: Growth in the mid to upper single-digit percentage range	110.1	–3.4
VINCORION	151.7	March: Stable development (dependent on developments in the aviation industry resulting from the pandemic)	145.0	–4.4
Group EBITDA/ EBITDA margin	111.6/14.6%	March: Significant EBITDA growth/margin between 16.0 and 17.0 percent ⁴ July: 19.0 and 19.5 percent (incl. one-off effect)	177.2/19.8%	58.7
Light & Optics	68.3	March: Growth significantly stronger than in revenue ¹	136.6	100.1
Light & Production	8.2	March: Growth stronger than in revenue ²	13.2	60.9
Light & Safety	22.3	March: Slight rise	19.2	–14.1
VINCORION	16.6	March: Stable development (dependent on developments in the aviation industry resulting from the pandemic)	21.4	28.9
Group order intake	739.4	March: Growth in the low double-digit percentage range	1,073.6	45.2
Group cash conversion rate	55.8%	March: Over 50 percent ¹	35.4%	
Group capital expenditure ³	47.3	March: Above prior year	61.3	29.6

¹ incl. OTTO

² excl. OTTO

³ excl. capital expenditure on financial assets

⁴ Due to the uncertainty caused by the Covid-19 lockdown at the beginning of the year and the risk of a third wave of the pandemic, a more accurate forecast is not possible at this time. The aim, however, is to clarify the forecast during the course of the year

⁵ Group refers to the sum of continuing and discontinued operations

⁶ March forecast is the forecast published in the Annual Report 2020

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Changes to the group structure in fiscal year 2021 and impacts of structural and portfolio measures in 2020

In fiscal year 2020, Jenoptik reported figures adjusted for structural and portfolio measures (merger costs, consolidation or closure of sites, restructuring, cost-cutting programs, and in connection with M+A activities). These adjustments were no longer made in fiscal year 2021. Prior-year figures are also non-adjusted. OTTO Vision Technology GmbH (OTTO) was reclassified into the Light & Optics division (before Light & Production) as of January 1, 2021; the prior-year figures were adjusted accordingly. In addition, the crystal growth business (Light & Optics division, revenue of approx. 6 million euros in 2020) and the non-optical process measuring technology business for grinding machines (Light & Production division, revenue of approx. 7 million euros in 2020) were both sold in the summer of 2021. The acquisition of BG Medical and the SwissOptic Group was successfully completed as of the closing date of November 30, 2021; the companies have since been included in the Consolidated Financial Statements.

Earnings position

Even given the challenges of the ongoing Covid-19 pandemic and supply bottlenecks, Jenoptik still has, in part, a crisis-resistant business model and is in a good financial and balance sheet position, according to the assessment of the Executive Board.

Over the fiscal year 2021, Covid-19 also impacted on the operating activities of the Jenoptik businesses and thus on the Group's earnings, financial, and asset positions (see text below). The impacts arising from delivery delays due to the pandemic were largely offset.

In the fiscal year 2021, continuing operations generated revenue of 750.7 million euros, 22.0 percent, more than in the prior year (prior year: 615.5 million euros). TRIOPTICS' contribution to revenue came to 99.5 million euros (prior year: 27.8 million euros), while the companies acquired in 2021 contributed a total of 9.6 million euros. Including the discontinued operation, group revenue amounted to 895.7 million euros (prior year: 767.2 million euros).

The quarter with the highest revenue both in the 2021 fiscal year and the prior year was the fourth, with 231.3 million euros (prior year: 201.5 million euros). Growth in 2021 came primarily from the Light & Optics division, facilitated by sustained high demand in semiconductor equipment business and good growth in biophotonics. TRIOPTICS also contributed through its inclusion over the full-year period and good operating performance. In the Light & Production division, revenue was largely unchanged on the prior year. Despite a strong fourth quarter, the Light & Safety division posted a minor fall in revenue, primarily attributable to the strongly project-based nature of its business, delays in the placement of orders, and pandemic-related delays in deliveries of electronic components, particularly in the first half-year.

On a regional level, revenue increased across the board. TRIOPTICS was the main contributor to the significant increase in revenue of 64.8 percent in the Asia/Pacific region. Revenue in Europe (excl. Germany) increased by 11.1 percent due to stronger demand in the Light & Optics division. In the Americas, revenue grew by a total of 28.0 percent compared to the prior year in all three divisions, with in particular the Light & Optics and Light & Production divisions increasing their revenues. At 611.3 million euros, continuing operations generated 81.4 percent of revenue abroad in the past fiscal year (prior year: 473.4 million euros/76.9 percent).



More information on the development of revenue in the divisions can be found in the Segment Report

T35 Revenue by segment (in million euros)

	2021	2020	Change in %
Continuing operations	750.7	615.5	22.0
Light & Optics	460.7	321.4	43.4
Light & Production	176.2	175.5	0.4
Light & Safety	110.1	114.0	-3.4
Other	3.7	4.5	-17.8


Once again, in 2021 the continuing operations generated their largest share of revenue of 34.9 percent in the automotive and mechanical engineering market, although this figure was still down on the prior year (prior year: 37.0 percent). Although revenue with the semiconductor equipment industry rose in absolute terms, its share reduced to 26.0 percent (prior year: 27.2 percent). Following the pandemic-related decline in 2020, the medical technology market picked up significantly in 2021. The share of revenue generated with medical technology rose to 9.5 percent (prior year: 6.2 percent). As TRIOPTICS was first included for a full year in 2021, the share of revenue in the "Electronics manufacturing" market segment increased to 6.3 percent, compared to 3.6 percent in the prior year.

In the fiscal year 2021, our top three customers accounted for 21.4 percent of revenue in continuing operations (prior year: 22.6 percent).

The **cost of sales** rose by 26.4 percent to 493.8 million euros (prior year: 390.7 million euros) and thus at a higher rate than revenue, primarily due to increased material and personnel

costs. This item also includes expenses arising from developments on behalf of customers, totaling 20.3 million euros (prior year: 13.5 million euros), which were offset by corresponding revenues.

Gross profit was up on the prior-year figure of 224.7 million euros and came to 256.9 million euros. With a higher cost of sales, the **gross margin** of 34.2 percent was down on the prior-year figure of 36.5 percent.

In 2021, **research and development expenses** amounted to 38.9 million euros (prior year: 39.4 million euros). The share of R+D expenses as a proportion of revenue thus decreased to 5.2 percent (prior year: 6.4 percent). At 63.6 million euros, the R+D output, including developments on behalf of customers, was sharply up on the prior-year figure (prior year: 56.9 million euros). 

Partly as a result of the inclusion of TRIOPTICS for the full fiscal year and higher amortization in connection with PPA effects, in particular on customer relationships, **selling expenses** increased by 16.3 percent, to 89.7 million euros, in 2021 (prior



More detailed information on research and development can be found from page 103 on

T36 Revenue by region (in million euros)

	2021	2020	Change in %
Continuing operations	750.7	615.5	22.0
Germany	139.4	142.0	-1.9
Europe	208.4	187.5	11.1
America	205.7	160.6	28.0
Asia/Pacific	172.9	104.9	64.8
Middle East/Africa	24.3	20.4	19.4

T37 Revenue by target market (in million euros and as % of total revenue of continuing operations)

	2021		2020	
Automotive & mechanical engineering	261.7	34.9%	227.8	37.0%
Semiconductor equipment industry	194.9	26.0%	167.6	27.2%
Aviation & traffic	130.3	17.4%	114.1	18.5%
Medical technology	71.3	9.5%	38.1	6.2%
Electronics manufacturing	47.2	6.3%	22.2	3.6%
Security & defense technology	12.2	1.6%	24.7	4.0%
Other	33.1	4.4%	21.0	3.4%
Total	750.7	100.0%	615.5	100.0%

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year: 77.1 million euros). At 11.9 percent, the selling expenses ratio was slightly down on the prior-year level (prior year: 12.5 percent).

General administrative expenses of 53.5 million euros were unchanged on the prior year (prior year: 53.9 million euros) despite the inclusion of TRIOPTICS for the entire reporting period. This was in part achieved by lower personnel expenses in already existing units, some of them arising from efficiency measures. The administrative expenses ratio fell to 7.1 percent (prior year: 8.8 percent).

Impairment gains and losses in connection with the valuation of trade receivables and contract assets amounted to minus 1.2 million euros (prior year: 4.1 million euros). This was essentially due to an increased focus on receivables management in the prior year, which resulted in a sharp reduction in overdue receivables and thus also a reduction in general bad debt allowances.

Other operating income came to 50.7 million euros, clearly up on the prior year's figure of 16.5 million euros. This item includes a one-off effect worth around 30.5 million euros in connection with the valuation of conditional purchase price components arising from the acquisitions of TRIOPTICS and INTEROB. Due to delays in the completion of individual major customer-specific projects at TRIOPTICS, the expected revenue under commercial law relevant for the purchase price components in 2021 and consequently also the expected EBITDA under commercial law could not be achieved, with the result that the bonus and earn-out liabilities were reversed through profit or loss. At the same time, a malus receivable was capital-

ized through profit or loss. In 2021, TRIOPTICS generated revenue of around 100 million euros according to IRFS, including revenue recognized over time, with an EBITDA margin above the group average. In addition, higher currency exchange gains of 8.6 million euros (prior year: 5.6 million euros) and gains on the sale of consolidated entities of 3.9 million euros also contributed to the rise of other operating income.

Other operating expenses fell to 16.3 million euros (prior year: 27.6 million euros), mainly due to the reversal of provisions. In addition, in 2021 the item also included transaction costs, especially in connection with the acquisition of BG Medical and the SwissOptic Group. In 2020, the item included expenses for group projects, structural and portfolio measures, costs in connection with corporate transactions, and impairment losses on fixed assets. At 8.6 million euros, currency losses exceeded the prior-year figure of 7.3 million euros.

Overall, other operating income and expenses came to 34.4 million euros (prior year: minus 11.1 million euros).

The profitability of continuing operations improved significantly in fiscal year 2021. In addition to a significant rise in revenue, this also reflected the positive impacts arising from the restructuring measures implemented in 2020. In addition, the EBITDA item also includes the above-mentioned positive one-off effects of around 30.5 million euros in connection with the acquisitions of TRIOPTICS and INTEROB in 2020 (prior year: costs from structural and portfolio measures of 19.1 million euros). **Earnings before interest, taxes, depreciation, and amortization, including impairment losses and reversals (EBITDA)** increased to 155.7 million euros (incl. PPA impacts of minus 2.1 million euros (prior year: minus 4.6 million euros), and were thus 67.9 percent up on the comparable prior-year figure of 92.8 million euros. Excluding the one-off effects, EBITDA amounted to 125.2 million euros. The impacts of structural and portfolio measures included in 2020 came to minus 19.1 million euros. In terms of EBITDA, the fourth quarter was again the strongest, with 46.1 million euros (prior year: 34.8 million euros). The EBITDA margin for continuing operations rose to 20.7 percent (prior year: 15.1 percent), or 16.7 percent excluding the one-off effects. Group EBITDA, i.e., including VINCORION, increased to 177.2 million euros (prior year: 111.6 million euros), the EBITDA margin to 19.8 percent (prior year: 14.6 percent). Excluding the abovementioned one-off effects, the group EBITDA margin was 16.4 percent.



Detailed information on the composition of other operating income and expenses can be found on page 188 of the Notes and in the Consolidated Statement of Comprehensive Income on page 162

T38 Key items in the Statement of Comprehensive Income (in million euros)

	2021	2020	Change in %
Cost of sales	493.8	390.7	26.4
R+D expenses	38.9	39.4	-1.4
Selling expenses	89.7	77.1	16.3
Administrative expenses	53.5	53.9	-0.7
Impairment gains and losses	-1.2	4.1	n. a.
Other operating income	50.7	16.5	207.5
Other operating expenses	16.3	27.6	-40.9

Income from operations (EBIT) of the continuing operations of 108.1 million euros was also a strong 128.2 percent up on the prior-year figure of 47.4 million euros. The EBIT margin accordingly improved to 14.4 percent (prior year: 7.7 percent). In addition to the above-mentioned one-off effects, the EBIT item also includes impacts arising from the purchase price allocations of minus 16.4 million euros as a result of acquisitions in 2021 and prior years (prior year: minus 14.9 million euros), effects from structural and portfolio measures were included in the prior year. Group EBIT incl. VINCORION came to 100.7 million euros, with an EBIT margin of 11.2 percent.

Due in particular to the higher EBIT, the **ROCE (Return on Capital Employed)** for continuing operations also improved to 13.4 percent by December 31, 2021 (prior year: 8.2 percent (Group)). Jenoptik shows this indicator inclusive of goodwill and before taxes. The calculation of the ROCE is explained in the Control System chapter from page 101 on and shown in the following table. The calculation of averages uses the twelve month-end balances in the period under review and the opening balance at the start of the year.

Financial income and financial expenses were roughly at the same level as the prior-year figures. Positive currency effects, in particular, were offset by higher interest rates for financing. The **financial result** decreased to a total of minus 5.6 million euros (prior year: minus 5.1 million euros).

Significantly higher EBIT was also reflected in the **earnings before tax**, which at a total of 102.5 million euros were 142.7 percent up on the prior year (prior year: 42.3 million euros).

The current income taxes for continuing operations of 14.0 million euros were also above the level of the prior year (prior year: 8.3 million euros). Of these, 8.6 million euros (prior year: 5.0 million euros) are attributable to Germany and 5.4 million euros (prior year: 3.3 million euros) to other countries. The increase in Germany is due to a significant rise in earnings in the period covered by the report.

The Jenoptik Group's cash effective tax rate, the relationship between the current income taxes and earnings before tax, fell due to the increased domestic share of taxable income to 13.6 percent (prior year: 19.6 percent), but in view of the domestic earnings and deductible tax loss carryforwards was at a comparatively low level for a German company.

Non-cash deferred tax expense came to 4.3 million euros in the past fiscal year (prior year: 0.0 million euros). The increase resulted mainly from increased timing differences and additional recognition of deferred tax assets on tax loss carryforwards,



Information on the segment EBITDA and EBIT can be found in the Segment Report from page 130 on

T40 EBITDA (in million euros)

	2021	2020	Change in %
Continuing operations	155.7	92.8	67.9
Light & Optics	136.6	68.3	100.1
Light & Production	13.2	8.2	60.9
Light & Safety	19.2	22.3	-14.1
Other	-13.3	-6.1	-119.3

T39 ROCE for continuing operations (in million euros)

	2021	2020
Long-term non-interest bearing assets	724.7	510.5
Short-term non-interest bearing assets	347.0	271.8
Non-interest bearing borrowings	-264.0	-201.5
Average tied capital	807.7	580.9
EBIT	108.1	47.4
ROCE (in percent)	13.4	8.2

T41 EBIT (in million euros)

	2021	2020	Change in %
Continuing operations	108.1	47.4	128.2
Light & Optics	110.8	51.5	115.3
Light & Production	2.3	-4.1	n. a.
Light & Safety	14.1	15.2	-7.4
Other	-19.0	-15.1	-25.9

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as well as from the impacts of purchase price allocations of company acquisitions. This was offset by the utilization of the domestic tax loss carryforward. The group tax rate thus amounted to 9.4 percent (prior year: 19.5 percent); income taxes totaled minus 9.7 million euros (prior year: minus 8.2 million euros).

In 2021, Jenoptik generated earnings after tax of 84.3 million euros, a significant improvement of 97.4 percent (prior year: 42.7 million euros). At 82.0 million euros, earnings attributable to shareholders were above the prior-year figure of 41.8 million euros. Earnings per share of 1.43 were also well up on the prior-year figure of 0.73 euros per share.

Discontinued operation

In 2021, revenue of the discontinued operation decreased to 145.0 million euros (prior year: 151.7 million euros). This resulted from lower revenue in the project business in the area of ground-based air defense. As a result of the measures also taken at VINCORION, the division's EBITDA improved to 21.4 million euros (prior year: 16.6 million euros) or, taking into account the elimination of intragroup transactions and the allocation of disposal costs in accordance with IFRS 5, to 21.5 million euros (prior year: 18.8 million euros).

Earnings after tax in the discontinued operation (VINCORION) amounted to minus 8.5 million euros (prior year: 8.7 million euros). This item includes both the current earnings and the impairment loss arising from the fair value measurement following the agreement to sell the division (see the Notes, page 194).

Strong demand in the first nine months continued into the fourth quarter. The order intake of the continuing operations in 2021 rose to a total of 936.7 million euros (prior year: 594.2 million euros), an increase of 57.6 percent. Including VINCORION's order intake, the group order intake exceeded the one-billion-euro mark and was worth 1,073.6 million euros (prior year: 739.4 million euros). Of this figure, 120.9 million euros came from TRIOPTICS, 9.9 million euros from BG Medical and the SwissOptic Group.

The growth in the order intake was also higher than the revenue generated in the fiscal year. The book-to-bill ratio therefore increased appreciably to 1.25 (prior year: 0.97).

Within the Light & Optics division, all units, incl. TRIOPTICS, contributed to this rise. The order intake in the Light & Production division also grew considerably, as it did in the Light &



See page 193 of the Notes for detailed information on the subject of taxes

T42 Order intake (in million euros)

	2021	2020	Change in %
Continuing operations	936.7	594.2	57.6
Light & Optics	631.1	343.4	83.8
Light & Production	185.3	154.0	20.4
Light & Safety	116.5	92.3	26.2
Other	3.7	4.5	-17.8

T43 Order backlog (in million euros)

	2021	2020	Change in %
Continuing operations	543.5	299.8	81.3
Light & Optics	408.5	179.1	128.1
Light & Production	80.7	74.7	8.0
Light & Safety	54.3	46.0	18.0

T44 Frame contracts (in million euros)

	2021	2020	Change in %
Continuing operations	135.1	21.5	527.6
Light & Optics	107.4	12.6	750.0
Light & Safety	27.7	8.9	211.8

T45 Book-to-bill ratio

	2021	2020
Continuing operations	1.25	0.97
Light & Optics	1.37	1.07
Light & Production	1.05	0.88
Light & Safety	1.06	0.81

Safety division, which posted significantly more orders, particularly in North America. In the latter division, the order intake is strongly influenced by projects and thus subject to fluctuations.



See page 130 of the Segment Report for detailed information on the order intake in the divisions

The **order backlog** of the continuing operations increased to a value of 543.5 million euros at the end of 2021 (31/12/2020: 299.8 million euros). Of this order backlog, 85.9 percent will be converted to revenue in 2022, less than in the prior year (prior year: 89.2 percent). Together with encouraging order intake growth in the fourth quarter of 2021, the well-filled project pipeline, and continued good performance in areas such as the semiconductor equipment business, this represents a solid basis for further growth in fiscal year 2022, to which organic growth and both BG Medical and the SwissOptic Group, which will be consolidated for the full year for the first time, will make a contribution.



See page 209 of the Notes for more information on factoring

At the end of 2021, there were **frame contracts** worth an expected 135.1 million euros (31/12/2020: 21.5 million euros), the increase resulting in particular from the acquisition of BG Medical. Frame contracts are contracts or framework agreements with customers where the exact extent and time of occurrence cannot yet be specified precisely.

Financial Position



See page 228 of the Notes for more information

Over the fiscal year 2021, Covid-19 again impacted on the operating activities of the Jenoptik businesses and thus on the Consolidated Statement of Financial Position and the Consolidated Statement of Cash Flows. In the opinion of the Executive Board, the Group continues to ensure healthy balance sheet ratios and an ample supply of liquidity, and is thus in a very good financial position.

Financial management principles

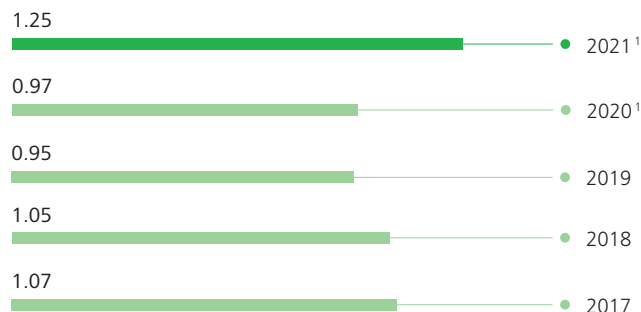
The central Treasury department plans for requirements and controls the provision of liquid resources within the Group. The Group's financial flexibility and solvency is guaranteed at all times on the basis of multi-year financial planning and quarterly forecasts. A cash pooling system also ensures the liquidity supply to all the major companies in Europe and North America. Companies not integrated in the cash pooling system are usually supplied with liquidity through internal group loans or, in exceptional cases, lines of credit from local banks.

Since 2019, Jenoptik has also been utilizing a program to sell trade receivables (factoring), which gives the Group a further instrument to manage its liquidity and working capital. The volume of this instrument is limited to 25 million euros.

Primarily using currency forward transactions, Jenoptik hedges orders and group-internal loan receivables in foreign currencies, thereby reducing the impacts of exchange rate fluctuations on earnings and cash flow. Derivative financial instruments are used exclusively to hedge the operational business as well as financial transactions required for operational purposes.

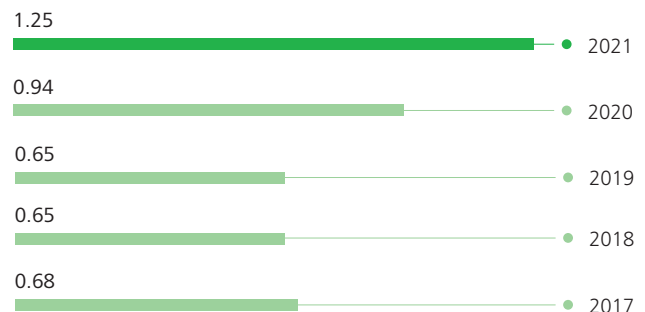
As a result of the above measures, the existing financing instruments – essentially the syndicated loan and debenture bonds –, and the available cash and cash equivalents, the liquidity of all the group companies in the past fiscal year was sufficiently secured at all times.

G22 Development of the book-to-bill ratio



¹ Figures refer to continuing operations

G23 Debt-to-equity ratio¹



¹ Figures for the years 2017 to 2020 are data for the Group including VINCORION

Capital structure and financing analysis

With an equity ratio of 44.4 percent as of December 31, 2021 and net debt of 541.4 million euros, the Group still enjoys a solid and viable financing structure, as well as healthy balance sheet ratios, according to the assessment of the Executive Board. This gives Jenoptik the flexibility and financial latitude to finance future organic growth and potential acquisitions, thus implementing its "Agenda 2025".

In March 2021, Jenoptik placed sustainability-linked debenture bonds worth 400 million euros on the capital market on attractive terms. Of this sum, around 130 million euros were already disbursed in March, the remaining 270 million euros in September 2021. The debenture bonds were significantly oversubscribed and comprised several tranches with terms of five, seven, and ten years, which were issued not only in euros but also, to a lesser extent, in US dollars (59 million US dollars). Investors from Germany and abroad were offered both fixed and variable interest rate options.

In December 2021, Jenoptik also refinanced the revolving syndicated loan and increased it from 230 to 400 million euros. The loan, which is provided by seven banks, has a term of five years and, with the approval of the lenders, can be extended twice by one year (5+1+1), as required; its volume can be increased to 600 million euros. This financing instrument, too, for the first time included sustainability components.

Funds from the debenture bonds and the syndicated loan were already used to finance the purchase price payments to acquire the remaining 25 percent in TRIOPTICS in late 2021 and both BG Medical and the SwissOptic Group. They also give the Group room for maneuver for investments in its core business of photonics and further acquisitions.

In addition to cash and cash equivalents of 54.8 million euros and current financial investments of 1.6 million euros, the Group also has unused lines of credit totaling 325 million euros to fall back on. Around 75 million euros had been utilized as of December 31, 2021. This means that, as of the end of 2021, Jenoptik had over 380 million euros available for corporate development projects.

The following information on the financial position in fiscal year 2021 relates to continuing operations in the Jenoptik Group. Following signing of the contract to sell VINCORION, this division is now shown as a discontinued operation for the past fiscal year.

The individual items on the prior-year balance sheet have not been adjusted and include the assets and liabilities of VINCORION. Adjusted figures for the prior year are indicated as "excluding VINCORION"; the figure is stated as if assets and liabilities of VINCORION had already been classified as held for sale in the prior 2020 year.

In 2021, **non-current financial debt** increased sharply to 448.7 million euros (31/12/2020: 138.4 million euros/117.9 million euros excluding VINCORION), in particular due to the issue of the debenture bonds and the first-time consolidation of BG Medical and the SwissOptic Group. This item included financial debt to banks in the amount of 421.2 million euros (31/12/2020: 90.7 million euros/90.7 million euros excluding VINCORION) and lease liabilities of 27.5 million euros (31/12/2020: 47.7 million euros/27.2 million euros excluding VINCORION).

Current financial debt increased to 149.0 million euros (31/12/2020: 130.9 million euros/127.8 million euros excluding VINCORION). At the end of 2021, non-current

T46 Net and gross debt (in million euros) ¹

	2021	2020	2019	2018	2017
Non-current financial debt	448.7	138.4	122.6	111.4	108.6
Current financial debt	149.0	130.9	37.0	10.1	19.3
Gross debt	597.7	269.3	159.6	121.5	127.9
minus current financial investments	1.6	4.9	69.7	59.5	64.6
minus cash and cash equivalents	54.8	63.4	99.0	89.3	132.3
Net debt	541.4	201.0	-9.1	-27.2	-69.0

¹ Figures for 2017 through 2020 refer to the Group, incl. VINCORION

financial debt accounted for around 75 percent of Jenoptik's financial debt (31/12/2020: 51 percent/48.0 percent excluding VINCORION).

The **debt-to-equity ratio** was 1.25 at the end of 2021 (31/12/2020: 0.94), due to a significant increase in borrowings in connection with the acquisition of BG Medical and the SwissOptic Group, and the acquisition of the second 25-percent stake in TRIOPTICS. The debt-to-equity ratio is defined as the ratio between borrowings (976.4 million euros) and equity (780.7 million euros).

At year-end 2021, the **net cash position**, defined as the total cash, cash equivalents, and current financial investments minus current financial debt, amounted to minus 92.6 million euros (31/12/2020: minus 62.6 million euros/minus 59.5 million euros excluding VINCORION). The value of cash, cash equivalents, and current financial investments decreased to 56.4 million euros (31/12/2020: 68.3 million euros/68.3 million euros excluding VINCORION); current financial debt rose to 149.0 million euros (31/12/2020: 130.9 million euros/127.8 million euros excluding VINCORION).

As of December 31, 2021, cash, cash equivalents, and current financial investments were down in value. The sharp rise in financial debt following the acquisition and the purchase of shares resulted in **net debt** increasing significantly to 541.4 million euros as of December 31, 2021 (31/12/2020: 201.0 million euros/177.4 million euros excluding VINCORION).

Analysis of capital expenditure

The focus of capital expenditure is derived from the Group strategy and is in line with the planned growth targets and the asset structure of the Group. To ensure this, the individual investments are systematically reviewed with respect to sustainability or their value contribution on the basis of performance and financial indicators, and all risks and opportunities are thoroughly analyzed.

In 2021, continuing operations invested 49.9 million euros in intangible assets and property, plant, and equipment (prior year: 38.1 million euros). The Group invested 61.3 million euros (prior year: 47.3 million euros). **Capital expenditure** was primarily deployed to create the conditions for growth and new customer orders.

T47 Capital expenditure and depreciation/amortization in continuing operations (in million euros)

	2021	2020	Change in %
Capital expenditure	49.9	38.1	31.1
Intangible assets	10.1	11.6	-13.0
Property, plant, and equipment	39.9	26.5	50.4
Investment properties	0	0	n.a.
Depreciation/amortization/impairment losses and reversals	47.6	45.4	4.9
Intangible assets	18.7	15.6	19.8
Property, plant, and equipment	28.4	29.7	-4.5
Investment properties	0.5	0.1	506.5

T48 Capital expenditure by segment – Intangible assets and property, plant, and equipment as well as investment properties (in million euros)

	2021	2020	Change in %
Continuing operations	49.9	38.1	31.1
Light & Optics	28.9	18.7	55.1
Light & Production	3.4	4.8	-29.8
Light & Safety	8.1	4.6	75.2
Other	9.5	10.0	-4.7

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At 39.9 million euros, the largest share of capital expenditure was once again on property, plant, and equipment (prior year: 26.5 million euros). These funds were used to increase manufacturing capacity and acquire new technical equipment.

Capital expenditure for intangible assets (excluding additions to the group of consolidated entities) decreased on a comparable basis to 10.1 million euros (prior year: 11.6 million euros). Investment was mainly attributable to costs in connection with setting up and launching an SAP S/4 HANA system and the development costs from internal projects to be capitalized, which in the reporting period amounted to 4.2 million euros (prior year: 3.6 million euros).

Scheduled depreciation and amortization in continuing operations increased to 47.6 million euros (prior year: 43.9 million euros). This increase was mainly due to impacts arising from the purchase price allocation for the companies acquired in 2020.

Scheduled depreciation on property, plant, and equipment came to 28.8 million euros (prior year: 28.4 million euros) and was thus below the figure for capital expenditure on property, plant, and equipment.

Scheduled amortization on intangible assets amounted to 18.7 million euros (prior year: 15.4 million euros), and, as in the prior year, primarily included amortization of software as well as intangible assets identified in the course of company acquisitions.

Analysis of cash flows

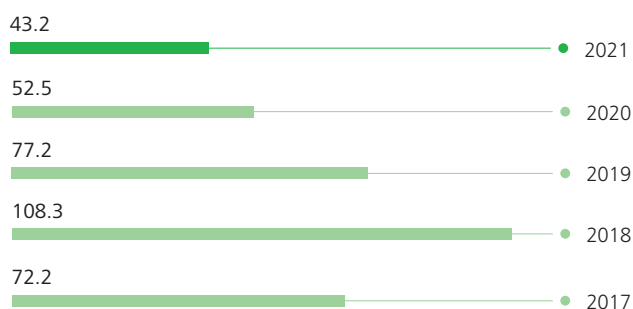
The Group's cash flows from operating activities improved to 98.0 million euros in the reporting year (prior year: 89.7 million euros). Earnings before tax were significantly up on the prior year, but included considerable non-cash income. This, together with the build-up of working capital, resulted in cash flows from operating activities rising by just 8.3 million euros.

In 2021, the Group's cash flows from investing activities amounted to minus 413.6 million euros (prior year: minus 188.4 million euros). Over the reporting period, they were largely influenced by payments amounting to 380.0 million euros, primarily for the acquisition of BG Medical and the Swiss-Optic Group, as well as the remaining 25-percent stake in TRIOPTICS. Over the course of 2021, this item was also influenced by operating investment activities (capital expenditure for and proceeds from the sale of intangible assets and property, plant, and equipment) and receipts from the sale of the crystal growth business and the non-optical measuring technology business for grinding machines. In the prior year, the largest impact had arisen from the payments to acquire TRIOPTICS and INTEROB, as well as from the net cash inflow from short-term investments.



More information on capital expenditure can be found in the Segment Report from page 30 on; on future investment projects in the Forecast Report from page 153 on

G24 Free cash flow in million euros¹



¹ Figures for 2017 through 2019 refer to the Group, incl. VINCORION

T49 Cash flow Group (incl. VINCORION) (in million euros)

	2021	2020	2019	2018	2017
Cash flows from operating activities	98.0	89.7	108.9	135.5	96.3
Cash flows from investment activities	-413.6	-188.4	-54.4	-117.5	-42.2
Cash flows from financing activities	304.2	63.7	-46.1	-60.9	-12.9
Cash-effective change in cash and cash equivalents	-11.4	-35.0	8.4	-42.9	41.3
Non-cash-effective change in cash and cash equivalents	2.8	-0.6	1.4	-0.1	-0.9
Change in cash and cash equivalents	-8.6	-35.6	9.8	-43.1	40.3
Cash and cash equivalents at end of fiscal year	54.8	63.4	99.0	89.3	132.3

Despite the higher cash flows from operating activities before taxes and interest, the **free cash flow** of 62.8 million euros at group level was slightly up on the prior-year figure of 62.3 million euros. The free cash flow is calculated as the group cash flows from operating activities before payments for income tax of the Group in the amount of 108.3 million euros (prior year: 102.3 million euros) and cash flows from operating investment activities, i.e., the balance of receipts and payments of funds for intangible assets and property, plant, and equipment, amounting to minus 45.5 million euros (prior year: minus 40.0 million euros). At 43.2 million euros, the free cash flow in continuing operations was lower than in the prior year (prior year: 52.5 million euros).

The **cash conversion rate** for continuing operations was 27.7 percent in fiscal year 2021 (prior year: 56.6 percent); for the Group, the figure was 35.4 percent (prior year: 55.8 percent), reflecting the significant increase in EBITDA, which was, however, influenced by non-cash income.

The **cash flows from financing activities** amounted to 304.2 million euros in the period covered by the report (prior year: 63.7 million euros), and were particularly influenced by the proceeds from the issue of the debenture bonds (tranches with value dates in March and September 2021). Dividends worth a total of 16.1 million euros were also paid out to shareholders of the parent company and minority shareholders in 2021 (prior year: 8.4 million euros), of which 14.3 million euros were paid to JENOPTIK AG shareholders and 1.7 million euros to TRIOPTICS minority shareholders.

Asset Position

In fiscal year 2021, first-time consolidation of BG Medical and the SwissOptic Group, as well as classification of the VINCORION division as held for sale following signing of the agreement to sell VINCORION, led to considerable changes in the Consolidated Statement of Financial Position.

The following information on the asset position relates to continuing operations in the Jenoptik Group. VINCORION's assets and liabilities are shown as separate items in respect of assets and liabilities – “assets held for sale” and “liabilities related to assets held for sale”. The individual items on the prior-year statement of financial position include the assets and liabilities of VINCORION. Adjusted figures of the prior year are indicated as “excluding VINCORION”; for the sake of comparability adjusted prior-year figures are stated as if VINCORION had already been classified as held for sale in the prior year 2020.

Despite the challenges posed by the coronavirus pandemic and a higher level of debt arising from the acquisitions, the Executive Board is of the opinion that the Group continued to ensure healthy balance sheet ratios.

Compared to the end of 2020, the Jenoptik Group's **total assets** grew in value to 1,757.0 million euros as of December 31, 2021 (31/12/2020: 1,338.8 million euros), a rise of 418.2 million euros). There were significant changes to individual items, in particular due to first-time consolidation of BG Medical and the SwissOptic Group, and the classification of VINCORION as held for sale.

On the assets side, the acquisition primarily had the effect of boosting **non-current assets** to 1,110.8 million euros (31/12/2020: 848.9 million euros/779.4 million euros excluding VINCORION). Intangible assets saw a particularly strong increase compared to year-end 2020, rising from 487.1 million euros (31/12/2020: 472.0 million euros excluding VINCORION) to 753.2 million euros, largely due to the goodwill recognized and the acquired companies' intangible assets identified during the purchase price allocation. The “Goodwill” item increased to 573.0 million euros (31/12/2020: 390.2 million euros/384.0 million euros excluding VINCORION) and thus remained the largest item in intangible assets. The increase in intangible assets was also the result of an increase in the acquired patents, trademarks, software, and customer relationships item, as well as the capitalization of customer relationships at BG Medical and the SwissOptic Group. Property, plant, and equipment increased from 263.5 million euros at the end of 2020 (31/12/2020: 218.1 million euros excluding VINCORION) to 266.7 million euros as of December 31, 2021, in part due to the real estate, technical equipment, and machinery acquired in the course of the acquisitions and to advances/assets under construction. There were only minor changes in the remaining items under non-current assets. 

Over the past fiscal year, **current assets** rose to a value of 646.3 million euros (31/12/2020: 489.9 million euros/559.5 million euros including VINCORION as per IFRS 5). The main reason for this was the classification of VINCORION's assets as held for sale in this item. The rise in inventories to 200.2 million euros was mainly due to the acquisition and services made in advance for future revenue (31/12/2020: 191.4 million euros/134.5 million euros excluding VINCORION). In addition to the acquisition, the increase in trade receivables was a result of high revenue in the fourth quarter. Contract assets, particularly in the Light & Production division, grew in value to 81.4 million euros (31/12/2020: 74.7 million euros/63.4 million euros excluding



More information on the intangible assets and property, plant, and equipment can be found in the Notes, from pages 197 and 201 on

VINCORION). Higher receivables from company acquisitions in connection with the acquisitions of TRIOPTICS, BG Medical and the SwissOptic Group contributed to the increase in other current financial assets. Cash and cash equivalents fell to 54.8 million euros (31/12/2020: 63.4 million euros/63.4 million euros excluding VINCORION).

VINCORION's assets are shown as held for sale, and as of December 31, 2021 came to 156.8 million euros (31/12/2020: 0 million euros).

On a comparable basis, the continuing operations' **working capital** rose as of December 31, 2021, in part due to the acquisition, to 260.6 million euros (31/12/2020: 268.1 million euros / 185.2 million euros excluding VINCORION). On the assets side, inventories, trade receivables, and contract assets increased considerably more strongly than trade accounts payable and contract liabilities on the liabilities side. The working capital

ratio, that of working capital to revenue based on the last twelve months, increased on a comparable basis to 34.7 percent at year-end 2021 (31/12/2020: 34.9 percent/30.1 percent excluding VINCORION). Reasons for this include the first-time consolidation; BG Medical and the SwissOptic Group are included here on a pro rata basis with regard to revenue but in full in the balance sheet items and thus in working capital.

As of December 31, 2021, **equity** of 780.7 million euros was above the level as at year-end 2020 (31/12/2020: 689.4 million euros). In addition to the increase in net profit for the period, currency differences and actuarial effects also had a positive impact here. By contrast, the dividend for the shareholders of JENOPTIK AG and the minority shareholders of TRIOPTICS, a total of 16.0 million euros, had an equity-reducing effect. In the light of significantly higher financial debt, the **equity ratio**, that of equity to total assets, fell to 44.4 percent (31/12/2020: 51.5 percent).

T50 Reconciliation of key asset items (in million euros)

	2021 Continuing operations	2020 Continuing operations (simulation)	2020 Group ¹
Intangible assets	753.2	472.0	487.1
Property, plant, and equipment	266.7	218.1	263.5
Inventories	200.2	134.5	191.4
Current trade receivables	120.5	94.7	138.0
Contract assets	81.4	63.4	74.7
Cash and cash equivalents	54.8	63.4	63.4

¹ Group covers continuing operations and discontinued operation (VINCORION)

T51 Reconciliation of key liability items (in million euros)

	2021 Continuing operations	2020 Continuing operations (simulation)	2020 Group ¹
Non-current financial debt	448.7	117.9	138.4
Pension provisions	9.4	9.7	35.2
Current financial debt	149.0	127.8	130.9
Trade accounts payable	94.2	71.0	89.7
Contract liabilities	47.3	36.4	46.3
Other current provisions	39.9	35.3	52.5

¹ Group covers continuing operations and discontinued operation (VINCORION)

Non-current liabilities increased to 503.1 million euros (31/12/2020: 233.0 million euros/183.2 million euros excluding VINCORION), in 2021 mainly influenced by the issue of the debenture bonds in March. Five debenture bonds, worth around 130 million euros, were value-dated on March 31, 2021, six more worth around 270 million euros in September. The debenture bonds are included in the non-current financial debt item, which therefore increased to 448.7 million euros (31/12/2020: 138.4 million euros/117.9 million euros excluding VINCORION). Pension provisions fell due to the classification of VINCORION's pension provisions to the item "Liabilities related to assets held for sale", but also due to higher interest rates and a positive development of plan assets (see the Notes, "Provisions for Pensions and Similar Obligations," from page 186 on). The release of the contingent purchase price liabilities from the acquisitions made in 2020 and the reclassification of purchase price components to current liabilities led to a reduction in other non-current liabilities.

Current liabilities rose to a value of 473.3 million euros (31/12/2020: 416.4 million euros/466.2 million euros including VINCORION as per IFRS 5), largely due to the increase in current financial debt to 149.0 million euros (31/12/2020: 130.9 million euros/127.8 million euros excluding VINCORION). Following acquisition of the remaining 25-percent stake in TRIOPTICS, the value of other current financial liabilities fell from 75.3 million euros (74.6 million euros excluding VINCORION) at the end of 2020 to 22.0 million euros at the end of 2021. In the prior year, a purchase price liability was recognized for the acquisition of the remaining 25-percent stake in TRIOPTICS. As of the reporting date, current trade accounts payable

increased in value to 94.2 million euros (31/12/2020: 89.7 million euros/71.0 million euros excluding VINCORION). An increase in advances received for projects with revenue recognition at a point in time resulted in higher contract liabilities of 47.3 million euros (31/12/2020: 46.3 million euros/36.4 million euros excluding VINCORION).

Liabilities related to assets held for sale (VINCORION) amounted to 93.6 million euros at year 2021 (31/12/2020: 0 million euros).

Acquisitions and disposals

The following acquisitions and disposals were made in fiscal year 2021.

In the fall of 2021, Jenoptik boosted its global photonics business with the acquisition of BG Medical Applications GmbH (BG Medical, since January 13, 2022 JENOPTIK Medical GmbH) and the SwissOptic Group. Jenoptik acquired from Berliner Glas GmbH, a wholly-owned subsidiary of ASML Holding N.V., 100-percent stakes in

- BG Medical Applications GmbH, a supplier of high-precision components for the medical technology industry based in Berlin,
- SwissOptic AG, a specialist in the development and manufacture of optical components and assemblies, primarily for the medical technology, semiconductor, and metrology industries based in Heerbrugg/Switzerland, and
- Chinese company SwissOptic Co., Ltd., based in Wuhan/China, incl. Berliner Glas Wuhan Trading Co., Ltd. (together with SwissOptic AG, SwissOptic Group).

T52 Components of working capital (in million euros)

	2021 Continuing operations	2020 Continuing operations (simulation)	2020 Group ¹
Inventories	200.2	134.5	191.4
Trade receivables	120.5	94.7	138.0
Contract assets	81.4	63.4	74.7
Trade accounts payable	94.2	71.0	89.7
Contract liabilities	47.3	36.4	46.3
Total	260.6	185.2	268.1

¹ Group covers continuing operations and discontinued operation (VINCORION)

The closing date was November 30, 2021. Revenue and earnings for 2021, including the impacts arising from the purchase price allocation, were consolidated on a pro rata basis from the time of acquisition. The acquired companies are being integrated into the Light & Optics division. In addition to accelerating growth and sharpening Jenoptik's focus on photonics, the acquisition will enable the Group to expand its global presence, especially in the semiconductor and medical technology industries, and boost its product and technology portfolio.

As it continues to focus its business on photonic applications, Jenoptik concluded an agreement on the sale of its crystal growth business to Hellma Materials GmbH in early July 2021. The closing date was August 31, 2021.

Also in July 2021, Jenoptik reported the sale of its non-optical process measuring technology business for grinding machines to the Italian Marposs Group. The closing date was July 30, 2021.

For VINCORION, which sells mechatronic products, in particular for the security and defense technology, aviation, and rail and transport industries, a sale agreement with a fund managed by

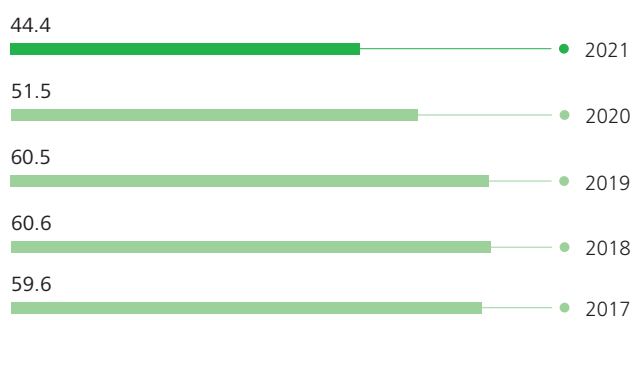
STAR Capital Partnership LLP was concluded in November 2021, with closing expected in 2022. VINCORION is already shown as a discontinued operation in accordance with IFRS 5.

There were no other acquisitions or disposals in 2021. 



For more information on acquisitions and disposals, see the Notes, from pages 175 on

G25 Equity ratio (in percent)



T53 Financial liabilities by due date (in million euros)

	Up to 1 year		1 to 5 years		More than 5 years		Total as of 31/12	
	2021	2020 ¹	2021	2020 ¹	2021	2020 ¹	2021	2020 ¹
Liabilities to banks	137.6	118.6	201.9	82.1	219.3	8.6	558.8	209.2
Liabilities from leases	11.4	12.3	25.4	32.8	2.2	14.9	38.9	60.0
Total	149.0	130.9	227.3	115.0	221.5	23.4	597.7	269.3

¹ Figure for Group, incl. VINCORION

T54 Components of interest-bearing liabilities (in million euros)

	2021	2020 ¹	Change in %
Current	149.0	130.9	13.8
Liabilities to banks	137.6	118.6	16.0
Lease liabilities	11.4	12.3	-7.2
Non-current	448.7	138.4	224.2
Liabilities to banks	421.2	90.7	364.5
Lease liabilities	27.5	47.7	-42.3

¹ Figures for Group, incl. VINCORION

Assets and liabilities not included in the Statement of Financial Position

The value of the [Jenoptik brand](#) is one of the main assets we do not include in the statement of financial position. Jenoptik operates in the highly fragmented photonics market, which is characterized by a multitude of highly-specialized companies. We aim to further boost awareness of our brand, especially on the international stage, in the coming years. Since early 2019, Jenoptik has been on the market with new brand positioning and a new corporate design. Strategically, Jenoptik is positioning itself with its brand as a photonics specialist.

[Non-capitalized tax loss carryforwards](#). Tax loss carryforwards arise from losses in the past that have not yet been offset against taxable profits. They represent potential future cash flow benefits, since actual tax payments can be reduced by these losses being offset against taxable profits.

For non-usable tax loss carryforwards, deferred tax assets are not recognized for corporation tax purposes in the amount of 25.5 million euros (prior year: 23.8 million euros) and trade tax purposes in the amount of 11.8 million euros (prior year: 81.3 million euros), as they are unlikely to be used within a determined planning time frame. Equally, no deferred tax assets were recognized for deductible timing differences in the amount of 2.0 million euros (prior year: 6.6 million euros).

[Off-balance sheet financing instruments for the financial and asset position](#). Since the end of 2019 Jenoptik has been using a factoring program limited to 25 million euros, a further instrument for managing its liquidity and working capital, in order to sell trade receivables from selected customers to a factoring company. This allows Jenoptik to convert some long-term receivables into liquidity at short notice. Since the economic opportunities and risks associated with the receivables are transferred to the buyer when the receivables are sold, those receivables are no longer recognized in Jenoptik's statement of financial position ("real factoring"). Jenoptik does not use any other significant off-balance sheet financing instruments.

With regard to [off-balance sheet obligations](#), we refer to the section "Other financial obligations" on page 236 of the Group Notes.

Information on [contingent assets and liabilities](#) can be found in the Notes, from page 186 on.

[Clauses in contracts concluded by JENOPTIK AG, which apply in the event of a change of control](#) within the ownership structure of JENOPTIK AG following a takeover bid, exist for financing agreements with a total utilized volume of approximately 549.6 million euros (prior year: 190.5 million euros). More information can be found in the Information on Takeover Law, from page 36 on.

General Statement by the Executive Board on the Development of Business

Over the fiscal year 2021, Jenoptik reported good performance in terms of revenue, earnings, and order intake, despite the fact that Covid-19 continued to impact on the operating activities of the Jenoptik businesses and thus on the Group's earnings, financial, and asset position. Jenoptik raised its forecasts during the year, and for fiscal year 2021 achieved the upper end of the forecast range in revenue and even exceeded it for the EBITDA margin.

The continuing operations generated appreciable revenue growth in 2021, sustained by strong ongoing demand in semiconductor equipment business, good developments in the biophotonics market, and by TRIOPTICS. In the Light & Production division, revenue was almost level with the previous year, while revenue generated in the Light & Safety division was slightly down due to the project-based nature of its business.

The profitability of continuing operations also improved significantly in fiscal year 2021. In addition to the strong increase in revenue, this was due to one-off effects in connection with the acquisitions of TRIOPTICS and INTEROB, as positive impacts arising from the restructuring measures put in place by the Executive Board in 2020.

All three divisions saw considerable order intake growth in 2021. The Group's order backlog was also up on the good level of the prior year and thus represents, in the opinion of the Executive Board, a solid basis for further profitable growth.

Following signing of the contract to sell VINCORION, this division, in accordance with IFRS 5, is now shown as a discontinued operation.

Despite the higher cash flows from operating activities, the free cash flow of the continuing operations was down on the prior-year figure. Jenoptik issued both debenture bonds and took out a syndicated loan in 2021. The Executive Board used the resources thus made available to finance the acquisition of BG Medical and the SwissOptic Group, as well as the purchase of the remaining 25-percent stake in TRIOPTICS. It also has room for maneuver to invest in the core photonics business and for further acquisitions. This has created a solid basis for our ongoing growth.


Even following financing of the above-mentioned acquisitions, the Executive Board assesses that the company's balance sheet and financing structure have remained robust. Due to the significant increase in financial debt resulting from the acquisition, the equity ratio came to 44.4 percent.

In view of the still difficult environment caused by the pandemic, the Executive Board was very satisfied overall with the company's performance.

Segment Report

The three photonics divisions, Light & Optics, Light & Production, and Light & Safety, represent the segments as defined in IFRS 8. Following signing of the contract to sell VINCORION, this division has been classified as a discontinued operation in accordance with IFRS 5 and is no longer included in the Segment Report.

The divisions' range of services and competitive positioning are set out in greater detail in the Group Business Model chapter, from page 89 on.

The revenue, order intake, and order backlog numbers provided in the Segment Report are external figures. 

ures such as revenue, earnings, and order intake from the end of September 2020 on, and then for the full 2021 year.

On the closing date of November 30, 2021, Jenoptik successfully completed the acquisition of BG Medical and the SwissOptic Group. The acquired companies' contributions to revenue, earnings and order intake are also disclosed in the text below.

The Light & Optics division acts as a partner to support its customers with a broad photonics technology portfolio covering everything from development to volume production. Cooperation as a development and production partner with numerous international companies was again an important part of the business in the 2021 reporting year.

Light & Optics Division

On the closing date of September 24, 2020, Jenoptik acquired an initial 75-percent stake in the optics specialist TRIOPTICS based in Wedel, Germany. On the basis of the existing control, the company was already fully consolidated. As of December 31, Jenoptik legally acquired the remaining 25 percent from the owners. The company specializes in measurement and production systems for optical components and systems. TRIOPTICS was integrated into the Light & Optics division, but not included in the financial statements until the closing date of September 24, 2020. As a result, TRIOPTICS is only included in prior-year figures

Light & Optics generated **revenue** of 460.7 million euros in 2021 (prior year: 321.4 million euros). The fourth quarter was the strongest, with 136.4 million euros in revenue (prior year: 108.9 million euros). Business with the semiconductor equipment industry continued to grow in 2021. The Biophotonics and Industrial Solutions areas also contributed to the positive business development. TRIOPTICS made a strong contribution of 99.5 million euros (prior year: 27.8 million euros) to the increase; BG Medical and SwissOptic Group generated combined revenue of 9.6 million euros. The Light & Optics division's share of revenue rose to 61.4 percent (prior year: 52.2 percent).

T55 Light & Optics at a glance (in million euros)

	2021	2020 ²	Change in %
Revenue	460.7	321.4	43.4
EBITDA	136.6	68.3	100.1
EBITDA margin in % ¹	29.6	21.2	
EBIT	110.8	51.5	115.3
EBIT margin in % ¹	24.0	16.0	
Capital expenditure	28.9	18.7	55.1
Free cash flow	78.0	40.9	90.6
Cash conversion rate in %	57.1	59.9	
Order intake	631.1	343.4	83.8
Order backlog	408.5	179.1	128.1
Frame contracts	107.4	12.6	750.0
Employees	2,535	1,845	37.4

¹ Based on the sum of external and internal revenue

² Prior-year figures were adjusted due to the reclassification of OTTO Vision GmbH into the Light & Optics division (before Light & Production)


 Information on the various markets can be found in the Sector Report, from page 110 on, and on future developments in the Forecast Report, from page 153 on

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In total, around 85.3 percent of the division’s revenue was generated abroad in 2021 (prior year: 83.1 percent). Revenue increased in all regions. Europe (incl. Germany) grew to 221.1 million euros (prior year: 174.1 million euros) and still enjoyed the greatest share, followed by Asia/Pacific, where revenue saw a sharp rise from 70.5 million euros to 129.4 million euros, particularly due to the contribution from TRIOPTICS. 

Earnings before interest, taxes, depreciation, and amortization (EBITDA) almost doubled year-on-year to 136.6 million euros (prior year: 68.3 million euros), including negative PPA impacts of 2.1 million euros (prior year: 4.6 million euros). In addition to the very good operating performance, this was also due to a one-off effect of around 25.6 million euros in connection with the conditional purchase price components arising from the acquisition of TRIOPTICS and earnings of 0.4 million euros from the sale of the crystal growth business. In terms of EBITDA, the fourth quarter was again the most profitable of the year, with 38.8 million euros. The EBITDA margin of 29.6 percent in 2021 noticeably exceeded the prior-year figure of 21.2 percent.

The division’s **EBIT** came to 110.8 million euros (prior year: 51.5 million euros), including the abovementioned one-off effects and the PPA impacts from the acquisitions in 2020 and 2021 of minus 10.8 million euros (prior year: 8.6 million euros). The EBIT margin came to 24.0 percent (prior year: 16.0 percent).

At 631.1 million euros, the **order intake** exceeded the prior-year figure of 343.4 million euros by 83.8 percent. The division posted its strongest contribution in the fourth quarter, with orders worth 195.0 million euros (prior year: 126.1 million euros). Growth was seen in all areas – particularly in the semiconductor equipment industry and in the biophotonics area. In addition, growth was bolstered by new orders from TRIOPTICS, worth 120.9 million euros (prior year: 26.9 million euros), and from BG Medical and the SwissOptic Group, worth 9.9 million euros. Set against revenue, this resulted in a book-to-bill ratio of 1.37 for the reporting period (prior year: 1.07).

Due to the higher order intake, the division’s **order backlog** rose to 229.4 million euros in value, to 408.5 million euros, at the end of 2021 (31/12/2020: 179.1 million euros). TRIOPTICS’ order backlog was worth 50.3 million euros (prior year: 27.1 million euros); BG Medical and the SwissOptic Group reported an order backlog of 62.7 million euros. The Light & Optics division also has frame contracts worth 107.4 million euros (31/12/2020: 12.6 million euros), the increase resulting in particular from the acquisition of BG Medical.

In the light of good business performance and the contribution from TRIOPTICS, the **free cash flow** increased to 78.0 million euros before interest and taxes (prior year: 40.9 million euros). The cash conversion rate fell just slightly, from 59.9 percent in the prior-year period to 57.1 percent at the end of 2021, despite the non-cash income included in EBITDA, in particular the one-off effect in connection with the acquisition of TRIOPTICS. The division continued to utilize factoring as a financing instrument in 2021; the factoring volume increased marginally. By contrast, a strong increase was seen in the **working capital**, in part due to the significant build-up of inventories and the acquisition, from 114.6 million euros at the end of 2020 to 172.1 million euros as of December 31, 2021.

As of December 31, 2021, Light & Optics had a total of 2,535 **employees**, 690 more than in the prior year (31/12/2020: 1,845 employees), primarily due to the acquisition of BG Medical and the SwissOptic Group. At the end of 2021, the division had 107 trainees (31/12/2020: 86 trainees).

Including development services on behalf of customers, the division’s **R + D output** came to 39.7 million euros, sharply up on the prior-year figure of 32.8 million euros. R + D expenses totaled 18.2 million euros in the past fiscal year (prior year: 19.7 million euros). The share of total R + D costs in division revenue was 8.6 percent (prior year: 10.2 percent). 

Capital expenditure on property, plant, and equipment and intangible assets rose to 28.9 million euros (prior year: 18.7 million euros). This was offset by scheduled depreciation/amortization in the sum of 25.8 million euros (prior year: 16.5 million euros), up due to PPA impacts in connection with the acquisition of TRIOPTICS and higher depreciation/amortization on property, plant, and equipment and intangible assets.

Key areas of investment in the fiscal year 2021 included the expansion of capacities and the technical development of the manufacturing infrastructure, e.g., for the semiconductor equipment sector. These investments aim to help secure the long-term competitiveness of the Light & Optics division in its core business of photonics. As an example, the division is investing a double-digit million sum in a new electron-beam lithography tool (e-beam), which will go into operation at its Dresden site in mid-2022. It will be a core element for the development and production of the most sophisticated next-generation precision sensors, which are essential for the further development of DUV and establishing high-precision EUV wafer exposure in semiconductor production processes.



For further information, see the Segment Report in the Notes from page 225 on



For more information on the key development topics, see the Research and Development chapter from page 103 on

Acquisitions and disposals. With the signing of the agreement to acquire BG Medical and the SwissOptic Group in mid-October and the closing at the end of November Jenoptik boosts its global photonics business.

In addition to accelerating growth and sharpening Jenoptik's focus on photonics, the acquisition will enable the division to expand its global presence in attractive markets, especially the semiconductor and medical technology industries, and boost its product and technology portfolio. The acquired companies are expected to contribute around 130 million euros of revenue in 2022. Combined, BG Medical and the SwissOptic Group employ around 500 people worldwide. 

In early July 2021, Jenoptik announced that the Group had concluded an agreement for the sale of its crystal growth business (2020 revenue of around 6 million euros) to Hellma Materials, thereby allowing it to continue to focus its business on photonic applications. The closing date was August 31, 2021.

Production and organization. In the light of rising demand for optics and sensors for the semiconductor industry, Jenoptik is planning to expand its manufacturing capacities and invest in a state-of-the-art production building and a new office complex in Dresden. For this purpose, the Group acquired a plot of land at the Airportpark Dresden industrial park in May 2021. Construction is due to commence in the second half of 2022, with production at the new factory to begin in early 2025.

In 2021, the Global Operations area in the Light & Optics division again managed to improve its quality and on-time delivery performance, in our opinion, and in the future will work to expand its international reach and better pool expertise at its locations. A project was also launched in 2021 to help meet increased demand for a product group through the establishment of a global supply chain and an international project team.

Light & Production Division

The Light & Production division particularly focuses on solutions for the automotive industry in its Metrology, Laser Processing, and Automation & Integration business areas.

In the Light & Production division, signs of recovery in the automotive industry have become particularly apparent in recent months. Despite this, the impacts of the coronavirus pandemic from the prior year, especially the lower order backlog at the beginning of 2021, have not yet been fully overcome.

Revenue in the Light & Production division rose just slightly, by 0.4 percent to 176.2 million euros (prior year: 175.5 million euros). The reporting year's highest quarterly revenue of 54.9 million euros was achieved in the fourth quarter. Automation & Integration saw growth, while Metrology and Laser Processing were slightly down on the prior year. The division's share of revenue fell to 23.5 percent (prior year: 28.5 percent).

At around 79.0 percent, the division again generated most of its revenue abroad in 2021 (prior year: 72.3 percent). While revenue in the Americas (increase of 68.2 million euros to 85.1 million euros), in particular the US, and in the Asia/Pacific region sharply exceeded the prior-year figures, revenue in Europe (incl. Germany) was down.

EBITDA, growing 60.9 percent to 13.2 million euros (prior year: 8.2 million euros), increased at a stronger rate than revenue. Here impacts resulting from the reversal of provisions, which were recorded in particular in connection with the restructuring and cost-cutting measures implemented in fiscal year 2020, earnings of 3.5 million euros from the sale of the measuring technology business for grinding machines, and a one-off effect worth around 4.9 million euros in connection with the conditional purchase price components arising from the acquisition of INTEROB all made positive contributions. The prior year's EBITDA item included restructuring costs of 7.9 million euros. The EBITDA margin improved to 7.5 percent, compared with 4.7 percent in the prior year.



Further information on the acquisition of BG Medical and the SwissOptic Group can be found in the Group Notes, point 2.4

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EBIT in the Light & Production division increased to 2.3 million euros (prior year: minus 4.1 million euros), and included impacts arising from the purchase price allocation for the acquisitions of INTEROB, Prodomax, and Five Lakes Automation amounting to minus 5.2 million euros (prior year: minus 5.8 million euros). The EBIT margin improved to 1.3 percent (prior year: minus 2.4 percent).

Improved sentiment in the automotive industry, the key sector for the Light & Production division, was reflected in its **order intake**. In 2021, the division received new orders worth a total of 185.3 million euros, 20.4 percent more than in 2020 (prior year: 154.0 million euros). The Automation & Integration and Laser Processing areas posted particularly strong growth in order intake. In 2021 the book-to-bill ratio in reached a figure of 1.05 (prior year: 0.88).

In the period covered by the report, the division reported several orders for its Automation & Integration business in North America. The orders from automotive customers in the Tier 1 segment include automation lines producing structural assemblies for several major car manufacturers.

At the end of 2021, the **order backlog** was worth 80.7 million euros, 8.0 percent above the figure at the end of 2020 (31/12/2020: 74.7 million euros).

Despite improved earnings before tax, the strong build-up of working capital in conjunction with the commencement of work on projects, the non-cash income included in earnings,

and the reduction of provisions led to a reduction in the **free cash flow** (before interest and income taxes) to minus 12.5 million euros (prior year: minus 0.1 million euros). As in the prior year, the cash conversion rate was below 0 due to the negative free cash flow. The working capital increased from 66.6 million euros at the end of 2020 to 76.9 million euros at the end of the reporting year, chiefly due to the rise in contract assets.

As of December 31, 2021, the Light & Production division had 878 **employees** (31/12/2020: 1,040 employees), mostly down due to the restructuring measures implemented. 24 people were in trainee positions in the division as of the reporting date (31/12/2020: 28 trainees).

The division's **R+D output** fell to a value of 8.9 million euros (prior year: 10.3 million euros). This included developments on behalf of customers in the amount of 2.6 million euros (prior year: 3.6 million euros). R+D expenses came to 6.3 million euros (prior year: 6.7 million euros). In 2021, the share of R+D output in total revenue in the Light & Production division was 5.1 percent (prior year: 5.9 percent).

Capital expenditure on property, plant, and equipment and intangible assets fell to 3.4 million euros (prior year: 4.8 million euros). The prior year's capital expenditure had included investment in the new build at the Villingen-Schwenningen site. In 2021, capital expenditure was offset by scheduled depreciation/amortization in the sum of 10.9 million euros (prior year: 12.2 million euros). This includes amortization resulting from PPA impacts.



For more information on the key development topics, see the Research and Development chapter

T56 Light & Production at a glance (in million euros)

	2021	2020 ²	Change in %
Revenue	176.2	175.5	0.4
EBITDA	13.2	8.2	60.9
EBITDA margin in % ¹	7.5	4.7	
EBIT	2.3	-4.1	n. a.
EBIT margin in % ¹	1.3	-2.4	
Capital expenditure	3.4	4.8	-29.8
Free cash flow	-12.5	-0.1	n. a.
Cash conversion rate in %	<0	<0	
Order intake	185.3	154.0	20.4
Order backlog	80.7	74.7	8.0
Employees	878	1,040	-15.6

¹ Based on the sum of external and internal revenue

² Prior-year figures were adjusted due to the reclassification of OTTO Vision GmbH into the Light & Optics division (before Light & Production)

Disposals. As part of its focus on the metrology business, Jenoptik announced in early July 2021 that an agreement had been reached with Marposs to sell its non-optical process measuring technology business for grinding machines (2020 revenue of around 7 million euros). The closing date was July 30, 2021.

Light & Safety Division

The Light & Safety division is responsible for the Group's business with systems and services related to road traffic, such as speed and red light monitoring systems and custom solutions for identifying other traffic violations, and for the fields of public safety and road user charging. Business in the Light & Safety division is predominantly project-based.

In 2021, the division generated **revenue** of 110.1 million euros (prior year: 114.0 million euros), 3.4 percent less than in the prior year. New orders came in later than originally expected, and there were pandemic-related delays in the supply of electronic components, especially in the first half-year, therefore, fewer orders were delivered than planned. In this division, too, the fourth quarter was the strongest, with 37.8 million euros (prior year: 31.9 million euros). Light & Safety's share of revenue in the past fiscal year came to 14.7 percent (prior year: 18.5 percent).

At around 72.0 percent, the share of revenue generated abroad in 2021, was slightly up on the prior-year figure of 69.6 percent which was attributable to the project business. The division saw growth in the Americas and the Asia/Pacific region. By contrast, revenue was down in Europe (incl. Germany) and the Middle East/Africa.

The decline in revenue was also reflected in the division's profitability. At 19.2 million euros, **EBITDA** was down on the prior-year figure of 22.3 million euros. A considerable contribution to earnings of 10.6 million euros (prior year: 8.8 million euros) was generated in the fourth quarter. In 2021, the EBITDA margin came to 17.4 percent, compared with 19.6 percent in the prior year.

At 14.1 million euros, **EBIT** was also down on the prior-year figure of 15.2 million euros; the corresponding EBIT margin came to 12.8 percent (prior year: 13.3 percent).


The division's **order intake** is subject to typical fluctuations in project business. In 2021, Light & Safety received new orders worth a total of 116.5 million euros, more than in the prior year (prior year: 92.3 million euros). The **book-to-bill ratio** increased to 1.06 (prior year: 0.81).

In early 2021, Light & Safety received several orders for traffic safety technology in North America. The orders were awarded as part of "Vision Zero," a multinational traffic safety project that aims to drastically reduce the number of traffic accidents and deaths or serious injuries on the roads.

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Due to the higher order intake, the **order backlog** grew to a value of 54.3 million euros as of December 31, 2021 (31/12/2020: 46.0 million euros). The division also has **frame contracts** worth 27.7 million euros (31/12/2020: 8.9 million euros).

With a total of 491 **employees**, the number of people employed in the Light & Safety division at the end of 2021 was virtually unchanged (31/12/2020: 489 employees). At the end of December, the division had 9 trainees (31/12/2020: 14 trainees).

In 2021, the division's R+D expenses of 14.4 million euros were up on the prior-year figure of 13.1 million euros. Development costs on behalf of customers remained practically unchanged at 0.6 million euros. Overall, the division's **R+D output** increased to 15.0 million euros (prior year: 13.8 million euros). 

In the year covered by the report, the division invested 8.1 million euros in property, plant, and equipment and intangible assets (prior year: 4.6 million euros), primarily in connection with traffic service provision (TSP) projects, especially in Canada and Germany. The traffic safety technology employed on these projects is installed and operated by Jenoptik on behalf of the customer. As a result, the level of **capital expenditure** was 75.2 percent higher than in the prior year. Capital expenditure was offset by scheduled depreciation/amortization totaling 5.1 million euros (prior year: 7.1 million euros).

As of December 31, 2021, the **working capital** came to 25.6 million euros, up on the prior-year figure of 12.1 million euros, primarily due to increases in inventories and trade receivables and a decrease in trade payables.

Significantly lower earnings before tax, a higher level of capital expenditure, and a strong rise in working capital resulted in a lower **free cash flow** (before interest and income taxes) of minus 4.4 million euros in the fiscal year (prior year: 21.4 million euros). As a result, the cash conversion rate was also significantly down on the prior-year figure of 95.9 percent.

Production and organization. Over the past fiscal year, the Light & Safety division increased its inventories, worked closely with its key suppliers, and thus prevented any significant production shutdowns. A weaker first half-year followed by a very strong second six months was managed by effective control of production capacity. Investment in automation of final testing increased flexibility and reduced production costs. The Operations unit was reorganized to cut costs and increase the responsibility and competence of the quality organization. In the service organization, a new training platform was set up and preparations were made for a new service management system to further push on with expansion of the service business.



For information on the key development topics, see the Research and Development chapter from page 103 on

T57 Light & Safety at a glance (in million euros)

	2021	2020	Change in %
Revenue	110.1	114.0	-3.4
EBITDA	19.2	22.3	-14.1
EBITDA margin in % ¹	17.4	19.6	
EBIT	14.1	15.2	-7.4
EBIT margin in % ¹	12.8	13.3	
Capital expenditure	8.1	4.6	75.2
Free cash flow	-4.4	21.4	n.a.
Cash conversion rate in %	<0	95.9	
Order intake	116.5	92.3	26.2
Order backlog	54.3	46.0	18.0
Frame contracts	27.7	8.9	211.8
Employees	491	489	0.4

¹ Based on the sum of external and internal revenue

General Statement by the Executive Board on the Development of the Segments

The Light & Optics division benefited from good revenue and order intake with the semiconductor equipment industry in 2021, but the significant growth was also due to good performance in the Biophotonics and Industrial Solutions areas, and at TRIOPTICS. In the light of good business performance and TRIOPTICS' contribution, the division's free cash flow also improved.

The acquisition of BG Medical and the SwissOptic Group will allow Light & Optics to accelerate growth, expand its global presence in attractive markets, especially the semiconductor and medical technology industries, and boost its product and technology portfolio.

In the Light & Production division, signs of recovery in the automotive industry have become apparent particularly in recent months. Nevertheless, the impacts of the coronavirus pandemic from the prior year have still not yet been fully overcome. As a result, revenue increased only slightly. The appreciable improvement in EBITDA was due to positive impacts in connection with the restructuring and cost-cutting measures implemented by the Executive Board in the fiscal year 2020 and in connection with a sale and the conditional purchase price components arising from the acquisition of INTEROB. Improved sentiment in the automotive industry was reflected in the increased order intake. Among other factors, the strong rise in working capital and payments in connection with the reduction in provisions led to a decline in the free cash flow.

In 2021, the Light & Safety division generated slightly less revenue than in the prior year. New orders came in later than originally expected, and there were pandemic-related delays in the supply of electronic components. This was also reflected in lower profitability. Due to the project-related business, including orders from the US, the division's order intake in the past fiscal year was higher than in the prior year. Nevertheless, lower earnings before tax and the strong rise in inventories produced a lower free cash flow.

Over the course of the past fiscal year, Jenoptik boosted its capital expenditure on expanding international sales structures, in efficient processes, and the development of new products.

In 2021, we also managed to establish a broader range of systems and secure both international projects and new customers. We reported revenue increases in two divisions; this performance was also reflected in our profitability. Demand in all three divisions was higher than in 2020. In the past fiscal year, the acquisition of BG Medical and SwissOptic Group represented a key step in Jenoptik's plans to become a pure, globally operating photonics group.

JENOPTIK AG

(Abridged Version According to HGB)

Supplementary to the reports on the Jenoptik Group, the development of JENOPTIK AG is set out below.

JENOPTIK AG is the parent company of the Jenoptik Group and based in Jena. Its asset, financial, and earnings position is fundamentally defined by its capacity as the holding company of the Jenoptik Group. The operating activities of JENOPTIK AG primarily cover the provision of services for subsidiary companies and the subleasing of commercial premises.

The Annual Financial Statements of JENOPTIK AG are prepared in accordance with German commercial law (HGB) and the supplementary regulations of the German Stock Corporation Act (AktG). The Consolidated Financial Statements are prepared in accordance with the International Financial Reporting Standards (IFRS) valid on the reporting date and the interpretations of the International Financial Reporting Interpretations Commit-

tee (IFRIC) whose application is mandatory within the European Union. This gives rise to differences in the accounting and measurement methods, chiefly concerning fixed assets, derivatives, provisions, deferred taxes, leases, and revenue recognition.

The Group's strategic policy entails a greater focus on photonic growth markets and thus its transformation into a globally positioned photonics company.

Asset, Financial, and Earnings Position

Earnings Position

Revenue was down 6.0 million euros on the prior year, at 44.2 million euros, mainly the result of postponed invoicing of the incidental rental costs for two fiscal years in the prior year.

Selling expenses of 1.6 million euros (prior year: 1.5 million euros) covered costs for communications, advertising, sponsorship, and strategic brand projects.

Administrative expenses remained at the prior-year level. They included, in particular, personnel costs of 8,334 thousand euros (prior year: 8,317 thousand euros).

JENOPTIK AG posted research and development expenses amounting to 0.1 million euros (prior year: 0.1 million euros), primarily covering expenditure for innovation management and the coordination of R + D work in the Jenoptik Group.

The other operating result included other operating income of 19.2 million euros (prior year: 13.9 million euros), which was offset by 18.1 million euros of other operating expenses (prior year: 15.5 million euros).

Other operating income primarily included intra-group recharging of costs of 8.4 million euros (prior year: 5.4 million euros), currency gains worth 4.7 million euros (prior year: 4.5 million euros), and income arising from the reversal of provisions in the sum of 1.5 million euros (prior year: 3.3 million euros).

Key items in the other operating expenses were expenses for intra-group recharging of costs of 8.7 million euros (prior year: 5.6 million euros) and currency losses of 6.1 million euros (prior year: 3.5 million euros).

T58 Abbreviated Income Statement of JENOPTIK AG (in thousand euros)

	1/1 to 31/12/2021	1/1 to 31/12/2020
Revenue	44,167	50,234
Cost of sales	44,047	45,589
Gross profit	119	4,645
Selling expenses	1,643	1,504
General administrative expenses	14,487	15,004
Research and development expenses	57	125
Other operating result	1,094	-1,612
Income and expenses from profit and loss transfer agreements and income from investments	88,937	61,954
Financial result	-48,483	-6,627
Income taxes	9,437	4,566
Earnings after tax	16,044	37,162
Net profit	16,044	37,161
Retained profits from prior year	30,000	30,000
Accumulated profit	46,044	67,161

The financial result of minus 48.5 million euros (prior year: minus 6.6 million euros) included unscheduled depreciation/ amortization on shares in associates of 47.1 million euros, of which 38.3 million euros were due to the scheduled sale of a subsidiary.

Income taxes were 4.9 million euros above the figure for the prior year due to higher taxable income of the companies consolidated for tax purposes in fiscal year 2021.

JENOPTIK AG's net profit fell by 21.1 million euros, or 56.8 percent, to 16.0 million euros (prior year: 37.1 million euros). The company's earnings position was mainly influenced by high amortization on financial investments of 47.3 million euros and the subsidiaries' earnings, which are paid to JENOPTIK AG on

the basis of existing control and profit and loss transfer agreements. The net earnings contribution of the subsidiaries increased on the prior year, by 40.2 million euros to 88.3 million euros. This was the result of good earnings performance with the semiconductor equipment and medical technology industries, as well as the positive development in the Biophotonics and Industrial Solutions areas. The automotive industry showed good signs of recovery in the last months, producing an increase in profit transfer.

Asset and Financial Position

At 1,268 million euros, JENOPTIK AG's total assets were 41.2 percent up on the figure for the prior year (31/12/2020: 898 million euros).

The assets side of the statement of financial position reflected JENOPTIK AG's status as a holding company. Alongside a capitalization ratio of 88.9 percent, of which 82.6 percent was attributable to financial investments, and 6.3 percent to other fixed assets (in particular real estate), the total assets are also dominated by a high level of loans to associates (10.6 percent).

The increase of 331.7 million euros in financial investments was predominantly the result of 401.0 million euros of capital contributions, primarily to finance the acquisition by subsidiaries. This was offset by unscheduled depreciation/amortization of 47.1 million euros and loan repayments by subsidiaries in the amount of 24.5 million euros.

Receivables from associates amounting to 134.3 million euros (31/12/2020: 85.5 million euros) mainly relate to cash pool balances of subsidiaries amounting to 127.8 million euros (31/12/2020: 79.2 million euros), which have also increased as a result of the profit transfer, and short-term loans arrangement with a subsidiary, which amounted to 6.5 million euros.

The reduction by 14.0 million euros in cash and cash equivalents is due to the balance sheet date and the result of active liquidity management.

Accruals and deferrals essentially comprised accrued costs for IT service and maintenance contracts.

JENOPTIK AG's financing function as the holding company for the Jenoptik Group was reflected on the liabilities side. Equity came to 662.7 million euros (52.3 percent of total assets), liabilities to banks to 531.5 million euros (41.9 percent of total assets).

T59 JENOPTIK AG Statement of Financial Position (in thousand euros)

	31/12/2021	31/12/2020
Assets		
Intangible assets, property, plant, and equipment	79,587	76,753
Financial investments	1,047,663	715,940
Non-current assets	1,127,250	792,693
Inventories, trade receivables, and other assets	135,732	85,923
Cash and cash equivalents	3,305	17,334
Current assets	139,036	103,257
Accruals and deferrals	1,764	2,137
	1,268,051	898,087
Equity and liabilities		
Share capital	148,819	148,819
(Conditional capital 14,950 thousand euros)		
Capital reserves	180,756	180,756
Revenue reserves	287,101	264,249
Accumulated profit	46,044	67,161
Equity	662,721	660,986
Provisions	16,978	11,937
Liabilities to banks	531,538	179,646
Trade accounts payable	11,914	7,270
Other liabilities	44,271	38,248
Liabilities	587,723	225,164
Accruals and deferrals	629	0
	1,268,051	898,087

Thanks to the positive annual result of 16.0 million euros, equity improved by 1.7 million euros from 661.0 million euros to 662.7 million euros. This was countered by the payment of dividends worth a total of 14.3 million euros for the 2020 fiscal year. Following the take-up of new liabilities to banks, the equity ratio fell from 73.6 percent to 52.26 percent.

Tax provisions for the companies consolidated for tax purposes rose by 3.7 million euros, of which 2.8 million euros are income taxes for the current year and 1.2 million euros for taxes in prior years.

The increase in liabilities to banks of 352.3 million euros, from 179.6 million euros to 531.5 million euros, was the result of restructuring of the financing. New debenture bonds with various tranches and terms, worth a total of approximately 400 million euros, were issued in the fiscal year 2021. In addition, the old syndicated loan of 230 million euros was repaid and a new syndicated loan for 400 million euros taken out. As of the reporting date of December 31, 2021, 75.0 million euros of this loan had been utilized.

Other liabilities essentially comprised 24.4 million euros of cash pool liabilities, and 12.6 million euros to offset earnings at a subsidiary.

Over the reporting year, JENOPTIK AG's debt ratio changed, primarily due to the increase in borrowing, from a 26.4-percent to a 47.74-percent share of total assets.

As of December 31, 2021, JENOPTIK AG had 261 employees, of which 27 were temporary workers and trainees (prior year: 257 employees, of which 29 temporary workers and trainees).

Risks and Opportunities

Due to its function as a holding company, JENOPTIK AG's development of business is subject to the same risks and opportunities as the Jenoptik Group. It generally participates in the risks of equity holdings and subsidiaries in line with their equity interests and financial investments. The risks and opportunities of the Group and the segments are set out in the Risk and Opportunity Report.

Forecast Report

The annual result of JENOPTIK AG is largely dependent on the development of contributions to earnings by the subsidiaries.

Based on the development of business set out in the Group Forecast Report, in fiscal year 2022, JENOPTIK AG is expecting service allocations to be 2.9 million euros higher than in the prior year due to the change to group license agreements. Revenue from holding company services and from rentals will remain at the prior-year level.

JENOPTIK AG's earnings – prior to transfer of subsidiaries' earnings contributions – is expected to remain stable compared to the past fiscal year. For a detailed presentation of the expected future development of the Jenoptik Group and its segments, we refer to the Forecast Report.

Report on Post-Balance Sheet Events

The JENOPTIK AG Executive Board approved the submission of the present Consolidated Financial Statements to the Supervisory Board on March 16, 2022. The Supervisory Board is responsible for reviewing and approving the Consolidated Financial Statements at its March 25, 2022 meeting.

Dividend. According to the Stock Corporation Act, the amount available for a dividend payment to the shareholders is based on the accumulated profit of the parent company JENOPTIK AG, as determined by the regulations of the HGB. For the fiscal year 2021, JENOPTIK AG's accumulated profit totaled 46,043,833.67 euros, comprising net profit for 2021 in the amount of 16,043,833.67 euros plus retained profits of 30,000,000.00 euros.

The Executive Board recommends to the Supervisory Board that for the fiscal year 2021 a dividend of 0.25 euros per qualifying no-par value share be proposed to the 2022 Annual General Meeting (prior year: 0.25 euros). This would mean that a sum of 14,309,528.75 euros of from JENOPTIK AG's accumulated profits in the fiscal year 2021 will be distributed. Of the remaining accumulated profits of JENOPTIK AG, an amount of 11,734,304.92 euros will be allocated to other profit reserves and an amount of 20,000,000.00 euros will be carried forward to the new account.

New group structure in the first quarter 2022. Jenoptik's new growth agenda, "More Value," is set to accelerate the company's plans to become a pure, globally-leading photonics group. As part of its new organizational set-up, the Group is consolidating its core photonics business in two new division, Advanced Photonic Solutions (industrial customer business) and Smart Mobility Solutions (business with public sector contractors).

The former Light & Optics and Light & Production divisions will be merged into the new Advanced Photonic Solutions division, while non-photonics activities, particularly for the automotive market, will be separated and operate as independent brands (incl. Hommel, Prodomax, and INTEROB) within the Jenoptik Group's Non-Photonic Portfolio Companies. The former Light & Safety division will become the Smart Mobility Solutions division. These two new divisions will focus on the three core markets of semiconductor & electronics, life science & medical technology, and smart mobility. The new structure will take effect in the first quarter of 2022.

Ukraine war. The war in Ukraine and the associated sanctions may have an impact in particular on the supply of energy, and affect its price development as well as the short-term availability of raw materials and logistics services. Similarly, the interdiction of financial transactions may also have an impact on the procurement or distribution of non-sanctioned goods. This may have a negative impact on both production costs and productivity in parts of our value chains as well as a decisive influence on the overall economic development in Jenoptik's growth markets. At the time of preparing this report, the situation is still very dynamic and the effects of the war cannot be assessed conclusively. A significant increase in inflation rates could have an impact on our business activities, with price increases for raw materials and intermediate goods negatively affecting our cost structure. We are attempting to counter this through various measures in Purchasing, through further optimization of the internal cost structure and, if necessary, through price adjustments in close cooperation with our customers.

No further events of significance occurred after December 31, 2021.

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Risk and Opportunity Report

Principles of Risk and Opportunity Management (Enterprise Risk Management) at Jenoptik

Jenoptik operates in a global and complex business environment, and is therefore constantly exposed to internal and external influences on its business activities. Every business decision therefore involves weighing the risks and opportunities within the corporate environment. This, for Jenoptik, is one of the principles of responsible and value-oriented corporate management.

Jenoptik’s comprehensive risk management system is based on an interactive and management-oriented approach. Its enterprise risk management (ERM) accounts for both risks and opportunities, and is integrated throughout the company. The goal is to support the implementation of the group strategy and to define actions that create an optimum balance between growth and return targets on the one side and the associated risks on the other. In implementing the strategy, it is necessary to identify strategic, operational, financial, and compliance-

related risks and opportunities early on, to present, evaluate, and manage them transparently and in a way that facilitates comparison. This is achieved by promoting an open risk culture, and through regular development of the enterprise risk management system guided by the ISO 31000 standard. G26

Structure and organizational integration of enterprise risk management

The Supervisory Board’s Audit Committee monitors the existence and effectiveness of Jenoptik’s enterprise risk management. The Executive Board is responsible for the ERM system in the Jenoptik Group. The group-wide approach is set out in a risk manual. The structure and process is shown in figure G27.

Functional responsibility lies with the Compliance & Risk Management department, which reports on group risk management directly to the CFO, who is also defined as the Group’s risk officer.

G26 Risk assessment

Metrics	Probability of occurrence	Consequences/ extent of damage		
		Qualitative		Quantitative EBITDA deviation
5 = High	up to 50%	The goal of the Group or the risk reporting unit is jeopardized	or	> 20%
4 = Medium-high	up to 40%	The goal of the Group or the risk reporting unit has to be adapted immediately	or	> 15 to 20%
3 = Medium	up to 30%	The goal of the Group or the risk reporting unit has to be adapted in the medium term	or	> 10 to 15%
2 = Low	up to 20%	Further measures are necessary in order to achieve the goals of the Group or the risk reporting unit	or	> 5 to 10%
1 = Very low	up to 10%	Minor consequences	or	> 0 to 5%

The Risk Committee is made up of the members of the Executive Board and the head of central Compliance & Risk Management. It consolidates all aggregated reporting results to form a top-level evaluation of the Group's risk position. G27

The definition and ongoing development of the system takes place with the close cooperation of central Compliance & Risk Management, the Executive Board, and the Audit Committee of the Supervisory Board. The Executive Board is responsible for the system and approves it. The Central Compliance & Risk Management communicates the current requirements of the risk management system to the Executive Board, advises on its practical implementation and monitors the measures and results of the risk management processes.

Compliance & Risk Management also organizes and manages the system, working closely with the other central departments and the risk officers in the divisions. These, in turn, are responsible for implementing the ERM system in the various risk reporting units. The risk reporting units are defined reporting units that are employed to accurately identify and allocate risks and opportunities. They can be both business units and individual subsidiaries or consolidated regional units.

While Internal Audit monitors the effectiveness, appropriateness, and efficiency of enterprise risk management, the Super-

visory Board's Audit Committee performs the external monitoring function for or in conjunction with the Supervisory Board.

As part of the audit of the Annual Financial Statements, the risk early warning system of JENOPTIK AG is examined by the auditor with regard to the requirements of stock corporation law. The audit for the fiscal year 2021 showed that Jenoptik's ERM system complies with the legal requirements for a risk early warning system and that it is designed to be suitable for the early detection of developments that could jeopardize the continued existence of the Group.

The group of consolidated companies exposed to risk corresponds to those included in the consolidated financial statements.

Enterprise risk management system procedure and processes

Risks are defined as potential developments and events that may result in a negative divergence from objectives and forecasts for the company and involve uncertainty regarding the occurrence of an event. Correspondingly, opportunities are events that may result in a positive divergence from expected targets.

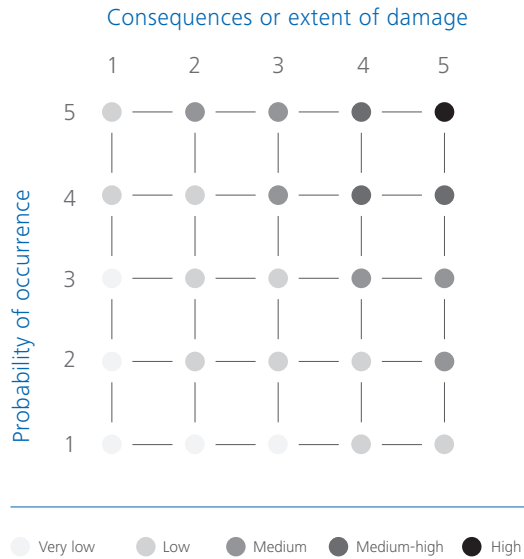
G27 Process of risk reporting

✓	Risk Officers in the divisions and central departments	Assessment of single risks
	Central Functions	Review of aggregated risks
✓	Corporate Compliance & Risk Management department	Review and analysis of group risks
	Risk Committee	Analysis of group risks
✓	Executive Board	Final assessment of group risks
	Audit Committee	Evaluation of group risks
✓	Supervisory Board	

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The self-contained, regular, and IT-supported risk management process consists of various risk assessments, which are carried out using a combination of top-down and bottom-up elements. In order to ensure that risk identification and comparability are as complete as possible within the company, a risk register was developed to support management in the evaluation of risks. It comprises several specified categories, further divided up into subcategories, which are associated with pre-defined risk symptoms and provide the risk reporting units with a framework to assign potential risks and opportunities. This is to ensure that each risk reporting unit deals with the entire risk landscape and that, simultaneously, an aggregation of the results is guaranteed across the specified categories. While operational and financial targets are analyzed over a time frame of up to two years, strategic topics are considered for periods of up to four years. Under the current system, sustainability risks are not determined in a separate risk category. They are, however, in part covered by the existing risk categories. G29

G28 Calculation of risk scores



G29 Risk and opportunity categories

Operational Risks/Opportunities	Strategic Risks/Opportunities
Supply Chain Management/Safety and Environmental Protection/ Production (incl. Quality Management)/ Marketing & Sales/Patents & IP rights/ Human Resources Management/IT/ Compliance/ Legal Affairs/Real Estate	Market Development/Product Development (incl. Research and Development)/ Corporate Development (Portfolio and Structure)/ Organizational Setup (Processes and Resources)
Financial Management Risks/Opportunities	
Accounting/Finance Management (Treasury)/ Controlling/Taxes	

1st year

2nd year

3rd year

4th year

Within the scope of the risk analysis, the risk reporting units determine the risks and opportunities, recorded by divisional risk managers, in order to be able to undertake a valid risk assessment in the next stage regarding the assessment methods (qualitative or quantitative) and the measures already taken or still required. The information is recorded using both the gross and net methods. Only the assessed residual risks (net risks) are used for aggregation and reporting, i.e., mitigating measures are already included in the assessment. The assessment of a risk is the product of the probability of occurrence and the quantitative amount of loss or the qualitative extent of damage. The opportunities are evaluated in the same way.

There is a scale of 1 to 5 for both assessment factors mentioned, probability of occurrence and amount of loss, with 1 being the smallest and 25 the greatest possible risk indicator. G28

Every six months, the results of the assessments are requested by central Compliance & Risk Management from the risk reporting units, and aggregated to the Group Risk and Opportunity Report. The findings are then validated by the central departments of the Corporate Center prior to discussion on the Risk Committee. The Executive Board undertakes a general evaluation and, as necessary, approves required further action. The Group Risk and Opportunity Report is then presented to and discussed by the Audit Committee of the Supervisory Board and the Supervisory Board itself.

In addition, any risks identified during the year which have a high probability of occurrence and significant potential for damage, are communicated without delay to the Chief Compliance & Risk Officer and the Executive Board. Following joint analysis with the technical departments, they decide on further measures to be taken and, if necessary, the required communication.

Risk prevention and ensuring compliance

Prevention is a key element of the risk management system, and an integral part of regular business operations and committee work. It essentially comprises risk monitoring as part of a range of assessments and special approval procedures. Risks and opportunities, as well as their impact on the company, are discussed during the monthly meetings of the Executive Board,

the EMC meeting, and the quarterly business reviews. At the same time, potential risks to achieving the strategic goals can be considered directly in the strategy development process and suitable measures adopted.

Compliance with national and international compliance requirements is an integral part of risk prevention and of the processes of Jenoptik's risk management system. In order to improve employee awareness and achieve a company-wide uniform understanding of our compliance standards, regular training is provided on subjects relevant to compliance, such as anti-corruption or anti-trust law, as well as data protection issues. Online training on key compliance issues is obligatory for all employees. More information can be found in the Corporate Governance Statement from page 26 on. A help desk is available on the intranet to assist employees on any risk or compliance issues they may have. The guidelines implemented within the Group with regard to important company processes are regularly reexamined, expanded, and updated if necessary. They are published on the intranet. Together with the Jenoptik Code of Conduct, they are a further aspect of risk prevention.

In accordance with international standards, a supplier code of conduct requires Jenoptik's suppliers to comply with a number of different compliance requirements. Central business partner screening (third-party due diligence) is used to check whether a cooperation is viable from a compliance perspective.

Jenoptik therefore has a preventive system of regulations, processes, and controls that enable it to identify any possible deficits in the company and to minimize them using appropriate measures at an early stage.

Alongside the risk and compliance management systems, the [Internal Control System \(ICS\)](#) is a key element of corporate governance. It covers technical and organizational regulations and control steps to ensure compliance with guidelines and prevent losses, as well as ensuring clear divisions of responsibility and function, in adherence to the principle of double-checking. In particular, its intention is to ensure the security and efficiency of transaction processing as well as the reliability of financial reporting. In the past fiscal year, ICS self-assessments were again carried out at all group companies, to be completed by the respective management. Monitoring and evaluation of

the completed questionnaires is carried out by Internal Audit. Reported deficits are analyzed and appropriate countermeasures are defined to ensure they are lastingly eliminated.

Internal Audit supports the Jenoptik Group in achieving its goals by using a systematic and comprehensive approach to assessing and improving the effectiveness of its risk management, control, and monitoring processes. It is responsible for the risk-oriented audit of all processes in the divisions, regions, group companies, operating sites/facilities, strategic business units or functions/specialist areas of the Group (“audit universe”), and follow-up of measures for any deficiencies identified. 14 audits were carried out in 2021. In order to ensure the greatest possible independence and objectivity, the function is a staff function of the Executive Board at JENOPTIK AG. In addition to ongoing reporting to the Executive Board, reports are also submitted directly to the Audit Committee every six months.

Key features of the Internal Control and Risk Management System (ICS) with regard to the accounting processes of the Group and JENOPTIK AG (§ 289 (4) and § 315 (4) of the German Commercial Code [HGB])

The accounting-related internal control system is part of the overall ICS of the Jenoptik Group. Its purpose, in part, is to ensure a due and proper process in preparing the Consolidated Financial Statements, guaranteeing compliance with statutory regulations, accounting rules, and internal guidelines for uniform accounting and valuation principles, which are binding for all companies included in the Consolidated Financial Statements. New regulations and changes to existing rules are analyzed and implemented promptly. All employees involved in the accounting process receive regular training. Regional financial delivery centers carry out some of the operational accounting processes. They also support the harmonization of processes, their efficiency and quality, and thus also the reliability of the internal control system.

Access restrictions in the respective IT systems protect the financial systems against abuse. Centralized control and regular backup of the IT systems reduce the risk of data loss.

In order to prepare the Consolidated Financial Statements, data from the companies is recorded directly by them in the consolidation tool. The transferred data from the statements and the financial statements of consolidated companies is verified by manual and technical system inspections. All consolidation processes required for the preparation of the Consolidated Financial Statements are documented. These processes, systems, and controls enable Jenoptik to ensure a group accounting process that complies with both the IFRS and statutory requirements. The group auditor audits JENOPTIK AG’s Consolidated Financial Statements prepared in accordance with IFRS regulations, and the Annual Financial Statements in accordance with Section 317 of the German Commercial Code (HGB) and the EU Audit Regulation (537/2014), giving consideration to the generally accepted German audit principles defined by the Institute of Public Auditors in Germany (IDW).

The **Corporate Governance Statement** in accordance with §§ 289f, 315d of the German Commercial Code can be found from page 33 on of the Annual Report and on our website at www.jenoptik.com by going to Investors/Corporate Governance. In accordance with § 317 (2)(6) of the German Commercial Code, the information required under §§ 289f, 315d HGB is not considered by the auditor.

The Group's Risk and Opportunity Profile

The Group's risk profile for 2021 and subsequent years was determined with the aid of the risk and opportunity assessments from the segments. Part of the risk assessment of the segments is a review by the central functions of the Corporate Center, their identified risk assessments are then included in the segment reporting and in the final group assessment. Our risk and opportunity management makes possible a direct comparison of the individual risk profiles at the level of risk symptoms. The risk assessment at the level of the risk and opportunity categories in the individual subcategories is shown in more detail in the following chart. T60

Overall, the risks to which the Group is exposed remains at the lower end of the medium risk range. No significant changes on the prior year were identified.

At the time the risks and opportunities were assessed, the VINCORION segment was still fully integrated into the enterprise risk management process set out above, and pursuant to IDW PS 340 (new version) will remain so until closing, which is expected in 2022. However, following signing of the contract to sell VINCORION, this division is already classified as a discontinued operation pursuant to IFRS 5; accordingly, risks or opportunities for the units being sold are only set out in the following Risk Report, when they may have a material impact on the Jenoptik Group.

The expected disposal of VINCORION does not result in a different presentation of Jenoptik's overall risk, as the risks aggregated for the division in the subcategories fall into the same assessment categories as the aggregated values of the continuing divisions.

T60 Risk profile of the Jenoptik Group 2021

	Group risk assessment	
	Current (2021)	Prior year (2020)
Strategic risks		
Market development	Medium	Medium
Product development (incl. R+D)	Medium	Medium
Corporate development (portfolio and structure)	Medium	Medium
Organizational setup (processes and resources)	Medium	Medium
Operational risks		
Supply chain management	Medium high	Medium high
Safety and environmental protection	Low	Low
Production (incl. quality management)	Medium	Medium
Marketing and sales	Medium	Medium
Patents and IP rights	Low	Low
Human resources management	Medium	Medium
IT	Medium	Medium
Compliance	Medium	Medium
Legal affairs	Low	Low
Real estate	Low	Low
Financial management risks		
Accounting	Low	Low
Finance management	Low	Medium
Controlling	Low	Low
Taxes	Low	Low
Total risk	Medium	Medium

Once again, [strategic risks and opportunities](#) for the overall Group were on average assessed as the most important, compared to operational and financial management risks, in 2021. Our focus on photonic market segments represents both an opportunity and a risk to the Group.

The spread of Covid-19 infection (e.g., potential new variants) and the potential resulting action to contain the pandemic may continue to have an impact on Jenoptik's business activities. China's zero-Covid strategy is of particular note here, and may well impact on our direct business relationships, as well as on supply chains.

Impacts on our businesses still include extended project lead times, postponements, and supply chain issues. Restrictions on international travel and access to our customer's plants are also impacting on our ability to plan installations, technical acceptance procedures for systems, and our service business.

The internal processes and measures applied since 2020 to address Covid-19 remain in place and are continuously reviewed on the basis of changing requirements to minimize the risks to the health and safety of our employees and to safeguard the operating business.

The easing of coronavirus restrictions offers opportunities for our business activities, such as customer service and visits, trade show participation, and international travel.

Uncertainties arising from trade and geopolitical conflicts persist or are increasing again in some regions. For example, an increasing economic decoupling between the US and China due to rising trade barriers and technical regulations may impede global growth. The war in Ukraine and the associated sanctions may have an impact in particular on the supply of energy, and affect its price development as well as the short-term availability of raw materials and logistics services. Similarly, the interdiction of financial transactions may also have an impact on the procurement or distribution of non-sanctioned goods. This may have a negative impact on both production costs and productivity in parts of our value chains as well as a decisive influence on the overall economic development in Jenoptik's growth markets. At the time of preparing this report, the situation is still very dynamic and the effects of the war cannot be assessed conclusively. With price increases for raw materials and intermediate goods negatively affecting our cost structure. We are attempting to counter this through various measures in Purchasing, through further optimization of the

internal cost structure and, if necessary, through price adjustments in close cooperation with our customers.

Jenoptik is dependent on the economic development of specific industries. On the one hand, we are particularly affected by the continuing weakness of the automotive markets, which is currently mainly due to the ongoing semiconductor shortage. At the same time, acute market changes resulting from the Covid-19 crisis are also impacting on our success as a business. For example, travel restrictions (e.g., zero-Covid strategy) continue to have a negative impact on our project business, but at the same time they are assisting the global trend toward digitization, which is driving demand for optical technologies.

Jenoptik is exposed to intense competition throughout its business. The company counters the risk of being squeezed out by competitors with, for example, innovative USPs, specific and flexible changes to its product range, or customization options for existing products and solutions. In addition, mergers and acquisitions in the markets we target may intensify the competitive environment, and potentially improved cost structures at competitor companies, and the resulting increasing pricing pressure, may have negative effects on group earnings. We counter this risk by continuously analyzing our portfolio, i.e., by determining whether and how specific acquisitions and disposals may usefully support our strategy to generate lasting profitable growth. M+A activities and the integration of acquisitions pose a fundamental risk to the Group. We proactively counter this risk with extensive due diligence and a structured integration process tailored to the acquired company.

[Operational risks and opportunities](#) were assessed with low to medium-high risk indicators for the overall Group.

The increasing number of complex international projects, particularly those of a technically challenging nature, place enormous operational demands on all parts of the business. Supplier management and production are predominantly responsible for assuring the quality of our products. The use of individual single-source suppliers and the continuing possibility of insolvencies, for example, may increase the risk of dependency on or the loss of individual suppliers. Inflation may also lead to increased price pressure on purchased parts by our suppliers in the coming months. Ongoing refinement of our purchasing and production organization aims to ensure that our customers continue to receive high-quality, tailored solutions when they need them.

Global IT systems and processes are of great significance to Jenoptik in all its divisions. The security and availability of these systems have top priority. Data is stored on redundant storage media and secured against data loss by means of a partially tiered archive and backup system. This aims to enable rapid data recovery in the event of a crisis situation. Due to increasing IT threats worldwide, for example in the form of social engineering such as phishing attacks, Jenoptik is actively taking both preventive and corrective measures to reduce the risk of cyber attacks. As examples, all IT security issues are coordinated by the Chief Information Security Officer, existing processes are continuously scrutinized and adjusted, technical measures are implemented, and employees who are responsible for these are provided with internal training. Jenoptik has also set up a Security Operations Center (SOC) to better ensure protection of its IT infrastructure. It integrates, monitors, and analyzes all security-related systems such as our corporate networks, servers, workstations, and internet services, alerts the affected units, and takes action to protect our data and applications. However, these measures have been implemented to protect our IT infrastructure, intellectual property, and portfolio can never result in complete risk mitigation.

Our employees make the most important contribution to the company's success. As an international technology company, we need dedicated and highly qualified colleagues – now and in the future. Due to the difficulties in attracting qualified employees, particularly in Germany, Jenoptik is also exposed to the risk of not being able to fill vacant positions as they arise. We counter this risk with a large range of targeted measures, including the establishment of a succession planning process for management positions, leadership and professional career programs, an employer branding campaign, and both attractive and personalized incentive and loyalty schemes.


In view of Jenoptik's international business operations, one general risk is non-compliance with legal, ethical, and contractual requirements. Successfully completed M+A activities, in particular, require careful integration and coordination processes to ensure full integration into our corporate governance. The continuous improvement of our compliance structures and processes assists all departments and business units in this regard. As a company with customers and business partners in numerous countries, clients in the public sector and involvement in the US defense market, Jenoptik must grapple with many, partly increasing, compliance requirements in a wide range of different markets. Although the necessary organiza-

tional structures and measures to minimize potential compliance violations have been implemented with a group-wide export control and data protection organization, the central Compliance and Risk Management department, and corresponding processes, such violations cannot be entirely ruled out. Strict adherence to the compliance program and the continuous development of the compliance management system aim to close up any process gaps and ensure that processes comply with laws and regulations.

Financial management risks were assessed on average as low throughout the Group in 2021. The issues cited below also include the segment-specific risks. One key task of the central Treasury department is to safeguard and coordinate the financing of all group companies over the long term. For this purpose, Jenoptik has access to a range of financing instruments.

Currency-related risks arising from the Group's international activities are identified together with the group companies and reduced by adopting suitable measures such as the conclusion of currency forward transactions.

The risk of changing interest rates is in part reduced by the conclusion of fixed interest loans. Interest derivatives are also used where required.

Group-wide liquidity planning aims to identify liquidity risks at an early stage and systematically minimize them. Regular Treasury reports and quarterly planning updates have been established for liquidity control and monitoring. 

In the Financial Controlling and Accounting departments, opportunities predominantly arise from the continuing expansion and optimization of the standardized ERP system, and from the centralization of accounting activities for continuous quality improvement. Thanks to the establishment of new financial controlling instruments based on modern IT solutions, we counter the risk of lacking business-critical information in internal reporting.



With regard to the use of financial instruments, we refer to the Notes, section 8.2 from page 232 on

Risk and Opportunity Profiles of the Segments

The risk and opportunity profile of the Jenoptik Group was derived from the various risk profiles of the photonics divisions and VINCORION. Financial management risks are consolidated and shown in the Group risk and opportunity profile. T61

Light & Optics

Strategic risks and opportunities primarily arise on the basis of demand in the semiconductor equipment industry. They may have a significant positive or negative effect on results. Beyond this, the focus on larger customers is generally associated with the risk that poor business performance or the loss of customers may impact severely on revenue and earnings. On the other hand, the loyalty of such customers enables profitable revenue growth due to economies of scale. Although there is always an inherent threat posed by the growing number of mainly Asian competitors and the trend among suppliers and customers toward forward and/or backward integration, it may still be achieved through the continuous expansion of existing competitive advantages, in-house development activities, and internationalization. In addition, the Light & Optics division addresses this risk by continuously reviewing vertical integration with the aim of supplying more system and service solutions to its customers.

The growing importance of digitization, further accelerated by the Covid-19 crisis, is boosting demand for applications and PC devices, both from private households and companies, and presents Light & Optics with major opportunities both in the present situation and in coming years. The relentless progress being made in medical technology and demographic developments, especially in our core markets of Asia and the Americas, are also boosting demand for product solutions. Ongoing development of the product portfolio and Jenoptik's stronger market orientation mean that we are better able to meet our customers' requirements. Increasing financing problems in health-care systems, however, are resulting in growing price pressure among suppliers. The trend toward increasing complexity in the market environment makes clear and reliable forecasts more difficult, especially in innovative areas of application.

With the acquisition of BG Medical and the SwissOptic Group, Jenoptik is strategically strengthening its position in the medical technology sector and expanding its product portfolio in the semiconductor industry. In 2020, the acquisition of TRIOPTICS and its gradual integration into the Light & Optics division represented the foundation of Jenoptik's ongoing strategic focus on photonics. TRIOPTICS' innovative test solutions ideally complement the Jenoptik Group's expertise and portfolio, thus sharpening our focus on high-growth cutting edge industries. With its strong presence in Asian markets, TRIOPTICS also provides Light & Optics with additional market development opportunities in this region. Despite this, integrating two acquisitions of this size and international importance into our existing structure also poses challenges. We have to strike a fine balance between the requirements of the market and internal reporting, processes and specifications.

The exacting technology and quality requirements placed on Jenoptik and our suppliers with regard to source materials and production technology result in particular **operational risks and opportunities** in supplier management and production processes. For many components manufactured in the division, there is only a very limited number of qualified suppliers that are able to meet the necessary specifications in a timely manner. When such a supplier is lost or the customer changes specifications, this can result in corresponding problems in the development or production process. To ensure a stable base of suitable suppliers in the medium and long term, the division's partners are subject to ongoing qualification with the help of Strategic Purchasing. In addition, special supplier development teams support our suppliers where there is a need to evolve their organizational arrangements or business processes. Strained supply chains may also pose risks, especially at a time of increased demand for our products. For specific materials, these risks may be seen in fixed allocations by suppliers or sharp price increases. Efforts are being made to overcome these challenges by setting up dedicated task forces.

Specific customer requirements, especially regarding the quality and growing number of complex high-end products, and the dynamic growth of some business areas, lead to increased demands on production technologies, capacities, and floor area concepts, which are met through targeted expansion or replacement investment. Delays in necessary investments may

increase the risk of quality and performance requirements not being met to the agreed schedule, or at all, resulting in either delivery delays or non-acceptance by the customer.

Through the expansion of manufacturing activities in Dresden and the purchased capacities at the SwissOptic Group, Jenoptik is taking action to meet this dynamic growth. At the Jena site, too, existing space is being optimized during ongoing operations in order to better meet growing demand in the future.

Light & Production

The **strategic risks and opportunities** in the Light & Production division are strongly influenced by the development of the automotive industry and its investments. In addition to current challenges facing the industry, based on technological shifts and sales trends, which may pose risks to our success as a supplier to this industry, the Covid-19 pandemic presents additional business risks. These still comprise extended project lead

T61 Risk profiles of the segments 2021

	Risk assessment					
	Light & Optics division		Light & Production division		Light & Safety division	
	2021	2020	2021	2020	2021	2020
Strategic risks						
Market development	Low	Medium	Medium high	High	Medium	Medium
Product development (incl. R+D)	Medium	Medium	Medium	Medium	Medium high	Medium high
Corporate development (portfolio and structure)	Medium	Medium	Medium	Medium	Medium	Medium
Organizational setup (processes and resources)	Medium	Medium	Medium high	Medium	Medium	Low
Operational risks						
Supply chain management	Medium high	Medium high	Medium high	Medium high	Medium high	Medium high
Safety and environmental protection	Low	Low	Low	Low	Medium	Medium
Production (incl. quality management)	Medium high	Medium	Medium	Low	Medium	Medium
Marketing and sales	Medium	Medium	Medium	Medium	Medium	Medium
Patents and IP rights	Low	Low	Low	Low	Medium	Medium
Human resources management	Medium high	Medium	Medium	Medium	Medium	Low
IT	Medium high	Medium	Medium	Medium	Medium	Medium
Compliance	Medium	Medium	Low	Low	Medium	Medium
Legal affairs	Low	Low	Low	Low	Low	Medium
Real estate	Medium high	Medium	Very low	Very low	Low	Low
Financial management risks						
Accounting	Low	Low	Low	Low	Low	Low
Finance management	Low	Medium	Medium	Medium	Low	Low
Controlling	Medium	Low	Low	Low	Low	Low
Taxes	Medium	Low	Low	Medium	Medium	Medium
Total risk	Medium	Medium	Medium	Medium	Medium	Medium

times, postponements, and significant supply chain issues, particularly in the automotive sector. A focus on larger customers in the field of process automation is generally associated with the risk that poor business performance or the loss of customers may impact severely on revenue and earnings. Moving the division's strategy away from major, integrated projects and toward smaller one-off projects may result in a need to adjust the working capital in the short term. By addressing other branches of industry with our product portfolio, we aim to reduce our dependence on the automotive industry in the future. Similarly, the further roll-out of operational improvement programs and structural adjustments to the product portfolio and workforce aim to reduce the risks arising from the challenging business situation.

In terms of **operational risks and opportunities**, the increasing internationalization of projects and parts of the value chain is reflected in increased demands on supplier management, manufacturing, marketing, sales, and HR management. The systematic expansion of efficient service and sales structures is of crucial importance to achieving growth targets, particularly abroad. Here, too, however, actions to contain the Covid-19 crisis are currently impacting on our business. We have had to postpone a number of projects, while restrictions on international travel and access to car manufacturers' plants are impacting on our ability to plan installations, technical acceptance procedures for systems, and our service business.

Financial pressure on stakeholders throughout the automotive supply chain is increasing, and may result in increased risks to the division due to cash flow optimization on the part of customers as well as the loss of suppliers. To counter this, we have initiated a more efficient receivables management system and the further qualification of suitable suppliers.

By building up a broad sales partner organization, we have consistently increased our access to new customers and markets in Asia over recent years. This network and the establishment of digital marketing and sales channels aim to make up for the loss of established forums for communicating with customers, such as trade shows and conferences, in the wake of the Covid-19 pandemic.

Light & Safety

Uncertain economic and political developments around the world represent the main **strategic risks and opportunities** currently affecting the Light & Safety division. As a supplier to international public-sector customers in particular, Jenoptik is exposed to both the political and economic development of the respective countries. Particularly in the event of unrest or regime change, this may result in projects being delayed or even stopped entirely. There is currently very little evidence of the Covid-19 crisis affecting our project business with public-sector customers, but the risk cannot be ruled out entirely in the future given the potential of cuts in public investment in traffic monitoring projects.

Consolidation of the traffic safety market through Verra Mobility's acquisition of Redflex in 2021 poses sales market risks, especially in the United States, but also in other international markets. At present, the division is working to adjust its sales organization to better meet these challenges in 2022.

At the same time, the growing demand for safety technologies, intelligent traffic flow solutions ("smart cities"), the levying of congestion charges for the use of inner-city traffic infrastructure, and compliance with emission values for air pollutants, especially in metropolitan areas, present good opportunities for the division. We want to improve our strategic competitive position by continuously optimizing our product range and develop a standardized platform to cover the above-mentioned future issues.

The **operational risks and opportunities** are dominated by the difficult situation in parts of the supply chain. The products made by the Light & Safety division require technical approval, particularly in European countries, the duration of which we are unable to influence. It is therefore not always an easy process to substitute purchased materials or modules or to apply for an updated operating license. In many cases, therefore, only a very limited number of companies are qualified as suppliers. If one of these suppliers is lost or products are discontinued, problems may arise due to the need for new approvals, modified production processes, delivery bottlenecks, and negative impacts on long-term sales. The division's partners are subject to qualification with the help of Strategic Purchasing to ensure a stable base of suitable suppliers in the medium and long term.

In addition, the Light & Safety division is compelled to meet strict compliance requirements, whether imposed by customers or legislation. They entail the risk of delays in our business processes or of additional costs that could adversely affect the business's earnings. In the field of traffic safety technology, the requirements of the General Data Protection Regulation are of particular significance. They can now be met thanks to the further expansion of a standardized group-wide data protection organization.

VINCORION

Due to the [discontinuation of this division](#), no general risks and opportunities for the VINCORION business are listed here. In addition, apart from the known challenges arising from Germany's restrictive export policy and the pandemic-related effects on the civil aviation industry, no significant risks affecting the Jenoptik Group have been identified for this business. Future claims based on liability exemptions granted are not currently expected, but cannot be ruled out.

For the Group, the sale of the division will result in opportunities for the share price development, as the share of revenue of security and defense technology will fall below the five percent mark. As a result, the Jenoptik share will once again be available as an investment opportunity to institutional investors who have to comply with high ESG standards, which may have positive effects on the share price.

General statement by the executive board on the group's risk and opportunity situation

Significant and controllable risks and opportunities were identified and assessed on the basis of our risk and opportunity management system. Overall, in terms of strategic, operational, and financial management risks, the Jenoptik Group's exposure to risk is slightly increased on the prior year, and currently remains in the medium risk range. The risks addressed are limited – as far as possible – by the initiation and follow-up of appropriate measures.

In addition to the specific risks set out in the Group Management Report, however, unforeseeable events may occur at any time that have a significant impact on market developments, our sales and production process, and the reputation of the company.

For example, as described in the section on the Group's strategic risks, the war in Ukraine, which broke out during the preparation of this annual report, with the sanctions and counter-reactions that have been introduced, may have an impact on the supply and price development of energy, raw materials, and logistics, as well as construction services. Downstream, this could result in inflation rates remaining high or rising in the coming years, which could also impact our personnel cost structure in the context of upcoming collective bargaining rounds.

Overall, it can be said that a sharpened focus on the Group's strategic market segments (with the help of "Strategy 2025") may gradually help to reduce the existing strategic risks. The growing importance of the photonics industry and the strong related demand for applications and devices, both from private households and companies, continues to offer Jenoptik with the potential for further growth.

Overall, there is an acceptable relationship between risks and opportunities in the Jenoptik Group. No risks were identified that may jeopardize the continued existence of the Group.

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Forecast Report

Framework Conditions: Future Development of the Economy as a Whole and the Jenoptik Sectors

At the beginning of 2022, the global economy is in a weaker position than previously forecast by the International Monetary Fund (IMF) in October. Before the outbreak of war in Ukraine, the IMF saw economic recovery as significantly impeded by supply chain issues, high levels of inflation, and the spread of coronavirus/Omicron. In addition, the two largest economic areas have not grown as strongly as was assumed in October. In the US, the administration’s investment package was not approved by the US Congress, while the Chinese economy has been weakened by problems in the real estate sector, coronavirus regulations, and low levels of consumer spending. The IMF therefore cut back its forecast for the global economy by 0.5 percentage points and is now expecting global growth in 2022 to increase 4.4 percent on the prior year.

At the beginning of March 2022, the IMF, together with the World Bank, reported that the war in Ukraine would cause commodity prices to rise further, fueling already high inflation. Distortions in the financial markets would worsen if the conflict continued. In addition, the sanctions against Russia would have an impact on the economy.

Experts particularly see China’s inflexible coronavirus policy as a risk to global trade and global supply chains. According to the IMF, China’s economy had lost momentum by the end of 2021, and this slowdown will continue into 2022. Reasons, according to the IMF, include a restrictive fiscal policy, as the focus has shifted from supporting the economy to reducing debt, isolation related to the zero-Covid strategy, increased raw material costs and energy shortages, and a crisis in the real estate market, which has recently cooled sharply, among other things driven by uncertainties surrounding a highly indebted real estate group.

Following a weak fourth quarter 2021, Germany began the new year with subdued momentum. Experts expect the Omicron wave to burden the economy in the first quarter 2022, making a technical recession possible – if economic output falls in two successive quarters. From the second quarter 2022 on, economists are anticipating a noticeable recovery if the pandemic subsidies and consumer spending picks up. For 2022, the German government is forecasting economic growth of 3.6 percent on the prior year, and an increase of 2.3 percent in 2023. According to experts, indicators such as the recent rise in industry order intakes suggest dynamic economic development – if the gradual resolution of supply bottlenecks means that the high order backlog can be worked off.

Thanks to digitization, the **photonics** industry remains part of a growing field, according to the Spectaris industry association. The use of lighting technologies is making an essential contribution to global market growth and has become indispensable for many innovations, e.g., as a basic technology for autonomous driving, for industry 4.0 and big data applications, for the so-called smart laboratory in analytical and biotechnology, and through the use of quantum technology, which may provide photonics with its next source of growth momentum. According to Spectaris, efforts to better protect the climate and promote sustainability are expected to make a positive contribution. Light-based technologies deployed in the service of “green photonics” are key here. The use of photonic solutions will save 3 billion tons of CO₂ emissions by 2030, according to Spectaris.

T62 Gross domestic product forecast (in percent)

	2022*	2023*
World	4.4	3.8
US	4.0	2.6
Eurozone	3.9	2.5
Germany	3.8	2.5
China	4.8	5.2
India	9.0	7.1
Emerging countries	4.8	4.7

Source: International Monetary Fund, World Economic Outlook (Update), January 2022
 * Forecast

Industry experts expect a compound annual growth rate (CAGR) for the global [photonics](#) industry of at least 6 percent in the coming years: Market researcher Tematys (together with Photonics21) is forecasting a CAGR of 6 percent, to 900 billion euros in 2025, MarketsAndMarkets 7.1 percent to 837.8 billion US dollars by 2025, and Triton 8.1 percent to 921.7 billion US dollars by 2028. Growth will primarily be driven by the increasing use of photonics products in the healthcare sector, in industry, and in IT and communications, where photonics can facilitate data generation, transmission, storage, and usage. Due to immense demand for cloud computing applications, the optical transceiver market alone is expected to grow at an average annual rate of 15.2 percent, from 7.0 billion US dollars in 2021 to 14.3 billion US dollars by 2026, according to MarketsAndMarkets.

Potential risks may arise from disruptions to supply chains caused by the pandemic, for example with delays in the roll-out of 5G in some countries or price increases for fiber optics because production in countries such as China has been or can be affected.

In the [laser material processing](#) market, the market researchers at ResearchAndMarkets are expecting stable revenue growth of an annual average of 7.8 percent to 2026. From 11.1 billion US dollars in the base year 2019, the market will grow to a value of 18.7 billion US dollars. In the laser-based micro material processing market segment, an important segment for Jenoptik, revenue with short-pulse laser sources is expected to grow by an average of 16.6 percent each year from 2021 through 2026.

According to Spectaris, the drivers of growth in the [medical technology industry](#) remain intact, and include opportunities arising from demographic changes, especially in industrial nations, and high levels of healthcare investment in many emerging economies. The pandemic has further intensified digitization within the industry; as a consequence, manufacturers' business models are moving from traditional instrument engineering via solution providers in the current decade toward suppliers of digital and holistic healthcare solutions in the next decade. Based on conservative assessments by Frost & Sullivan, the global medical technology market will grow by an average of over 6 percent a year to a value of 582 billion US dollars in 2025.

The growth prospects for the [machine vision industry](#) remain good for the next few years, according to VDMA Machine Vision, which sees revenue in the European industry growing 7 percent in 2022. The trend toward "seeing machines" remains unbroken; machine vision is a key component in the automation industry and the combination of embedded vision and deep learning will generate new growth momentum.

The boom in the [semiconductor industry](#) shows no signs of ending: Consulting firm McKinsey is expecting annual industry revenue growth of 6 to 8 percent through 2030. Market researcher IC Insight is projecting a revenue increase of 11 percent, to a record high of 680.6 billion euros in the current year, while the Semiconductor Industry Association (SIA) expects revenue 8.8 percent up on the prior year. The chip industry is seeing huge expansion, especially in China. The SIA predicts that if China maintains the strong momentum seen in recent years, with average growth of 30 percent in the next three years, and growth rates remain stable in other regions, China will be the third largest chip market, after the US and South Korea, by 2024. Following a record year in 2021, the [semiconductor equipment](#) market will continue to grow in the current year, according to the Semiconductor Equipment and Materials International (SEMI) industry association. Revenue is expected to grow from 103 billion US dollars in 2021 to 114 billion US dollars in 2022. The wafer fab equipment segment is expected to see double-digit growth to a figure of around 99 billion US dollars, after which a slight 0.5-percent decline is anticipated in 2023. The test equipment and back-end assembly and packaging segment will also contribute to grow in 2022, according to SEMI, in part driven by 5G applications and high-performance computing.

In view of strong chip demand in many industries, but also potential trade conflicts, countries and regions such as the US or the EU plan to increase their own chip capacities with support programs and thus become less dependent on supplies from abroad. Under the auspices of the European Chips Act, the EU Commission plans to build new chip factories in Europe in the medium to long term, doubling Europe's share of global chip production to 20 percent by 2030. The EU Commission plans to mobilize around 43 billion euros for this purpose, in part from its own budget, in part from member state budgets. The US also intends to invest 52 billion US dollars in establish-

ing its own chip production industry under the “CHIPS for America Act”.

According to the German Electrical and Electronic Manufacturers’ Association (ZVEI), the German **electrical and digital industry** will see production growth of 4 percent in 2022. Capacity utilization in the industry was very high, 88.5 percent, at the beginning of the first quarter 2022; the order range of 4.8 production months is a historical high. On the other hand, many industry companies are having to contend with shortages of materials and skilled workers.

The German Mechanical Engineering Industry Association (VDMA) is expecting production in the German **mechanical and plant engineering industry** to again increase by 7 percent in 2022. The industry started the current year with a high order backlog, which provides certainty for the full year, although supply bottlenecks mean these orders cannot be processed quickly. Electromobility is one driver of industry growth, reflected in rising demand for production technology, for example for battery cells.

In the **robotics industry**, the VDMA Robotics and Automation sector group expects industry revenue to reach pre-crisis levels again in 2022, with industry revenue of 14.7 billion euros in Germany. This is dependent on disruptions to supply chains not significantly worsening, as reported by the VDMA in late 2021. In China, under a new Five-Year Plan for the robotics industry, innovation will be given targeted government support to make the country a leading location for robot technology. To date, the rapid automation of Chinese industry has primarily rested on supplies from foreign manufacturers, according to the International Federation of Robotics (IFR).

Slow improvement is expected in the **automotive industry**: The German Association of the Automotive Industry (VDA) believes the German market will grow around 7 percent to a figure of 2.8 million new registrations in 2022. For the global market, the VDA is anticipating growth of 4 percent, to around 75 million vehicles, which would be similar to prior-year growth, but 13 percent down on the record figure of 84 million units in 2017. A new “Future Fund” with a volume of 1 billion euros is being set up for the German car industry to promote the shift to

electromobility and more digitization. The first automakers want to phase out internal combustion engines by 2035. The transformation could engender new dependencies in the raw materials market and lead to sharp price rises for important metals. The semiconductor shortage that has plagued the industry for months could last well into the current year or not end in a balance of supply and demand until 2023, according to chip manufacturer estimates.

The global **traffic safety** market is expected to grow by an annual average 12.4 percent, to 6.6 billion US dollars, from 2021 through 2028, according to the US market research company Grand View Research in its May 2021 market report. The further development of smart systems and initiatives for greater road safety, including “Vision Zero,” in which any road traffic fatalities are considered unacceptable, play a key role here. Within the speed monitoring segment, automatic license plate recognition (ALPR) accounts for a significant portion of industry revenue, and demand here is forecast to remain solid through 2028. Also becoming more important are services, or the ability to provide end-to-end monitoring and maintenance services. The vehicle-to-everything (V2X) market also pursues objectives such as greater road safety, autonomous driving, energy saving, and the optimization of traffic flows. Here, market researchers such as Astute Analytica expect a CAGR of 33.8 percent from 2022 through 2027 and an increase in market volume from 3.3 billion US dollars in 2021 to almost 18.9 billion US dollars by 2027. V2X is a technology for real-time communication between vehicles and their surrounding environment.

In June 2021, the European Parliament’s Transport Committee adopted a document confirming the EU Commission’s strategy for greater **traffic safety**: Under its plans, road traffic injuries and fatalities are to be reduced by 50 percent by 2030, key performance indicators (KPIs) for road safety will be defined by 2023, and speed limits will be recommended for the different EU states. This will help to reduce traffic noise, accidents, and CO₂ emissions. The World Health Organization (WHO) is also calling for a speed limit in urban areas of 30 km/h, or 20 mph in the Anglo-American system. In the summer of 2021, the German government initiated an amendment to the law on automatic license plate recognition, which would extend the recognition already possible for manhunts to cover other inves-

tigative purposes. Belgium wants to achieve the goal of zero road traffic fatalities by 2050 with a national "Vision Zero" plan. In addition, automatic detection of phone use at the wheel and the installation of cameras for section control will be made possible. According to an EU regulation, all new vehicle types must be equipped with an Intelligent Speed Assistant (ISA) from July 6, 2022 on. This assistance system is to become a supporting speed brake in the vehicle by means of sensor fusion between traffic sign recognition, cruise control, and navigation system. The ISA will be mandatory for all new cars from July 2024 on. In the USA, the Department of Transportation wants to improve traffic statistics and safety with a new "Safe Systems" strategy. Over the next two years, it plans to provide advice and 5 billion US dollars in funding to enable US states to introduce speed limits or launch pilot programs to increase the use of speed cameras.



See the "Control System" chapter for more information on the top control parameters



See the "Business Model and Markets" and the "Targets and Strategy" chapters for more information on the strategy and the division structure

Expected Development of the Business Situation

Planning assumptions for the Group and the divisions

The forecast for business development in 2022 was based on the [group planning](#).

The group planning was made in the fall of 2021 and thus before the Ukraine war and the associated sanctions. Therefore, these events and any potential risks arising from them have not been taken into account.

Since the first quarter of 2022, Jenoptik operates in the following reportable segments: Advanced Photonic Solutions, Smart Mobility Solutions, and Non-Photonic Portfolio Companies.

As part of its new organizational set-up, the Group is consolidating its core photonics business in two new division, Advanced Photonic Solutions and Smart Mobility Solutions. The former Light & Optics and Light & Production divisions will be merged into the new Advanced Photonic Solutions division, while non-photonics activities, particularly for the automotive market, will be separated. In future, these business activities will operate as independent brands within the Jenoptik Group's Non-Photonic Portfolio Companies. The former Light & Safety division will become the Smart Mobility Solutions division.

The starting point are the separate plans from the divisions and operational business units, which are harmonized and integrated in the group planning. Potential acquisitions, divestitures (excluding VINCORION), and exchange rate fluctuations are not included in the planning process.

The system of key performance indicators covers the revenue, EBITDA margin, order intake, cash conversion rate, and capital expenditure indicators. Other indicators will also be regularly compiled in the future and are used by top management for informational purposes.

With our strategic Agenda 2025, "More Value," we are targeting lasting profitable growth in the core photonic markets of semiconductor & electronics, life science & medical technology, and smart mobility. We continue to push on with our plans to become a pure, globally leading photonics group.

Overall, the Jenoptik Group anticipates consistently good business performance in the [Advanced Photonic Solutions division](#) in 2022. We will help to enable this by stepping up our activities as an active global supplier of solutions and products based on photonic technologies, by focusing on key sales markets, by growing our global reach, and with innovative products and a larger range of integrated system solutions. Jenoptik Medical (formerly BG Medical) and the SwissOptic Group, consolidated for the full year for the first time, will also make a significant contribution to growth. Market observers and key customers expect continued high demand in the semiconductor equipment market in the current year. In this regard, the division will benefit from its range of optical and micro-optical system solutions for semiconductor production. In the Biophotonics area (medical technology and life science), existing cooperation arrangements with key international customers are to be further expanded and new ones won in the current fiscal year. The above-mentioned acquisition will enable Jenoptik to roughly double the size of its medical technology business in this attractive market. The division expects stable business growth in the Industrial Solutions area, and appreciable growth is also anticipated in the Optical Test & Measurement area. Good performance in the Advanced Photonic Solutions division will be supported by both the range of optical solutions for information and communication technologies, and by applications in the field of virtual and augmented reality.

In the current fiscal year, the Advanced Photonic Solutions division will also continue to invest in its operational performance and sales to promote future growth and continue the process of internationalization.

For the fiscal year 2022, the Executive Board expects stable to slightly positive development in the [Smart Mobility Solutions division](#). This is to be supported by new products, investment in the expansion of the customer portfolio, and a promising project pipeline. In addition, local project management and service structures will be strengthened to further improve direct customer support.

Optimizations that have been made in sales and the partner network are showing positive results, also in view of the global pandemic. Supply chains and security procedures continue to

be closely monitored. The share of recurring revenue contributions in the division is to be increased by optimizing the product pipeline, also in form of new business models such as software as a service, and a broader range of products in the value chain. On a regional level, Jenoptik is primarily expecting growth momentum benefiting the Smart Mobility Solutions division to come from Europe and the Arab and Pacific region.

Business development in the [Non-Photonic Portfolio Companies](#) was still impacted in 2021 by the effects of the Covid-19 pandemic, but also by structural changes in the automotive industry. For 2022, we expect to see a positive development in the segment.

We expect growth, particularly in our Automation & Integration business in the current fiscal year. In our Metrology business, we expect the effects of the implemented restructuring measures to have a positive impact as planned in 2022.

2022 earnings position forecast

Based on the good order intake in the fourth quarter 2021 and the full year 2021, the high order backlog, and ongoing promising developments in the core photonics businesses, especially in the semiconductor sector, the Executive Board is confident of further profitable growth in the fiscal year 2022.

The forecast provided is for continuing operations.

In addition to the organic growth in the divisions, Jenoptik Medical and the SwissOptic Group, consolidated for the full year for the first time, will also make a contribution to positive business development. At the present time, uncertainties exist with regard to the development of the Covid-19 pandemic and associated supply bottlenecks, although we are confident of our ability to manage them. However, our scheduled growth also presupposes that political and economic conditions do not worsen. In particular, these include economic trends, regulations at European level, export restrictions, and further policy developments in our sales markets.

Major portfolio changes were not considered in the forecast.



See the Framework Conditions chapter for more information on the future development of the Jenoptik sectors

Jenoptik expects **revenue growth** of at least 20 percent for its continuing operations, including Jenoptik Medical and the SwissOptic Group, in 2022 (revenue 2021: 750.7 million euros).

At present, the Executive Board is expecting **EBITDA** (earnings before interest, taxes and depreciation, incl. impairment losses and reversals) to see significant growth in the current fiscal year compared with the prior year's EBITDA excluding one-off effects (2021: 125.2 million euros (excluding one-off effects) / 155.7 million euros (including one-off effects)). The **EBITDA margin** is due to be around 18 percent (2021: 16.7 percent (excluding one-off effects) / 20.7 percent (including one-off effects)). We will endeavor to clarify the forecast during the course of the year.

Order intake is influenced by major orders, especially in the Smart Mobility Solutions division, and increasingly also in the Non-Photonic Portfolio Companies. In the past fiscal year, the continuing operations received new orders worth 936.7 million euros and had thus built up a good order base at year-end 2021, particularly following a strong fourth quarter. Due to a very good order intake in 2021, which included pull-forward effects, the Executive Board assumes that the order intake in the 2022 fiscal year will not reach this very high level again, instead remaining slightly below the figure in 2021.

Also worthy of note is that the continuing operations had frame contracts worth 135.1 million euros at the end of 2021, which are not included in the order intake or backlog. 85.9 percent of the order backlog as of December 31, 2021 is expected to be converted to revenue in 2022.

In 2022, the **Advanced Photonic Solutions division** expects revenue, including the contributions from Jenoptik Medical and the SwissOptic Group, to grow in the mid-double-digit percentage range. EBITDA is expected to increase in line with revenue on a comparable prior-year basis, i.e., excluding one-off effects in connection with the acquisitions made in 2020.


The **Smart Mobility Solutions division** also expects growth in 2022, with a revenue increase in the mid-single-digit percentage range. EBITDA is expected to be slightly up on the prior year.

The **Non-Photonic Portfolio Companies** are expecting revenue to grow in the low double-digit percentage range. The EBITDA is expected to show a stronger rate of growth than revenue.

Group asset and financial position forecast

Jenoptik expects that its continuing operations' **capital expenditure** in the fiscal year 2022 will be up on the prior year's figure (2021: 49.9 million euros). Capital expenditure on property, plant, and equipment will focus on the growth areas within the divisions or take place within the scope of new customer projects. It aims to expand capacities, thereby ensuring future growth, e.g., through construction of the new cleanroom facility in Dresden.

We expect the **cash conversion rate** (ratio of free cash flow to EBITDA) to grow to 45 to 55 percent in 2022 (31/12/2021: 27.7 percent).

Notwithstanding the current extreme geopolitical uncertainties, and in addition to financing the continued growth of the company, the future aim of the Executive Board remains to ensure a [dividend policy](#) in line with corporate success. In the view of the Executive Board, a stable provision of equity for sustainable organic growth to increase the company value as well as the exploitation of further opportunities for acquisitions are also of crucial importance to the interests of the shareholders. 

Important note. The actual results may differ significantly from the forecasts of anticipated development made above and summarized below. This may arise, in particular, if one of the uncertainties mentioned in this report were to materialize or worsen, or if the assumptions upon which the statements are based prove to be inaccurate in relation to the economic development, especially in association with the spread of the coronavirus, risks arising from the markets as well as geopolitical risks, in particular in connection with the Ukraine war and the associated sanctions.



See the Report on Post-Balance Sheet Events for more information on the dividend

T63 Summary of targets for group (continuing operations) and divisions

	Actual 2021	Forecast for 2022 (without major portfolio changes)
Revenue	750.7	Growth of at least 20 percent
Advanced Photonic Solutions	525.6 ²	Growth in the mid-double-digit percentage range
Smart Mobility Solutions	110.1 ²	Growth in the mid-single-digit percentage range
Non-Photonic Portfolio Companies	111.3 ²	Growth in the lower double-digit percentage range
EBITDA/EBITDA margin	155.7/20.7%	
EBITDA/EBITDA margin (excluding one-off effects from the acquisitions of TRIOPTICS and INTEROB)	125.2/16.7%	Marked growth/approx. 18 percent
Advanced Photonic Solutions	117.9 ^{2,3}	Growth in line with revenue
Smart Mobility Solutions	19.2 ²	Slightly above prior year
Non-Photonic Portfolio Companies	1.5 ²	Growth stronger than revenue
Order intake	936.7	Slightly below prior year
Cash conversion rate	27.7%	Between 45 and 55 percent
Capital expenditure ¹	49.9	Markedly above prior year

¹ Excluding capital expenditure on financial assets

² Segment data is simulated

³ Without one-off effects in connection with the acquisitions made in 2020

General Statement by the Executive Board on Future Development

In the current fiscal year 2022, the Jenoptik Group will begin rolling out its strategic Agenda 2025, concentrating on core photonics markets. In terms of economic development, our key focus remains on profitable growth. We believe that revenue growth, resulting economies of scale, and more efficient and faster processes result in higher, sustainable earnings. It is the assessment of the Executive Board that what is still a good asset position and a viable financing structure give Jenoptik sufficient room for maneuver to finance both further organic and inorganic growth.

Achieving our targets is dependent on the development of the economic and political environment, especially in connection with the Ukraine war and associated sanctions.

On the basis of encouraging order intake growth in the fourth quarter of 2021, the current order backlog, and ongoing promising developments in the core photonics business, the Executive Board remains positive for the fiscal year 2022 and expects revenue growth of at least 20 percent. In addition to the organic growth in the divisions, Jenoptik Medical and the SwissOptic Group, consolidated for the full year for the first time, will also make a significant contribution to growth. The EBITDA margin of the Group (continuing operations) is due to come in at around 18 percent.

In 2022, we will again invest a significant portion of our funds in the expansion of the international sales network and the development of innovative products. As part of our active portfolio management, potential acquisitions are closely scrutinized; divestitures have not been ruled out.

Based on the information available at the time this report was created, the Executive Board expects the Jenoptik Group to see positive business development in 2022.

Jena, March 16, 2022

JENOPTIK AG
The Executive Board

Consolidated Financial Statements

» In short «

With an equity ratio of

44.4 %

the Group has a solid and sustainable financing structure and healthy balance sheet ratios.

Consolidated Statement of Comprehensive Income

Consolidated Statement of Income

in thousand euros	Note No.	1/1 – 31/12/2021	1/1 – 31/12/2020 ¹
Continuing operations			
Revenue	4.1	750,717	615,466
Cost of Sales	4.2	493,814	390,718
Gross profit		256,903	224,749
Research and development expenses	4.3	38,886	39,420
Selling expenses	4.4	89,693	77,096
General administrative expenses	4.5	53,462	53,854
Impairment gains and losses	4.7	-1,151	4,090
Other operating income	4.8	50,747	16,504
Other operating expenses	4.9	16,309	27,574
EBIT		108,148	47,397
Profit or loss from investments	4.10	592	1,640
Financial income	4.11	4,972	3,742
Financial expenses	4.11	11,164	10,521
Financial result		-5,600	-5,139
Earnings before tax from continuing operations		102,548	42,258
Income taxes	4.12	-9,689	-8,223
Earnings after tax from continuing operations		92,859	34,035
Discontinued operation			
Earnings after tax from discontinued operation	4.13	-8,520	8,696
Group			
Earnings after tax		84,339	42,731
Results from non-controlling interests	4.14	2,341	963
Earnings attributable to shareholders	4.15	81,998	41,769
Earnings per share in euros (undiluted = diluted)	4.15	1.43	0.73
Earnings per share from continuing operations in euros (undiluted = diluted)		1.58	0.58

¹ Adjustment of prior year due to discontinued operation VINCORION

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Consolidated Comprehensive Income

in thousand euros	Note No.	1/1 – 31/12/2021	1/1 – 31/12/2020
Earnings after tax		84,339	42,731
Items that will never be reclassified to profit or loss	5.16	4,974	-2,620
Actuarial gains/losses arising from the valuation of pensions and similar obligations	5.18	6,986	-2,096
Equity instruments measured at fair value through other comprehensive income		17	-1,375
Income taxes		-2,029	851
Items that are or may be reclassified to profit or loss	5.16	17,998	-7,207
Cash flow hedges	8.2	-2,253	3,987
Foreign currency exchange differences	2.3	21,014	-11,328
Income taxes		-763	134
Total other comprehensive income		22,972	-9,827
Total comprehensive income		107,311	32,904
Thereof attributable to:			
Non-controlling interests		2,965	889
Shareholders		104,346	32,015

Consolidated Statement of Financial Position

Assets in thousand euros	Note no.	31/12/2021	31/12/2020
Non-current assets		1,110,770	848,943
Intangible assets	5.1	753,247	487,075
Property, plant and equipment	5.2/5.4	266,656	263,499
Investment property	5.3	3,638	4,175
Investments accounted for using the equity method	5.5	14,328	13,410
Financial investments	5.6	2,987	2,926
Other non-current assets	5.7	6,555	3,276
Deferred tax assets	4.12	63,360	74,583
Current assets		646,271	489,900
Inventories	5.9	200,213	191,406
Current trade receivables	5.10	120,475	138,010
Contract assets	5.11	81,414	74,735
Other current financial assets	5.12	19,582	6,492
Other current non-financial assets	5.13	11,439	10,958
Current financial investments	5.14	1,555	4,894
Cash and cash equivalents	5.15	54,817	63,405
Assets held for sale	4.13	156,777	0
Total assets		1,757,041	1,338,843

Equity and liabilities in thousand euros	Note no.	31/12/2021	31/12/2020
Equity	5.16	780,659	689,391
Share capital		148,819	148,819
Capital reserve		194,286	194,286
Other reserves		424,705	334,668
Non-controlling interests	5.17	12,849	11,618
Non-current liabilities		503,102	233,029
Pension provisions	5.18	9,379	35,178
Other non-current provisions	5.20	17,886	17,039
Non-current financial debt	5.22	448,746	138,410
Other non-current liabilities	5.23	2,350	29,545
Deferred tax liabilities	4.12	24,741	12,858
Current liabilities		473,279	416,423
Tax provisions	5.19	6,949	2,624
Other current provisions	5.20	39,907	52,482
Current financial debt	5.22	148,993	130,871
Current trade payables	5.24	94,221	89,747
Contract liabilities	5.25	47,323	46,274
Other current financial liabilities	5.26	22,023	75,327
Other current non-financial liabilities	5.27	20,249	19,098
Liabilities related to assets held for sale	4.13	93,613	0
Total equity and liabilities		1,757,041	1,338,843

Consolidated Statement of Cash Flows

in thousand euros	1/1 – 31/12/2021	1/1 – 31/12/2020
Earnings before tax from continuing operations	102,548	42,258
Earnings before tax from discontinued operation	-8,230	10,977
Earnings before tax	94,318	53,235
Financial income and expenses	6,997	7,716
Non-operating result from investments	-628	0
Depreciation and amortization	54,179	50,879
Impairment losses and reversals of impairment losses from non-current assets ¹	22,357	1,459
Profit/loss from disposals of non-current assets, subsidiaries and other business units	-3,858	-895
Profit/loss from fair value adjustment of conditional purchase price components	-30,509	-476
Other non-cash income/expenses	-2,158	-175
Change in provisions	1,638	-4,785
Change in working capital	-35,786	-3,736
Change in other assets and liabilities	1,720	-934
Cash flows from operating activities before income tax payments	108,271	102,288
Income tax payments	-10,237	-12,540
Cash flows from operating activities	98,034	89,748
Capital expenditure for intangible assets	-15,934	-16,811
Proceeds from sale of property, plant and equipment	686	3,312
Capital expenditure for property, plant and equipment	-30,229	-26,489
Proceeds from the sale of subsidiaries and other business units less cash sold	7,586	0
Acquisition of consolidated entities less acquired cash	-379,963	-220,382
Proceeds from sale of financial assets within the framework of short-term disposition	197	89,900
Capital expenditure for financial assets within the framework of short-term disposition	-1,564	-20,000
Proceeds from other financial investments	6,036	626
Capital expenditure for other financial investments	-619	-405
Interest received and other income	184	1,805
Cash flows from investing activities	-413,621	-188,443
Dividend to shareholders of the parent company	-14,310	-7,441
Dividend to non-controlling interests	-1,749	-985
Acquisition of non-controlling interests	0	-1,711
Proceeds from additions of financial liabilities	548,559	177,686
Repayments of loans	-208,088	-86,073
Payments for leases	-13,732	-12,259
Change in group financing	945	-537
Interest paid and other expenses	-7,420	-4,964
Cash flows from financing activities	304,205	63,716
Cash-effective change in cash and cash equivalents	-11,383	-34,980
Less cash and cash equivalents from discontinued operations	-46	0
Change in cash and cash equivalents from foreign currency effects	2,871	-737
Changes in cash and cash equivalents from first-time consolidation and valuation	-30	97
Cash and cash equivalents at the beginning of the period	63,405	99,025
Cash and cash equivalents at the end of the period	54,817	63,405

¹ Including impairment loss from remeasurement at fair value less costs to sell in accordance with IFRS 5

Statement of Changes in Equity

in thousand euros	Note no.	Share capital	Capital reserve	Retained earnings	Equity instruments measured through other comprehensive income
Balance at 1/1/2020		148,819	194,286	326,456	882
Net profit for the period	4.14/4.15			41,769	
Other comprehensive income after tax	2.3/5.16/5.18/8.2				-965
Total comprehensive income				41,769	-965
Changes in the scope of consolidation	2.1/2.4				
Acquisition of non-controlling interests				-1,565	
Transactions with owners (dividend)				-7,441	
Other adjustments				-23	
Balance at 31/12/2020		148,819	194,286	359,196	-83
Balance at 1/1/2021		148,819	194,286	359,196	-83
Net profit for the period	4.14/4.15			81,998	
Other comprehensive income after tax	2.3/5.16/5.18/8.2				-3
Total comprehensive income				81,998	-3
Transactions with owners (dividend)				-14,310	
Transfer of actuarial effects to cumulative gains				-257	
Balance at 31/12/2021		148,819	194,286	426,627	-86

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Cash flow hedges	Cumulative exchange differences	Actuarial effects	Equity attributable to shareholders of JENOPTIK AG	Non-controlling interests	Total	
-1,890	8,000	-21,765	654,788	656	655,444	Balance at 1/1/2020
			41,769	963	42,731	Net profit for the period
2,787	-9,918	-1,658	-9,754	-73	-9,827	Other comprehensive income after tax
2,787	-9,918	-1,658	32,015	889	32,904	Total comprehensive income
				10,218	10,218	Changes in the scope of consolidation
			-1,565	-146	-1,711	Acquisition of non-controlling interests
			-7,441		-7,441	Transactions with owners (dividend)
			-23		-23	Other adjustments
897	-1,918	-23,423	677,774	11,617	689,391	Balance at 31/12/2020
897	-1,918	-23,423	677,774	11,617	689,391	Balance at 1/1/2021
			81,998	2,341	84,339	Net profit for the period
-1,557	18,562	5,346	22,348	624	22,972	Other comprehensive income after tax
-1,557	18,562	5,346	104,346	2,965	107,311	Total comprehensive income
			-14,310	-1,733	-16,043	Transactions with owners (dividend)
		257	0		0	Transfer of actuarial effects to cumulative gains
-659	16,644	-17,820	767,811	12,849	780,659	Balance at 31/12/2021

Notes

1 Presentation of the Group Structure

1.1 Parent Company

The parent company is JENOPTIK AG, Jena, Germany, and is registered in the Commercial Register of Jena in Department B under the number 200146. JENOPTIK AG is listed on the German Stock Exchange in Frankfurt and traded on the TecDax and SDax, amongst others.

The list of shareholdings of the Jenoptik Technology Group is published in the Federal Gazette in accordance with § 313 (2) Nos. 1 to 4 of the German Commercial Code (Handelsgesetzbuch [HGB]) and is disclosed from page 245 on in the Notes under the heading "List of Shareholdings of the Jenoptik Group". The entities to which the simplification relief regulations were applied as specified in § 264 (3) or § 264b of the HGB, are disclosed in the section "Required and Supplementary Disclosures under HGB".

1.2 Accounting Principles

The consolidated financial statements of JENOPTIK AG were prepared for the 2021 fiscal year in accordance with the International Financial Reporting Standards (IFRS) and the binding interpretations of the International Financial Reporting Interpretations Committee (IFRIC) in force at the reporting date for use in the European Union.

The consolidated financial statements were presented in euros. Unless otherwise specified, all amounts are presented in thousand euros. Please note that there may be rounding differences compared to the mathematically exact amounts (monetary units, percentages, etc.). The consolidated statement of income was prepared in accordance with the cost of sales method.

The fiscal year of JENOPTIK AG and of its subsidiaries included in the consolidated financial statements corresponds with the calendar year.

In order to improve the clarity of the presentation, individual items were aggregated in the statement of total other comprehensive income and the statement of financial position. The classifications used for these items are listed in the Notes.

Changes in accounting policies

The following IFRS were applied for the first time in the fiscal year 2021:

Amendments to IFRS 4: Extension of the temporary relief from the application of IFRS 9. IFRS 4 is not applicable to the Group. This amendment therefore has no material impact on the consolidated financial statements.

Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4, and IFRS 16: Reform of the reference interest rates – Phase 2. In August 2020, the IASB passed amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4, and IFRS 16 in respect of the reform of the reference interest rates. The amendments provide for temporary relief when a reference interest rate (IBOR) is replaced by an alternative near-risk-free rate (RFR) and this has an impact on the financial reporting.

The amendments are to be applied for fiscal years from January 1, 2021. There are no financial instruments in hedging transactions that are linked to the IBOR as the reference interest rate. To that extent, the changes have no impact on the consolidated financial statements for the fiscal year 2021.

Amendments to IFRS 16: Rental concessions in connection with Covid-19 after June 30, 2021. In March 2021, the IASB extended the valid period of the amendment to IFRS 16 which grants optional relief for lessees in the assessment as to whether a concession in conjunction with Covid-19 constitutes a modification of the lease under IFRS 16. Lessees can instead account for these rental concessions using the same method that would apply if this did not involve a modification of the lease contract.

The amendments are to be applied from July 1, 2021. As there were no rental concessions in the context of Covid-19 for the Jenoptik Group companies, the optional relief is not applicable, so the changes do not affect the consolidated financial statements.

Standards which have been published but not yet adopted by the EU as mandatory

The application of the following standards and interpretations published by the IASB and adopted by the EU is not yet mandatory and they were not taken into account by Jenoptik in the consolidated financial statements as of December 31, 2021. The Group has no plans to apply these standards early.

Amendments to IAS 16: Generation of revenues before an asset has reached operational readiness. The IASB published amendments to IAS 16 in May 2020. Thereafter, entities will no longer be permitted to deduct proceeds from the sale of goods produced, whilst an item of property, plant, and equipment is being brought to their location and in the operational readiness intended by management, from the acquisition or production costs of this item of property, plant, and equipment. Instead, these revenues, together with the costs of production for these goods, must be recorded in the income statement.

The amendments are valid for fiscal years commencing on or after January 1, 2022 and are to be applied retrospectively to property, plant, and equipment that has been brought to operational readiness during the reporting period of its initial application. Jenoptik does not expect the amendments to have any or any significant impact on the consolidated financial statements.

Amendments to IAS 37: Onerous contracts – costs for the performance of a contract. In May 2020, the IASB published amendments to IAS 37 in order to specify the costs which an entity has to take into consideration when assessing whether a contract is onerous or loss-making. The amendment is based on costs which relate directly to the contract (directly related cost approach). The costs associated with the performance of contracts for the supply of goods or the provision of services, include both the directly attributable (incremental) costs of the performance of the contract as well as overheads that relate directly to activities for the performance of the contract. General administrative expenses are not directly related to the contract and are therefore not covered by the contract performance costs, unless the contract makes express provision for these to be passed on to the customer.

The amendments are valid for fiscal years commencing on or after January 1, 2022. Since the current accounting method already corresponds to the specification of IAS 37, Jenoptik does not expect any impact on the consolidated financial statements.

Amendments to IFRS 3: Reference to the framework concept. The IASB published amendments to IFRS 3 in May 2020: The amendments replace the reference to the Framework for the Preparation and Presentation of Financial Statements published in 1989 with a reference to the Financial Reporting Framework Concept published in March 2018, with no significant amendment to the existing rules of the Standard.

The amendments are valid for fiscal years commencing on or after January 1, 2022 and are to be applied prospectively. Jenoptik does not anticipate any significant impact on the consolidated financial statements.

Annual improvement process (2018–2020) – Amendment to IAS 41: Taxation for valuations reported at fair value. IAS 41 is not applicable to the Group. This amendment will therefore have no material impact on the consolidated financial statements.

Annual improvement process (2018–2020) – Amendment to IFRS 1: Subsidiaries as first-time users. As part of its annual improvement process to the IFRS for the 2018-2020 cycle, the IASB carried out an amendment to IFRS 1. The amendment allows subsidiaries applying paragraph D16(a) of IFRS 1 to value accumulated conversion differences based on the amounts reported by the parent company, based on the date on which the parent company switched to IFRS. This amendment is also valid for associated entities and joint ventures which apply IFRS 1.D16(a).

The amendment is valid for fiscal years commencing on or after January 1, 2022. Early application is allowed. Since the Jenoptik Group applies the accounting according to IFRS it does not expect any impact on the consolidated financial statements.

Annual improvement process (2018–2020) – Amendment to IFRS 9: Charges for the 10% current value test in relation to the derecognition of financial liabilities. The amendment to IFRS 9 clarifies which charges an entity has to take into account when assessing whether the terms of a new or modified financial liability differ materially from those of the original financial liability. This only includes charges which have been paid or received between the borrower and the lender, including those charges which have been paid or received either by the borrower or by the lender on behalf of the other respectively.

The amendment is valid for fiscal years commencing on or after January 1, 2022. Early application is allowed. Jenoptik does not expect the amendments to have any significant impact on the consolidated financial statements.

Annual improvement process (2018–2020) – Amendments to IFRS 16: Lease incentives. The amendment deletes the presentation of the reimbursement for tenant installations by the lessor from Explanatory Example 13 to IFRS 16 in order to remove confusion regarding the treatment of lease incentives that might result from the presentation of lease incentives in this example.

The amendment is valid for fiscal years commencing on or after January 1, 2022. Early application is allowed. Jenoptik does not anticipate any impact on the consolidated financial statements.

Standards which have been published but not yet adopted by the EU as mandatory

The following standards published by the IASB have not yet been adopted by the European Union.

Amendments to IAS 1: Categorization of liabilities as current or non-current. In January and July 2020, the IASB published amendments to IAS 1 in order to clarify the rules on the classification of liabilities as current or non-current. These changes relate, among others, to the classification if financial conditions (covenants) exist. The rights of the reporting entity as at the reporting date are therefore definitive for the classification of liabilities. A liability is to be classified as non-current if the entity is entitled to postpone the settlement of the liability by at least 12 months after the reporting date of the balance sheet, taking into account the circumstances or expectations on the respective reporting date.

The amendments are valid for fiscal years commencing on or after January 1, 2023. Based on the amendments to the standard, a different classification and a related reclassification of existing liabilities in the Jenoptik Group may be required.

Amendments to IAS 1 and IFRS Practice Statement 2: Disclosure of accounting methods. In accordance with the amendments to IAS 1 and IFRS Practice Statement 2 published by the IASB in February 2021, in future only material accounting methods will have to be presented in the notes. In the future, this should eliminate irrelevant information and focus on entity-specific explanations instead of standardized explanations. The amendments also include guidance and explanatory examples which are intended to simplify the assessment as to when to classify information on accounting methods as material.

The amendments to IAS 1 are valid for fiscal years commencing on or after January 1, 2023. The scope of the disclosures in the notes on accounting methods in Jenoptik's consolidated financial statements, will change in accordance with the requirements.

Amendments to IAS 8: Definition of accounting-related estimates. In February 2021, the IASB published amendments to IAS 8 introducing a new definition of accounting-related estimates. The amendments clarify to what extent amendments to estimates differ from amendments in accounting methods and corrections to errors.

The amendments are valid for fiscal years commencing on or after January 1, 2023. They are to be applied to amendments in accounting-related estimates and accounting methods made at or after the beginning of this fiscal year. Earlier application is allowed. Jenoptik does not anticipate any impact on the consolidated financial statements.

Amendments to IAS 12: Deferred taxes relating to assets and liabilities resulting from one single transaction. In May 2021, the IASB published amendments to IAS 12 that specify how an entity accounts for income taxes, including deferred taxes. Under certain circumstances, entities are exempt from recognizing deferred taxes when they recognize assets or liabilities for the first time. Until now, there has been uncertainty as to whether the exemption applies to transactions in the context of leases and dismantling obligations. The amendments clarify that this exemption does not apply and that entities must recognize deferred taxes on such transactions.

The amendments are valid for fiscal years commencing on or after January 1, 2023 and may be applied early. Jenoptik does not anticipate any material impact on the consolidated financial statements.

IFRS 17: Insurance contracts. The standard is not applicable to the Group and will therefore have no impact on the consolidated financial statements:

1.3 Estimates

The preparation of the consolidated financial statements in accordance with IFRS, as are to be applied in the EU, requires that assumptions be made for certain items, affecting their recognition in the consolidated statement of financial position or in the consolidated statement of comprehensive income, as well as the disclosure of contingent receivables and liabilities. All assumptions and estimates are made to the best of the Group’s knowledge and belief in order to provide a true and fair picture of the asset, financial, and earnings situation of the Group.

The underlying assumptions and estimates are continually reviewed. This gives the author of the consolidated financial statements a certain amount of discretionary leeway. Against the background of the Covid-19 pandemic, there is increased uncertainty as to estimates and risks with regard to significant adjustments to carrying amounts. The assumptions and estimates made for the preparation of these consolidated financial statements relate mainly to:

- the assumptions and parameters for the valuation of intangible assets identified in the context of purchase price allocations (see section “Corporate acquisitions and disposals” from page 175 on),
- the valuation of contingent purchase price liabilities arising from mergers (see section “Corporate acquisitions and disposals” from page 175 on as well as “Financial instruments” from page 228 on),
- the determination of the fair value for the valuation of non-current assets held for sale or disposal groups and discontinued operations (see section “Non-current assets or disposal groups held for sale and discontinued operations” from page 185 on),
- the realizability of future tax breaks – in particular arising from losses carried forward – in the valuation of deferred tax assets (see section “Income taxes” from page 193 on),
- the assessment of impairment to goodwill, also under consideration of the Covid-19 pandemic (see section “Intangible assets” from page 197 on),
- the assessment of impairment to non-current assets in accordance with IAS 36, in particular with regard to the forecast cash flows also under consideration of the Covid-19 pandemic (see section “Impairment of property, plant, and equipment and intangible assets” from page 181 on),
- the assessment of the technical feasibility and future economic benefits, in particular with regard to the projected cash flows from development projects when capitalizing development costs in accordance with IAS 38 (see section “Intangible assets” from page 197 on),
- the definition of useful lives for the assessment of intangible assets and property, plant, and equipment (see section “Intangible assets” from page 197 on and section “Property, plant, and equipment” from page 201 on),
- the assessment of the likelihood of extension, purchase or termination options for the valuation of the leasing liabilities in accordance with IFRS 16, being exercised (see section “Leasing” from page 203 on),
- the method for valuing inventories, as well as for defining valuation routines and discounts, (see section “Inventories” from page 206 on),
- the estimate of anticipated losses as part of the valuation of contract assets and trade receivables (see section “Contract assets and contract liabilities” from page 185 on as well as “Trade receivables” from page 207 on),

- the actuarial parameters for the valuation of provisions for pensions and similar obligations (see section “Provisions for pensions and similar obligations” from page 186 on),
- the assumptions and methods for valuing other provisions – for example, warranty obligations and actuarial parameters of personnel provisions (see section “Other provisions” from page 218 on),
- the identification of separate payment obligations and allocation of the transaction price (see section “Revenue” from page 187 on).

2 Consolidation Principles

2.1 The Group of consolidated entities

Along with JENOPTIK AG, all significant subsidiaries have been included fully in the consolidated financial statements. The list of shareholdings is shown in the Notes in the section “List of Shareholdings in the Jenoptik Group” from page 245 on.

The consolidated financial statements of JENOPTIK AG includes 47 (prior year: 49) fully consolidated subsidiaries. Of which 12 (prior year: 14) have their legal seat in Germany and 35 (prior year: 35) have theirs abroad. 3 entities (prior year: 3) will continue to be included in the consolidated financial statements based on the at-equity method.

As at the closing on November 30, 2021, Jenoptik acquired BG Medical Applications GmbH and the SwissOptic Group. Further information is included in the section “Acquisitions and sales of entities” from page 175 on.

As part of the disposal of the non-optic process metrology business for grinding machines, all shares in JENOPTIK Industrial Metrology Switzerland SA, Peseux, Switzerland were sold and the entity deconsolidated.

A number of internal group mergers took place in the fiscal year 2021. In addition, two non-operating companies were dissolved. The mergers and dissolutions had no impact on the Group.

The subsidiaries in the table below have material investments held by non-controlling shareholders: Additional entities have insignificant investments held by non-controlling shareholders. The corresponding minority investments can be seen in the List of Shareholdings from page 245 on.

Name	Company's head office	Non-controlling interests
JENOPTIK Korea Corporation Ltd.	Korea	33.34
Trioptics Optical Test Instruments (China) Ltd.	China	49.00
Trioptics Hong Kong Limited (through Trioptics China)	Hong Kong	49.00
Trioptics Japan Co., Ltd.	Japan	38.75
Trioptics Korea Co., Ltd.	Korea	40.00
TRIOPTICS TAIWAN LTD.	Taiwan	49.00

The table on page 174 summarizes the financial information of subsidiaries with significant investments based on their individual financial statements including IFRS adjustments and impacts arising from the purchase price allocation. Impacts of the consolidation were not taken into account. The revenue, earnings, and cash flow figures of the TRIOPTICS entities in the prior year represent contributions with effect from the date of the initial consolidation.

2.2 Consolidation procedures

The assets and liabilities of the domestic and foreign entities included fully in the consolidated financial statements are recognized in accordance with the uniform accounting policies and valuation methods applicable for the Jenoptik Group.

At the acquisition date, the capital consolidation is based on the acquisition method. In this context, the assets and liabilities of the subsidiaries are recognized at fair values. Furthermore, identifiable intangible assets are capitalized and contingent liabilities classified as liabilities as defined in IFRS 3.23. The remaining difference between the purchase price and the acquired net assets corresponds to the goodwill. This is subject to an annual impairment test in the subsequent periods in accordance with IAS 36.

Receivables and payables as well as expenses and income between the consolidated entities are eliminated. The Group's inter-company goods and services are delivered and rendered both based on market prices as well as transfer prices which are determined on the basis of the "dealing-at-arm's-length" principle. Assets from inter-company deliveries included in the inventories and property, plant, and equipment are adjusted by interim results. Consolidation procedures recognized as profit or loss are subject to the delimitation of deferred taxes, with deferred tax assets and deferred tax liabilities being netted if there is a legally enforceable right to offset current tax refund claims against current tax liabilities and only if they concern income taxes levied by the same tax authority.

Changes in shareholdings in subsidiaries which reduce or increase the investment ratio without loss of control, are shown as transactions between equity investors, outside of profit or loss.

In the event of loss of control of a subsidiary, the assets and liabilities of the subsidiary are derecognized (deconsolidation) and any resulting gain or loss taken into account in the income statement.

There was no change in the consolidation methods compared with the prior year.

2.3 Foreign currency conversion

Annual financial statements of the consolidated entities prepared in foreign currencies are converted based on the functional currency concept as defined in IAS 21 "The Effects of Changes in Foreign Exchange Rates" by using the modified reporting date exchange rate method. Since the subsidiaries conduct their business activities independently from the financial, economic, and organizational aspects, the functional currency of the entities is generally identical to that of their respective national currency.

Assets and liabilities are consequently converted at the exchange rate on the reporting date, whereas income and expenses are converted at the annual average exchange rate which is determined on month wise. The resulting difference arising from the currency conversion is offset outside of profit or loss and shown separately in equity under foreign currency reserves.

If a consolidated entity leaves the group of consolidated entities, the corresponding difference arising from the foreign currency conversion is reversed through profit or loss.

in thousand euros	JENOPTIK Korea	Trioptics China	Trioptics Hong Kong	Trioptics Japan	Trioptics Korea	Trioptics Taiwan
Revenue	6,445 (6,417)	22,034 (4,292)	15,106 (5,567)	7,936 (2,241)	2,756 (1,226)	3,610 (4,434)
Earnings after tax	429 (705)	4,171 (-113)	2,072 (559)	411 (43)	-88 (317)	-36 (780)
Earnings after tax from non-controlling interests	143 (235)	2,044 (-56)	1,015 (274)	159 (17)	-35 (127)	-18 (382)
Other comprehensive income	-8 (-19)	649 (25)	450 (-271)	-132 (-73)	-38 (199)	315 (22)
Total other comprehensive income	421 (686)	4,821 (-88)	2,522 (288)	279 (-30)	-126 (516)	279 (802)
Total other comprehensive income from non-controlling interests	140 (229)	2,362 (-43)	1,236 (141)	108 (-12)	-50 (206)	137 (393)
Non-current assets	141 (363)	1,824 (1,879)	2,840 (3,343)	3,387 (3,863)	1,224 (1,496)	2,174 (2,417)
Current assets	3,336 (3,030)	11,886 (8,856)	9,225 (10,631)	3,706 (3,386)	2,900 (3,253)	3,298 (4,304)
Non-current liabilities	15 (38)	813 (989)	470 (553)	876 (936)	225 (274)	666 (726)
Current liabilities	939 (1,252)	5,669 (5,247)	4,544 (6,906)	1,464 (1,523)	424 (370)	1,213 (1,897)
Net assets	2,524 (2,103)	7,228 (4,498)	7,051 (6,515)	4,752 (4,790)	3,476 (4,105)	3,593 (4,099)
Net assets from non-controlling interests	842 (701)	3,542 (2,204)	3,455 (3,193)	1,841 (1,856)	1,390 (1,642)	1,760 (2,009)
Cash flow from operating activities	473 (1,036)	6,872 (920)	3,981 (1,130)	1,425 (-133)	46 (1,241)	-92 (200)
Cash flows from investing activities	47 (-9)	42 (1)	0 (0)	35 (-58)	-82 (5)	-1,613 (309)
Cash flows from financing activities	-30 (-32)	-2,425 (-2,129)	-1,987 (0)	-490 (-44)	-568 (-15)	-867 (-68)
Change in cash and cash equivalents	491 (995)	4,489 (-1,207)	1,994 (1,130)	970 (-235)	-604 (1,231)	-2,571 (442)

The figures in brackets relate to the prior year

Receivables and payables in the individual financial statements of consolidated entities prepared in a local currency which is not the functional currency of the subsidiary, are converted at the exchange rate on the balance sheet date in accordance with IAS 21. Differences arising from the foreign currency conversion are shown under other operating income or other operating expenses affecting the results and, if these are derived from financial transactions, are recognized under financial

income or financial expenses (see details on the Income Statement from page 189 on). This excludes currency conversion differences arising from loans which constitute a part of the net investment in a foreign operation. These differences from foreign currency conversions are recorded in other comprehensive income outside or profit or loss until the sale of the net investment; it is only at the time of their disposal that the cumulative amount is reclassified into the income statement.

The exchange rates used for the conversion are shown in the table below:

	1 EUR =	Annual average exchange rate		Exchange rate on the reporting date	
		1/1 to 31/12/2021	1/1 to 31/12/2020	31/12/2021	31/12/2020
Australia	AUD	1.5747	1.6554	1.5615	1.5896
Canada	CAD	1.4835	1.5294	1.4393	1.5633
Switzerland	CHF	1.0814	1.0703	1.0331	1.0802
China	CNY	7.6340	7.8708	7.1947	8.0225
Great Britain	GBP	0.8600	0.8892	0.8403	0.8990
Hong Kong	HKD	9.1988	9.2193*	8.8333	9.5142
India	INR	87.4861	84.5795	84.2292	89.6605
Japan	JPY	129.8575	121.7754	130.3800	126.4900
Korea	KRW	1,353.9456	1,345.1058	1,346.3800	1,336.0000
Malaysia	MYR	4.9026	4.7935	4.7184	4.9340
Singapore	SGD	1.5896	1.5736	1.5279	1.6218
Taiwan	TWD	33.0346	33.8093 *	31.5030	34.2880
USA	USD	1.1835	1.1413	1.1326	1.2271

* Average exchange rate from initial consolidation of the TRIOPTICS Group in September 2020

2.4 Acquisitions and sales of entities

Acquisitions

Acquisition of BG Medical Applications GmbH and the SwissOptic Group

With the signing of the contract in mid-October 2021 and the closing on November 30, 2021, JENOPTIK AG, via JENOPTIK Optical Systems GmbH and JENOPTIK Asia-Pacific Pte. Ltd., acquired 100 percent of the shares in the following entities respectively:

- BG Medical Applications GmbH (BG Medical, renamed JENOPTIK Medical GmbH in January 2022), Berlin, Germany
- SwissOptic AG, Heerbrugg, Switzerland
- SwissOptic (Wuhan) Co., Ltd., Wuhan, China

With the acquisition of SwissOptic (Wuhan) Co., Ltd., Jenoptik also acquired control of its subsidiary Berliner Glas Wuhan Trading Co., Ltd., Wuhan, China.

With this acquisition, Jenoptik is strengthening its global and fast-growing photonics business and, in addition to the semi-conductor equipment business, is significantly expanding, in

particular, its medical technology business. BG Medical and the SwissOptic Group have a workforce of around 500 employees worldwide.

The information below is based on provisional figures. In addition to the determination of the acquired net assets, the provisional nature relates to the valuation of the assets identified in the process of purchase price allocation as well as the determination of the purchase price with a view to the finalization of the closing accounts as at the date of acquisition. The finalization of the initial consolidation of BG Medical and the SwissOptic Group will take place in the fiscal year 2022.

The provisional purchase price of 322,636 thousand euros comprises a fixed cash component for the acquisition of the shares. The purchase in the amount of 326,454 thousand euros was paid in November 2021. Due to the provisional closing accounts, a receivable from the adjustment of the purchase price in the amount of 3,818 thousand euros was capitalized.

In return, the following net assets were acquired as at the date of the initial consolidation:

in thousand euros	Total
Non-current assets	311,492
Intangible assets	276,725
Property, plant, and equipment	34,176
Deferred tax assets	591
Current assets	70,037
Inventories	34,042
Current trade receivables	20,662
Other current assets	1,431
Cash and cash equivalents	13,902
Non-current liabilities	26,972
Pension provisions	4,019
Non-current financial debt	4,396
Deferred tax liabilities	17,866
Other non-current liabilities	692
Current liabilities	31,921
Other current provisions	7,039
Current financial debt	5,463
Current trade payables	11,182
Contract Liabilities	3,358
Other current liabilities	4,879

The acquired assets include receivables with a gross value of 21,060 thousand euros. The general default risk was taken into account through an impairment loss in the amount of the anticipated loss of 398 thousand euros. The acquired assets also include cash and cash equivalents amounting to 13,902 thousand euros.

In connection with the acquisition of shares in BG Medical and the SwissOptic Group, in addition to the revaluation of inventories, various customer relationships, a brand and an order backlog were identified as intangible assets as part of the purchase price allocation. The intangible assets are amortized over periods of between one month and 15 years. In addition, goodwill in the sum of 178,205 thousand euros was recorded in intangible assets, reflecting the acquisition of trained personnel and the synergy effects primarily in the areas of purchasing, research & development, and capacity optimization via the Wuhan site. The goodwill is allocated to the group of cash-generating units "Light & Optics" and is partially tax-deductible.

No contingent liabilities were identified during the corporate acquisition.

The costs incurred up to December 31, 2021 for the acquisition of BG Medical and the SwissOptic Group totaled 6,369 thousand euros. The costs incurred in 2021 were shown in other operating expenses.

The consolidated financial statements include revenues of 9,619 thousand euros and earnings after tax of minus 1,126 thousand euros from the inclusion of BG Medical and the SwissOptic Group. Earnings after tax include expenses from the scheduled amortization on the intangible assets identified within the framework of the purchase price allocation.

On the premise that the corporate acquisition would have already taken place as of January 1, 2021, the Jenoptik Group would show revenue of continuing operations of 864,848 thousand euros and earnings after tax of continuing operations of 94,554 thousand euros. In order to determine this information, it was assumed that the fair values and useful lives as of January 1, 2021 of the intangible assets identified in the context of the purchase price allocation, are identical to those as at the initial consolidation date. These proforma figures were produced solely for comparison purposes. They do not provide either a reliable indication of the operating results that would actually have been achieved if the acquisition had been made at the beginning of the period, nor of future results.

There were no further company acquisitions in the fiscal year 2021.

Acquisitions of the prior year:

Acquisition of TRIOPTICS

On the closing date of September 24, 2020, Jenoptik Optical Systems GmbH successfully completed the acquisition of the initial 75-percent stake in the optics specialist Trioptics GmbH, Wedel, Germany. As of December 31, 2021 Jenoptik had acquired the remaining 25 percent of Trioptics GmbH. The acquisition took place at terms which had already been firmly agreed in the prior year. On the basis of the existing control and present ownership of the remaining 25 percent of the shares, Trioptics GmbH had already been 100 percent consolidated in the prior year from the date of acquisition.

With the acquisition of Trioptics GmbH, Jenoptik also gained control over its subsidiaries as followed:

- TRIOPTICS Berlin GmbH, Berlin, Germany
- TRIOPTICS Singapore PTE. LTD., Singapore
- Trioptics Optical Test Instruments (China) Ltd., Beijing, China
- Trioptics Hong Kong Limited, Hong Kong
- Trioptics Japan Co., Ltd., Shizuoka, Japan
- Trioptics Korea Co., Ltd., Suwon, Korea
- TRIOPTICS TAIWAN LTD., Taoyuan, Taiwan
- Trioptics, Inc., Rancho Cucamonga, California, USA

In addition, through the acquisition of the shares in Trioptics GmbH, 50 percent of Trioptics France S.A.R.L., Villeurbanne, France, was also acquired, which will be included in the consolidated financial statements as a joint venture from the time of the closing.

With the takeover of Trioptics GmbH, Jenoptik is consistently strengthening its focus on high-growth industries of the future. The complementary portfolio of TRIOPTICS enables additional offers of measuring systems and production systems for sensor solutions and optical micro-components. TRIOPTICS employs over 400 people worldwide and generates more than half of its revenues in Asia.

The finalization of the initial consolidation took place in the first nine months of 2021 but did not lead to any adjustments to the intangible assets and to the goodwill identified in the provisional purchase price allocation.

The purchase price of 308,151 thousand euros consisted of a cash component for the acquisition of the 75 percent of the shares (220,701 thousand euros), a subsequent purchase price for the remaining 25 percent of the shares (nominal 78,148 thousand euros, present value 76,939 thousand euros) and several conditional purchase price components (nominal 12,517 thousand euros, present value 10,511 thousand euros) together. The outstanding purchase price liabilities are discounted as of the reporting date using an interest rate that is dependent on the term and risk.

The conditional components of the purchase price accounted for at fair value included earn-out components depending on the EBITDA for the years 2020 and 2021 as well as a revenue-related bonus/malus scheme based on the year 2021. The conditional components range between minus 15 million euros and up to plus 45 million euros. The development of the conditional liabilities and receivables from the acquisition of Trioptics

GmbH are shown in detail in the section “Financial instruments” from page 228 on.

In return, the following net assets were acquired at the time of initial consolidation:

in thousand euros	Total
Non-current assets	283,904
Intangible assets	254,062
Property, plant and equipment	24,164
Other non-current assets	5,678
Current assets	86,555
Inventories	39,070
Current trade receivables	10,277
Other current assets	6,668
Cash and cash equivalents	30,540
Non-current liabilities	28,809
Non-current financial debt	12,376
Deferred tax liabilities	13,431
Other non-current liabilities	3,002
Current liabilities	23,281
Other current provisions	3,124
Current financial debt	2,572
Current trade payables	2,928
Contract liabilities	10,610
Other current liabilities	4,048

The acquired assets included receivables with a gross value of 12,182 thousand euros. The general default risk was considered with an impairment loss in the amount of the expected loss of 1,905 thousand euros. The acquired assets also included cash and cash equivalents of 30,540 thousand euros.

In connection with the acquisition of the shares in Trioptics GmbH, in addition to the revaluation of inventories, a customer base, technologies, a brand and an order backlog were identified as intangible assets as part of the purchase price allocation. The amortization periods for intangible assets ranged from four and a half months to seven years. In addition, goodwill of 211,304 thousand euros was recognized for taking on the trained staff and for synergy effects from the areas of application of the optical components, the expansion of the customer base and the development of markets, which is included in the intangible assets. The goodwill was allocated to the group of cash-generating units “Light & Optics” and was not tax-deductible.

Contingent liabilities were not identified as part of the company acquisition.

Minority shareholders sometimes hold stakes in subsidiaries of Trioptics GmbH. The non-controlling interests in the companies were each considered with their share of the revalued net assets without recognizing goodwill. The valuation of the existing non-controlling interests at the time of initial consolidation was 10,218 thousand euros.

From the inclusion of TRIOPTICS, the consolidated financial statements in the prior year included revenue of 27,806 thousand euros and earnings after tax of minus 34 thousand euros. Earnings after tax included the expenses from the scheduled amortization of the intangible assets identified as part of the purchase price allocation.

Acquisition of INTEROB

On February 4, 2020, Jenoptik acquired 100 percent of the shares in INTEROB, SL, Valladolid, Spain, and INTEROB RESEARCH AND SUPPLY, SL, Valladolid, Spain, (together INTEROB) via JENOPTIK Automation GmbH.

The purchase price of 34,726 thousand euros consisted of a cash component (29,437 thousand euros) and a conditional component (nominal 7,113 thousand euros, present value 5,289 thousand euros) based on the achievement of agreed key earnings figures in 2020 until 2022 and recognized at fair value at the time of initial consolidation.

In return, Jenoptik acquired the following net assets at the time of initial consolidation:

in thousand euros	Total
Non-current assets	30,779
Intangible assets	27,805
Property, plant and equipment	2,730
Other non-current assets	244
Current assets	20,782
Current trade receivables	7,270
Contract assets	12,258
Other current assets	1,047
Cash and cash equivalents	207
Non-current liabilities	5,000
Non-current financial debt	2,757
Deferred tax liabilities	2,178
Other non-current liabilities	65
Current liabilities	11,835
Other current provisions	4,184
Current financial debt	6,557
Other current liabilities	1,094

In connection with the acquisition of the shares in INTEROB, a customer base and the order backlog were identified as intangible assets as part of the purchase price allocation. In addition, goodwill of 19,841 thousand euros was recognized for taking over the trained staff and for synergy effects from other areas of application in the field of automation solutions and robotics applications, the expansion of the customer base and the development of new markets. This is included in intangible assets. The goodwill of INTEROB was assigned to the group of cash-generating units "Light & Production" and was not tax-deductible.

Under the fiction that both company acquisitions had already taken place on January 1, 2020, the prior year's revenue of the continuing operations would have been 664,107 thousand euros and the earnings after tax of the continuing operations would have been 33,435 thousand euros. To determine this information, it was assumed that the fair values and useful lives of the intangible assets identified as part of the purchase price allocation as of January 1, 2020 are identical to those at the time of initial consolidation. These pro forma figures have been prepared for comparison purposes only. They are not a reliable indication of the operating results that would actually have been achieved had the acquisition occurred at the beginning of the period or of future results.

Disinvestments

Sale of the crystal growth business

At the beginning of July 2021 Jenoptik concluded an agreement for the sale of the crystal growth business to Hellma Materials GmbH. The closing date was August 31, 2021.

Sale of the non-optical process metrology business

In July 2021, Jenoptik reported the sale of its non-optical process metrology business for grinding machines to Marposs. The closing date was July 30, 2021. As part of the sale, all shares in JENOPTIK Industrial Metrology Switzerland SA, Peseux, Switzerland, were also sold.

Further information on the effects of the disposal of the crystal growth and non-optical process metrology businesses on the consolidated financial statement of Jenoptik can be found in the section "Other operating income" from page 190 on and in the section "Cash Flow Statement" from page 223 on.

Sale of VINCORION

On November 25, 2021 Jenoptik signed a contract on the sale of the VINCORION division, comprising the one-hundred percent owned subsidiaries JENOPTIK Advanced Systems GmbH, JENOPTIK Power Systems GmbH and JENOPTIK Advanced Systems, LLC. The purchaser was a fund managed by STAR Capital Partnership LLP.

With the conclusion of the binding purchase agreement, the VINCORION business segment is classified as discontinued operation and the assets and liabilities are shown as held for sale. Detailed information on the discontinued operation is provided in section "Discontinued operation" from page 194 on.

There were no further sales of companies in the fiscal year 2021.

2.5 Notes on other entities

Jenoptik holds shares in 6 (prior year 6) other entities with a maximum 50 percent investment quota respectively. These investments are of minor importance respectively and overall, for the asset, financial, and earnings situation of Jenoptik. Therefore, based on the principle of cost effectiveness and materiality, the equity valuation was not applied to these investments. The general disclosures on the investments are contained in the list of shareholdings of the Jenoptik Group from page 245 on.

3 Accounting Policies and Valuation Methods

3.1 Effects on accounting and valuations associated with Covid-19

In view of the continuing impact of the Covid-19 pandemic on the operating activities of the Jenoptik companies, an ongoing analysis is conducted of the potential effects on the statement of financial position and the effects on the group asset, financial, and earnings position.

The Covid-19 pandemic is having operational effects on Jenoptik's earnings situation, particularly as a result of mobility restrictions. Risks in the global supply chains caused by Covid-19 also have an impact on purchase prices and inventories in the form of higher stocks to secure business operations. Both mobility restrictions and pandemic-related delays in the delivery of components also led to delays in revenue recognition and project postponements.

In addition, there are accounting and valuation effects, particularly from government grants that the Group has used in the prior year, to mitigate the economic consequences of Covid-19 and the overall economic situation. These relate to short-time working allowances and other government benefits, in part granted abroad. Insofar as the national requirements for the respective financial support are virtually certain to be met, the entitlement is recognized in the statement of financial position under other non-financial assets. In the fiscal year, support payments, in particular up to the 2nd quarter of 2021, totaling 3,028 thousand euros (prior year: 12,514 thousand euros) were recognized through profit or loss, leading primarily to lower personnel costs and consequently a corresponding improvement in the earnings situation. As of the balance sheet date, there were outstanding receivables from grants amounting to 262 thousand euros (prior year: 2,462 thousand euros).

Further explanations of accounting and valuation effects are contained in the respective disclosures in the income statement and statement of financial position.

3.2 Goodwill

Goodwill as stated in IFRS 3 corresponds to the positive difference between the consideration for a corporate merger and the newly acquired, revalued assets and liabilities, including certain contingent liabilities remaining after a purchase price allocation. Within the framework of this purchase price allocation,

the identifiable assets and liabilities are not recognized at their previous carrying amounts but at their fair value. As part of the gaining of control over the acquired entity, non-controlling interests are valued according to the share of identifiable net assets.

Goodwill is recognized as an asset and subject to an impairment test at least once a year on a defined date or whenever there is an indication that the cash-generating unit could be impaired. An impairment loss to goodwill is recognized immediately through profit or loss and not reversed in later reporting periods.

3.3 Intangible assets

Intangible assets acquired in return for payment, primarily patents, trademarks, software, and customer relationships, are capitalized at their acquisition costs. Intangible assets with finite useful lives are subject to schedule amortization on a straight-line basis over their economic useful lives. This is generally a period of between three and ten years. The Group reviews whether its intangible assets with finite useful lives have suffered an impairment loss (see section "Impairment losses on property, plant, and equipment and intangible assets").

Internally generated intangible assets are capitalized if the recognition criteria specified in IAS 38 "Intangible assets" have been fulfilled.

Development costs are capitalized if a newly developed product or process can be clearly identified, is technically realizable and if there plans for production, own use, or marketing. Furthermore, it is assumed that, if capitalized, there is sufficient probability that the development costs will be covered by future financial cash inflows and can be reliably determined. Finally, there must be adequate resources available to conclude the development and enable the asset to be used or sold.

Internally generated intangible assets are subject to scheduled amortization on a straight-line basis over their anticipated useful lives. This is generally a period of between five and ten years.

Intangible assets not ready for use are subject to impairment tests at least on an annual basis (see section "Impairments of property, plant, and equipment and intangible assets"). Capitalized development costs are subject to scheduled amortization over the anticipated sales period of the products – in principle

however no longer than five years. In this context, the acquisition and production costs cover all the costs directly attributable to the development process as well as appropriate portions of the overheads relating to the development. If the requirements for capitalization have not been fulfilled, the expenditures are recognized through profit or loss in the year they occurred.

Amortization on intangible assets is apportioned on the basis of the causer principle to the corresponding function areas in the income statement.

Research costs are recorded as current expenses in research and development expenses in accordance with IAS 38.

3.4 Property, plant, and equipment

Property, plant, and equipment are valued at acquisition and production cost, less scheduled, straight-line depreciation. The depreciation method reflects the anticipated pattern of consumption of the future economic benefits. If the acquisition cost of individual components of an asset is material (particularly in the case of buildings), the depreciation is applied separately for each part of the property, plant, and equipment. Where necessary, impairment losses reduce the amortized acquisition and production cost. In principle, government grants for non-current assets are deducted from the acquisition and production costs in accordance with IAS 20 "Accounting for and Presentation of Government Grants" (see section entitled "Government grants"). Production costs are calculated on the basis of directly attributable specific costs as well as proportionate, directly attributable cost of materials and production overheads including depreciation. In accordance with IAS 23 "Borrowing Costs", borrowing costs directly attributable to acquisition or production costs of a qualifying asset are capitalized as a portion of the acquisition or production costs.

Costs incurred for repairing property, plant, and equipment are generally treated as an expense. Subsequent acquisition costs for any components of property, plant, and equipment replaced at regular intervals, can be capitalized insofar as future economic benefits can be reasonably expected and the respective costs can be reliably measured.

Scheduled depreciation, unchanged from the prior year, is essentially based on the following useful lives:

	Useful life
Buildings	12–80 years
Machinery and technical equipment	5–15 years
Other equipment, operating and office equipment	3–15 years

If any items of property, plant, and equipment are decommissioned, sold or relinquished, the gain or loss arising from the difference between the proceeds of the sale and the residual carrying amount are recorded under other operating income or other operating expenses.

3.5 Impairment of property, plant, and equipment and intangible assets

Property, plant, and equipment and intangible assets with finite useful lives are assessed at each reporting date to see if there are any indications of possible impairment losses for the corresponding assets in accordance with IAS 36 “Impairment of Assets”. If any such indications for specific assets or a cash-generating unit are identified, an impairment test will be performed on these assets.

The differentiation between the cash-generating units for goodwill purposes is carried out on division level and for property, plant, and equipment and other intangible assets on the level of the reporting units.

As part of the impairment test, the recoverable amount of an asset or cash-generating unit is first determined and then compared with the corresponding carrying amount in order to identify if there is any need for an impairment to be applied.

The recoverable amount is the higher of an asset’s fair value less costs to sell and value in use of an asset or a cash-generating unit.

The amount designated as at fair value less costs to sell is that which could be achieved through the sale of an asset in a transaction at arm’s length between knowledgeable and willing parties.

Value in use is determined based on discounted anticipated future cash inflows. This is based on a fair market interest rate before tax that reflects the risks of using the asset that are not yet considered in the estimated future cash inflows.

If the recoverable amount of an asset is estimated to be less than the carrying amount, it is then depreciated to the recoverable amount. The impairment loss is immediately shown in other operating expenses, affecting profit or loss.

If an impairment loss is reversed in a subsequent accounting period, the carrying amount of the asset must then be adjusted to the recoverable amount determined. The maximum limit for the reversal of an impairment loss is determined by the amount of the amortized acquisition or production costs that would have been recorded if an impairment loss had not been recognized in prior periods. The impairment reversal is immediately shown in other operating income, affecting profit or loss.

3.6 Government grants

IAS 20 distinguishes between grants related to acquiring non-current assets and grants related to income.

IAS 20 specifies in principle that public grants which mainly relate to public subsidies to mitigate the economic consequences of Covid-19 and the overall economic developments in the year under review, are recognized through profit or loss in the same period.

In the Jenoptik Group grants for non-current assets are deducted from the acquisition and production costs. Correspondingly, the amount to be written off is determined on the basis of the reduced acquisition and production costs.

3.7 Leases

On commencement of contract, the Group assesses whether a contract constitutes or contains a lease. This is the case if the contract provides the entitlement to control the use of an identified asset for a specific period in return for payment of a remuneration. As a lessee, Jenoptik fundamentally accounts for the rights of use of the lease items and the corresponding leasing liabilities in accordance with IFRS 16.

Rights of use are valued at acquisition costs less all accumulated depreciation. The acquisition costs include the recognized leasing liabilities, the initial direct costs incurred as well as the lease payments made at or before provision. Rights of use are subject to planned, straight-line depreciation over the shorter of the two periods of duration and anticipated useful life and for real estate class assets amount to one to 25 years and for machinery, technical equipment as well as other equipment, operating and office equipment class assets, one to five years. The rights of use are recognized in the item in the statement of financial position in which the underlying asset would be shown if it were the property of the Group.

Leasing liabilities are recognized at current value. These entail fixed payments, variable lease payments linked to an index or interest rate, payments arising from a contractually guaranteed residual value, payments from the exercising of extensions or purchase options deemed to be sufficiently secure and contractual penalties for the exercising of sufficiently secure termination options.

When calculating the current value of the lease payments, the Group applies its incremental borrowing rate on the date of provision if the interest rate underlying the lease cannot be readily determined. The Group's leasing debt are shown in the items "non-current financial debt" and "current financial debt".

The Group makes use of the practical expedients offered by IFRS 16 and recognizes the lease payments for short-term leases (excluding property) as well as low-value leased assets as expenses on a straight-line basis over the term of the lease.

3.8 Investment property

Investment property comprises plots of land and buildings held for gaining rental income or for the purpose of their value increasing. These properties are not held for the Group's own production, for supplying goods or rendering services, for administration purposes or for any sales in the ordinary course of business activities.

In accordance with the right of choice under IAS 40 "Investment Property", such assets are to be accounted for at the amortized acquisition or production costs. The fair values to be stated are determined using the discounted cash flow method.

The straight-line depreciation method is based on a useful life of between 20 to 80 years.

In accordance with IAS 36, depreciation resulting from impairment losses on investment property is made if the value in use or fair value less costs to sell of the respective asset is less than the carrying amount. If the reasons for an impairment loss resulting from depreciation from a prior period cease to exist, corresponding write ups are recorded. The maximum limit for the reversal of an impairment loss is determined by the amount of the amortized acquisition or production costs that would have been recorded if an impairment loss had not been recognized in prior periods.

3.9 Financial instruments

Financial instruments are contracts giving rise to a financial asset of one entity and to a financial liability or an equity instrument of another entity. As defined in IAS 32, such instruments include on the one side primary financial instruments such as trade receivables and trade payables or financial receivables and financial payables. On the other side, they also include derivative financial instruments which are used for hedging risks arising from fluctuations in interest and foreign currency exchange rates.

Financial assets and financial liabilities are recognized in the consolidated statement of financial position from the date on which the Group becomes a contractual party in a financial instrument.

Depending upon the Group's business model for managing assets and the question as to whether the contractual cash flows of the financial instruments exclusively constitute repayments and interest payments on the outstanding nominal amount, the existing financial instruments are categorized in accordance with IFRS 9 either as "at amortized acquisition costs", "at fair value outside profit or loss in other comprehensive income", or "at fair value recorded through profit or loss" and valued accordingly.

The amortized acquisition costs of a financial asset or a financial liability are defined as the amount at which a financial asset or financial liability was valued when recognized for the first time

- minus any repayments,
- minus any impairment losses or potential inability to be recovered, as well as
- plus/minus the cumulative distribution of any difference between the original amount and the amount repayable on maturity (e.g., premium and transaction costs). Under the effective interest method, this difference is spread over the full contractual term of the financial asset or financial liability.

The amortized acquisition costs for current receivables and payables generally reflect the nominal amount or the repayment value.

Fair value generally corresponds to the market or stock market value. If there is no active market, the fair value is determined by using financial mathematical methods such as by discounting estimated future cash flows at market interest rates or by applying standard option price models and by checking confirmations issued by the banks that sold the instruments.

a) Primary financial instruments

Shares in entities

Initial recognition in the statement of financial position is based on the fair value.

In the Jenoptik Group, all long-term shareholdings in companies are classified as “outside profit or loss at fair value in other comprehensive income” based on the exercising of the voting right granted in accordance with IFRS 9 and valued at fair value. In the absence of any identifiable market prices, the fair values of these financial instruments are determined on the basis of discounted cash flows. Changes in value are recorded in other comprehensive income outside of profit or loss.

Investments valued using the at-equity method

Shares in entities over which Jenoptik exerts key influence, as well as shares in joint ventures, are valued in accordance with the at-equity method under IAS 28. For this purpose, the original investment carrying amount is updated with the shares in the company’s Consolidated Statement of Changes in Equity to which the shareholders are entitled. Shares in the profit or loss are recognized through profit or loss, whilst shares in other comprehensive income are, by contrast, recorded outside profit or loss.

Loans

Loans involve credit granted by the Jenoptik Group and are to be valued at the amortized acquisition costs in accordance with IAS 9.

Non-current, non-interest-bearing loans and low interest-bearing loans are accounted for at current value. If any objective, substantial evidence of impairment can be identified, then unscheduled depreciation is applied.

Trade receivables

Trade receivables are non-interest bearing due to their short-term nature and are recognized at nominal value less impairment losses on the basis of anticipated bad debts (amortized acquisition costs). The anticipated bad debts are determined in accordance with IFRS 9 via the simplified method. In this context, consideration is given to both the individual default risk as well as an anticipated default risk derived from past events for a group of receivables with comparable default risks (portfolio-based impairment) through the recognition of a provision for risk in the amount of the bad debts anticipated over the entire period. When the loss of a trade receivable is finally realized, the receivable is derecognized by using any impairment previously recognized. Similarly, the receivable is derecognized when the contractual rights relating to the cash flows arising from the receivable expire, or the rights to receive the cash flows are transferred in a transaction in which all the risks and opportunities associated with the ownership of the receivable are transferred. As part of the factoring, the receivables are held for collection or in some cases for resale.

Other financial investments

Other financial assets are recognized at amortized acquisition costs. All identifiable default risks are accounted for by a corresponding impairment.

Non-current, non-interest-bearing or low interest-bearing receivables are discounted.

Current financial investments

In accordance with IFRS 9, current cash deposits and current financial receivables are classified as “at amortized acquisition costs” and securities as “at fair value through profit or loss” and valued accordingly.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, checks and bank credit balances available on demand with an original maturity of up to three months. These are recognized at the nominal amount less a provision for the risk of anticipated loan defaults.

Equity instruments

An equity instrument is any contractual agreement containing a residual interest in the assets of the Group after all liabilities have been deducted. Shares which have been issued are classified as equity, whereby the costs (less related income tax benefits) directly attributable to the issue of treasury shares, have been deducted from equity.

Liabilities to banks

Interest-bearing bank loans and overdraft lines of credit are accounted for at the amounts received less any directly attributable disbursement expenses. Financing costs, including premiums payable on repayment or redemption, are recognized in accordance with the accruals principle, using the effective interest method. Amortization via the effective interest method is included in the income statement as part of the financial expenses.

Other financial liabilities

In principle, financial liabilities are valued at amortized acquisition costs by applying the effective interest method. This does not apply to financial liabilities which are accounted for at fair value through profit or loss.

b) Derivative financial instruments

The Jenoptik Group uses derivative financial instruments for hedging risks arising from fluctuations in interest and foreign currency exchange rates. They serve to reduce earnings volatility resulting from interest and foreign currency exchange rate risks. Fair value is determined by considering the market conditions – interest rates, foreign currency exchange rates – at the balance sheet date and using the valuation methods presented below.

Derivative financial instruments are not used for speculation purposes. The use of derivative financial instruments is subject to a group guideline which governs the use of derivative financial instruments. The Group uses cash flow hedges to hedge risks from fluctuations in foreign currency exchange and interest rates.

Changes in the fair value of derivative financial instruments which serve to hedge cash flow risks, are documented. If the hedge accounting has been classified as effective, the changes in fair value are recognized outside of profit or loss in other comprehensive income. Reclassifications from equity to profit or loss are carried out in the period during which the hedged underlying transaction affects profit or loss. Fluctuations in value arising from financial instruments which are classified as not effective are recorded directly in profit or loss.

3.10 Inventories

Inventories are recognized at the lower of acquisition or production costs and their net realizable value.

The net realizable value is the estimated proceeds from sale less the estimated production costs and any further costs incurred up to sale. For determining the net realizable value, devaluation routines are applied in addition to case-by-case assessment. The range, market price (based on existing orders) as well as marketability, serve as indicators of lower net sales proceeds. In this context, the specific discount rates are regularly reviewed and, if necessary, adapted.

Acquisition costs also include any other costs incurred to restore the inventories to their current condition. These take into account any reductions such as rebates, bonuses or trade discounts.

Production costs include the full costs relating to production that have been determined based on normal production capacity utilization. In addition to direct costs, these also include the appropriate portion of the necessary material and production overheads as well as production related depreciation which can be directly attributable to the production process. In this context, particular account is taken of the costs that are allocated to specific production cost centers. Administrative expenses are also considered insofar as they can be allocated to production. If amounts at the reporting date have decreased owing to lower prices on the sales market, then these are recognized. In principle, the valuation of similar inventory assets is based on the average cost method. If the reasons that led to a write-down of inventories cease to exist and the net realizable value has consequently increased, the reversals of write-downs are recognized as a reduction in material expenses in the corresponding periods in which the reversal of the write-downs occurs.

3.11 Borrowing costs

Borrowing costs that can be directly attributed to the construction or production of a qualifying asset are capitalized as a portion of the acquisition or production costs of this asset.

3.12 Contract assets and contract liabilities

A contract asset is the as yet unconditional claim to the receipt of a consideration in return for goods or services transferred to a customer. If the Group meets its contractual obligations by transferring goods or services to a customer before the customer pays the consideration or before the payment is due, a contract asset will be recognized for the conditional claim to consideration in return. This gives rise to contract assets as the difference between the realized revenue from the respective order, less payments received and customer billings. Receivables from customers arising from invoices issued, are shown under trade receivables.

If the requested payments received and due, as well as the customer billings issued, exceed the realized revenue, a contract liability will be shown. A contract liability therefore constitutes the obligation of the group to transfer goods or services to a customer for which it, the Group, has received a consideration from the customer or for which a requested payment is due. Contract liabilities are recognized as proceeds as soon as the Group fulfills its contractual obligations.

The contractual liabilities additionally include obligations arising from agreed contractual penalties which must be taken into account in order to reduce turnover.

Contract assets reported in accordance with IFRS 15 are valued at the nominal value, taking into account impairment losses in the default amounts anticipated over the entire useful life.

3.13 Non-current assets or disposal groups and discontinued operation held for sale

Non-current assets or disposal groups held for sale

Non-current assets or disposal groups are classified as held for sale under IFRS 5 if their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is highly probable.

A transaction is considered highly probable if, on the reporting date, there are no significant risks to its completion, normally requiring the conclusion of binding contracts or at least agreement on all material terms of the contract.

Assets and liabilities classified as held for sale are reported separately as current items in the statement of financial position and valued at the lower of carrying amount and fair value less costs to sell.

Any impairment loss of a disposal group is first allocated to goodwill and then to the remaining assets.

Intangible assets and property, plant, and equipment classified as held for sale are no longer subject to scheduled depreciation/amortization.

Discontinued operation

A discontinued operation is a part of the entity that has been sold or is classified as held for sale and represents a separate, material line of business or geographic business unit.

The results of the discontinued operation are shown separately in the income statement. The comparison period is adjusted as though the business operation had been discontinued at the beginning of the comparison year.

3.14 Deferred taxes

The accounting for and valuation of deferred taxes is performed in accordance with IAS 12 "Income Taxes". Deferred tax assets and deferred tax liabilities are shown as separate items in the statement of financial position to consider future tax effects resulting from timing differences between the statement of financial position valuations of assets and liabilities and tax losses carried forward.

Deferred tax assets and deferred tax liabilities are computed in the amount of the anticipated tax burden or tax relief in subsequent fiscal years based on the tax rate applicable on the date of realization. The effects of changes in tax rates on deferred taxes are recognized in the reporting period during which the legislative procedure on which the change in the tax rate is based has been completed.

Deferred tax assets on differences in the statement of financial position and on tax losses carried forward are only recognized if it is probable that these tax advantages can be realized in the foreseeable future.

Deferred tax assets and deferred tax liabilities are offset against each other insofar as taxes are levied by the same authority and relate to the same tax period. In accordance with the regulations of IAS 12, there is no discounting of deferred tax assets and liabilities.

3.15 Provisions for pensions and similar obligations

Pensions and similar obligations comprise the pension obligations of the Jenoptik Group arising from both defined benefit as well as defined contribution retirement schemes.

In accordance with IAS 19, pension obligations for defined benefit schemes are determined by applying the so-called projected unit credit method. An actuarial expert opinion for this procedure is obtained at least once a year.

In Germany, the mortality rates are determined in accordance with the Klaus Heubeck guideline mortality tables 2018 G. The LPP 2020 mortality tables apply in Switzerland, whilst in France it's the current tables of the INSEE. Actuarial gains and losses are recognized outside profit or loss in other comprehensive income. Past-service expenses are shown under personnel expenses and the interest portion of the addition to provisions is recorded in the financial result.

Assets that meet the requirements for plan assets under IAS 19.8 are recognized at their fair value and offset against the pension obligations.

For defined contribution schemes, the contributions payable are recognized immediately as an expense.

3.16 Tax provisions

Tax provisions contain obligations arising from current income taxes, including uncertain tax positions. Deferred taxes are disclosed in separate items in the statement of financial position.

Tax provisions for corporation tax and business tax or similar income tax expenses are determined based on the taxable income of the consolidated entities, less any prepayments made.

3.17 Other provisions

In accordance with IAS 37 "Provisions, Contingent Liabilities, and Contingent Assets", provisions are set aside insofar as there is any current liability to a third party resulting from a past event that is likely to lead to an outflow of resources in the future and the amount of which can be reliably estimated. Other provisions are only set aside for legal or de facto liabilities to third parties that are more likely than not at the reporting date.

Provisions are recognized at their settlement value discounted at the reporting date, providing the interest effect is significant. The settlement value also includes the anticipated price or cost increases. The discounting is based on non-negative interest rates before taxes that reflect current market expectations regarding the interest effect and which are dependent upon the corresponding term of the liability. The interest portion arising from the compounded of the provision, as well as any effects of changes in interest rates, are recognized in the financial result.

Provisions are valued based on empirical values, taking the circumstances at the balance sheet date into consideration.

Provisions for onerous contracts are recognized in the amount of the liability overhang from the difference between the unavoidable costs of fulfilling the contract and the anticipated economic benefits.

Provisions for guarantees and warranties are set aside for individual cases and on a lump-sum basis. The amount of the provision is based on the historical development of guarantees and warranties as well as on a consideration of all future potential guarantee or warranty claims, weighted by the probability of their occurrence.

Claims to the right of recourse are only considered if these claims are virtually certain.

3.18 Share-based remuneration

The members of the Executive Board and some senior management personnel of JENOPTIK AG receive multi-year variable remuneration in the form of long-term incentives (LTI) or performance shares. Both types of these virtual shares are accounted for in accordance with IFRS 2 as share-based remuneration with settlement in cash. At the balance sheet date and depending upon the contractual provisions, a provision is set aside in the amount either of the pro rata temporis or full fair value of the payment obligation. Changes in fair value are recognized through profit or loss up to fulfillment.

3.19 Contingent liabilities

Contingent liabilities are potential obligations that are based on past events and whose existence is only confirmed by the occurrence of one or more uncertain future events, which are, however, outside the control of the Jenoptik Group. Moreover, current obligations can constitute contingent liabilities if there is insufficient certainty regarding the likelihood of outflows of resources to set aside a provision and/or the amount of the obligation cannot be reliably estimated. The valuations of the contingent liabilities correspond to the existing scope of liability at the balance sheet date. In principle, they are not accounted for in the statement of financial position but are explained in the Notes.

3.20 Revenue

Proceeds from contracts with customers are recognized in accordance with IFRS 15 if the control of the goods or services is transferred to the customer. These are recognized in the amount of the consideration in return that the Group is expected to receive in exchange for these goods or services. For sales transactions with multiple performance obligations, revenues are apportioned based on the estimated relative individual selling prices.

Proceeds from the sale of goods are generally recorded at the time when control of the asset passes to the customer. The determination of this timing considers, among other things, the transfer of the legal ownership, the physical transfer of possession and any potentially agreed acceptance of the products by the customer.

In certain cases, the goods produced by Jenoptik as part of a specific order process represent assets with no alternative benefit to the Group. Subject to a claim for payment for the service

rendered to date, the revenue is realized over a specific period, whereby the degree of completion is determined according to the input-oriented cost-to-cost method. This applies both to the production of individual assets as well as to development projects with subsequent volume production (customer-specific volume production).

Revenue from the rendering of services which represent separate performance obligations within the meaning of IFRS 15 and from which the customer can benefit at the same time as the service is rendered, are recognized over time according to the degree of completion as at the balance sheet date, whereby the degree of completion is generally determined according to the input-oriented cost-to-cost method.

The Group is usually subject to statutory warranties for the repair of defects that were present at the time of sale. These so-called assurance-type warranties are recognized under provisions for warranties in accordance with IAS 37. If agreed guarantees and warranty claims significantly exceed the usual framework (so-called service-type warranties), these are assessed and accounted for as a separate service obligation. In this case, the revenue for the applicable portion is realized on a straight-line basis over the agreed period of the service-type warranty.

Rental income received from investment property is recognized on a straight-line basis over the term of the corresponding rental contracts and disclosed in revenue.

If a contract contains several delimitable components (multi-component contracts), these will be implemented separately in accordance with the above principles.

In determining the consideration in return that Jenoptik receives for fulfilling a customer order, agreed variable components are estimated at the beginning of the contract and then included in the transaction price when it is highly likely that the elimination of the uncertainty associated with the variable components of the consideration in return will not lead to a cancellation of revenue which has already been recognized. At Jenoptik, this applies to both agreed discounts and bonuses as well as to possible contractual penalties.

Since advances received from the customer are generally short-term, the Group takes advantage of the simplification relief offered by IFRS 15 and refrains from taking a financing component into account when determining the consideration in return.

3.21 Cost of sales

Cost of sales show the costs incurred to generate revenue. This item also includes the costs for setting aside provisions for warranties and guarantees. The scheduled depreciation/amortization on intangible assets and property, plant, and equipment is shown in the respective functional costs according to their cause and included in cost of sales insofar as they are attributed to the production process.

3.22 Research and development expenses

Research and development expenses include non-capitalizable research and development expenses, except for research and development expenses for customer orders which are disclosed under cost of sales..

3.23 Selling expenses and general administrative expenses

Along with personnel expenses and cost of materials, selling expenses include the costs incurred for distribution, advertising, sales promotion, market research, and customer service. In addition, selling expenses also include the costs for contract initiation which are immediately recognized as an expense as a result of the application of the practical remedy under IFRS 15, since the period of depreciation for the asset that the Group would otherwise have recognized is not more than one year. Amortization of customer relationships and order backlogs acquired as part of corporate mergers are also recorded in the selling expenses.

General administrative expenses include personnel expenses and the cost of materials as well as administration-related depreciation.

3.24 Impairment gains and losses

Impairments to and reversals for trade receivables as well as contract assets in accordance with IFRS 9 are reported in the consolidated income statement in a separate item.

3.25 Other operating income and expenses

Income from the reversal of provisions is recorded in the functional costs, insofar as the provision was also set aside in the corresponding functional costs. If the provision was set aside in other operating expenses, the provision reversal will also be shown in other operating expenses. Furthermore, these items include currency exchange gains and losses arising from operational receivables and liabilities as well as net gains and losses arising from hedging instruments for these items. The items also include effects arising from the hedging of net positions. In addition to restructuring expenses, expenses for group projects are also allocated to other operating expenses. Income and expenses from the measurement of the fair value of contingent considerations arising from corporate acquisitions are shown in these items if the contingent considerations are dependent upon financial parameters within the EBIT. Similarly, gains and losses from the sale of consolidated entities as well as the contributions to earnings by investments, accounted for using the at-equity method and other taxes, are recognized in this item.

3.26 Investment income and investment expenses

The investment income and investment expenses of the Group mainly comprise income from dividend payments from investments and income from current financial investments. Impairment losses and reversals of impairment losses on financial investments are also recognized in these items.

3.27 Financial income and financial expenses

The financial income and financial expenses of the Group mainly comprise interest income and interest expenses. In addition, the financial result includes currency exchange gains and losses arising from financial assets and liabilities as well as net gains and losses arising from hedging instruments for these financial assets and liabilities.

4 Disclosures on the Statement of Income

With the conclusion of the binding purchase agreement the VINCORION segment has been classified as a discontinued operation. The results of this discontinued operation are shown separately in the income statement (see section "Discontinued operation" from page 194 on) and the information for the comparative period accordingly adjusted. The following information on the income statement relates to the continuing operations.

4.1 Revenue

Revenue increased overall by 135,251 thousand euros or 22.0 percent to 750,717 thousand euros compared to 2020.

Detailed disclosures on revenue by division and region are shown in the Segment Report from page 225 on.

A breakdown of revenue, recognized over time and at a point in time, is shown in the table below. The increase in revenue over time correlates with the overall higher level of external revenue compared to the prior year.

The revenue over time included revenue from customer-specific volume production in the sum of 127,516 thousand euros (prior year: 124,529 thousand euros). In addition, sales for customer-specific individual production, services provided and arising from the Traffic Service Provision contracts were recorded recorded over time.

Revenue in the Light & Safety Division also included other revenue from embedded operating lease contracts in the sum of 10,048 thousand euros (prior year: 11,139 thousand euros).

As in the prior year, no significant revenue was recognized for performance obligations that had already been fulfilled in previous years.

4.2 Cost of sales

in thousand euros	1/1 – 31 /12/2021	1/1 – 31 /12/2020
Cost of materials	283,294	232,165
Personnel expenses	150,846	119,454
Depreciation and amortization	25,748	24,708
Other expenses	33,926	14,390
Total	493,814	390,718

In contrast to 2020 cost of sales showed an overall increase of 103,096 thousand euros or 26.4 percent to 493,814 thousand euros. These consequently rose at a stronger rate than revenue. This was primarily the result of increased material and personnel expenses.

4.3 Research and development expenses

The research and development expenses cover all expenses attributable to research and development activities. This income statement item did not include expenses paid by customers in connection with research and development services in the sum of 20,330 thousand euros (prior year: 13,484 thousand euros). These were allocated to cost of sales.

In the fiscal year just past, expenses in the sum of 4,198 thousand euros (prior year: 3,606 thousand euros) were capitalized in the intangible assets for internal development projects of the continuing operations.

in thousand euros	Light & Optics	Light & Production	Light & Safety	Other	Total
External revenue	460,728	176,174	110,101	3,714	750,717
	(321,395)	(175,548)	(114,008)	(4,516)	(615,466)
thereof recognized over time	160,665	94,745	40,283	3,714	299,407
	(137,901)	(88,956)	(39,469)	(4,516)	(270,842)
Thereof recognized at a point in time	300,063	81,429	69,818	0	451,310
	(183,494)	(86,592)	(74,538)	(0)	(344,624)

The figures in brackets relate to the prior year

4.4 Selling expenses

In 2021, selling expenses increased overall compared to 2020 by 12,597 thousand euros or 16.3 percent to 89,693 thousand euros. This is due to the costs of the entities acquired in 2020 which were included for the first time over a full fiscal year.

Selling expenses essentially comprised material costs, including purchased services, in the sum of 1,951 thousand euros (prior year: 4,363 thousand euros), personnel expenses in the sum of 52,454 thousand euros (prior year: 44,503 thousand euros) and depreciation in the sum of 15,499 thousand euros (prior year: 12,030 thousand euros).

4.5 General administrative expenses

In 2021, general administrative expenses reduced compared to the prior year by 392 thousand euros to 53,462 thousand euros.

General administrative expenses essentially comprised personnel expenses in the sum of 36,876 thousand euros (prior year: 36,338 thousand euros), depreciation in the sum of 4,216 thousand euros (prior year: 4,001 thousand euros) and other expenses in the sum of 5,259 thousand euros (prior year: 5,839 thousand euros).

4.6 Expenses according to types of expense

The following main types of expenses are included in revenue, selling, and administrative expenses as well as in the research and development expenses:

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Cost of materials	300,597	241,966
Personnel expenses	281,805	238,464
Depreciation and amortization	47,584	43,401
Other expenses	45,870	37,257
Total	675,855	561,088

The increase in all types of expenses is in particular the result of the increased revenue volume and the expenses for the company acquisitions of the prior year included for the whole year in 2021. The increase in depreciation and amortization resulted in particular from the intangible assets identified as part of the purchase price allocation for acquisitions.

4.7 Impairment gains and losses

The impairment gains and losses reported in this item in accordance with IFRS 9 relate to trade receivables and contract assets.

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Impairment gains	2,203	5,669
Impairment losses	3,354	1,580
Total	-1,151	4,090

In total, impairment gains and losses posted were negative. Impairment losses exceeded reversals of impairment losses on trade receivables. The markedly positive effect in the prior year was attributable to an increased focus on receivables management and the associated high one-off effect on the reversal of impairments. The on-going continuation of these measures is also reflected in a good maturity structure of receivables in 2021.

Further information on income and expenses in connection with impairments to receivables is shown in section "Financial instruments" (from page 228 on) as well as section "Current trade receivables" (from page 207 on).

4.8 Other operating income

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Income from adjustment of earn-out liabilities	30,509	1,567
Income from currency gains	8,554	5,555
Income from the disposal of subsidiaries and other business units	3,874	0
Income from benefits in kind	1,781	1,936
Income from services, offsets and rental	1,143	1,448
Income from government grants	1,069	1,166
Income from at-equity accounting	995	703
Income from damage claims/ insurance payments	859	398
Income from reversal of impairments to intangible assets, and property, plant, and equipment	451	292
Income from the sale of intangible assets and property, plant and equipment and financial investments	219	1,563
Income from sales of materials	181	43
Others	1,112	1,831
Total	50,747	16,504

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The income from the adjustment to the fair values of contingent purchase price components relates to variable purchase price components arising from the acquisition of TRIOPTICS and INTEROB. The development of the contingent purchase price components is shown in the section "Financial instruments" from page 228 on.

Income from foreign currency exchange gains mainly include gains arising from fluctuations in exchange rates between the transaction date and the payment date of receivables and payables in foreign currencies, as well as exchange rate gains arising from the valuation at the exchange rate on the reporting date.

The gain from the sale of subsidiaries and other business units results from the sale of the crystal growth business and the non-optical process metrology business for grinding machines.

Income from services, offsets, and rentals which is not derived from the normal business activity of the entities, is shown under other operating income.

Income from government grants related essentially to grants for research and development projects that Jenoptik received from the Federal Ministry for Education and Research and other federal and European institutions.

Other operating income includes, among other things, income from the operation of staff canteens.

4.9 Other operating expenses

in thousand euros	1/1– 31/12/2021	1/1– 31/12/2020
Currency losses	8,583	7,331
Transaction costs	7,383	3,611
Expenses for group projects	1,744	3,300
Other taxes	658	454
Impairment losses to intangible assets, property, plant, and equipment and investment property	460	1,733
Expenses arising from services and rentals	360	202
Losses from the sale of intangible assets and property, plant, and equipment	259	663
Reorganization and restructuring	0	9,191
Expenses arising from fair value adjustment of contingent purchase price components	0	1,091
Others	900	639
Additions to reversals of provisions	-4,038	-641
Total	16,309	27,574

Other operating expenses have reduced by 40.9 percent compared to the prior year, to 16,309 thousand euros.

The expenses incurred from foreign currency exchange losses primarily include losses from changes in currency exchange rates between the transaction date and the date of payment of receivables or payables, as well as from the valuation at the exchange rate on the reporting date. Exchange rate gains resulting from these items are recognized under other operating income. Foreign currency gains and losses in 2021 led to a net loss of 29 thousand euros (prior year: net loss of 1,776 thousand euros).

The transaction costs include, in particular, consultation costs in connection with the acquisition of BG Medical and the SwissOptic Group, as well as costs for the auditing of potential further corporate acquisitions.

Group projects mainly involve non-capitalizable expenses for the implementation of a new group-wide ERP system, as well as expenses for measures designed to increase the efficiency of Jenoptik's management processes and organization.

Impairments to intangible assets and property, plant, and equipment are primarily the result of a property write-down. The write-down was based on future realizable rental income, lower by comparison with prior years.

Expenses for reorganization and restructuring in the prior year include cost-cutting and efficiency improvement measures which were required mainly as a result of the structural shift in the automotive industry towards electro-mobility and the ongoing Covid-19 pandemic.

In the Light & Production division in particular, after the successful implementation and completion of these measures, the restructuring provisions were partially reversed since employees could be transferred to other areas of the company and lower severance costs were incurred as a result. The effects from the reversal of these restructuring provisions are included in the item addition and reversal of provisions. More information on the development of the provisions can be found in the section "Other provisions" from page 218 on.

4.10 Investment income

in thousand euros	1/1– 31/12/2021	1/1– 31/12/2020
Impairment gains and losses on financial investments	– 228	– 75
Income from investments	820	1,715
Total	592	1,640

Investment income reduced by 1,048 thousand euros compared to 2020, to 592 thousand euros.

The result from investments included in particular income from the disposal of listed shares and bonds that Jenoptik took over with the acquisition of TRIOPTICS.

The investment result in the fiscal year 2020 included in particular the dividend from of a real estate company.

4.11 Financial income and financial expenses

in thousand euros	1/1– 31/12/2021	1/1– 31/12/2020
Income from measuring financial instruments in foreign currency	4,746	3,227
Other interest and similar income	164	178
Income from reversal of impairment losses on current financial investments as well as cash and cash equivalents	62	337
Total financial income	4,972	3,742
Expenses for measuring financial instruments in foreign currency	3,296	4,600
Financing costs for syndicated loans, debenture bonds and bridge financing	4,419	2,832
Accrued interest on other provisions and liabilities	1,664	1,214
Interest expenses for leases	785	803
Custody fee on financial assets (negative interest)	244	0
Net interest expenses for pension provisions	68	57
Other interests and other financial expenses	688	1,016
Total financial expenses	11,164	10,521
Total	–6,192	–6,779

Income from the foreign currency valuation of financial transactions in the sum of 4,746 thousand euros (prior year: 3,227 thousand euros) and countervailing expenses in the sum of 3,296 thousand euros (prior year: 4,600 thousand euros) led to a net profit in fiscal year 2021 of 1,450 thousand euros (prior year: net loss of 1,373 thousand euros). This result is attributable to currency exchange gains and losses arising from the group financing.

The items financing costs for syndicated loans, debenture bonds and bridging loans include not only interest expenses but also the arrangement fees paid to the banks.

Other interests and other financial expenses include, in particular, guarantee and bank charges, as well as interest expenses for other loans and interest rate derivatives.

The net balance of financial income and financial expenses improved by 587 thousand euros or 8.7 percent to minus 6,192 thousand euros (prior year: minus 6,779 thousand euros).

4.12 Income taxes

Current income taxes (paid or owing), as well as deferred tax assets and deferred tax liabilities in the individual countries, are shown as income taxes. The current income taxes of the Jenoptik Group were calculated by applying the tax rates applicable at the balance sheet date.

The calculation of the deferred taxes for the domestic entities was based on a tax rate of 30.28 percent (prior year: 29.73 percent). In addition to the corporation tax at 15.0 percent (prior year: 15.0 percent) and the solidarity surcharge of 5.5 percent of the corporation tax charge (prior year: 5.5 percent), an effective trade tax rate of 14.46 percent (prior year: 13.91 percent) was considered. The calculation of deferred taxes for foreign entities is based on the tax rates applicable in the respective country.

Deferred taxes are recognized as either tax expenses or tax income in the income statement, unless these directly relate to items recognized outside of profit or loss in other comprehensive income. In this event, deferred taxes are also recognized outside of profit or loss in other comprehensive income.

Uncertainties regarding the treatment of income for tax purposes are subject to continuous analysis. Where there is a probability of the tax authorities not accepting uncertain income tax treatment, a reasonable sum will be set aside for risk provisioning. The amount of the risk provision shall be equal to the amount which hypothetically represents the most likely value or expected value, considering any tax uncertainties. In this context, uncertain tax situations are not considered separately but together.

Tax expenses were classified according to origin as follows:

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Current income tax expense		
Germany	8,607	4,965
Abroad	5,354	3,306
Total	13,961	8,271
Deferred Taxes		
Germany	–109	2,692
Abroad	–4,163	–2,740
Total	–4,272	–48
Total income taxes	9,689	8,223

The current income taxes included for 2021 an expense in the sum of 915 thousand euros (prior year: income of 307 thousand euros) for current taxes from earlier business periods. Deferred tax income include income relating to a different period in the sum of 840 thousand euros (prior year: expense 417 thousand euros).

Deferred tax income includes income resulting from the development of temporary differences in the sum of 6,315 thousand euros (prior year: expense 838 thousand euros).

As at the balance sheet date, the Jenoptik Group had the following tax losses carried forward at its disposal for offsetting against future profits:

in thousand euros	31/12/2021	31/12/2020
Corporation tax	139,532	180,839
Trade tax	292,898	340,316

The reduction in tax losses carried forward mainly resulted from their being used in the fiscal year just past. Taking into consideration all currently known positive and negative factors influencing the future tax results of the Jenoptik Group, a utilization of the corporation tax loss carried forward of 114,004 thousand euros (prior year: 157,021 thousand euros) and the use of a trade tax loss carried forward of 281,093 thousand euros (prior year: 259,049 thousand euros) is probable. A deferred tax claim of 59,407 thousand euros (prior year: 61,276 thousand euros) was recognized for these available tax losses carried forward. Of which 40,632 thousand euros (prior year: 36,019 thousand euros) was attributable to trade tax losses carried forward.

For the remaining, non-utilizable losses carried forward, no deferred tax assets were recognized for corporation tax purposes in the sum of 25,528 thousand euros (prior year: 23,818 thousand euros) and for trade tax purposes in the sum of 11,805 thousand euros (prior year: 81,267 thousand euros).

A portion of the tax losses carried forward is subject to a time limit for carry forward purposes:

in thousand euros	31/12/2021	31/12/2020
Up to 1 year	0	112
2 to 5 years	770	1,750
6 to 9 years	4,977	2,602
More than 9 years	1,395	415
Total losses with carried forward option subject to a time limit	7,142	4,879

No deferred tax assets were shown for allowable time differences in the sum of 2,033 thousand euros (prior year: 6,646 thousand euros) as these will probably not be realized in the underlying reporting period.

The following recognized deferred tax assets and deferred tax liabilities were attributed to recognition and valuation differences in the individual items in the statement of financial position and to tax losses carried forward:

in thousand euros	Deferred tax assets		Deferred tax liabilities	
	31/12/2021	31/12/2020	31/12/2021	31/12/2020
Intangible assets	1,875	3,774	33,488	19,019
Property, plant, and equipment	829	1,047	15,905	15,326
Financial investments	743	111	1,880	1,044
Inventories	8,987	7,202	1,302	293
Receivables and other assets	2,240	1,133	6,329	6,796
Provisions	15,430	13,877	1,027	836
Liabilities	13,987	14,671	345	741
Tax losses carried forward and tax refunds	62,629	63,965	0	0
Gross value	106,720	105,780	60,276	44,055
Offset	-35,535	-31,197	-35,535	-31,197
Recognition in the statement of financial position	71,185	74,583	24,741	12,858
Value presented in statement of financial position				
Continuing operations	63,360	74,583	24,741	12,858
Discontinued operation	7,825	0	0	0

The net inventory of the asset surplus in deferred taxes reduced by 15,282 thousand euros. Taking into consideration the initial consolidations and de-consolidations (minus 17,426 thousand euros), deferred taxes recognized outside of profit or loss (minus 2,842 thousand euros), as well as the foreign currency exchange conversions (204 thousand euros) in the reporting year, this led to deferred tax income of 4,782 thousand euros shown in the income statement. Of this, deferred tax income of 4,272 thousand euros is attributable to the continuing operations. Furthermore, an asset surplus in deferred taxes in the sum of 7,825 thousand euros is allocated to the discontinued operation.

Temporary differences in the sum of 219,761 thousand euros (prior year: 155,256 thousand euros) related to shares in subsidiaries for which no deferred tax liabilities had been set aside due to IAS 12.39. Deferred tax liabilities in the sum of 249 thousand euros (prior year: 222 thousand euros) were set aside on outside basis differences in accordance with IAS 12.40.

The following table shows the tax reconciliation between the tax expense expected in the respective fiscal year and the actual tax expense recognized. To determine the anticipated tax expense, in the fiscal year 2021 the applicable group tax rate of 30.28 percent (prior year: 29.73 percent) was multiplied by the earnings before tax.

4.13 Discontinued operation

On November 25, 2021 Jenoptik signed a contract for the sale of the VINCORION division, comprising the one-hundred percent owned subsidiaries JENOPTIK Advanced Systems GmbH, JENOPTIK Power Systems GmbH as well as JENOPTIK Advanced Systems, LLC. The transaction closing date is expected in 2022. With the upcoming sale of its mechatronic activities, the Group is continuing its transformation into a focused photonics group.

With the conclusion of the binding purchase agreement, the VINCORION business segment is classified as discontinued operation and the assets and liabilities shown as held for sale.

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Earnings before tax from continuing operations	102,548	42,258
Earnings before tax from discontinued operation	– 8,230	10,977
Earnings before tax	94,318	53,235
Income tax rate for the Jenoptik Group in %	30.28	29.73
Expected tax expense	28,560	15,827
Following tax effects resulted in the difference between the actual and the expected tax expense:		
Non-deductible expenses, tax-exempt income and permanent deviations	–8,784	2,557
Change in the realizability of deferred tax assets and tax credits	–7,953	–8,064
Effects arising from differences in tax rates	–573	–534
Implications of changes in tax rates	–1,497	520
Taxes in prior years	75	110
Other tax effects	152	88
Total adjustments	–18,580	–5,323
Tax expenses according to the income statement	9,979	10,504
The breakdown of the actual income taxes is as follows:		
Income tax expense attributable to continuing operations	9,689	8,223
Income tax expense attributable to discontinued operation	290	2,281

Earnings from discontinued operation

The VINCORION result is shown as follows:

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Revenue	145,030	151,730
Expenses	130,155	139,816
EBIT	14,875	11,915
Financial expenses	–805	–938
Result of current business activities before income taxes	14,070	10,977
Income taxes	–3,090	–2,281
Earnings from operating activities after income taxes	10,980	8,696
Impairment loss arising from the revaluation at fair value less selling costs	–22,300	
Income taxes on the impairment loss arising from the revaluation at fair value less selling costs	2,800	
Earnings after tax from discontinued operation	–8,520	8,696

Intra-group transactions were completely eliminated from the financial results, with intra-group earnings from the performing business unit and the elimination of the related expenses of the receiving business unit being consolidated. As a result, the EBIT and EBITDA of the discontinued operation show an improvement of 1,088 thousand euros compared to the economic perspective (prior year: 2,048 thousand euros) and this amount is charged additionally to the continuing operations.

Earnings per share from discontinued operation (undiluted = diluted) amounted to minus 0.15 euros (prior year: 0.15 euros).

Net cash flows from discontinued operation

The net cash flows of VINCORION are as follows:

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Current business activities	29,753	20,518
Investment activities	–9,995	–8,603
Financing activities	–4,055	–3,901
Net cash flows	15,703	8,014

Assets and liabilities of the disposal group classified as held for sale

As of December 31, 2021, the following assets and liabilities of VINCORION were reported in the category "held for sale":

in thousand euros	31/12/2021
Assets	
Intangible assets	10,773
Property, plant, and equipment	32,128
Deferred taxes	7,824
Inventories	54,421
Trade receivables	39,306
Contract assets	11,395
Cash and cash equivalents	46
Other assets	883
Available-for-sale financial assets	156,777
Liabilities	
Financial liabilities	21,745
Pension provisions	21,189
Trade accounts payable	17,282
Contract Liabilities	8,240
Other liabilities	3,616
Other Provisions	21,541
Liabilities associated with assets held for sale	93,613
Net assets directly associated with the disposal group	63,164

As of December 31, 2021, the accumulated income and expenses recognized in equity totaled minus 599 thousand euros arising from currency conversion, minus 133 thousand euros from cash flow hedges.

As a result of the classification as "held for sale", an impairment loss after tax of 19,500 thousand euros was recognized in the result from discontinued operation and the carrying amount of VINCORION was therefore reduced to the fair value less selling costs.

The determination of the fair value is based on valuation parameters that are not based on observed market data (level 3). In addition to the contractually agreed purchase price, net financial debt, and an agreed working capital compensation mechanism as of the valuation date, the valuation also took into account the anticipated contingent considerations which are dependent upon certain future performance criteria.

4.14 Earnings from non-controlling interests

Earnings from non-controlling interests in the group earnings totaled 2,341 thousand euros (prior year: 963 thousand euros) and concerned the non-controlling interests in various TRIOPTICS sales companies, JENOPTIK Korea Corporation Ltd. as well as Asam Grundstücksverwaltungsgesellschaft mbH & Co Vermietungs KG. The prior year also includes the result from non-controlling interests in JENOPTIK Japan Co. Ltd. up to the acquisition of the minority shareholder's shares.

More information on the entities with non-controlling interests is available in section "Group of consolidated entities" from page 172 on.

4.15 Earnings attributable to shareholder and earnings per share

Earnings attributable to shareholders include the earnings after taxes from continuing operations and earnings after tax from discontinued operation. Earnings per share correspond to the earnings attributable to shareholders divided by the weighted average of outstanding shares.

	1/1– 31/12/2021	1/1– 31/12/2020
Earnings attributable to shareholders – continuing operations in thousand euros	90,518	33,073
Earnings attributable to shareholders – discontinued operation in thousand euros	-8,520	8,696
Total earnings attributable to shareholders in thousand euros	81,998	41,769
Weighted average number of outstanding shares	57,238,115	57,238,115
Earnings per share in euros (undiluted = diluted)	1.43	0.73

The earnings after tax from discontinued operation are to be allocated to the shareholders of the parent company in full. A sum of 92,859 thousand euros (prior year: 34,035 thousand euros) is to be allocated from the earnings after tax from the continuing operations in the sum of 90,518 thousand euros (prior year: 33,073 thousand euros) to the shareholders of the parent company.

The diluted and undiluted earnings per share for the discontinued operation are disclosed in the section "Discontinued operation" from page 196 on.

5 Disclosures on the Statement of Financial Position

5.1 Intangible assets

in thousand euros	Development costs arising from internal development projects	Acquired patents, trademarks, software, customer relationships	Internally generated patents	Goodwill	Other intangible assets	Total
Acquisition/production costs	27,971	147,241	2,176	400,057	7,569	585,013
Balance as of 1/1/2021	(19,335)	(104,011)	(2,436)	(175,806)	(4,622)	(306,210)
Foreign currency exchange effects	7	4,147	0	12,587	0	16,742
	(10)	(-3,154)	(0)	(-6,895)	(0)	(-10,039)
Additions through business combinations	0	98,520	0	178,205	0	276,725
	(0)	(50,705)	(0)	(231,146)	(17)	(281,868)
Additions	9,488	1,732	201	0	4,187	15,608
	(8,641)	(3,692)	(390)	(0)	(4,582)	(17,305)
Disposals	1,742	7,836	183	6,737	3	16,501
	(15)	(9,665)	(651)	(0)	(0)	(10,331)
Transfers (+/-)	0	594	0	0	-565	29
	(0)	(1,652)	(0)	(0)	(-1,652)	(0)
Reclassification according to IFRS 5	-13,202	-4,572	0	-6,124	-659	-24,558
	(0)	(0)	(0)	(0)	(0)	(0)
Acquisition/production costs	22,522	239,825	2,194	577,989	10,529	853,059
Balance as of 31/12/2021	(27,971)	(147,241)	(2,176)	(400,057)	(7,569)	(585,013)
Amortization and impairments	13,972	73,132	940	9,895	0	97,938
Balance as of 1/1/2021	(13,748)	(68,769)	(1,061)	(9,895)	(0)	(93,474)
Foreign currency exchange effects	7	1,683	0	0	0	1,691
	(10)	(-1,344)	(0)	(0)	(0)	(-1,334)
Additions	420	18,328	173	0	0	18,920
	(229)	(15,167)	(197)	(0)	(0)	(15,592)
Impairment losses	0	0	0	0	0	0
	(0)	(179)	(0)	(0)	(0)	(179)
Disposals	1,742	7,776	108	4,929	0	14,555
	(15)	(9,640)	(318)	(0)	(0)	(9,972)
Reclassification according to IFRS 5	-88	-4,096	0	0	0	-4,183
	(0)	(0)	(0)	(0)	(0)	(0)
Amortization and impairments	12,569	81,272	1,005	4,966	0	99,812
Balance as of 31/12/2021	(13,972)	(73,132)	(940)	(9,895)	(0)	(97,938)
Net carrying amount as of 31/12/2021	9,953	158,554	1,190	573,022	10,529	753,247
	(13,999)	(74,110)	(1,236)	(390,161)	(7,569)	(487,075)

The figures in brackets relate to the prior year

The marked increase in intangible assets resulted in particular from the acquisition of BG Medical and the SwissOptic Group. Detailed information is disclosed in the section "Entities acquired and sold" from page 175 on.

With the signing of the contract for the sale of the VINCORION division, the assets were classified as held for sale and reported separately in the statement of financial position. Changes in intangible assets after this initial classification as held for sale are not shown in the analysis of non-current assets. The development of depreciation and amortization for the fiscal year also does not include the impairment loss from the revaluation in accordance with IFRS 5. Detailed information on assets held for sale is disclosed in the section "Discontinued operation" from page 194 on.

Assets acquired in return for payment and still in development are shown as other intangible assets. Additions to these totaled 3,884 thousand euros (prior year: 4,071 thousand euros) arising from investments in the new SAP S/4HANA system which is being introduced as part of a process and data harmonization program.

The additions to development costs from internal development projects relate in particular to the divisions VINCORION (up to its initial classification as held for sale) plus Light & Optics. As of December 31, 2021, development projects not yet completed in the sum of 8,877 thousand euros (prior year: 12,374 thousand euros inclusive of 7,508 thousand euros VINCORION) were recognized under this item.

Disposals of patents, trademarks, software, and customer relationships primarily relate to intangible assets that were recorded in prior years within the context of acquisitions and are written off in full at the end of their useful life as well as disposals due to divestments.

As in the prior year, intangible assets were not subject to any significant disposal restrictions. The order commitments for intangible assets totaled 241 thousand euros (prior year: 305 thousand euros).

Other than goodwill, there were no intangible assets with an undefinable useful life.

As of December 31, 2021, the goodwill totaled 573,022 thousand euros (prior year: 390,161 thousand euros). The additions due to business combinations of the goodwill in the sum of 178,205 thousand euros were attributable to the first-time consolidation of BG Medical and the SwissOptic Group.

As part of the sale of the non-optical process metrology business for grinding machines, pro rata disposals of the goodwill of the Light & Production division were recognized (carrying amount minus 1,808 thousand euros). The additional increase in carrying amounts by 12,587 thousand euros was exclusively due to currency effects (prior year: minus 6,895 thousand euros).

As in the prior year, no impairments to goodwill were required in the fiscal year 2021.

The following table summarizes the goodwill for the cash-generating units which continued to correspond to the divisions:

in thousand euros	31/12/2021	31/12/2020
Light & Optics	443,472	259,425
Light & Production	86,730	84,395
Light & Safety	42,819	40,217
VINCORION ¹	0	6,124
Total	573,022	390,161

¹ Reclassification into assets held for sale in 2021

The impairment test for goodwill was performed at the level of the cash-generating units benefiting from the synergies of the respective corporate merger and representing the lowest level at which goodwill is monitored for internal company management. If the carrying amounts of these cash-generating units exceeded their recoverable amounts, the goodwill allocated was correspondingly reduced. The determining factor for the impairment test was the recoverable amount, i.e., the higher of the two amounts derived from the fair value less costs to sell or value in use.

Jenoptik calculated the recoverable amount in the form of the value in use, based on a discounted cash flow method. The basis for this is the five-year corporate plan approved by the management. This took past experience into consideration and was based on the management’s best estimate of future development. The cash flows in the detailed planning phase were planned on the basis of differentiated growth rates. These took account of the development and dynamics of the relevant sectors and target markets.

However, against the background of the ongoing Covid-19 pandemic, there is increased uncertainty regarding the forecasts of projected cash flows. Based on past experience, the five-year corporate plan has assumed that Covid-19 will not have any further significant negative impact in 2022.

The following planning assumptions according to the structure applicable in the fiscal year 2021, were used as a basis for divisions with significant goodwill:

The Light & Optics division benefited from increasing demand in the fiscal year 2021 and was able to increase revenue in all areas compared to the prior year. Covid-19-related catch-up effects in all areas, as well as the increasing demand of the semiconductor equipment industry in the Semi & Advanced Manufacturing area, had a positive impact on the development of revenue. Both the gross margin and the EBITDA margin improved as a result of the increased revenue. In addition, TRIOPTICS made increased contributions to earnings as the company has only been part of the Light & Optics division since September 2020 and, compared to the prior year, has now been included for the entire fiscal year. The following planning assumptions were used as a basis for the Light & Optics division: The division is focusing for new revenue growth on the areas of Semi & Advanced Manufacturing, Biophotonics, Industrial Solutions as well as optical test & Measurement. Despite the increasing challenges in the procurement market for both our own and our customers’ production, we expect further growth across all areas of the Light & Optics division. Both the high global demand in the semiconductor equipment industry in the Semi & Advanced Manufacturing area as well as the Optical Test & Measurement area, newly acquired in the prior year, are making a significant contribution to the division’s growth. The aim of our acquisition of the BG Medical/SwissOptic Group is to exploit opportunities and synergies over the medium-term in order to provide significant support for the division’s growth. The division’s overall plans for significant revenue growth go hand-in-hand with a moderate increase in the EBITDA margin over the medium-term.

In the fiscal year just passed, the Light & Production division generated revenue at the same level in the prior year whilst increasing profitability through one-time effects, amongst others. Problems in the procurement market, the trend towards e-mobility, uncertainties in the automotive sector and the ongoing effects of the Covid-19 pandemic are challenges facing the division. The planning assumptions for the Light & Production division are: to achieve growth in the future, the aim will be to address additional target markets and continuously develop new products in order to serve key industries on the international level.

With an expected revival of business in North America, for example, moderate sales growth is expected in the Metrology and Laser Processing areas and significant growth in the Automation & Integration area. Due to the completed restructuring measures and higher margins for new orders, an increase in profitability is expected in the medium term.

The Light & Safety division posted a slight fall in revenue in the fiscal year 2021 and, as a result, a decline in profitability. As a result of the Covid-19 pandemic, public safety budgets were cut and projects postponed, what, in addition to problems in the procurement market led to the business development. We have drawn the following assumptions for planning in the Light & Safety division: The focus of development over the coming years will be on the increasing demand for public safety, especially in the regions of America, the Middle East/ North Africa, and other European countries. As competition increases, structural and process optimizations that have been introduced will be continued, with the increase in the generation of local and international value added bringing about a sustained increase in revenue and profitability over the medium term.

The result of the respective planning year for determining the free cash flow is adjusted for non-cash expenses and income such as depreciation.

This assumes a perpetual annuity, the amount of which is individually determined for each cash-generating unit by management from the fifth year of the planning time frame. The perpetual annuity includes a growth component in the form of a deduction on the capitalization interest rate of between 0.9 and 1.0 percentage points (prior year: 0.9 and 1.0 percentage points). Non-recurring effects in the last year of the plan are eliminated prior to calculating the perpetual annuity.

The weighted average cost of capital after taxes required for the impairment tests is determined by using the capital asset pricing model for determining the cost of equity. The components for calculating the cost of equity are a risk-free interest rate, the market risk premium, a beta factor customary in our industry determined from division-specific peer groups as well as the average country risk of each cash-generating unit. Borrowing costs were determined by including a risk-free interest rate, the spread customary in our industry and the standard average tax rate. The weighted costs of equity and borrowing costs resulted from applying the capital structure customary in our industry.

Impairment testing was conducted assuming a weighted average cost of capital after taxes at a rate between 6.42 and 9.21 percent (prior year: 6.76 to 9.56 percent). This corresponded to the weighted average cost of capital before tax of between 7.96 and 12.21 percent (prior year: 8.52 to 12.61 percent).

The assumptions used to determine the values in use of the cash-generating unit are shown in the following table:

	Growth components in the perpetual annuity	Weighted cost of capital after tax	Weighted cost of capital before tax
Light & Optics	0.90 (1.00)	9.21 (9.56)	12.21 (12.61)
Light & Production	1.00 (1.00)	8.36 (8.17)	10.72 (10.38)
Light & Safety	0.90 (0.90)	6.42 (6.76)	7.96 (8.52)
VINCORION	n. a. (0.90)	n. a. (6.80)	n. a. (9.63)

.....
 The figures in brackets relate to the prior year

Sensitivity analyses were conducted for all cash-generating units to which goodwill was allocated as of December 31, 2021. A reduction in the cash flows or an increase in the weighted cost of capital within the range considered by the management as possible would not result in the recoverable amount being less than the carrying amount of the cash-generating units.

5.2 Property, plant, and equipment

in thousand euros	Land, buildings,	Technical equipment and machinery	Other equipment, operating and office equipment	Equipment under construction	Total
Acquisition / production costs	261,175	207,274	118,150	10,336	596,934
Balance as of 1/1/2021	(231,452)	(205,344)	(115,278)	(24,714)	(576,787)
Foreign currency exchange effects	3,586	4,045	922	189	8,741
	(-2,816)	(-4,098)	(-693)	(-137)	(-7,743)
Additions through business combinations	17,926	13,539	2,443	268	34,176
	(20,625)	(2,996)	(2,961)	(311)	(26,893)
Additions	6,041	14,753	9,067	14,160	44,020
	(5,901)	(9,724)	(7,718)	(6,604)	(29,947)
Disposals	2,997	19,134	15,765	4	37,899
	(6,715)	(14,053)	(8,020)	(160)	(28,948)
Transfers (+/-)	767	3,953	597	-5,413	-97
	(12,728)	(7,361)	(905)	(-20,996)	(-2)
Reclassification according to IFRS 5	-48,028	-36,480	-20,109	-1,112	-105,729
	(0)	(0)	(0)	(0)	(0)
Acquisition / production costs	238,469	187,949	95,304	18,424	540,146
Balance as of 31/12/2021	(261,175)	(207,274)	(118,150)	(10,336)	(596,934)
Depreciation and amortization	91,531	152,490	89,415	0	333,436
Balance as of 1/1/2021	(83,184)	(154,909)	(87,571)	(0)	(325,664)
Foreign currency exchange effects	1,032	2,807	564	0	4,403
	(-613)	(-2,898)	(-387)	(0)	(-3,897)
Additions	13,450	12,290	9,432	0	35,172
	(12,664)	(13,156)	(9,378)	(0)	(35,198)
Impairment losses	0	3	6	0	10
	(1,138)	(353)	(59)	(0)	(1,550)
Impairment reversal	-451	0	0	0	-451
	(-205)	(-40)	(-43)	(0)	(-288)
Disposals	2,347	19,009	15,121	0	36,477
	(4,639)	(12,990)	(7,161)	(0)	(24,790)
Transfers (+/-)	-70	2	0	0	-68
	(0)	(0)	(-2)	(0)	(-2)
Reclassification according to IFRS 5	-21,008	-26,460	-15,065	0	-62,533
	(0)	(0)	(0)	(0)	(0)
Depreciation and amortization	82,136	122,123	69,232	0	273,491
Balance as of 12/31/2021	(91,531)	(152,490)	(89,415)	(0)	(333,436)
Net carrying amount as of 31/12/2021	156,334	65,826	26,073	18,424	266,656
	(169,644)	(54,784)	(28,734)	(10,336)	(263,499)

The figures in brackets relate to the prior year

In addition to the investments made, the increase in property, plant, and equipment was mainly attributable to the first-time consolidation of BG Medical and the SwissOptic Group.

Detailed information is disclosed in the section "Entities acquired and sold" from page 175 on.

The assets of the VINCORION division were classified as "held for sale" and recognized separately in the statement of financial position. Changes in property, plant, and equipment after this initial classification as held for sale, are not shown in the analysis of non-current assets. Similarly, the development of depreciation and amortization for the fiscal year does not include the impairment loss from the revaluation in accordance with IFRS 5. Detailed information on assets held for sale is disclosed in the chapter "Discontinued operation" from page 194 on.

Land and buildings of the Group with a net book value of 156,334 thousand euros (prior year: 169,644 thousand euros) mainly comprised the Group's own production and administrative buildings in Jena, Wedel, Bayeux (France), Heerbrugg (Switzerland), Huntsville (USA), Shanghai (China) and Rochester Hills (USA) as well as the leased production and administrative buildings in Berlin, Monheim, and Camberley (UK).

Order commitments for property, plant, and equipment in the sum of 30,049 thousand euros have increased significantly compared with the prior year (prior year: 17,037 thousand euros) and primarily resulted in replacement and new investment in technical equipment and machinery.

As of the balance sheet date, no property, plant and equipment were pledged as of December 31, 2020.

5.3 Investment property

in thousand euros	Investment property
Acquisition/production costs	10,495
Balance as of 1/1/2021	(10,495)
Transfers	70
	(0)
Acquisition/production costs	10,566
Balance as of 31/12/2021	(10,495)
Depreciation	6,321
Balance as of 01/01/2021	(6,232)
Additions	87
	(89)
Impairment losses	450
	(0)
Transfers	70
	(0)
Depreciation	6,928
Balance as of 31/12/2021	(6,321)
Net carrying amount as of 31/12/2021	3,638
	(4,175)

The figures in brackets relate to the prior year

The investment property as of December 31, 2021 primarily encompassed property in the Jena-Göschwitz Industrial Park.

The fair values totaled 3,832 thousand euros (prior year: 4,549 thousand euros). These were determined internally within the company based on a discounted cash flow method. In this context, the net rents without utilities as well as the maintenance and other costs are estimated for the entire remaining useful lives of the properties and discounted over the remaining useful lives. Risk-adjusted interest rates are applied as the discount rate. As a result of the use of non-observable parameters such as interest rates, rents without utilities, as well as maintenance and ancillary expenses, the level 3 fair value in the hierarchy of fair values is assigned.

For 2021, rental income from investment property as of the end of the fiscal year amounted to 518 thousand euros (prior year: 552 thousand euros).

In fiscal year 2021, the direct operating expenses for property and movables accounted for at the end of the year for rented space totaled 126 thousand euros (prior year: 175 thousand euros) and for non-rented space 26 thousand euros (prior year: 32 thousand euros).

5.4 Leasing

The Group as lessee. The Group has concluded leasing contracts for real estate, technical equipment and machinery and other equipment, motor vehicles and for operating and business equipment.

The rights of use are shown in the statement of financial position under property, plant, and equipment, in which the underlying assets would be presented if they were the property of the Group. A separate presentation of the rights of use as of

January 1, 2021 and December 31, 2021, as well as additions and depreciation in the 2021 fiscal year, can be found in the following table.

Additions due to business combinations are the result of the inclusion of BG Medical and the SwissOptic Group. Reclassifications in accordance with IFRS 5 are the result of VINCORION's assets being classified as held for sale. Changes in right-of-use assets after initial classification as held for sale, including impairment losses as a result of remeasurement in accordance with IFRS 5, are not shown.

in thousand euros	Rights of use to land, buildings,	Rights of use to technical equipment and machinery	Rights of use to other equipment, operating and business equipment	Total rights of use
Acquisition/production costs, balance as of 1/1/2021	58,041	10,277	8,132	76,450
	(54,922)	(5,365)	(7,203)	(67,490)
Foreign currency exchange effects	1,395	102	94	1,590
	(-1,060)	(-28)	(-85)	(-1,174)
Additions through business combinations	293	5,508	0	5,802
	(2,541)	(87)	(400)	(3,028)
Additions	4,365	4,686	1,904	10,956
	(3,511)	(2,409)	(2,105)	(8,025)
Disposals	2,330	0	2,465	4,795
	(1,872)	(0)	(1,505)	(3,376)
Transfers (+/-)	0	0	-20	-20
	(0)	(2,443)	(14)	(2,457)
Reclassifications in accordance with IFRS 5 (+/-)	-27,461	-44	-579	-28,084
	(0)	(0)	(0)	(0)
Acquisition/production costs, balance as of 31/12/2021	34,304	20,529	7,066	61,900
	(58,041)	(10,277)	(8,132)	(76,450)
Depreciation, balance as of 1/1/2021	15,271	2,024	3,828	21,124
	(7,770)	(1,021)	(2,330)	(11,121)
Foreign currency exchange effects	460	52	58	570
	(-237)	(-12)	(-45)	(-294)
Additions	8,255	1,625	2,476	12,355
	(8,066)	(1,015)	(2,784)	(11,866)
Impairment losses	0	0	0	0
	(259)	(0)	(27)	(286)
Impairment gains	0	0	0	0
	(-205)	(0)	(0)	(-205)
Disposals	1,688	0	2,198	3,886
	(383)	0	(1,267)	(1,650)
Transfers (+/-)	0	0	-17	-17
	(0)	(0)	(0)	(0)
Reclassifications in accordance with IFRS 5 (+/-)	-8,573	-19	-296	-8,887
	(0)	(0)	(0)	(0)
Depreciation, balance as of 31/12/2021	13,724	3,683	3,852	21,258
	(15,271)	(2,024)	(3,828)	(21,124)
Net carrying amount as of 31/12/2021	20,581	16,847	3,214	40,642
	(42,770)	(8,253)	(4,303)	(55,326)

The figures in brackets relate to the prior year

Lease liabilities are shown in the statement of financial position under "Non-current financial debt" or "Current financial debt" and can be taken from the following table (prior year including lease liabilities of VINCORION):

in thousand euros	31/12/2021	31/12/2020
Non-current lease liabilities	27,528	47,726
Current lease liabilities	11,418	12,306

Interest expenses of the continuing operations for leases in the fiscal year 2021 totaled 785 thousand euros (prior year: 803 thousand euros).

In addition to depreciation and interest expenses, the following expenses of continuing operations were recognized through profit or loss:

Expenses for lease contracts (in thousand euros)	1/1– 31/12/2021	1/1– 31/12/2020
from short-term lease agreements	972	507
from low-value lease contracts	1,605	1,190
from variable lease payments	1,033	964
Total lease expenses	3,609	2,662

The variable lease payments mainly include payments for non-leasing components of lease contracts that have been accounted for in accordance with IFRS 16.

Liabilities arising from fixed lease payments are listed according to their maturity in the table below (prior year including lease liabilities of VINCORION):

Liabilities from fixed lease payments (in thousand euros)	31/12/2021	31/12/2020
Up to 1 year	12,373	14,188
1 to 5 years	23,929	35,323
More than 5 years	5,119	15,745
Total	41,421	65,256

Renewal and termination options included in the leases are negotiated by management. The assessment as to whether there is sufficient certainty regarding the exercise of these extension and termination options has been assessed and evaluated accordingly by the management.

The non-discounted potential future lease payments for periods after the exercise date for extension and termination options, not included in the term of the lease, totaled 6,191 thousand euros (prior year: 5,706 thousand euros) as of the balance sheet date.

Further details (in thousand euros)	31/12/2021	31/12/2020
Payment obligations for short-term lease contracts	394	415
Potential cash outflows arising from extension and termination options which were not shown in the statement of financial position	6,191	5,706

In the fiscal year 2021, the total cash outflow arising from leasing contracts of the continuing operations (including current and low-value lease contracts as well as variable lease payments) with interest portion totaled 14,731 thousand euros (prior year: 12,554 thousand euros, adjusted without VINCORION).

In the fiscal year 2021, income from subletting of legal assets for the use of fixed assets amounted to 181 thousand euros (prior year: 173 thousand euros).

The Group as lessor. Leases will continue to be classified as operating or finance leases.

The anticipated deposits arising from minimum lease payments of continuing operations are listed in the tables below according to their maturity:

Finance leases

Anticipated deposits arising from fixed lease payments (in thousand euros)	31/12/2021	31/12/2020
Up to 1 year	57	137
1 to 2 years	0	57

Operating leases

Anticipated deposits arising from fixed lease payments (in thousand euros)	31/12/2021	31/12/2020
Up to 1 year	1,588	1,444
1 to 2 years	329	1,048
2 to 3 years	173	704
3 to 4 years	109	77
4 to 5 years	7	48
More than 5 years	5	48

Lease agreements without a termination date were only recorded in the amount of the rental income up to the earliest possible date of termination. The probability of a continuation of the lease or of granting extensions to the lease agreements, was not included in the calculation.

5.5 Investments accounted for in accordance with the at-equity method

The following entities were included in the consolidated financial statements as associate companies or as joint ventures, in accordance with the at-equity method:

TELSTAR-HOMMEL CORPORATION, Ltd., Pyeongtaek, Korea

The company was a long-standing partner for Jenoptik in the Korean market and sourced components, amongst other things, from the Light & Production division. There are currently no longer any significant delivery and service relationships with Jenoptik.

HILLOS GmbH, Jena, Germany

The company, which specializes in the production of laser measurement, ranging and positioning equipment, is a supplier to the Light & Optics and Light & Safety divisions, amongst others.

TRIOPTICS France S.A.R.L., Villeurbane, France

The joint venture, acquired as part of the acquisition of Trioptics GmbH, is an integral part of the TRIOPTICS international sales network. In addition to TRIOPTICS' product range, the company has concluded several partnership arrangements with European and American entities in order to offer further product solutions in the optical sector.

The following table contains summarized financial information on the companies. The share of the companies' profit due to Jenoptik is shown under other operating income. The shares in the total other comprehensive income recognized in the current year are based on the preliminary annual financial statements of the companies. Deviations between the preliminary and final annual financial statements are taken into account in the subsequent year.

in thousand euros	TELSTAR-HOMMEL Corporation, Ltd.		HILLOS GmbH		Trioptics France S.A.R.L.	
	2021	2020 ²	2021	2020	2021	2020 ²
Disclosures on the income statement						
Revenue	13,665	27,618	48,749	40,912	3,760	2,329
Profit/loss arising from continued activities	-765	1,124	1,604	1,401	38	-186
Other comprehensive income	-230	-197	0	0	0	0
Total other comprehensive income	-995	927	1,604	1,401	38	-186
Amount of the share	33.33%	33.33%	50.00%	50.00%	50.00%	50.00%
Group share of total other comprehensive income	-332	309	802	701	19	-93
Disclosures on the statement of financial position and reconciliation to the at-equity carrying amount						
Non-current assets	12,989	18,656	1,251	1,584	28	25
Current assets	15,395	17,173	20,633	20,260	1,393	1,194
Non-current liabilities	10,090	2,459	263	138	18	116
Current liabilities	940	15,113	4,795	6,480	1,145	882
Equity	17,354	18,257	16,825	15,225	259	221
Amount of the share	33.33%	33.33%	50.00%	50.00%	50.00%	50.00%
Proportional equity = at-equity carrying amount	5,784	6,085	8,413	7,613	129	111

¹ The details for TRIOPTICS France S.A.R.L. in the year 2020 relate to the calendar year. The company was included using the equity method from the date of acquisition

² Financial information adjusted to the company's final annual financial statements

5.6 Financial investments

in TEUR	31/12/2021	31/12/2020
Shares in non-consolidated associates	502	347
Investments	499	494
Loans to non-consolidated associates and investments	10	10
Other loans	1,975	2,074
Total	2,987	2,926

Other loans are mainly derived from an escrow account which will be paid out at the end of a pending dispute over construction defects.

The table below reflects the changes in the impairments to financial investments:

in thousand euros	2021	2020
Impairments as of 1/1	8,332	8,163
Additions	37	17
Currencies	-1	0
Transfer	0	152
Impairments as of 31/12	8,368	8,332

5.7 Other non-current assets

Other non-current assets include both financial assets as well as non-financial assets.

Other non-current financial assets include the following:

in thousand euros	31/12/2021	31/12/2020
Derivatives	2,978	626
Reinsurance cover	85	85
Receivables from lease contracts	0	57
Other non-current financial assets	1,970	1,817
Total	5,034	2,585

Other non-current financial assets essentially include claims arising from insurance contracts of a TRIOPTICS entity.

As in the prior year, there were no restrictions on disposals of other non-current financial assets.

The aggregated item derivatives are explained in greater detail in section "Financial instruments" from page 228 on.

Other non-current, non-financial assets in the sum of 1,519 thousand euros (prior year: 690 thousand euros) mainly included non-current accruals, amongst others, fees for the existing syndicated loan financing.

5.8 Deferred taxes

The development of deferred taxes is shown as an item under section 4.12 from page 193 on.

5.9 Inventories

in thousand euros	31/12/2021	31/12/2020
Raw materials, consumables and supplies	80,655	80,336
Unfinished products, unfinished services	86,840	79,076
Finished products and goods	30,285	29,659
Deposits paid for inventories	2,433	2,335
Total	200,213	191,406

The prior year's figures include VINCORION's inventories in the sum of 56,911 thousand euros. As of December 31, 2021, the inventories are shown as "held for sale".

As of the end of the fiscal year 2021, accumulated impairment losses in the sum of 38,552 thousand euros (prior year: 46,182 thousand euros, inclusive of VINCORION) were considered in the carrying amount. The net sale value of these inventories was 63,126 thousand euros (prior year: 35,142 thousand euros, inclusive of VINCORION).

The change in impairments to continuing operations developed as follows:

in thousand euros	31/12/2021	31/12/2020
Impairment losses in inventories	-12,885	-7,245
Reversal of impairment losses to inventories	7,390	2,190
Overall change arising from additions and reversals	-5,495	-5,054

The reversals of impairment losses are the result, in particular, of the termination of ranges and marketability in the Light & Optics division as the reason for the impairment loss carried out in prior years, no longer applies.

The consumption of inventories affected expenses of continuing operations in the fiscal year in the sum of 234,338 thousand euros (prior year: 186,482 thousand euros), with the table below showing the distribution:

in thousand euros	31/12/2021	31/12/2020
Cost of sales	231,992	184,388
Research and development expenses	1,783	1,582
Selling expenses	175	273
Administrative expenses	388	239
Total	234,338	186,482

As in the prior year, there were no restrictions on the disposal of inventories on the reporting dates.

5.10 Current trade receivables

Trade receivables

in thousand euros	31/12/2021	31/12/2020
Trade receivables from third parties	110,766	132,456
Receivables from due requested advance payments	9,398	5,277
Trade receivables due from non-consolidated associates and investments	310	277
Total	120,475	138,010

The prior year's figures include the trade receivables of VINCORION in the sum of 43,294 thousand euros. As of December 31, 2021, these receivables are shown as "held for sale".

The fair values of trade receivables correspond to their carrying amounts as of the reporting date. Trade receivables are not interest-bearing and generally have a due date of 30 to 60 days.

The table below shows the composition of the trade receivables:

in thousand euros	31/12/2021	31/12/2020
Gross value of trade receivables due from third parties	117,516	138,487
Receivables from due requested advance payments	9,398	5,277
Gross value of trade receivables due from non-consolidated associates and investments	310	277
Total gross value of trade receivables	127,225	144,041
Cumulative impairments	-6,750	-6,031
Carrying amount of trade receivables	120,475	138,010

Default risks were determined through the assessment of clients' creditworthiness by means of a scorecard, taking into account specific regional and individual company characteristics. In addition to internal company data, this includes credit assessments through external credit agencies. Based on the rating of customers' creditworthiness, lines of credit are granted to ensure the active management of business transactions. This means for example, amongst other things, that certain payment methods can be agreed with customers depending on their creditworthiness. In addition, outstanding claims against customers are regularly monitored and measures taken to reduce overdue claims.

The default risk is taken into account through individual impairments and flat-rate individual impairments. The following table shows the changes in impairments to outstanding trade receivables:

in thousand euros	2021	2020
Impairments as of 1/1	6,031	8,704
Additions	3,400	1,865
Reversal/derecognition	2,407	5,814
Consumption	581	572
Changes in the group of consolidated entities	369	2,030
Currencies	210	-182
Reclassification in accordance with IFRS 5	-272	0
Impairments as of 31/12	6,750	6,031

The impairment requirement is analyzed at each closing date in order to determine the anticipated loan losses. If there are any objective indications of impairment losses, an individual impairment is applied. In addition, flat-rate individual impairments for receivables grouped into categories are recognized in days, based on the overdue period. Finally, a flat-rate impairment is created to consider the existing default risk for receivables not yet due and for which no impairment has been created.

As a result of developments arising from the impact of Covid-19, additional individualized valuation adjustments (post-model adjustments) are made in addition to the system-side assessment routines for determining the anticipated default risk. The valuation takes into account, in particular, geographic location, industry, support measures from public institutions as well as individual agreements with the respective customers.

The amount of the impairment to trade receivables due from third parties totaled 6,750 thousand euros (prior year: 6,031 thousand euros).

As in the prior year, as of December 31, 2021 there were no sureties for unimpaired receivables in the form of bank guarantees.

The table below shows the default risk position for trade receivables due from third parties with the help of an impairment matrix (prior year including VINCORION):

in thousand euros	Expected credit loss rate	Expected total gross carrying amount at default	Expected credit loss
not due	0.58 %	88,325	510
	(0.44 %)	(95,645)	(421)
overdue < 30 days	1.84 %	12,989	239
	(0.62 %)	(17,189)	(107)
overdue 30 – 60 days	6.95 %	5,741	399
	(3.90 %)	(8,988)	(350)
overdue 61 – 120 days	29.15 %	4,281	1,248
	(16.11 %)	(4,326)	(697)
overdue 121 – 240 days	26.96 %	1,954	527
	(13.45 %)	(2,727)	(367)
overdue 241 – 360 days	76.36 %	1,039	793
	(15.65 %)	(4,370)	(684)
overdue > 360 days	95.21 %	3,187	3,035
	(64.98 %)	(5,242)	(3,406)
Total	5.74 %	117,516	6,750
	(4.36 %)	(138,487)	(6,031)

Values in brackets relate to the prior year

Since receivables management has been intensified or optimized since 2020, a balanced maturity structure of receivables was achieved in 2021.

The higher, anticipated credit default rate in 2021 is due in particular to the classification of VINCORION’s receivables as “held for sale”. The low level of impairments at VINCORION compared to receivables was attributable to low credit default rates due to contracts with public sector customers. At 5.74 percent, the credit default rate in 2021 was roughly the same as the prior year’s level adjusted for VINCORION (5.9 percent).

In the fiscal year 2021 the context-related individual impairments to receivables totaled 1,480 thousand euros (prior year: 2,100 thousand euros). These primarily related to receivables with an overdue date of more than 360 days.

Factoring

As a result of extended payment deadlines for customers, inputs for customer-specific projects and changes in billing modalities, Jenoptik has been utilizing factoring since the fiscal year 2019. Within the framework of a genuine and confidential factoring program, existing receivables are sold to a factoring company (hereafter referred to as the “Factor”) – together with the transfer of the default or del credere risk – in return for a consideration. The payments from the original customer to the Group shown as income (due to their confidential nature) are classified as “other current financial liabilities” and then forwarded to the Factor.

In the statement of financial position, sold trade receivables are derecognized on transfer of the economic ownership to the Factor in accordance with IFRS 9 and, until receipt of payment, are recognized as receivables due from the Factor under the item “Other current financial assets”. The asset is finally derecognized on payment by the Factor.

Factoring charges are shown in the consolidated income statement, under administrative expenses.

In the cash flow statement, the Factor’s payments to the Group are shown under cash flows from operating activities. The payment received from the original customer and the subsequent payment as a result of the transfer to the Factor, are recognized net under cash flows from financing activities.

As of December 31, 2021, receivables to the value of 20,796 thousand euros (prior year: 18,355 thousand euros) were sold within the framework of the confidential factoring. After allowing for a surety retention by the Factor of 5 percent, payment receipts totaled 19,756 thousand euros (prior year: 17,437 thousand euros). The security deposit is reported under other current financial assets.

In addition, there was open factoring of receivables held for sale in the VINCORION division worth 3,233 thousand euros (prior year: 4,738 thousand euros).

5.11 Contract assets

The statement of financial position item includes conditional claims of the Group against customers for the receipt of a consideration in return, in exchange for goods or services that have already been transferred. These are grouped as follows:

in thousand euros	31/12/2021	31/12/2020
Contract assets	81,414	74,735
Realization within one year	78,398	68,685
Realization within more than one year	3,016	6,049

The prior-year figures include VINCORION contract assets of 11,369 thousand euros. As of December 31, 2021, these contract assets are reported as held for sale.

The default risk of contract assets is fundamentally taken into account through corresponding impairments. As of December 31, 2021, there were no indicators for an individual impairment identified. The general default risk was taken into account through an impairment loss in the amount of the anticipated loss. The impairment loss was in the sum of 123 thousand euros (prior year: 112 thousand euros).

5.12 Other current financial assets

in thousand euros	31/12/2021	31/12/2020
Receivables arising from contingent considerations	13,347	0
Receivables from acquisitions	3,818	0
Receivable arising from surety retention for factoring	1,032	901
Indemnification claims arising from business combinations	396	1,010
Other receivables due from non-consolidated associates and investments	115	0
Derivatives	68	1,622
Receivables due from pension trust associations (Treuhandvereine)	35	1,950
Other current financial assets	770	1,008
Total	19,582	6,492

The prior year's figures include other current financial assets of VINCORION in the amount of 2,788 thousand euros. As of December 31, 2021, these assets are reported as "held for sale".

As in the prior year, there were no restrictions on disposals of other current financial assets 2021.

The receivables from contingent consideration result from a sales-based bonus/malus arrangement agreed as part of the acquisition of TRIOPTICS, which was measured at fair value (see section "Financial instruments" from page 228 on).

Receivables from acquisitions include an adjustment of the purchase price from the acquisition of BG Medical and the Swiss-Optic Group based on the preliminary closing accounts at the time of acquisition. The final purchase price will be determined by finalizing the closing accounts in the fiscal year 2022.

Default risks are taken into account through impairments. Due to a retention on the purchase price for the remaining 25 percent of the shares in TRIOPTICS, as well as the collaterals deposited in notarial escrow accounts, there are no credit-related default risks within the meaning of IFRS 9 for the receivables due from conditional considerations.

The composition of the carrying amount of other current financial assets is as follows:

in thousand euros	31/12/2021	31/12/2020
Gross value of other financial assets	20,335	7,780
Accumulated impairment loss	-753	-1,288
Carrying amount of other financial assets as of 12/31	19,582	6,492

5.13 Other current non-financial assets

in thousand euros	31/12/2021	31/12/2020
Accruals	5,711	4,678
Receivables from other taxes	4,313	2,721
Receivables from income taxes	605	674
Receivables from grants, short-time working and subsidies	262	2,462
Other current non-financial assets	549	423
Total	11,439	10,958

The prior year's figures include other current non-financial assets of VINCORION in the amount of 657 thousand euros. As of December 31, 2021, these assets are reported as "held for sale".

As in the prior year, in 2021 there were no restrictions on disposals of other current non-financial assets.

5.14 Current financial investments

in thousand euros	31/12/2021	31/12/2020
Fair value	1,555	4,894

The current financial investments are a six-month bank deposit of a TRIOPTICS company that was not classified as cash and cash equivalents due to its maturity.

The current financial investments accounted for in the prior year, which mainly consisted of listed shares and bonds, were sold in the 2021 fiscal year. The fair value was determined on the basis of the stock market prices on the qualifying date. Changes in fair value between acquisition and balance sheet date, likewise the gain or loss arising from the sale, were recognized in the financial result through profit or loss.

For further information on the financial instruments we refer to the corresponding section in the Notes from page 228 on.

5.15 Cash and cash equivalents

in thousand euros	31/12/2021	31/12/2020
Checks, cash on hand, bank balances and demand deposits or deposits with a maturity of < 3 months	54,817	63,405

For information on the change in cash we refer to the section entitled "Details on the Cash Flow Statement" from page 223 on. In addition, in application of IFRS 9, an impairment of 122 thousand euros (prior year: 78 thousand euros) was recorded on the bank deposits in fiscal 2021 as provision for a default risk.

5.16 Equity

The development of the equity of Jenoptik is shown in the consolidated statement of changes in equity.

Share Capital

Share capital amounts to 148,819 thousand euros and is divided into 57,238,115 no-par value registered shares.

At the beginning of July 2011 Thüringer Industriebeteiligungs GmbH & Co. KG, Erfurt, Thüringer Industriebeteiligungs-geschäftsführungs GmbH, Erfurt, bm-t beteiligungsmanagement thüringen GmbH, Erfurt, Stiftung für Unternehmensbeteiligungen und -förderungen in der gewerblichen Wirtschaft Thüringens (StUWT), Erfurt, Thüringer Aufbaubank Erfurt and the Free State of Thüringia, Erfurt, disclosed that they had exceeded the thresholds of 3, 5, and 10 percent of the voting rights in JENOPTIK AG on June 30, 2011, and that they had

held 11.00 percent of the voting rights (6,296,193 voting rights) on that day. Thüringer Industriebeteiligungs GmbH & Co. KG acquired the voting rights from ECE Industriebeteiligungen GmbH.

On March 6, 2020, Allianz Global Investors GmbH, Frankfurt am Main, Germany, notified us it had exceeded the threshold of 10 percent of the voting rights in JENOPTIK AG on March 5, 2020. Accordingly, on that day Allianz Global Investors GmbH held 10.11 percent of the voting rights (5,788,418 voting rights) as attributed to it in accordance with § 34 (1) (No. 6) of the WpHG. Allianz Asset Management GmbH and Allianz SE also hold an indirect stake via Allianz Global Investors GmbH.

On March 5, 2020, Allianz SE informed us, with a voluntary Group notification with triggered threshold, that it had exceeded the threshold of 5 percent of the voting rights in JENOPTIK AG on March 2, 2020. Accordingly, on that day Allianz SE indirectly held 5.40 percent of the voting rights (3,092,867 voting rights) as attributed to it in accordance with § 34 (1) (No. 1) of the WpHG. All holdings included in this notification are managed by Allianz Global Investors GmbH.

On April 3, 2020, DWS Investment GmbH, Frankfurt am Main, Germany, notified us it had fallen below the threshold of 10 percent of the voting rights in JENOPTIK AG on April 2, 2020. Accordingly, on that day DWS Investment GmbH held 9.82 percent of the voting rights (5,620,671 voting rights) indirectly in accordance with § 34 WpHG.

The Ministry of Finance, Oslo, Norway, notified us on October 28, 2020 on behalf of the Norwegian state that although it had continued to exceed the threshold of 3 percent of the voting rights in JENOPTIK AG on October 27, 2020, this was below the number of indirectly held voting rights in accordance with § 34 WpHG. Accordingly, the Ministry of Finance held 3.55 percent of the voting rights (2,033,454 voting rights) on that day. Of this, 2.94 percent of the voting rights (1,682,311) were held by it indirectly in accordance with § 34 WpHG and 0.61 percent of the voting rights (351,143 voting rights) as instruments via stock borrowing in accordance with § 38 (1), (No. 1) WpHG. The voting rights are held directly by the Norges Bank, Oslo, Norway.

BlackRock, Inc., Wilmington, USA, notified us on September 21, 2021 that it had exceeded the threshold of 3 percent of the voting rights in JENOPTIK AG, Jena, Germany, on September 16, 2021. Accordingly, BlackRock, Inc., held 3.04 percent of the voting rights (1,739,603 voting rights) on that day. 2.99 percent of the voting rights (1,709,244 voting rights) were attributable to BlackRock, Inc. indirectly in accordance with § 34 of the WpHG. 0.05 percent of the voting rights (30,359 voting rights) were attributable to instruments in accordance with § 38 (1), (No. 1) WpHG.

The voting right notifications of recent years and the notifications of shareholders that had closed out their investments, are also published on our Internet site www.jenoptik.com under Investors/Share/Voting rights announcements.

Authorized capital

An "Authorized Capital 2019" was created with the resolution passed by the Annual General Meeting on Wednesday, June 12, 2019 as follows: The Executive Board is authorized through June 11, 2024, with the consent of the Supervisory Board, to increase the nominal capital of the company by up to 44,000 thousand euros through one or multiple issues of new, no-par value registered shares against cash and/or property, plant, and equipment ("Authorized Capital 2019"). The new shares can be taken up by one or more banks with the obligation to offer these to shareholders (indirect subscription rights). With the consent of the Supervisory Board, the Executive Board is authorized to preclude subscription rights for shareholders in certain cases: a) fractional amounts; b) capital increases against contributions in-kind in particular also within the framework of business combinations or the acquisition of companies, units of companies or investments in companies (including increasing existing investments) or other contributable assets in conjunction with such an intended acquisition as well as claims against the entity; c) capital increases against cash contributions, under the condition that the percentage of any new shares in the share capital does not in total exceed 10 percent of the share capital at the time the authorized shares are registered or in total 10 percent of the share capital at the time the new shares are issued, taking into consideration resolutions of the AGM or the use of other authorizations to preclude subscription rights in a direct or corresponding application of § 186 (3) (4) AktG [German Stock Corporation Act] since the effective date of this authorization and the issuance price of the new shares is not to be significantly lower than the stock market price; d) issuances of new shares to employees of the entity and to associates in which the entity holds a majority interest.

All aforementioned authorizations to exclude subscription rights are limited to a total of 10 percent of the share capital available at the time this authorization became effective – or, if this value is lower - to 10 percent of the share capital at the time this authorization is exercised. This limit of 10 percent includes shares that (i) are were or could still be issued for the purpose of servicing warrants and/or convertibles during the period of validity of authorized capital to the exclusion of subscription rights or (ii) are sold by the entity as treasury shares during the period of validity of authorized capital to the exclusion of subscription rights.

Decisions on the details of the issuance of new shares, in particular their conditions and the content of rights of the new shares, are taken by the Executive Board, with the consent of the Supervisory Board. The Authorized Capital 2019 has not yet been utilized.

Conditional Capital

The shareholder resolution passed at the Annual General Meeting (AGM) held on June 9, 2021, to contingently raise the share capital of the entity by up to 14,950 thousand euros through the issue of up to 5,750,000 new no-par value shares ("Conditional Capital 2021"). The conditional capital increase will be implemented only to the extent that

- creditors or holders of option and/or conversion rights arising from option and/or convertible bonds issued by the entity, or by a domestic and/or foreign corporation in which the entity either directly or indirectly holds a majority interest, make use of their option or conversion rights by June 8, 2026 as resolved by the shareholders in their Annual General Meeting resolution dated June 9, 2021, and/or
- the creditors of the issued convertible bonds obliged to exercise their conversion rights issued by the company or a domestic or foreign company in which the company has a direct or indirect majority stake, on the basis of the resolution of the Annual General Meeting on June 9, 2021, fulfill their conversion rights by June 8, 2026 and/or the shares are repatriated

and neither treasury shares are used nor payment is made in cash. The new shares participate in profits from the start of the fiscal year for which, on the date of their issue, no resolution has yet been passed by the Annual General Meeting in respect of the appropriation of the accumulated profit. To the extent legally permissible, the Executive Board may, with the consent of the Supervisory Board, determine the profit participation in deviation from this and also from Section 60 (2) AktG, including for a fiscal year that has already passed.

The Executive Board is authorized, with the consent of the Supervisory Board, to exclude the subscription rights of shareholders to the bonds under certain circumstances. Authorization to exclude subscription rights is limited in the sense that the pro rata amount of share capital corresponding to those shares that must be issued after exercising warrant and/or conversion rights/obligations may not account for more than 10 percent of the share capital existing at the time this authorization takes effect or – if the figure is lower – at the time use is made of the authorization. This 10 percent limit also applies to the sale of treasury shares that are excluded from subscription rights during the period of this authorization, and to shares issued during the period of this authorization under authorized capital and for which subscription rights are excluded.

The Executive Board is authorized to set out the further details relating to the increase in conditional capital (e.g. terms of the bonds, interest rate, form of interest, specific period, denomination, issue price, option/conversion price, option/conversion period) in the bond terms and conditions. The Conditional Capital 2021 has not yet been utilized.

Reserves

Capital reserve. The capital reserve contains the adjustments recognized within the framework of the first-time adoption of IFRS as well as the differences resulting from the capital consolidation being offset against reserves up to December 31, 2002.

Other reserves. A component of other reserves is retained earnings realized in the past by companies included in the consolidated financial statements less dividends paid.

Other reserves also contain value adjustments to be accounted for outside of profit or loss for

- equity instruments that are valued outside profit or loss at fair value in other comprehensive income,
- cash flow hedges,
- accumulated foreign currency exchange differences and
- actuarial gains/losses arising from the valuation of pensions and similar obligations.

In the fiscal year 2021, the changes in value for equity instruments valued outside profit or loss totaled 17 thousand euros (prior year: minus 1,375 thousand euros). The applicable income taxes total minus 20 thousand euros (prior year: 410 thousand euros).

The effective portions of the change in the value of the derivatives to be recognized outside of profit or loss within the framework of the cash flow hedges were recognized at 2,253 thousand euros (prior year: 3,987 thousand euros), less the applicable income taxes in the sum of 661 thousand euros (prior year: minus 1,200 thousand euros).

Accumulated foreign currency exchange effects encompass the influences of foreign currency conversions of the separate financial statements of subsidiaries whose functional currency deviates from that of the Group, as well as effects from foreign currency conversions of assets and liabilities of overall 21,014 thousand euros (prior year: minus 11,328 thousand euros). The change in the applicable income taxes was in the sum of minus 1,424 thousand euros (prior year: 1,333 thousand euros). As a result of the sale of the non-optical process metrology business for grinding machines, cumulative income from currency translation so far included in equity in the sum of 16 thousand euros was reclassified to the income statement.

Actuarial gains from the valuation of pensions in the sum of 6,986 thousand euros (prior year: minus 2,096 thousand euros) were recognized. The applicable income taxes total minus 2,009 thousand euros (prior year: 441 thousand euros).

In the fiscal year 2021 the change in income taxes recognized outside of profit or loss led to a reduction in the reserves by the total sum of 2,792 thousand euros (prior year: increase by 985 thousand euros).

Treasury Shares

On the basis of a resolution passed by the Annual General Meeting on June 5, 2018, the Executive Board is authorized up to June 4, 2023 to purchase treasury no-par value shares not exceeding a proportion of ten percent of the nominal capital existing at the time the resolution is adopted or – if this amount is lower – of the nominal capital existing at the time of exercising the resolution for purposes other than trading in treasury shares. The purchased treasury shares together with treasury shares that the entity had already purchased and still holds (including the attributable shares in accordance with §§ 71a ff. AktG) may not exceed 10 percent of the share capital of the entity. The authorization may be exercised in whole or in part, on a one-off or repeat basis and for one or more authorized purposes. The purchase and sale of treasury shares may be exercised by the entity or, for specific authorized purposes, also by dependent companies, by companies in which the entity holds a majority interest, or by third parties for its or their account. At the decision of the Executive Board, acquisition is by purchase, subject to compliance with the principle of equal treatment (§ 53a of the Stock Corporation Act), on the stock exchange or by means of a public offering or a public invitation to the shareholders to submit an offer for sale.

For the purpose of protecting shareholders against a dilution of their shares, the proposed resolution expressly provides for a restriction of the use of acquired treasury shares in such a way that the total of the acquired shares together with shares issued or sold by the Company during the term of this authorization under another authorization to the exclusion of shareholders' subscription rights or which enable or oblige the subscription of shares is limited to a notional interest in the nominal capital of no more than a total of 20 percent of the nominal capital at the time the authorization becomes effective or – if the following value is lower – at the time this authorization is exercised.

Further details regarding the buyback of treasury shares are described in agenda item 9 in the invitation to the 2018 Annual General Meeting, accessible to the general public on our website at www.jenoptik.com under the heading Investors/Annual General Meeting. As of December 31, 2021, the company had no treasury shares.

5.17 Non-controlling interests

This item in the statement of financial position contains reconciliation items for shares of non-controlling shareholders in the capital to be consolidated, arising from the capital consolidation, as well as the profits and losses allocated to them.

5.18 Pension provisions

Provisions for pension obligations are set aside on the basis of pension plans for retirement, disability and survivor benefit commitments and exist in Germany and Switzerland. There are additional commitments in France to make one-off payments upon retirement.

As a result of the acquisition of SwissOptic AG, additional obligations under the Swiss pension system were assumed in 2021, these are classified as a defined benefit plan due to a potential obligation to make additional contributions in the event of a shortfall. The plan is financed in accordance with the statutory requirements and provides for a contribution towards the risk benefit by beneficiaries up to retirement. In this context, the pension plan is financed by contributions from both the employer and the employee. The corresponding assets are offset as plan assets against the assumed obligation.

As a result of the classification of the VINCORION division as a discontinued operation in accordance with IFRS 5, the provisions for pensions and similar obligations were reclassified under "Liabilities in connection with assets held for sale".

The benefits provided by the Group vary according to the legal, tax, and economic circumstances of the respective country and, as a rule, depend on the duration of employment and on the remuneration of the employee on commencement of retirement. The existing pension plans in Germany are closed, with the exception of the reinsured group provident fund.

Within the Group, the occupational pension provision is provided both on the basis of defined contribution as well as defined benefit plans. In the case of defined contribution plans, the company pays contributions in accordance with statutory or contractual provisions, or voluntarily makes contributions to public or private pension insurers. Upon payment of the contributions, the company has no further benefit obligations.

Defined benefit plans

Most retirement schemes within the Group are based on defined benefit plans, wherein a distinction is made between pension schemes financed through provisions or externally financed pension schemes.

The company is exposed to various risks in conjunction with defined benefit plans. Along with general actuarial risks such as longevity risks and the risk of changes in interest rates, the company is exposed to foreign currency exchange as well as investment risks.

Pension plans in the form of a reinsured group provident fund are treated as defined benefit plans due to the ongoing low interest rate phase and the associated claim risk arising from the subsidiary liability.

In accordance with IAS 19, pension provisions for the benefit commitments are determined in accordance with the projected unit credit method. In this context, the future obligations are valued on the basis of benefit claims acquired pro rata as of the balance sheet date, taking into account trend assumptions for the valuation parameters which affect the level of benefits. All benefit schemes require actuarial calculations.

Jenoptik determines the net interest expense (net interest income) by multiplying the net liability (net asset) at the commencement of the period by the underlying interest rate on commencement of the period, discounting the benefit-oriented gross pension obligation.

The actuarial effects cover, on the one side, the actuarial profits and losses arising from the valuation of the benefit-oriented gross pension obligation and on the other, the difference between the actual yield realized on plan assets and the typical yield assumed on commencement of the period.

The benefit obligations of the continuing operations covered 852 entitled beneficiaries, including 536 active employees, 110 former employees as well as 206 retirees and survivors. There are additional 708 benefit obligations in the discontinued operation.

In particular, the obligations via the Group Provident Fund, plans under the Swiss pension scheme and the obligations of the discontinued operation are partially covered by plan assets and netted in accordance with IAS 19. These plan assets are primarily managed by the Leica Pensionskasse [pension fund] (Switzerland) and AXA Lebensversicherung AG [life insurance company] or, for the discontinued operation, by a trust association under a CTA model.

The change in the defined benefit obligations (DBO), including the discontinued operation, is shown as follows:

in thousand euros	2021	2020
DBO on 1/1	83,209	79,965
Foreign currency exchange effects	637	53
Current service expenses	719	593
Contributions to the pension plans	490	789
Thereof by employees	490	789
Interest expenses	481	671
Actuarial gains (-) and losses (+)	-6,419	2,602
Empirical actuarial gains and losses	-145	-840
Changes in demographic assumptions	-566	42
Changes in financial assumptions	-5,707	3,400
Changes in the scope of consolidation	83,129	1,007
Pension payments	-2,336	-2,470
Reclassification in accordance with IFRS 5	-48,342	0
DBO on 31/12	111,567	83,209

Actuarial losses resulting from the change in financial assumptions arose in particular as a result of the further rise in the discount rate in 2021.

The changes in the plan assets, including the discontinued operation, are shown as follows:

in thousand euros	2021	2020
Plan assets as of 1/1	48,031	48,320
Foreign currency exchange effects	628	24
Interest income from plan assets	266	407
Return on plan assets less interest income	568	506
Contribution	744	912
Employer	254	123
Employee	490	789
Changes in the scope of consolidation	81,156	-63
Administrative expenses	-14	-17
Pension payments	-2,036	-2,058
Reclassification in accordance with IFRS 5	-27,154	0
Plan assets as of 31/12	102,188	48,031

The changes in the DBO and plan assets attributable to the group of consolidated entities, relate in particular to the obligations assumed for SwissOptic AG and disposals as a result of the sale of JENOPTIK Industrial Metrology Switzerland SA.

The effects of the expense of the continuing operations, recognized in the income statement, are summarized as follows:

in thousand euros	1/1-31/12/2021	1/1-31/12/2020
Current service expenses	358	195
Net interest expenses	68	57
Total expenses	426	252

The current service expenses are included in the personnel expenses of the functional areas. The interest charged on the obligation as well as the interest received on plan assets are recorded in the interest result. The expense of the discontinued operation recognized in the income statement in the sum of 509 thousand euros (prior year: 605 thousand euros) is included in the item "Earnings after tax from discontinued operation".

The net pension obligation as of the balance sheet date is as follows:

in thousand euros	31/12/2021	31/12/2020
Present value of the obligation covered by the fund	105,741	76,974
Plan assets	-102,188	-48,031
Net liability of the obligation covered by plan assets	3,552	28,943
Net liability of the obligation not covered by plan assets	5,827	6,235
Total	9,379	35,178

The portfolio structure of the plan assets is shown as follows:

in thousand euros	31/12/2021	31/12/2020
Insurance contracts	13,636	21,033
Stocks, bonds and other securities	42,425	19,892
Real estate	31,205	0
Cash and cash equivalents	3,385	8,971
Investments	135	85
Other assets and liabilities	11,403	-1,950
Total	102,188	48,031

The insurance contracts in the sum of 13,478 thousand euros relate to pension insurance policies with AXA Lebensversicherung AG. The insurance company's investments were mainly in equities and investment assets, bearer bonds and fixed-interest bearing securities, as well as other loan receivables.

The key, weighted average actuarial assumptions are shown in the following table. Where applicable, the above-mentioned assumptions allow for anticipated inflation.

in percent	2021	2020
Discount rate		
Germany	1.05	0.60
Switzerland	0.30	0
France	1.04	0.60
Future increases in salary		
Germany	2.44	2.93
Switzerland	1.50	1.50
France	2.00	2.00
Future increases in pension		
Germany	1.75	1.75
Germany (Group Provident Fund)	1.00	1.00

Due to the structure of pension obligations in Switzerland, no future pension increase (0 percent) was taken into account in the actuarial assumptions.

The valuation assumptions for Germany also take into account the pension obligations of the discontinued operation.

Actuarial gains or losses are the result of changes in pension beneficiaries and deviations from actual trends (e.g. increases in income or pensions) compared with calculation assumptions. In accordance with the regulations stated in IAS 19, this amount is offset against other comprehensive income in equity.

A change in the key actuarial assumptions as of the balance sheet date would affect the DBO as follows (prior year including the discontinued operation):

in thousand euros	Change in the DBO	
	Increase	Reduction
Discounting rate –	–7,237	7,822
change of 0.5 percentage points	(–5,664)	(6,487)
Future increases in salary –	1,625	–1,579
change of 1.0 percentage points	(359)	(–345)
Future increases in pension –	9,557	–558
change of 1.0 percentage points	(8,821)	(–6,470)
Mortality rates –	3,730	–3,734
change by 1 year	(4,632)	(–4,583)

The figures in brackets relate to the prior year

The sensitivity analysis shows the change in a DBO in the event of a change in an assumption. Since the changes do not have a straight-line effect on the calculation of DBO due to actuarial effects, the cumulative change in the DBO resulting from changes in a number of assumptions cannot be directly determined.

The reduction in the pension increase was limited to a maximum of 0 percent, and was applied in particular to the pension obligation of SwissOptic AG.

As of December 31, 2021, the weighted average remaining service period was 10 years and the weighted average remaining maturity of the obligation was 15 years.

The anticipated pension payments arising from the pension plans of the continuing operations as of December 31, 2021 are in the sum of 4,386 thousand euros for the following fiscal year (prior year: 2,841 thousand euros) and for the subsequent four fiscal years total 19,219 thousand euros (prior year: 12,900 thousand euros).

Defined contribution plans

Within the framework of the defined contribution plans, expenses of the continuing operations totaled 17,929 thousand euros for 2021 (prior year: 16,353 thousand euros), this figure includes contributions to statutory pension insurance providers in the sum of 13,562 thousand euros (prior year: 12,505 thousand euros).

5.19 Provisions for income taxes

in thousand euros	31/12/2021	31/12/2020
Provisions for income taxes	6,949	2,624

Details on income taxes are provided in Note 4.12 from page 193 on.

5.20 Other provisions

The development of other provisions is shown in the table below.

Key items in the personnel provisions relate to performance premiums, profit sharing, and similar commitments, as well as to the share-based remuneration for the Executive Board and some senior management personnel. Personnel provisions also include anniversary of service payments in the sum of 5,217 thousand euros (prior year: 5,094 thousand euros) and partial retirement obligations in the sum of 1,628 thousand euros (prior year: 1,696 thousand euros). Actuarial expert opinions were prepared for the partial retirement obligations with the assumption of income increasing at 2.44 percent (prior year: 2.94 percent). The amount of the liability for top-up payments already earned as of December 31, 2021 was 533 thousand euros (prior year: 838 thousand euros).

The provision for guarantee and warranty obligations included expenses for individual guaranty cases as well as for flat-rate warranty risks. The calculation of the provision for flat-rate warranty risks is based on empirical values which were determined as a guarantee cost ratio of revenue on a company or product group-specific basis and applied to revenues which are liable to guarantees. The amounts that were reversed in the fiscal year 2021 chiefly comprise guarantee and warranty provisions for specific individual cases for which the underlying obligations no longer existed as a result of agreements with customers for remedial action.

The provision for impending losses was recognized for individual customer orders and relates in particular to a larger customer order in the Light & Optics division.

The measures for restructuring taken in the fiscal year 2020 for reducing costs and increasing efficiency in the Light & Production division were implemented in the fiscal year 2021; unused provisions were reversed through profit or loss.

Other provisions covered, amongst other things, decommissioning obligations as well as provisions for claims for damages. Other provisions also made allowance for numerous identifiable specific risks as well as contingent liabilities which were accounted for in the amount of the best possible estimate of the settlement sum. Additions in the fiscal year 2021 included, among other things, new indemnification obligations as well as expenses arising from decommissioning obligations.

The anticipated claims are shown below by maturity:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	2021
Personnel	22,362	5,518	2,808	30,687
Guarantee and warranty obligations	7,957	2,366	0	10,322
Impending losses	4,840	3,830	129	8,800
Restructuring	28	0	0	28
Others	4,721	1,730	1,505	7,956
Total	39,907	13,444	4,442	57,794

in thousand euros	Balance as at 1/1/2021	Changes in the scope of consolidated entities	Foreign currency exchange effects	Additions	Discounting	Utilization	Reversals	Reclassifications according to IFRS 5 (+/-)	Balance as at 31/12/2021
Personnel	23,891	4,742	485	18,409	19	- 12,552	- 2,626	- 1,682	30,687
Guarantee and warranty obligations	22,353	1,768	95	5,531	0	- 3,965	- 4,368	- 11,093	10,322
Impending losses	1,068	695	5	9,786	0	- 367	- 218	- 2,169	8,800
Restructuring	11,898	0	23	240	0	- 5,779	- 4,178	- 2,176	28
Others	10,311	251	190	2,674	5	- 1,767	- 2,224	- 1,484	7,956
Total	69,521	7,456	798	36,641	24	- 24,429	- 13,613	- 18,605	57,794

5.21 Share-based payments

As of December 31, 2021, the Jenoptik Group had at its disposal share-based remuneration instruments in the form of virtual shares for both Executive Board members and some senior management personnel. In this context, a distinction must be made between Long Term Incentives of the Executive Board remuneration system that was applicable for Hans-Dieter Schumacher up to the end of 2017 and the remuneration system for some senior management personnel ("LTI") (payment of the last tranche in 2022) as well as the Performance Shares in accordance with the currently applicable Executive Board remuneration system.

The effects associated with the share-based remuneration with settlement in cash in the income statement as well as the statement of financial position were as follows for the continuing operations:

in thousand euros	Income statement		Statement of financial position	
	2021	2020	2021	2020
Virtual shares for the current year	-730	-467	730	467
Virtual shares for prior years	-717	538	2,176	1,701
Total	-1,447	71	2,906	2,168

The valuation basis used for determining the fair value of the LTI is the daily and volume-weighted, average share price of JENOPTIK AG over the last twelve months. The fair value of the performance shares is determined on the basis of an arbitrage-free valuation according to the Black/Scholes option pricing model.

Payment for the virtual shares granted to the Executive Board is generally made at the end of their four-year, contractually defined term. However, this only applies to the performance shares if multi-annual targets have been achieved on completion of the term. In the event of a departure, performance shares will also only be valued, allocated and then paid out at the end of the respective performance period, depending on whether the targets have been achieved. In the first quarter 2021 a total of 30,273 Performance Shares were allocated provisionally to the members of the Executive Board. The virtual shares allocated to the members of the Executive Board for fiscal years 2017 to 2021 were measured at fair value as of the 2021 balance sheet date and recognized in provisions.

The development of the Executive Board members' virtual shares is shown in the following table:

in units	Number for 2021	Number for 2020
Executive Board		
1/1	124,701	114,257
Granted for period	30,273	32,620
Granted for protection of existing shares in case of dividend payment ¹	161	186
Paid out	-30,109	-22,362
31/12	125,026	124,701

* LTI in accordance with the Executive Board remuneration system in force up to 2017

Virtual shares are also granted to some members of the top management. The number of virtual shares is determined on the basis of target achievement as well as on the volume-weighted average closing price of the Jenoptik share over the last 12 months of the reference year. Payment is made at the end of the fourth subsequent year after allocation, based on the volume-weighted average closing price of the Jenoptik share in the full fourth subsequent year. In the event of an exit before the end of the term, the virtual shares may be forfeit, depending on the reasons for the departure.

The development of these virtual shares in the continuing operations is shown in the following table:

in units	Number for 2021	Number for 2020
Members of the top management		
1/1	25,496	47,255
Granted for period	8,526	11,058
Granted for adjusting degree of target attainment in prior year	-2,242	-2,586
Claims expired	0	-4,049
Paid out	-3,289	-26,182
31/12	28,491	25,496

The virtual shares granted to the top management are valued at the pro rata fair value already earned and shown under provisions.

5.22 Financial debt

The maturity periods for the financial debt are shown in the table below:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Liabilities to banks	137,575 (118,565)	201,899 (82,133)	219,319 (8,552)	558,793 (209,250)
Liabilities arising from leases	11,418 (12,306)	25,365 (32,828)	2,163 (14,897)	38,946 (60,031)
Total	148,993 (130,871)	227,264 (114,961)	221,482 (23,449)	597,739 (269,281)

The figures in brackets relate to the prior year

Liabilities to banks with a term of up to one year include an outstanding debenture bond tranche in the sum of 55,000 thousand euros (prior year: 69,000 thousand euros), which were reclassified from non-current to current. In addition, the item includes real estate loans as well as money market drawdowns under the syndicated loan agreement concluded in 2021 in the total sum of 75,000 thousand euros.

Liabilities to banks with a term of one to five years essentially comprise part of the debenture bonds issued in 2021 with sustainability components with originally terms of four-and-a-half and five years. This item also includes interest and redemption payments for real estate financing in Germany.

Liabilities to banks with a term of more than five years essentially relate to the remaining part of the debenture bonds with sustainability components with original terms of six-and-a-half, seven and nine and a half years.

As at the balance sheet date, the existing syndicated loan agreement was utilized with money market loans in the sum of 75,000 thousand euros (prior year: 110,000 thousand euros) and guarantees in the sum of 10,193 thousand euros (prior year: 10,886 thousand euros). Taking into account the additional lines of financing not fully utilized as of the balance sheet date 324,978 thousand euros (prior year: 417,319 thousand euros) of the guaranteed, existing credit lines were unused.

The decrease in liabilities from leases is mainly due to the classification of VINCORION's liabilities as "held for sale". Current liabilities from leases in the prior year included liabilities of the now discontinued operation VINCORION in the sum of 3,120 thousand euros. Non-current liabilities from leases in the prior year included a contribution from VINCORION in the sum of 20,522 thousand euros.

5.23 Other non-current liabilities

Other non-current liabilities comprise the following:

in thousand euros	31/12/2021	31/12/2020
Derivatives	713	84
Non-current trade payables to third parties	543	826
Liabilities arising from corporate acquisitions	0	27,159
Non-current financial liabilities to clients	0	495
Other non-current financial liabilities	1,095	980
Total	2,350	29,545

As in the prior year, the other non-current financial liabilities mainly include a contractual obligation to make a final payment after completion of the company headquarters of a TRIOPTICS company.

In the prior year, liabilities arising from corporate acquisitions were the result of conditional purchase price components of the acquisitions of INTEROB and TRIOPTICS, as well as a final payment for the contractually agreed acquisition of the remaining 25 percent of the shares in Trioptics GmbH. The still remaining final payment will be shown under current financial liabilities as of December 31, 2021.

Further information on the development of the contingent purchase price components and on the derivatives can be found in the Notes under "Financial instruments" from page 228 on.

5.24 Current trade payables

This item includes:

in thousand euros	31/12/2021	31/12/2020
Trade payables to third parties	94,221	89,681
Trade payables to non-consolidated associates and investments	0	66
Total	94,221	89,747

Current trade payables in the prior year included liabilities of the now discontinued operation VINCORION in the sum of 18,768 thousand euros.

5.25 Contract liabilities

This item in the statement of financial position constitutes the obligations of the Group, under IFRS 15, to transfer goods or services to a customer for which it, the Group, has received a consideration in return from the customer or for which a requested advance payment is due.

The status of the contract liabilities as of the balance sheet date of December 31, 2021 is shown in the table below:

in thousand euros	31/12/2021	31/12/2020
Contract liabilities	47,323	46,274
Realization within one year	44,684	44,768
Realization within more than one year	2,639	1,506

The non-current portion mainly includes deferred potential penalties as well as down-payments arising from long-term maintenance contracts and customer projects that will not be fully completed in 2022. There is no significant financing component.

In the prior year, the current portion of contract liabilities included advances in the sum of 9,486 thousand euros received from customers of the now discontinued operation VINCORION, and the non-current portion of contract liabilities included advances received from VINCORION's customers in the sum of 405 thousand euros.

Of the contract liabilities of 46,274 thousand euros recognized at the beginning of the year, 43,374 thousand euros were recognized as revenue in 2021. This amount includes realized revenue of 9,226 thousand euros from the now discontinued operation VINCORION.

The transaction price for all customer orders that have not yet been completed in full is shown as the order backlog. This shows the following due dates:

in thousand euros	31/12/2021	31/12/2020
Transaction price of performance obligations not yet completely fulfilled	543,491	299,812
Realization within the next fiscal year	467,020	267,393
Realization within the next but one fiscal year	28,105	12,938
Realization in subsequent fiscal years	48,365	19,482

The order backlogs reported for the fiscal year 2021 and for the prior year do not include the order backlogs of the discontinued operation VINCORION.

5.26 Other current financial liabilities

This item includes:

in thousand euros	31/12/2021	31/12/2020
Liabilities from acquisitions	10,692	66,621
Other liabilities to investments	3,022	2,800
Liabilities from interest payments	2,897	1,364
Derivatives	1,818	439
Liabilities arising from remuneration for the Supervisory Board	791	694
Payments received from sales of receivables	146	312
Other current financial debt	2,657	3,098
Total	22,023	75,327

Liabilities arising from corporate acquisitions as of December 31, 2021 include the final payment made for the completed acquisition of the remaining shares in Trioptics GmbH after transfer from non-current liabilities. In the prior year, liabilities also included purchase price components arising from the acquisition of TRIOPTICS that were paid in 2021. The development of the conditional purchase price components from the acquisition of TRIOPTICS is described in the section "Financial instruments".

The item derivatives is explained in greater detail in the Notes under "Financial instruments" from page 228 on.

The payments received from sales of receivables in the sum of 146 thousand euros resulted from payments by customers on trade receivables that were sold under a genuine and confidential factoring program (see the disclosures in the section "Current trade receivables" from page 207 on).

Other liabilities to investments included the item cash pool liabilities to HILLOS GmbH, which is recognized in the consolidated financial statements using the at-equity method and for which market interest rates were agreed.

5.27 Other current non-financial liabilities

This item includes:

in thousand euros	31/12/2021	31/12/2020
Liabilities to employees	9,392	6,888
Liabilities arising from other taxes	7,171	8,394
Liabilities arising from social security payments	1,708	1,624
Liabilities to trade association	998	1,335
Deferrals and accruals	126	467
Other current non-financial liabilities	854	389
Total	20,249	19,098

Liabilities to employees included, amongst others, vacation entitlements and flextime credits.

Liabilities from other taxes essentially comprise liabilities arising from sales tax and property transfer tax.

Other current, non-financial liabilities in the prior year comprised liabilities of VINCORION in the sum of 2,743 thousand euros.

6 Disclosures on Cash Flows

Liquid funds comprise the cash and cash equivalents recognized in the statement of financial position in the sum of 54,817 thousand euros (prior year: 63,405 thousand euros) after taking into account an impairment loss of 122 thousand euros (prior year: 78 thousand euros) as provision for a default risk. Liquid funds are defined as the sum of cash on hand and demand deposits at banks with an initial maturity of less than three months.

The statement of cash flows explains the flow of payments, divided between the inflows and outflows of cash from the current business, from investing and financing activities. There was no adjustment to the cash flow statement due to the discontinued operation; the net cash flows are presented in the section "Discontinued operation" from page 194 on. Changes in the statement of financial position items used for preparing the statement of cash flows cannot be directly derived from the statement of financial position because the effects arising from the foreign currency conversion and changes in the group of consolidated entities are non-cash transactions and are therefore eliminated. Cash flows from operating activities are indirectly derived from earnings before tax of the continuing as well as the discontinued operations. Earnings before tax are adjusted

for non-cash expenses and income. The cash flows from operating activities are determined by taking into account the changes in working capital, provisions and other operating statement of financial position items.

The cash flows from operating activities in the fiscal year just past totaled 98,034 thousand euros (prior year: 89,748 thousand euros). The increase is due mainly to the significant increase in earnings before tax despite the included non-cash income from the fair value adjustment of conditional purchase price components and higher net payments for the build-up of working capital.

Cash flows from investing activities amounted to minus 413,621 thousand euros (prior year: minus 188,443 thousand euros) and, in addition to higher operating investment activities, was characterized in the fiscal year 2021 in particular by the acquisition of BG Medical and the SwissOptic Group as well as the payment of a purchase price liability arising from the acquisition of TRIOPTICS.

In addition, disposals of financial investments and divestments had a positive impact on cash flows from investing activities.

in thousand euros	Balance as of 1/1/2021	Cash-effective change	Non cash-effective change					Reclassification in accordance with IFRS 5 ¹	Balance as of 31/12/2021
			Foreign currency exchange effects	Change in group of consolidated entries	Addition/disposal	Change in the fair value	Change in maturity		
Non-current financial debt	138,410 (122,562)	399,906 (121,771)	3,131 (-895)	4,353 (15,121)	8,504 (5,491)	-641 (100)	-86,699 (-125,740)	-18,220 (0)	448,746 (138,410)
Non-current liabilities to banks	90,685 (72,182)	399,906 (121,823)	2,220 (-86)	2,882 (12,902)	0 (0)	-641 (100)	-73,834 (-116,236)	0 (0)	421,218 (90,685)
Non-current liabilities from leases	47,726 (50,380)	0 (-52)	911 (-808)	1,470 (2,219)	8,504 (5,491)	0 (0)	-12,864 (-9,504)	-18,220 (0)	27,528 (47,726)
Current financial debts	130,871 (36,996)	-72,496 (-39,405)	283 (-299)	5,061 (6,746)	2,070 (1,058)	32 (35)	86,699 (125,740)	-3,525 (0)	148,993 (130,871)
Current liabilities to banks	118,565 (26,285)	-58,764 (-27,198)	65 (-149)	3,843 (5,821)	0 (0)	32 (35)	73,834 (113,771)	0 (0)	137,575 (118,565)
Current liabilities from leases	12,306 (10,712)	-13,731 (-12,207)	217 (-150)	1,218 (924)	2,070 (1,058)	0 (0)	12,864 (11,969)	-3,525 (0)	11,418 (12,306)
Total	269,281 (159,558)	327,410 (82,366)	3,414 (-1,194)	9,414 (21,867)	10,574 (6,550)	-609 (134)	0 (0)	-21,745 (0)	597,739 (269,281)

The figures in brackets relate to the prior year

¹ Status of financial debts of discontinued operation VINCORION as of December 31, 2021

In the prior year, in addition to the payments for the acquisition of TRIOPTICS, cash flows for investing activities included, in particular, net proceeds from current investments in the sum of 69,900 thousand euros.

Cash flows from financing activities totaled 304,205 thousand euros (prior year: 63,716 thousand euros). Cash outflows from the dividends paid in the sum of 14,310 thousand euros (prior year: 7,441 thousand euros), increased over the prior year as a result of the increased dividend payment compared with 2020 of 0.25 euros per share (prior year: 0.13 euros per share). In addition, dividends were paid to minority shareholders in the sum of 1,749 thousand euros (prior year: 985 thousand euros).

The proceeds from the take-up of loans are primarily attributable to the take-up of the debenture bonds in the sum of approx. 400,000 thousand euros.

In addition, the syndicated loan concluded in the fiscal year 2015 with a credit line of 230,000 thousand euros and repaid as at the qualifying date in the prior year through money market loans in the sum of 110,000 thousand euros was replaced by a new contract with a credit line in the sum of 400,000 thousand euros. As of December 31, 2021, 75,000 thousand euros had been drawn from this new syndicated credit line for money market loans.

Payments for leases totaled 13,732 thousand euros (prior year: 12,259 thousand euros). The change in the group financing included in particular payments from or to associated, non-consolidated companies and investments.

The changes in financial liabilities that will lead to cash flows from financing activities in the future, are shown in the following table:

The reconciliation shown above exclusively takes into account financial debt, consequently the payments collected from the original customer and forwarded to the Factor in the context of the factoring, are not taken into account (see section "Current trade receivables" from page 207 on). In the statement of cash flows these are included as a net amount in the item Repayments of loans in the sum of 670 thousand euros (prior year: payment of 3,012 thousand euros). Information regarding the allocation of free cash flows to the segments is provided in the Segment Report from page 225 on).

The sale of the crystal growth business and the non-optical process metrology business for grinding machines in the fiscal year impacted on the Group's statement of financial position items as follows:

in thousand euros	Total
Assets	
Intangible assets	-1,808
Property, plant, and equipment	-341
Deferred tax assets	-263
Inventories	-4,006
Trade accounts receivables	-454
Other current assets	-127
Cash and cash equivalents	-900
Liabilities	
Pension provisions	2,045
Non-current provisions	166
Non-current financial debts	43
Deferred tax liabilities	51
Current provisions	162
Current financial debts	402
Trade accounts payable	206
Other current liabilities	195
Net assets and liabilities	-4,628
Remuneration included in cash, less directly apportionable selling costs	8,485
Sold balance of cash and cash equivalents	-900
Net cash inflows	7,585

7 Disclosure on the Segment Report

The segments are shown in accordance with the regulations laid down in IFRS 8 “Operating segments”.

IFRS 8 follows the management approach. Accordingly, the external reporting is carried out for the attention of the chief operating decision makers on the basis of the group internal organizational and management structures as well as the internal reporting structure. The Executive Board analyzes the financial information using the key performance indicators which serve as a basis for decisions on allocating resources and assessing performance. The accounting policies and principles for the segments are the same as those described for the Group in the basic accounting principles.

The Light & Optics division is a global OEM supplier of solutions and products based on photonic technologies. Jenoptik offers a wide range of products and services in this field, combining comprehensive expertise in optics, laser technology, digital imaging, optoelectronics, and software. Under the TRIOPTICS brand, Jenoptik offers optical measuring and manufacturing systems for the quality control of lenses, objectives and camera modules. The systems, modules, and components help customers to tackle the challenges they face using photonic technologies. Customers include plant and machinery manufacturers, equipment manufacturers in areas such as semiconductor equipment, laser material processing, medical technology and life science, industrial automation, automotive and mobility, security, and research institutions. Jenoptik acquired a complementary product portfolio in the areas of dentistry (e.g., intra-oral scanners) and robot-assisted surgery (e.g. components for minimally invasive surgical devices) through the acquisition of BG Medical (renamed JENOPTIK Medical GmbH in January 2022). Through the activities of the SwissOptic Group, which was also newly acquired, the Group is strengthening its own business in the areas of ophthalmology and life science. The acquisition will enable Jenoptik to roughly double the size of its medical technology business.

The Light & Production division is a global specialist in the optimization of manufacturing processes, and increasingly also offers integrated solutions (complex production lines utilizing a range of technologies) from a single source. With many years’ experience and expertise in industrial metrology and optical

inspection, modern laser-based material processing and highly flexible robotic-based automation, the division develops manufacturing solutions for customers in the automotive, aerospace and other manufacturing industries.

In the field of smart mobility, the Light & Safety division operates in the following areas of business: traffic law enforcement, civil security, road user charging as well as emission control, and traffic management. Here, Jenoptik develops, produces, and sells various components, systems, and services used by public sector customers to monitor compliance with applicable road traffic regulations and consequently make the world’s roads safer.

The activities of the holding company (Corporate Center), real estate management and the segment VINCORION, previously subject to reporting requirements (insofar as required for the reconciliation of the indicators relating to the statement of financial position to the group figure), are summarized under Other. VINCORION was classified as a discontinued operation in accordance with IFRS 5 in the fiscal year 2021 and is therefore no longer shown in the segment reporting.

The “Consolidation” column comprises the business relationships to be consolidated between the segments and Other, as well as the necessary reconciliations.

The business relationships between the entities of the Jenoptik Group segments are fundamentally based on prices that are also agreed with third parties.

Revenue more than 10 percent of the total revenue of the Jenoptik Group was generated with one customer of the Light & Optics division (118,130 thousand euros; prior year: 104,156 thousand euros). There were no other customer relationships with individual customers whose share of revenue is of significant importance when measured against group revenue.

The analysis of revenue by region is conducted according to the country in which the customer has its legal seat.

7.1 Segment Report

in thousand euros	Light & Optics	Light & Production	Light & Safety	Other	Consolidation	Total
Revenue	462,018 (322,545)	176,324 (175,573)	110,101 (114,034)	44,763 (51,024)	-42,489 (-47,710)	750,717 (615,466)
of which intra-group revenue	1,290 (1,150)	150 (25)	0 (26)	41,049 (46,509)	-42,489 (-47,710)	0 (0)
of which external revenue	460,728 (321,395)	176,174 (175,548)	110,101 (114,008)	3,714 (4,516)	0 (0)	750,717 (615,466)
Europe	221,080 (174,122)	60,850 (83,376)	62,164 (67,553)	3,714 (4,516)	0 (0)	347,807 (329,567)
of which, Germany	67,761 (54,305)	37,056 (48,558)	30,856 (34,670)	3,712 (4,516)	0 (0)	139,384 (142,048)
of which Great Britain	2,204 (1,138)	1,983 (4,303)	18,485 (19,500)	0 (0)	0 (0)	22,672 (24,941)
of which the Netherlands	111,081 (96,406)	100 (65)	3,760 (3,184)	0 (0)	0 (0)	114,941 (99,655)
Americas	88,904 (64,237)	85,129 (68,214)	31,620 (28,188)	0 (0)	0 (0)	205,653 (160,639)
of which the USA	86,617 (61,749)	58,639 (39,208)	22,213 (20,753)	0 (0)	0 (0)	167,469 (121,709)
of which Canada	1,492 (2,454)	21,967 (21,755)	8,388 (7,139)	0 (0)	0 (0)	31,846 (31,348)
Middle East and Africa	21,296 (12,544)	556 (1,818)	2,490 (6,025)	0 (0)	0 (0)	24,343 (20,387)
Asia/Pacific	129,447 (70,520)	29,640 (22,140)	13,827 (12,242)	0 (0)	0 (0)	172,914 (104,903)
of which China	51,403 (24,182)	21,706 (16,885)	200 (373)	0 (0)	0 (0)	73,309 (41,441)
of which Singapore	30,329 (19,486)	14 (134)	380 (163)	0 (0)	0 (0)	30,723 (19,783)
EBITDA	136,634 (68,297)	13,188 (8,195)	19,191 (22,339)	-13,221 (-6,055)	-57 (0)	155,735 (92,776)
Scheduled depreciation and amortization	-25,828 (-16,451)	-10,872 (-12,159)	-5,123 (-7,143)	-5,758 (-8,191)	4 (7)	-47,578 (-43,937)
Impairment losses	0 (-672)	0 (-183)	0 (0)	-460 (-879)	0 (0)	-460 (-1,733)
Impairment reversals	0 (292)	0 (0)	0 (0)	451 (0)	0 (0)	451 (292)
Research and development expenses	-18,224 (-19,663)	-6,295 (-6,682)	-14,373 (-13,083)	-53 (-125)	60 (133)	-38,886 (-39,420)
Free cash flow (before income taxes)	78,002 (40,915)	-12,495 (-123)	-4,383 (21,424)	-16,531 (-13,250)	-1,401 (3,518)	43,192 (52,484)
Working capital ¹	172,081 (114,578)	76,852 (66,595)	25,585 (12,064)	-13,476 (75,119)	-485 (-227)	260,556 (268,130)
Order intake (external)	631,108 (343,374)	185,347 (153,974)	116,504 (92,314)	3,714 (4,516)	0 (0)	936,672 (594,179)
Frame contracts	107,407 (12,637)	0 (0)	27,743 (8,897)	0 (0)	0 (0)	135,150 (21,534)
Assets ¹	1,057,612 (626,139)	310,067 (307,905)	126,275 (114,888)	1,545,342 (1,208,040)	-1,282,255 (-918,129)	1,757,041 (1,338,843)
Liabilities ¹	256,614 (261,161)	210,776 (227,408)	77,295 (71,187)	758,477 (413,859)	-326,779 (-324,164)	976,382 (649,452)

in thousand euros	Light & Optics	Light & Production	Light & Safety	Other	Consolidation	Total
Capital expenditure for intangible assets, property, plant, and equipment and investment property	28,932 (18,657)	3,371 (4,802)	8,108 (4,629)	9,530 (9,996)	0 (0)	49,941 (38,084)
Number of employees on average excluding trainees (headcount) ²	1,972 (1,489)	895 (1,033)	484 (475)	971 (1,052)	0 (0)	4,322 (4,049)

The free cash flow (before income taxes) = cash flows from operating activities before payment of income taxes, less proceeds from and expenditure for intangible assets and property, plant, and equipment
 The figures in brackets relate to the prior year

¹ Including the VINCORION discontinued operation in the prior year and including assets and liabilities held for sale in the fiscal year

² Including employees of the discontinued operation VINCORION

Since January 1, 2021 when OTTO Vision Technology GmbH (OTTO) has been part of the Light & Optics division. In the prior year the entity was part of the Light & Production division. For this reason, the figures reported for the comparable period of the prior year differ from the figures from the prior year's Consolidated Financial Statements.

Due to the classification of VINCORION as a discontinued operation in the fiscal year 2021, the earnings figures for the prior year have been adjusted accordingly. For this reason, the earnings figures reported for the comparative period differ from the figures from the prior year's consolidated financial statements. The classification of VINCORION as a discontinued operation is taken into account exclusively in the fiscal year 2021 for items in the statement of financial position. In the prior year, the contracts relate to the continuing operations so as to provide transparency in the presentation of the development of these order book values.

Segment result reconciliation:

EBITDA is calculated as earnings before interest, taxes, depreciation and amortization including impairments and reversals. The reconciliation of the EBITDA to the EBIT of the continuing operations reported in the consolidated income statement is as follows:

In thousand euros	1/1–31/12/2021	1/1–31/12/2020
EBITDA	155,735	92,776
Scheduled depreciation and amortization	–47,578	–43,937
Impairment losses	–460	–1,733
Impairment reversals	451	292
EBIT	108,148	47,397

7.2 Non-current assets by regions

in thousand euros	31/12/2021	31/12/2020
Total	1,025,060	755,438
Germany	538,282	538,046
Europe	338,266	79,711
of which Great Britain	46,675	44,923
of which, Switzerland	260,343	783
Americas	125,699	119,547
of which the USA	48,355	43,961
of which Canada	77,344	75,586
Asia/Pacific	22,812	18,134

Non-current assets comprise intangible assets, property, plant, and equipment, investment property, as well as non-current non-financial assets. The assets are allocated to the individual regions according to the countries in which the consolidated entities have their legal seat.

By comparison with the prior year, the acquisition of BG Medical and the classification of VINCORION's assets as held for sale, had an impact on non-current assets in Germany.

The increase in non-current assets in Switzerland is primarily attributable to SwissOptic AG which was consolidated for the first time.

8 Other Disclosures

8.1 Capital management

The aim of Jenoptik's capital management is to maintain a strong capital base in order to retain the trust of the shareholders, creditors and capital markets, as well as to ensure the sustained, successful development of the company. The Executive Board monitors in particular the equity ratio, the development of cash flows as well as the net debt as part of the regular management reporting. In the event of significant deteriorations in the key parameters, alternative courses of action are worked out and the corresponding measures implemented.

As of the balance sheet date December 31, 2021, the key financing of the Jenoptik Group is a syndicated credit line in the sum of 400,000 thousand euros as well eleven debenture bonds totaling 405,000 thousand euros and one debenture bond in the sum of 59,000 thousand US dollars. Further details on these are shown in the Notes under the point Liquidity risk (see page 232). No agreements have been concluded on compliance with certain key financial figures for the existing debenture bonds or for the syndicated loan newly concluded in December 2021.

In addition to the syndicated loan and debenture bonds, the Jenoptik Group utilizes to a lesser extent other source of financing, consisting of bilateral credit lines, development loans, lease and rental financing as well as factoring. These instruments are used to actively manage the development of the cash flow. Detailed information on the factoring is shown in the Notes under section "Current trade receivables" (from page 207 on).

8.2 Financial instruments

General

Within the framework of its operating activities, the Jenoptik Group is exposed to credit, default, liquidity and market risks. The market risks include in particular risks of fluctuations in interest rates and foreign currency exchange rates.

The risks described above impact on the financial assets and liabilities which are shown below (prior year's figures regarding financial assets and financial liabilities include VINCORION).

Financial assets

in TEUR	Valuation category in accordance with IFRS 9 ¹	Carrying amounts 31/12/2021	Valuation in the statement of financial position in accordance with IFRS 9		
			Amortized acquisition costs	Fair value – outside of profit or loss	Fair value – through profit or loss
Financial investments					
Current financial investments (cash deposits, equities, bonds)	AC or FVTPL	1,555 (4,894)	1,555 (197)		0 (4,698)
Shares in non-consolidated, associates and investments	FVTOCI	1,001 (841)		1,001 (841)	
Shares in entities which are subject to equity valuation	– ²	14,328 (13,410)	14,328 (13,410)		
Loans and other financial investments	AC	1,985 (2,084)	1,985 (2,084)		
Trade receivables	AC	120,477 (138,011)	120,477 (138,011)		
Other financial assets					
Receivables from finance leases	–	57 (192)	57 (192)		
Receivables arising from contingent considerations	FVTPL	13,347 (0)			13,347 (0)
Derivatives with hedge relationships					
Interest and currency swap	–	2,957 (0)		2,957 (0)	

in TEUR	Valuation category in accordance with IFRS 9 ¹	Carrying amounts 31/12/2021	Valuation in the statement of financial position in accordance with IFRS 9		
			Amortized acquisition costs	Fair value – outside of profit or loss	Fair value – through profit or loss
Foreign exchange forward transactions/ foreign exchange swaps	–	20 (1,956)		20 (1,956)	
Derivatives without hedge relationships					
Interest and currency swap	FVTPL	0 (125)			0 (125)
Foreign exchange forward transactions/ foreign exchange swaps	FVTPL	69 (166)			69 (166)
Other financial assets	AC	8,166 (6,638)	8,166 (6,638)		
Cash and Cash Equivalents	AC	54,817 (63,405)	54,817 (63,405)		
Total		218,779 (231,723)	201,385 (223,936)	3,978 (2,797)	13,416 (4,989)

The figures in brackets relate to the prior year

¹ AC = Amortized costs

FVTPL = Fair value through Profit & Loss

FVTOCI = Fair value through other comprehensive income

² Valuation in accordance with IAS 28

Financial liabilities

in thousand euros	Valuation category in accordance with IFRS 9 ¹	Carrying amounts 31/12/2021	Valuation in the statement of financial position in accordance with IFRS 9			Balance sheet valuation in accordance with IFRS 16
			Amortized acquisition costs	Fair value – outside of profit or loss	Fair value – through profit or loss	
Financial debts						
Liabilities to banks	AC	558,793 (209,250)	558,793 (209,250)			
Liabilities from leases	- ²	38,946 (60,031)			38,946 (60,031)	
Trade payables	AC	94,764 (90,573)	94,764 (90,573)			
Other financial liabilities						
Liabilities from contingent considerations	FVTPL	0 (16,595)			0 (16,595)	
Derivatives with hedge relationships						
Foreign exchange forward transactions/ foreign exchange swaps	–	1,661 (385)		1,661 (385)		
Derivatives without hedge relationships						
Interest and currency swap	FVTPL	66 (0)			66 (0)	
Foreign exchange forward transactions/ foreign exchange swaps	FVTPL	805 (138)			805 (138)	
Other financial liabilities	AC	21,300 (86,928)	21,300 (86,928)			
Total		716,335 (463,900)	674,857 (386,751)	1,661 (385)	870 (16,732)	

The figures in brackets relate to the prior year

¹ AC = Amortized costs

FVTPL = Fair value through Profit & Loss

FVTOCI = Fair value through other comprehensive income

² Valuation in accordance with IFRS 16

The classification of the fair values for the financial assets and liabilities is taken from the following overview:

in thousand euros	Carrying amounts 31/12/2021	Level 1	Level 2	Level 3
Current financial investments	0 (4,698)	0 (4,698)	0 (0)	0 (0)
Shares in non-consolidated, associates and investments	1,001 (841)	0 (0)	0 (0)	1,001 (841)
Receivables from contingent considerations	13,347 (0)	0 (0)	0 (0)	13,347 (0)
Derivatives with hedge relations (assets)	2,977 (1,956)	0 (0)	2,977 (1,956)	0 (0)
Derivatives without hedge relations (assets)	69 (291)	0 (0)	69 (291)	0 (0)
Liabilities from contingent considerations	0 (16,595)	0 (0)	0 (0)	0 (16,595)
Derivatives with hedge relations (liabilities)	1,661 (385)	0 (0)	1,661 (385)	0 (0)
Derivatives without hedge relations (liabilities)	870 (138)	0 (0)	870 (138)	0 (0)

The figures in brackets relate to the prior year

Fair values which are always available as quoted market prices, are allocated to level 1. Fair values determined based on direct or indirect observable parameters, are allocated to level 2. Level 3 is based on measurement parameters that are not based upon observable market data.

The fair values of all derivatives are determined using the generally recognized present value method. In this context, the future cash flows determined via the agreed forward rate or interest rate are discounted using current market data. The market data used in this context is taken from leading financial information systems, such as for example Refinitiv (formerly Reuters). If an interpolation of market data is applied, this is done on a straight-line basis.

The fair values of contingent liabilities are valued at the anticipated payment outflows, taking into consideration the period and risk-dependent interest rate discounted as at the reporting date.

The development of the financial assets and liabilities which are valued at fair value and assigned to level 3, can be found in the table below:

in thousand euros	Shares in non-consolidated associates and investments	Receivables arising from contingent considerations	Liabilities from contingent considerations
Balance as of 1/1/2021	841	0	16,595
Additions	187	0	0
Profits (+)/losses (-) recorded in the operating result	0	12,977	17,532
Profits (+)/losses (-) recorded in the financial result	-37	370	-937
Valuation outside profit/loss	17	0	0
Currency effect	-7	0	0
Balance as of 31/12/2021	1,001	13,347	0

Receivables and liabilities from contingent consideration result from the company acquisitions of INTEROB and TRIOPTICS in the prior year (see section "Company acquisitions and sales" from page 175 on).

The recognized conditional purchase price liabilities from the acquisition of INTEROB were based on the achievement of agreed EBITDA targets in the fiscal years 2021 and 2022. The agreement stipulates that if the target is achieved between 80 and 100 percent, there will be a standard earn-out of up to 3.3 million euros per fiscal year. If the EBITDA target value is undercut by more than 20 percent, the earn-out obligation for the respective fiscal year is completely eliminated. Exceeding the EBITDA target value can result in an unlimited earn-out premium.

As in the prior year, the conditional purchase price liabilities were determined on the basis of the company's corporate planning approved by management. Despite the recovery in the automotive industry, the expected EBITDA result for 2021 could not be achieved, mainly due to delays caused by Covid-19, and was below the threshold of 80 percent. Based on the current corporate planning, it is no longer assumed that the threshold will be exceeded in the fiscal year 2022. The liabilities from contingent consideration were therefore released in full.

The recognized conditional purchase price components from the acquisition of TRIOPTICS included a revenue-dependent bonus/malus arrangement and an earn-out component depending on the EBITDA of the fiscal year 2021. The revenue-dependent bonus/malus arrangement is linked to the revenue of the TRIOPTICS Group under commercial law and leads to a bonus or malus of up to 15 million euros in the event of deviations from the original company plan of up to 15 percent. The earn-out component stipulates that if the defined EBITDA target value is exceeded, a conditional additional purchase price payment of up to 15 million euros may have to be made by Jenoptik.

The parameters relevant for the measurement of the purchase price liabilities – consisting of revenue and earnings figures according to German GAAP HGB – were initially determined in the prior year based on the corporate planning approved by management and updated as of December 31, 2021 with the expected revenue and earnings figures under commercial law.

The accounting according to IFRS, which is relevant for the consolidated financial statements, led to a revenue contribution of the TRIOPTICS Group of around 100 million euros revenue over time, and an EBITDA margin above the group average. Due to delays in the completion of individual large-scale customer-specific projects, the expected revenue under commercial law relevant for the purchase price components in 2021 and, as a result, the expected EBITDA under commercial law for the 2021 fiscal year could not be achieved, so that the bonus and earn-out liabilities were reversed through profit or loss. At the same time, a malus claim was capitalized through profit and loss. Receipt of the conditional component from the acquisition of TRIOPTICS is expected in 2022.

Fair value adjustments to contingent receivables and liabilities through profit and loss are recognized in other operating income or other operating expenses. The compounding is shown in the financial result.

Credit and default risks

The credit or default risk is the risk of a customer or a contract partner of the Jenoptik Group failing to fulfill its contractual obligations. This results in both the risk of creditworthiness-related impairment losses to financial instruments as well as the risk of a partial or a complete default on contractually agreed payments.

Credit and default risks primarily exist for trade receivables. These risks are countered by active receivables management and, if required, taken into account by creating impairment provisions. In addition, the Jenoptik Group is exposed to credit

and default risks for cash and cash equivalents as well as current cash deposits. These risks are taken into account through constant monitoring of the creditworthiness of our business partners. To this end, business partner credit ratings and Credit Default Swaps (CDS) are subject to regular evaluation. For risk management purposes, liquid funds, amongst other things, are distributed between a number of banks within fixed limits. In accordance with IFRS 9, impairments were also applied to cash and cash equivalents as well as to current cash deposits.

The maximum default risk corresponds to the carrying amount of the financial assets as of the reporting date in the sum of 218,779 thousand euros (prior year: 231,723 thousand euros).

The following impairments were recorded for financial assets for continuing operations in the fiscal year:

in thousand euros	2021	2020
Trade accounts receivable and contract assets	3,354	1,580
Financial investments	107	75
Cash and cash equivalents	92	7
Other financial assets	0	25
Total	3,553	1,687

These impairments are offset against the following reversals of write-downs on financial assets:

in thousand euros	2021	2020
Trade accounts receivable and contract assets	2,203	5,669
Cash and cash equivalents	62	98
Financial investments	0	239
Total	2,265	6,006

The impairments to or reversals of write-downs on financial investments as well as cash or cash equivalents are included in the financial result.

in thousand euros	Interest rates (Range in %)	Carrying amounts 31/12/2021	Cash outflows			
			Total	Up to 1 year	1 to 5 years	More than 5 years
Variable, interest-bearing liabilities to banks	0.9–1.30 (0.8–1.15)	244,577 (15,105)	261,928 (15,368)	2,628 (879)	98,117 (14,489)	161,183 0
Fixed-interest bearing liabilities to banks	0.60–2.02 (0.65–3.85)	314,216 (194,144)	333,966 (196,450)	140,006 (118,945)	130,183 (67,755)	63,777 (9,750)
Liabilities from leases	0.75–5.73 (0.79–5.91)	38,946 (60,031)	41,421 (65,256)	12,373 (14,188)	23,929 (35,323)	5,119 (15,745)
Total		597,739 (269,281)	637,315 (277,074)	155,007 (134,012)	252,228 (117,567)	230,080 (25,495)

The figures in brackets relate to the prior year

Liquidity risk

The liquidity risk entails the possibility of the Group being unable to meet its financial obligations. In order to ensure our ability to pay and financial flexibility at all times, the net cash and cash equivalents, as well as the credit lines and level of utilization, are planned yearly by means of a five-year financial plan as well as via a quarterly forecast of the statement of financial position, earnings and cash flow. The liquidity risk is also limited by effective cash and working capital management.

As of the balance sheet date the liquidity reserves were divided into cash and cash equivalents in the sum of 54,817 thousand euros (prior year: 63,405 thousand euros) and current financial investments in the sum of 1,555 thousand euros (prior year: 4.894 thousand euros). In addition, the Group has a secured and unused line of credit available in the sum of 324,978 thousand euros (prior year: 417,319 thousand euros). This is primarily the result of the newly agreed syndicated loan in the sum 400,000 thousand euros agreed in December 2021. As at the balance sheet date of December 31, 2021, the syndicated loan was utilized in the form of money market loans in the sum 75,000 thousand euros as well as in the form of guarantees in the sum of 10,193 thousand euros and to a minimal extent in the form of overdraft facilities. This is a limited term syndicated loan contract up to December 2026, with two extension options, each for one year respectively.

In March 2021, new debenture bond tranches in the sum of 350,000 thousand euros, spread over two value dates, as well as one debenture bond tranche in the sum of 59,000 thousand US dollars. The eleven newly issued debenture bonds in total have different maturities of between four and a half and nine and a half years.

No financial covenants were agreed for the new syndicated loan and the debenture bonds issued. However, the terms of the financing are based on the ESG goals of the Group to increase diversity, reduce CO₂ emissions and increase transparency in the supply chain, so that Jenoptik receives a small interest advantage if all goals are achieved for the first time from 2022; Conversely, a malus is accepted if fewer than two of the three goals are achieved.

The newly agreed syndicated loan and the debenture bonds issued in 2021 have significantly strengthened the long-term financial resources of the Jenoptik Group and created the financial basis for further organic growth and growth through acquisitions. Furthermore, the reorganization of the financing structure has provided for a significant diversification in the financing obligations, both in terms of repayment dates and lenders.

The outstanding debenture bond tranche from the year 2015 in the sum of 55,000 thousand euros (prior year: 69,000 thousand euros) will be repaid in April 2022.

Cash outflows up to one year primarily comprise the repayment of money market loans in the sum of 75,000 thousand euros plus interest, drawn under the syndicated loan, as well as the repayment of a debenture bond tranche in the amount of 55,000 thousand euros. This item also includes interest and redemption payments for real estate financing in and Germany as well as liabilities from leases.

The cash outflows in the time frame of between one to five years mainly comprise the repayments of the debenture bonds with original terms of four-and-a-half and five years. In addition, the item includes interest and redemption payments for real estate financing in Germany with an original ten-year term, as well as liabilities from leases.

Cash outflows over five years mainly comprise repayments for debenture bond tranches with original maturities of six-and-a-half, seven and nine-and-a-half years, as well as interest and redemption payments for real estate financing in Germany and leases.

The prior year's figures for liabilities from leases also include the contribution from the now discontinued operation VINCORION of 23,642 thousand euros, of which 3,795 thousand euros was due within one year, 12,957 thousand euros was due between one and five years and 9,523 thousand euros was due in over 5 years.

Risk of changes in interest rates

The Jenoptik Group is fundamentally exposed to the risks of fluctuations in market interest rates for all interest-bearing financial assets and liabilities. In the fiscal year 2021, this mainly affected the debenture bonds taken out in the sum of 405,000 thousand euros (prior year: 69,000 thousand euros) and 59,000 thousand US dollars (prior year: 0 thousand US dollars) as well as the utilization of the syndicated loan contract through money market loans in the sum of 75,000 thousand euros (prior year: 110,000 thousand euros) at the respective balance sheet.

in thousand euros	Carrying amounts	
	31/12/2021	31/12/2020
Interest bearing financial assets	21,456	16,722
Variable interest rates	9,226	3,274
Fixed-interest	12,230	13,448
Interest bearing financial liabilities	599,377	268,423
Variable interest rates	245,670	15,264
Fixed-interest	353,707	253,159

The calculated gains and losses arising from a change in the market interest rate as of December 31, 2021 within a bandwidth of 100 basis points, are shown in the following table:

in thousand euros	31/12/2021	31/12/2020
Increase by 100 base points		
Interest bearing financial assets	92	33
Interest bearing financial liabilities	-2,457	-153
Impact on earnings before tax	-2,364	-120
Reduction by 100 base points		
Interest bearing financial assets	-92	-33
Interest bearing financial liabilities	2,457	153
Impact on earnings before tax	2,364	120

As part of the management of interest rate risks, Jenoptik relies on a mix of fixed and variable interest-bearing assets and liabilities, as well as on various interest rate hedging transactions. These include, for example, interest swaps, interest caps and floors, as well as combined interest and currency swaps. As of the balance sheet date on December 31, 2021, there were two combined interest rate and currency swap instruments in place, with the following structure.

Interest and currency swap CNY	
Nominal volume	17,980 thousand CNY
Term	March 12, 2015 to March 12, 2025
Fixed interest rate to be paid in CNY	5.10 percent p.a.
Variable interest rate to be received in EUR	6-month month Euribor plus 0.2 percent p.a.
Interest and currency swap USD	
Nominal volume	59,000 thousand US dollars
Term	March 31, 2021 to March 31, 2026
Fixed interest rate to be received in USD	2.024 percent p.a.
Fixed interest rate to be paid in EUR	0.645 percent p.a.

The interest and currency swap in CNY is used as a hedge for an intra-group loan for real estate financing in Shanghai (China). The change in its market value of minus 191 thousand euros was recorded through profit or loss in the income statement.

The interest and currency swap in US dollars is used as a hedge for the risk of foreign currency exchange differences for the debenture bond tranche issued in 2021, in the sum of 59,000 thousand US dollars. The market value is broken down into an interest rate and a currency component. As of December 31, 2021, the interest component had a positive market value of 556 thousand euros which was recognized in equity outside profit or loss. Explanations of the foreign currency component follow in the next section "Foreign currency exchange risk".

The following receipts and payments are anticipated from these hedging instruments:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Interest and currency swap CNY				
Anticipated payments to bank	138 (122)	350 (458)	0 (0)	488 (579)
Interest and currency swap USD				
Anticipated payments to bank	322 (0)	1,288 (0)	0 (0)	1,610 (0)
Anticipated receipt received from bank	1,010 (0)	4,040 (0)	0 (0)	5,051 (0)

The figures in brackets relate to the prior year

Foreign currency exchange risk

Foreign currency exchange risks are divided into two types: conversion risk and transaction risk.

The conversion risk arises from fluctuations in value caused by changes in exchange rates arising from the conversion of financial assets and liabilities in foreign currencies into the currency of the statement of financial position. Since this is normally not associated with any cash flows, in most cases hedging is not required.

The transaction risk arises from the fluctuation in value of cash flows in foreign currencies caused by changes in currency exchange rates. Derivative financial instruments are used to hedge this risk. These are mainly currency forward transactions and currency swaps and, to a lesser extent, currency options.

Hedging is provided for significant cash flows in foreign currencies arising from the operational business (revenue). Contractually agreed cash flows are hedged 1:1 via so-called micro-hedges. Planned cash flows are hedged on a pro rata basis in the context of anticipatory hedging, securing both groups of similar transactions (revenues) as well as net positions of individual entities.

JENOPTIK AG also hedges the anticipated cash flows from intra-group loans in foreign currencies which have not been declared as a "Net investment in a foreign operation", using derivative financial instruments. As of December 31, 2021, intra-group loans in foreign currencies are hedged as follows (prior year including VINCORION):

Borrowers of intra-group loans	Outstanding amount of intra-group loans (excluding "Net investment in a Foreign operation" portion)	Hedging volume
JENOPTIK Holdings UK Ltd., Great Britain	5,250 thousand GBP	2,540 thousand GBP
JENOPTIK JAPAN Co. Ltd., Japan	130,000 thousand JPY	130,000 thousand JPY

As of the balance sheet date, existing foreign exchange forward transactions, foreign exchange swaps and foreign exchange options totaled a nominal 53,331 thousand euros (prior year: 84,234 thousand euros including VINCORION). A so-called cash flow hedge relationship with the respective underlying transaction was documented for the vast majority of these transactions. Where this is proven effective, its changes in value do not have to be recorded through profit or loss in equity but outside profit or loss in equity. In order to measure the effectiveness, a prospective, quality-related effectiveness test was conducted, on the designation date as well as on a continuous basis, normally as of the balance sheet dates, on the basis of the IFRS 9 "Financial instruments" accounting standard.

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The interest rate and currency swap in USD, already mentioned in the previous section "Risk of changes in interest rates", serves to hedge the foreign exchange currency risk for the debenture bond tranche in the sum of 59,000 thousand US dollars. The positive market value of its currency components totaled 2,401 thousand euros as of the qualifying date December 31, 2021. The change in the market value of the currency component is reflected in the income statement through profit or loss. This way, the opposite change in the value of the underlying transaction can be compensated (valuation of the foreign currency liability in EUR).

The breakdown of foreign exchange forward transactions, foreign exchange swaps and foreign exchange options, as well as interest and currency swap USD according to currency sales and purchases, is as follows (prior year including VINCORION):

in thousand euros	31/12/2021	31/12/2020
USD – sale for EUR	40,698	57,375
USD – purchase for EUR	49,907	1,731
GBP – sale for EUR	2,717	5,003
USD – sale for CHF	4,435	0
USD – sale for CAD	1,348	9,086
CNY – sale for EUR	924	391
JPY – sale for EUR	1,021	862
CAD – sale for EUR	2,188	9,715
SGD – sale for EUR	0	70
Total foreign currency sales	53,331	82,503
Total foreign currency purchases	49,907	1,731

The foreign exchange forward transactions, foreign exchange swaps and foreign exchange options, as well as the interest and currency swaps in USD, give rise to the following market values:

in thousand euros	31/12/2021	31/12/2020
Positive market values		
Derivatives with hedging relationship		
Non-current	2,957	500
Current	20	1,456
Derivatives without hedging relationship		
Non-current	21	0
Current	48	166
Total positive market values	3,046	2,122
Negative market values		
Derivatives with hedging relationship		
Non-current	492	0
Current	1,169	385
Derivatives without hedging relationship		
Non-current	155	84
Current	649	54
Total negative market values	2,465	523
Balance	581	1,599

The market values for hedging transactions for intra-group loans are included in the derivatives without hedging relationships as the underlying transaction comprising intra-group receivables and liabilities is deconsolidated. The positive market values of these derivatives as of the balance sheet date totaled 27 thousand euros (prior year: 164 thousand euros), the negative market values totaled 281 thousand euros (prior year: 138 thousand euros). The change led to an overall loss of 281 thousand euros (prior year: loss of 132 thousand euros) which was recognized in the financial result through profit or loss.

Cumulative losses in derivatives with a hedging relationship in the sum of 957 thousand euros (prior year: cumulative earnings in the amount of 1,269 thousand euros) were recognized in equity outside profit or loss as of December 31, 2021. Of the profits recognized in equity outside profit or loss as of December 31, 2020, in 2021 the sum of 769 thousand euros (prior year: losses in the amount of 2,278 thousand euros) was reclassified from equity to profit and loss. This type of reclassi-

fication is normally associated with the recognition of the underlying transaction (for example, recognition of revenue and booking of the corresponding receivable on billing) through profit or loss so the targeted balancing effect of concluding the hedging transaction is reflected in the income statement.

The foreign currency hedging transactions hedge against foreign exchange currency risks in the sum of 40,069 thousand euros with a time frame up to the end of 2022. Foreign currency risks with a time frame up to the end of 2026 were hedged in the sum of 63,170 thousand euros.

The main foreign currency exchange transactions of the Jenoptik Group involve US dollars. The table below shows a breakdown of the USD-based translation and transaction risks, as well as the net risk position of the Group:

in thousand euros	31/12/2021	31/12/2020
Financial assets	50,646	24,355
Financial debts	55,497	5,052
Interest and currency swap USD	49,907	0
Translation risk	-54,758	19,303
Planned cash flows	223,709	197,958
Cash flows hedged through derivatives	46,481	64,731
Transaction risk	177,228	133,227
Net risk item	122,470	152,530

The marked increase in financial assets held in US dollars compared to the prior year is mainly due to the increase in trade receivables and receivables arising from due, requested advance payments in US dollars. The increase in financial liabilities is primarily attributable to the debenture bond in the sum of 59,000 thousand US dollars.

The increase in planned cash flows in US dollars compared to the prior year is attributable to the targeted international growth of the Jenoptik Group.

As of the balance sheet date there was a US dollar-based net risk item in the sum of 122,470 thousand euros (prior year: 152,530 thousand euros). A change in the US dollar exchange rate would have the following consequences:

	EUR/USD rate	Change in the net risk item (in thousand euros)
Reporting date 31/12/2021	1.1326 (1.2271)	
Increase by 5 percent	1.1892 (1.2885)	5,832 (7,263)
Reduction by 5 percent	1.0760 (1.1657)	-6,446 (-8,028)
Increase by 10 percent	1.2459 (1.3498)	11,134 (13,866)
Reduction by 10 percent	1.0193 (1.1044)	-13,608 (-16,948)

The figures in brackets relate to the prior year

8.3 Other financial obligations

As of December 31, 2021 obligations existed in the sum of 192,731 thousand euros (prior year: 116,297 thousand euros, excluding VINCORION 71,887 thousand euros), in particular order commitments for inventories in the sum of 130,935 thousand euros (prior year: 61,942 thousand euros, excluding VINCORION 34,195 thousand euros) and for intangible assets and property, plant, and equipment in the sum of 30,290 thousand euros (prior year: 17,342 thousand euros, excluding VINCORION 16,480 thousand euros) as well as other financial obligations of 31,458 thousand euros (prior year: 36,966 thousand euros, excluding VINCORION 21,165 thousand euros).

The increase in order commitments for inventories is attributable in particular to the acquisition of BG Medical and the SwissOptic Group.

The increase in order commitments for intangible assets and property, plant, and equipment of 12,948 thousand euros to 30,290 thousand euros is mainly attributable to orders for a new plant for the manufacture of products for the semiconductor industry (electron beam facility) at the Dresden site, orders for planning and construction services for the new canteen at the Göschwitz site and the initial consolidation of the newly acquired entities.

Excluding VINCORION, other financial liabilities increased by 10,293 thousand euros to 31,458 thousand euros, mainly as a result of the extension of a building management contract in the Corporate Center up to 2023. Furthermore, contracts were concluded for the provision of consulting and software services in connection with the site modernization and IT security, as well as for the expansion of the BI system.

Other financial liabilities also include liabilities arising from a service agreement concluded for building management services for all Jenoptik locations in Germany which has been extended for a further two years, as well as contracts for consulting services for IT security and the introduction of a new ERP system.

Loan commitments to non-consolidated associates in the sum of 47 thousand euros (prior year: 47 thousand euros) were not taken up in full.

8.4 Legal disputes

JENOPTIK AG and its group entities are involved in few court or arbitration proceedings. Provisions for litigation risks, respectively litigation expenses, were set aside in the appropriate amounts in order to meet any potential financial burdens resulting from current court or arbitration proceedings (see section "Other provisions" from page 218 on).

8.5 Related party disclosures in accordance with IAS 24

Related parties are defined in IAS 24 "Related Party Disclosures" as being entities or persons that have control over or are controlled by the Jenoptik Group to the extent that they have not already been included in the consolidated financial statements as consolidated entities as well as entities or persons that, on the basis of the Articles of Association or by contractual agreements, are able to significantly influence the financial and corporate policies of the management of JENOPTIK AG or participate in the joint management of JENOPTIK AG. Control applies if a shareholder holds more than half of the voting rights in JENOPTIK AG. The largest single shareholder of JENOPTIK AG is Thüringer Industriebeteiligungs GmbH & Co. KG, Erfurt, which directly holds a total of 11 percent of the voting rights.

Members of the Executive Board and of the Supervisory Board of JENOPTIK AG also qualify as related parties. In the fiscal year 2021, as in the prior year, no exchange of goods or of services was transacted between the entity and members of these two bodies.

The breakdown of the total remuneration of the members of the management in key positions (Executive Board and Supervisory Board), recorded in 2021 through profit or loss, is shown in the following table.

in thousand euros	2021	2020
Short-term benefits	2,647	2,221
Post-employment benefits	360	360
Share-based payment	1,121	- 23
Total	4,128	2,559

At the balance sheet date, there were outstanding commitments to members of management in key positions in the total sum of 4,047 thousand euros (prior year: 3,094 thousand euros) consisting of one-year and multi-year variable remuneration components for the Executive Board and the remuneration of the Supervisory Board.

Further information on the mandatory disclosure of the remuneration of the Executive Board and Supervisory Board is published in the section "Corporate Governance" on pages 241 et seq.

The following table shows the composition of the business relationships with non-consolidated entities, associate entities and joint ventures.

in thousand euros	Total	of which	
		non-consolidated, affiliated entities	associated entities and investments
Revenue	1,024	12	1,012
	(997)	(25)	(972)
Purchased services	1,959	361	1,598
	(947)	(93)	(854)
Receivables from operating activities	310	36	274
	(277)	(104)	(173)
Liabilities from operating activities	0	0	0
	(66)	(12)	(54)
Financial liabilities	3,022	0	3,022
	(2,800)	(0)	(2,800)
Loans granted	10	0	10
	(10)	(0)	(10)

The figures in brackets relate to the prior year

9 Events after the Balance Sheet Date

The JENOPTIK AG Executive Board approved the submission of these Consolidated Financial Statements to the Supervisory Board on March 16, 2022. The Supervisory Board is responsible for reviewing and approving the Consolidated Financial Statements at its meeting on March 25, 2022.

Dividends. According to the Stock Corporation Act, the amount available for a dividend payment to the shareholders is based on the accumulated profit of the parent company JENOPTIK AG, as determined by the regulations of the HGB. For the fiscal year 2021, JENOPTIK AG's accumulated profit totaled 46,043,833.67 euros, comprising net profit for 2021 in the amount of 16,043,833.67 euros plus retained profits of 30,000,000.00 euros.

The Executive Board recommends to the Supervisory Board that for the 2021 fiscal year past a dividend of 0.25 euros per qualifying no-par value share be proposed at the 2022 Annual General Meeting (prior year: 0.25 euros). This would mean that a sum of 14,309,528.75 euros from JENOPTIK AG's accumulated profits in the 2021 fiscal year is to be distributed. Of JENOPTIK AG's remaining accumulated profits, a sum of 11,734,304.92 euros will be allocated to revenue reserves and a sum of 20,000,000.00 euros carried forward to the new account.

New group structure for the first quarter of 2022. With the new growth agenda "More Value", Jenoptik will further accelerate the transformation to a globally leading, pure photonics group. As part of its realignment, the Group is bundling its core photonics business into the two new divisions Advanced Photonic Solutions (business with industrial customers) and Smart Mobility Solutions (business with public clients). The previous Light & Optics and Light & Production divisions will be merged into the new Advanced Photonic Solutions division and the non-photonics activities, particularly those geared to the automotive market, will be separated.

In the future, these business activities will be managed within the Jenoptik Group under the Non-Photonic Portfolio Companies as independent brands (including Hommel, Prodomax and INTEROB). The former Light & Safety division will become the Smart Mobility Solutions division. These two new divisions focus on the three core markets of semiconductor & electronics, life science & medical technology and smart mobility. The new structure will be implemented during the first quarter of 2022.

Ukraine war. The war in Ukraine with the associated sanctions can primarily affect the supply of energy and its price development as well as the short-term availability of raw materials and logistics services. Likewise, the prohibition of financial transactions can also affect the procurement or sale of sanction-free goods. This can have a negative impact on both production costs and productivity in parts of our value chains and can have a decisive impact on overall economic development in Jenoptik's growth markets. At the time of reporting, the situation was still very dynamic and the effects of the war cannot be assessed conclusively. A significant increase in inflation rates could affect our business activities in that price increases for raw materials and intermediate goods have a negative impact on our cost structure. We try to counteract this with various purchasing measures, further optimization of the internal cost structure and, if necessary, price adjustments in close cooperation with our customers.

No further events of significance occurred after December 31, 2021.

10 Required Disclosures and Supplementary Information under HGB

10.1 Required disclosures in accordance with § 315e and § 264 (3) or § 264b of the HGB

The consolidated financial statements of JENOPTIK AG were prepared in accordance with § 315e of the HGB, exempting an entity from preparing consolidated financial statements under HGB in accordance with the guidelines of the IASB. At the same time, the consolidated financial statements and combined management report are in conformity with the European Union Consolidated Accounts Directive (2013/34/EU). In order to achieve comparability with a set of consolidated financial statements prepared in accordance with the commercial regulations of the HGB, all of the required disclosures and explanations under the HGB as well as any required disclosures above and beyond those needed to be in compliance with IFRS are published.

Through having been included in the consolidated financial statements of JENOPTIK AG, the following fully consolidated German associates have made use of the simplification relief measures defined in § 264 (3) or § 264b of the HGB:

- JENOPTIK Advanced Systems GmbH, Altenstadt
- JENOPTIK Automatisierungstechnik GmbH, Jena
- JENOPTIK Industrial Metrology Germany GmbH, Villingen-Schwenningen
- JENOPTIK Optical Systems GmbH, Jena
- JENOPTIK Power Systems GmbH, Altenstadt
- JENOPTIK Robot GmbH, Monheim am Rhein
- SAALEAUE Immobilien Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Pullach im Isartal
- Trioptics GmbH, Wedel

10.2 Number of employees and personnel expenses

The breakdown of the average number of employees is presented as follows:

Employees	2021	2020
Light & Optics	1,972	1,489
Light & Production	895	1,033
Light & Safety	484	475
Others ¹	971	1,052
Total	4,322	4,049

¹ Including discontinued operation VINCORION

In addition, in the fiscal year 2021 an average of 175 trainees (prior year: 161) were employed.

The average was determined in accordance with the requirements of § 267 (5) HGB [German Commercial Code] for the description of the size categories.

The breakdown of the personal expenses of the continuing and discontinued operations is as follows:

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Wages and salaries	282,951	246,279
Social security contributions and costs for assistance	47,813	42,710
Expenses for pensions	2,644	2,060
Total	333,408	291,049

Other attestation services of the auditor were rendered as part of the attestation of key financial figures, as well as certifications under the Renewable Energies Act and according to the European Market Infrastructure Regulation (EMIR). Tax advice was mainly given in the area of transfer prices.

Of the total expenses, financial statement audit services of 1,040 thousand euros (prior year: 862 thousand euros), other services of 21 thousand (prior year: 22 thousand euros) other attestation services of 21 thousand euros (prior year: 29 thousand euros), as well as tax consulting services of 18 thousand euros (prior year: 8 thousand euros) are attributable to the auditors of the consolidated financial statements Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Germany.

10.3 Financial statement auditor fees

The fees for the services rendered by our auditor, as well as by its affiliates and network companies, amounted to:

in thousand euros	1/1–31/12/2021	1/1–31/12/2020
Financial statement audit services	1,565	1,377
Other services	0	22
Other attestation services	21	29
Tax consulting services	23	8
Total	1,609	1,436

The fees for the financial statement audit services relate to expenses for the audit of the annual and consolidated financial statements of the JENOPTIK AG as well as the statutory and voluntary audits of the financial statements of the subsidiaries included in the consolidated financial statements.

11 Corporate Governance

11.1 German Corporate Governance Code

In December 2021, the Executive Board and Supervisory Board of JENOPTIK AG submitted a declaration of conformity in accordance with § 161 of the German Stock Corporation Act as required by the recommendations of the Government Commission’s German Corporate Governance Code in the version dated December 16, 2019. The declaration of conformity has been made permanently accessible to shareholders on the JENOPTIK AG website under www.jenoptik.com in the section Investors/Corporate Governance. The declaration can also be viewed in the offices of JENOPTIK AG (Carl-Zeiss-Straße 1, 07743 Jena, Germany).

11.2 Executive Board

The following persons were appointed as members of the Executive Board in the fiscal year 2021:

	other mandates with:
Dr. Stefan Traeger President & CEO	JENOPTIK North America, Inc., USA (GI, Chairman, CCB) JENOPTIK (Shanghai) Precision Instrument and Equipment Co., Ltd., Shanghai, China (GI, Chairman, CCB) JENOPTIK (Shanghai) International Trading Co., Ltd., China (GI, Member, CCB) Prodomax Automation Ltd., Canada (GI, Chairman, CCB) JENOPTIK Korea Corp., Ltd., Korea (GI, Member, CCB) JENOPTIK JAPAN Co. Ltd., Japan (GI, Member, CCB) TELSTAR-HOMMEL Co., Ltd., Korea (GI, Member, CCB)
Hans-Dieter Schumacher Member of the Executive Board of JENOPTIK AG	JENOPTIK (Shanghai) Precision Instrument and Equipment Co., Ltd; China (GI, Member, CCB) JENOPTIK (Shanghai) International Trading Co., Ltd., China (GI, Member, CCB) JENOPTIK North America, Inc., USA (GI, member, CCB) JENOPTIK Traffic Solutions Switzerland, Switzerland (GI, Chairman, CCB) Prodomax Automation Ltd., Canada (GI, member, CCB)

Abbreviations: CCB – comparable controlling body, GI – Group internal mandate

The total remuneration granted to the members of the Executive Board in accordance with Section 314 No. 6 HGB in the fiscal year 2021 totaled 2,781 thousand euros (prior year: 2,294 thousand euros). In addition to fixed remuneration, this includes annual variable remuneration and fringe benefits (contributions to accident insurance and the provision of company cars) and contributions to pension schemes. It also includes the fair value of the 30,273 (prior year: 32,620) performance shares provisionally allocated in the fiscal year and 161 (prior year: 186) LTIs according to the Executive Board remuneration system in effect until 2017 at the respective grant date.

Retirement benefits paid to former Executive Board members, or their survivors amounted to 185 thousand euros (prior year: 218 thousand euros). As of the balance sheet date, the pension provisions for former Executive Board members totaled 3,108 thousand euros (prior year: 3,371 thousand euros). The expenses recorded for these existing provisions in the fiscal year 2021 comprised interest expenses in the sum of 20 thousand euros (prior year: 26 thousand euros).

In the fiscal year 2021 – as in the preceding years – no loans or advances were granted to the members of either the Executive Board or the Supervisory Board. Consequently, there were no loan redemption payments.

11.3 Supervisory Board

The following persons were appointed to the Supervisory Board in fiscal year 2021:

	Member of:	Other mandates with:
<p>Matthias Wierlacher (Chairman) Chairman of the Board of the Thüringer Aufbaubank Appointed in 2012, Chairman since July 2015</p>	<ul style="list-style-type: none"> Personnel Committee (Chairman) Investment Committee (Chairman) Nominations Committee (Chairman) Mediation Committee (Chairman) 	<ul style="list-style-type: none"> Mittelständische Beteiligungsgesellschaft Thüringen mbH (not listed, SB member) bm-t beteiligungsmanagement thüringen GmbH (GI, not listed, SB Chairman) ThüringenForst – Public Body – (SB member, not listed, CCB)
<p>Stefan Schaumburg¹ (Vice Chairman since October 16, 2020) Head of the Functional Department and Secretary of the Management Board of the IG Metall Union, Frankfurt Appointed in 2012</p>	<ul style="list-style-type: none"> Personnel Committee Investment Committee Mediation Committee 	<ul style="list-style-type: none"> Dr. Ing. h.c. F. Porsche AG (SB member, not listed, since February 24, 2021) Porsche Holding Stuttgart GmbH (SB member, not listed, since March 1, 2021)
<p>Astrid Biesterfeldt¹ Director Corporate Development at JENOPTIK Advanced Systems GmbH Appointed in 2014</p>	<ul style="list-style-type: none"> Audit Committee 	None
<p>Evert Dudok Executive Vice President Connected Intelligence, Airbus Appointed in 2015</p>	<ul style="list-style-type: none"> Personnel Committee (since January 1, 2022) Nominations Committee (since January 1, 2022) Mediation Committee (since January 1, 2022) 	<ul style="list-style-type: none"> EURASSPACE Gesellschaft für Raumfahrttechnik mbH (GI, not listed, SB member up to December 31, 2021)
<p>Elke Eckstein CEO Enics AG, Switzerland Appointed since 2017</p>	<ul style="list-style-type: none"> Investment Committee 	<ul style="list-style-type: none"> Enics Eesti AS, Estonia (GI, not listed, CCB, Chairman) Enics Electronics (Beijing) Ltd., China (GI, not listed, CCB member) Enics Electronics (Suzhou) Ltd., China (GI, not listed, CCB member) Enics Finland Oy, Finland (GI, not listed, CCB, Chairman) Enics Hong Kong Ltd., Hong Kong (GI, not listed, CCB, Chairman and member up to September 1, 2021) Enics Raahe Oy, Finland (GI, not listed, CCB, Chairman) Enics Schweiz AG, Switzerland (GI, not listed, CCB, Chairman) Enics Slovakia s.r.o., Slovakia (GI, not listed, CCB, member) Enics Sweden AB, Sweden (GI, not listed, CCB, Chairman and member up to May 28, 2021) Enics Malaysia Sdn. Bhd. (GI, not listed, CCB, since July 14, 2020) Saferoad SRH Holding AS, Norway (not listed, CCB, member) KK Wind Solutions A/S, Denmark (not listed, CCB, member) BE Semiconductor Industries NV, Netherlands (listed GI, CCB, member since September 2021)
<p>Prof. Dr. Dr. h.c. Ursula Keller Professor at the ETH Zurich, Switzerland Appointed since January 21, 2022</p>		None

	Member of:	Other mandates with:
Thomas Klippstein¹ Chairman of the Group Works Council of Jenoptik Appointed in 1996	<ul style="list-style-type: none"> Personnel Committee Audit Committee 	None
Dörthe Knips¹ Chairman of the Local Works Council for JENOPTIK Optical Systems GmbH Jena & Dresden Appointed in 2017	<ul style="list-style-type: none"> Investment Committee 	None
Dieter Kröhn¹ Production planner at JENOPTIK Advanced Systems GmbH Appointed October 1999 to June 2007, reappointed since December 2010	<ul style="list-style-type: none"> Investment Committee Mediation Committee 	None
Doreen Nowotne Independent corporate management consultant Appointed in 2015	<ul style="list-style-type: none"> Audit Committee (Vice Chairman) Investment Committee 	<ul style="list-style-type: none"> Brenntag AG (listed, SB Chairman) Lufthansa Technik AG (not listed, SB member) Franz Haniel & Cie. GmbH (not listed, SB Chairman)
Heinrich Reimitz Member of the Management of HPS Holding GmbH, Austria Appointed in 2008	<ul style="list-style-type: none"> Audit Committee (Chairman) Personnel Committee Nominations Committee 	<ul style="list-style-type: none"> Ühinenud Farmid AS, Estonia (not listed, CCB, member up to January 6, 2022)
Frank-Dirk Steininger¹ District Secretary IG Metall Mitte in Frankfurt am Main Appointed since 2020	<ul style="list-style-type: none"> Personnel Committee 	None
Prof. Dr. rer. nat. habil., Dipl.-Physiker Andreas Tünnermann Master's in Physics Director of the Institute for Applied Physics and university lecturer in applied physics at the Friedrich Schiller University Jena, and Head of the Fraunhofer Institute for Applied Optics and Precision Mechanics, Jena Appointed in 2007 (up to December 31, 2021)	<ul style="list-style-type: none"> Personnel Committee (up to December 31, 2021) Mediation Committee (up to December 31, 2021) Nominations Committee (up to December 31, 2021) 	<ul style="list-style-type: none"> Docter Optics SE (not listed, CCB, member) ARRI AG (not listed, SB Vice Chairman)

¹ Employee representative
Abbreviations: SB – Supervisory Board, CCB – Comparable Controlling Body, GI – Group internal appointment)

Supervisory Board Remuneration

The remuneration for the members of the Supervisory Board totaled 782 thousand euros (prior year: 636 thousand euros; fixed remuneration and committee remuneration including attendance fees).

12 List of Shareholdings in the Jenoptik Group as at December 31, 2021 in accordance with § 313 (2) HGB

No.	Name and registered office of the entity	Share of JENOPTIK or the direct shareholder as % of	Equity 31/12/2021 thousand euros ¹	Result 2021 thousand euros ¹
1.1. Affiliated consolidated companies				
– direct investments				
1	JENOPTIK Robot GmbH, Monheim am Rhein, Germany	100		
2	JENOPTIK Industrial Metrology Germany GmbH, Villingen-Schwenningen, Germany	100		
3	JENOPTIK Automatisierungstechnik GmbH, Jena, Germany	100		
4	JENOPTIK Advanced Systems GmbH, Altenstadt, Germany	100		
5	JENOPTIK Optical Systems GmbH, Jena, Germany	100		
6	SAALEAUE Immobilien Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Jena, Germany, in liq. ²	100		
7	JENOPTIK North America, Inc., Jupiter (FL), USA	100		
8	JENOPTIK Asia-Pacific Pte. Ltd., Singapore, Singapore	100		
– indirect investments				
9	JENOPTIK Traffic Solutions Switzerland AG, Uster, Switzerland	100		
10	JENOPTIK ROBOT MALAYSIA SDN BHD, Kuala Lumpur, Malaysia, in liq. ²	100		
11	Jenoptik Benelux B.V., Riel, The Netherlands	100		
12	JENOPTIK UK Ltd., Milton Keynes, Great Britain	100		
13	JENOPTIK Traffic Solutions UK Ltd., Camberley, Great Britain	100		
14	JENOPTIK Industrial Metrology France SAS, Bayeux Cedex, France	100		
15	JENOPTIK Power Systems GmbH, Altenstadt, Germany	100		
16	Hörsel GmbH (formerly PHOTONIC SENSE GmbH), Eisenach, Germany ¹¹	100		
17	PHOTONIC SENSE, INC., Nashua (NH), USA	100		
18	Asam Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs KG, Mainz, Germany	94		
19	Traffipax, LLC, Jupiter (FL), USA	100		
20	JENOPTIK Automotive North America, LLC, Rochester Hills (MI), USA	100		
21	JENOPTIK INDUSTRIAL METROLOGY DE MEXICO, S. DE R.L. DE C.V., Saltillo, Mexico	98		
22	JENOPTIK Optical Systems, LLC, Jupiter (FL), USA	100		
23	JENOPTIK Advanced Systems, LLC, El Paso (TX), USA	100		
24	Prodomax Automation Ltd., Barrie, Canada	100		
25	JENOPTIK (Shanghai) Precision Instrument and Equipment Co., Ltd., Shanghai, China	100		
26	JENOPTIK (Shanghai) International Trading Co., Ltd., Shanghai, China	100		
27	JENOPTIK Australia Pty Ltd, Sydney, Australia	100		
28	JENOPTIK Korea Corporation, Ltd., Pyeongtaek, Korea	66.66		
29	JENOPTIK JAPAN Co. Ltd., Yokohama, Japan	100		
30	JENOPTIK India Private Limited, Bangalore, India	100		
31	BROXBURN, S.L., Madrid, Spain	100		
32	INTEROB, S.L., Valladolid, Spain	100		
33	INTEROB RESEARCH & SUPPLY, S.L., Valladolid, Spain	100		
34	Trioptics GmbH, Wedel, Germany	100		
35	JENOPTIK Berlin GmbH, Berlin, Germany	100		
36	TRIOPTICS SINGAPORE PTE. LTD., Singapore	100		

No.	Name and registered office of the entity	Share of JENOPTIK or the direct shareholder as % of	Equity 31/12/2021 thousand euros ¹	Result 2021 thousand euros ¹
37	Trioptics Optical Test Instruments (China) Ltd., Beijing, China	51		
38	Trioptics Hong Kong Limited, Hong Kong	100 ¹⁰		
39	Trioptics Japan Co., Ltd., Shizuoka, Japan	61.25		
40	Trioptics Korea Co., Ltd., Suwon, Korea	60		
41	TRIOPTICS TAIWAN LTD. Taoyuan, Taiwan	51		
42	Trioptics Inc., Rancho Cucamonga, California, USA	100		
43	TRIOPTICS Scandinavia OY, Tampere; Finland	100		
44	JENOPTIK Medical GmbH (formerly BG Medical Applications GmbH), Berlin, Germany	100		
45	SwissOptic AG, Heerbrugg, Switzerland	100		
46	SwissOptic (Wuhan) Co., Ltd., Wuhan, China	100		
47	Berliner Glas Wuhan Trading Co., Ltd., Wuhan, China	100		
1.2 Affiliated, non-consolidated companies				
– direct investments				
48	FIRMICUS Verwaltungsgesellschaft mbH Jena, Germany, in liq. ²	100 ⁸	36	4
49	SAALEAUE Immobilien Verwaltungsgesellschaft mbH, Jena, Germany, in liq. ²	100 ⁹	36	2
50	KORBEN Verwaltungsgesellschaft mbH, Grünwald, Germany, in liq. ²	100	31 ⁴	1 ⁴
– indirect investments				
51	JENOPTIK do Brasil Instrumentos de Precisão e Equipamentos Ltda., Sao Paulo, Brazil	100	-796 ⁴	-343 ⁴
52	JENOPTIK Saudi Arabia, LLC, Jeddah, Saudi-Arabia, in liq. ²	100	9 ⁵	-37 ⁵
53	Polar Optics Oy, Oulu, Finland	100	1	0
2. Associated entities valued at equity				
54	TELSTAR-HOMMEL CORPORATION, Ltd., Pyeongtaek, Korea	33.33	18,257 ⁴	1,124 ⁴
55	HILLOS GmbH, Jena, Germany	50	16,228	1,440
56	Trioptics France S.A.R.L., Villeurbanne, France	50	221 ⁴	-186 ⁴
3. Investments				
– direct investments				
57	JENAER BILDUNGSZENTRUM GmbH SCHOTT CARL ZEISS JENOPTIK, Jena, Germany	33.33	1,571 ⁴	246 ⁴
– indirect investments				
58	JT Optical Engine Verwaltungs GmbH, Jena, Germany, in liq. ²	50 ⁷	24	0
59	JT Optical Engine GmbH + Co. KG, Jena, Germany, in liq. ²	50 ⁷	507	-1
60	JENOPTIK Robot Algérie SARL, Algiers, Algeria	49	178 ⁴	-34 ⁴
61	HOMMEL CS s.r.o., Teplice, Czech Republic	40	1,030 ⁴	93 ⁴
62	Zenteris GmbH, Jena, Germany, in i. ³	24.9 ⁷	⁶	⁶

¹ Details from annual financial statements in foreign currency converted at the rate on the qualifying date or at the average rate of the respective year

² in. liq. = in liquidation

³ i.l. = in insolvency

⁴ Details for 2020 financial statements

⁵ Details as at March 31, 2018

⁶ Details not available

⁷ Deviating fiscal year as of June 30

⁸ Deviating fiscal year as of September 30

⁹ Short fiscal year from January 1 to September 30, 2021

¹⁰ indirect investment through Trioptics Optical Test Instruments (China) Ltd.

¹¹ in liquidation with effect since January 1, 2022

Jena, March 16, 2022
JENOPTIK AG

The Executive Board

Further information

» In short «

Jenoptik will invite its shareholders

on June 15,
2022

to the Annual General Meeting.

Assurance from the Legal Representatives

We give our assurance that, to the best of our knowledge and in accordance with the applicable accounting principles, the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group and that the course of business, including the business

result and the position of the Group, are portrayed in such a way in the Combined Management Report that a true and accurate picture is conveyed and that the significant opportunities and risks of the Group's future development are fairly described.

Jena, March 16, 2022



Dr. Stefan Traeger
President & CEO



Hans-Dieter Schumacher
Chief Financial Officer

Independent auditor's report

To JENOPTIK AG

Report on the audit of the consolidated financial statements and of the combined management report

Opinions

We have audited the consolidated financial statements of JENOPTIK AG, Jena, and its subsidiaries (the Group), which comprise the consolidated statement of comprehensive income for the fiscal year from 1 January to 31 December 2021, the consolidated statement of financial position as at 31 December 2021, the consolidated statement of cash flows and the consolidated statement of changes in equity for the fiscal year from 1 January to 31 December 2021, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of JENOPTIK AG, which was combined with the management report of the Company, for the fiscal year from 1 January to 31 December 2021. In accordance with the German legal requirements, we have not audited the content of the combined corporate governance statement pursuant to Sec. 289f and Sec. 315d HGB ["Handelsgesetzbuch": German Commercial Code], which is part of the group management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2021 and of its financial performance for the fiscal year from 1 January to 31 December 2021, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of the corporate governance statement referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and the EU Audit Regulation (No 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Art. 10 (2) f) of the EU Audit Regulation, we

declare that we have not provided non-audit services prohibited under Art. 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from 1 January to 31 December 2021. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

Below, we describe what we consider to be the key audit matters:

1. Testing goodwill for impairment

Reasons why the matter was determined to be a key audit matter

Goodwill recognized in the consolidated financial statements of JENOPTIK AG is subject to an annual impairment test pursuant to IAS 36.

The result of the valuations mainly depends on the future cash inflows estimated by the executive directors as well as the discount rate used. The impairment test is therefore associated with a large degree of judgment and uncertainty, which is why it was determined to be a key audit matter.

Auditor's response

We discussed the method used to perform the impairment test with the Company's executive directors and assessed its compliance with the requirements of IAS 36. We verified the individual components used to determine the discount rate with the support of our internal valuation experts, in particular by analyzing the peer group, comparing market data with external evidence and examining the calculation. We examined the clerical accuracy of the valuation model on a sample basis.

We checked on a test basis that the planning assumptions used in the detailed forecasts of each of the cash-generating units are in line with the business plan of the Company prepared by the Executive Board and assessed them critically taking into account our findings from the audit. In addition, we verified the growth rates for income and expenses used to roll forward the budget by comparing internal and external data. We also analyzed the forecasts with regard to adherence to the budget in the past, compared it with the prior-year forecast, discussed it with the Company's executive directors and obtained evidence substantiating the individual assumptions of the forecasts.

We verified the significant assumptions used in the sensitivity calculations prepared by the executive directors of the Company in order to estimate any potential impairment risk associated with a change in one of the significant assumptions used in the valuation.

We do not have any reservations regarding the impairment testing of goodwill recognized in the consolidated financial statements.

Reference to related disclosures

Additional disclosures on the impairment of goodwill as well as the associated judgments are contained in section 5.1 "Intangible assets" of the Company's notes to the consolidated financial statements.

2. Measurement of deferred tax assets on tax loss carryforwards

Reasons why the matter was determined to be a key audit matter

The deferred tax assets recognized in the consolidated financial statements of JENOPTIK AG primarily relate to tax loss carryforwards in Germany. The measurement of deferred tax assets on tax loss carryforwards mainly depends on the estimation of the projected future taxable income, also taking into account changes in the tax group. The measurement is therefore associated with a large degree of judgment and uncertainty, which is why it was determined to be a key audit matter.

Auditor's response

We discussed the method used to measure deferred tax assets on tax loss carryforwards with the executive directors and assessed its compliance with the rules of IAS 12.

We discussed the assumptions used in the forecast of the expected future taxable income with the executive directors, checked on a test basis with the internal forecasts prepared by the Executive Board and assessed them critically taking into account our findings from the audit. We also engaged our internal tax specialists to assist us with assessing the reconciliation of planned earnings to the expected taxable income. In addition, we verified the growth rates for income and expenses used to roll forward the budget by comparing internal and external data. We also analyzed the forecasts with regard to adherence to the budget in the past, compared them with the prior-year forecasts and obtained evidence substantiating the individual assumptions of the forecasts.

Furthermore, we confirmed the assumptions of the tax planning based on the taxable income generated in the past.

We do not have any reservations regarding the deferred tax assets on tax loss carryforwards recognized in the consolidated financial statements.

Reference to related disclosures

Additional disclosures on the recoverability of deferred tax assets on loss carryforwards are contained in section 4.12 "Income taxes" of the notes to the consolidated financial statements.

3. Accounting treatment of the acquisition of shares in BG Medical Applications GmbH and the SwissOptic Group

Reasons why the matter was determined to be a key audit matter

On 30 November 2021, JENOPTIK AG acquired 100 % of the shares in BG Medical Applications GmbH, Berlin, Germany, as well as SwissOptic AG, Heerbrugg, Switzerland, and SwissOptic (Wuhan) Co., Ltd., Wuhan, China, (hereinafter: "SwissOptic Group") via Jenoptik Optical Systems GmbH, Jena, and JENOPTIK Asia-Pacific Pte. Ltd., Singapore. With the acquisition of SwissOptic (Wuhan) Co., Ltd., Jenoptik also obtained control over its subsidiary Berliner Glas Wuhan Trading Co., Ltd., Wuhan, China.

In accordance with IFRS 3 "Business Combinations", the identifiable assets acquired and liabilities assumed have been recognized at the fair value on the acquisition date. The consideration paid to BG Medical Applications GmbH and the SwissOptic Group for the acquisition comprises a fixed cash component.

The identification and measurement of assets and liabilities acquired are complex and are based on judgment-based assumptions made by the executive directors. The assumptions relevant for the measurement affect the revenue and margin forecast and the calculation of cost of capital.

Against this background, the accounting treatment of the acquisition of shares in BG Medical Applications GmbH and the SwissOptic Group in the consolidated financial statements was a key audit matter.

Auditor's response:

With the involvement of our valuation experts, we assessed the method and calculation used for the identification and valuation processes applied for their agreement with the relevant financial reporting standards.

We compared the assumptions and parameters underlying the cost of capital, particularly the risk-free interest rate, the market risk premium and the betafactor, with own assumptions and publicly available data. In connection with the revenue and margin forecast, we analyzed the developments forecast against the background of market expectations and observing the historical developments.

We also reviewed the disclosures on the acquisition of shares in BG Medical Applications GmbH and the SwissOptic Group in the notes to the consolidated financial statements.

Our audit procedures did not lead to any reservations concerning the accounting treatment of the acquisition of shares in BG Medical Applications GmbH and the SwissOptic Group in the consolidated financial statements.

Reference to related disclosures:

Additional disclosures on the acquisition of shares in BG Medical Applications GmbH and the SwissOptic Group are contained in section 2.4 "Acquisitions and sales of entities" of the notes to the consolidated financial statements.

4. Accounting for VINCORION as discontinued operations

Reasons why the matter was determined to be a key audit matter

By contract dated 25 November 2021, JENOPTIK AG agreed on the sale of its subsidiaries JENOPTIK Advanced Systems GmbH, Wedel, Germany, JENOPTIK Power Systems GmbH, Altenstadt, Germany, and JENOPTIK Advanced Systems, LLC, El Paso, USA (together: VINCORION) with binding effect. The economic transfer of the shares in the corresponding entities is subject to a number of conditions precedent, such as authorities approving the transaction and other customary closing conditions. The transaction is expected to be completed in fiscal year 2022.

In return, JENOPTIK AG will receive the purchase price in cash, which is mainly determined at the time of the transfer using a mechanism based on a reference price, net debt and working capital as of the date of transfer. This is accompanied by contingent consideration that depend on VINCORION’s future performance.

The remeasurement of VINCORION’s assets and liabilities at fair value less any remaining costs of disposal resulted in the recognition of a corresponding impairment loss.

Accounting for VINCORION as discontinued operations was a key audit matter due to the pending completion of the transaction and the associated significant risk of material misstatements, estimation uncertainties and judgment exercised in the valuations as well as the overall material effects on the assets, liabilities, financial position and financial performance of the Group.

Auditor’s response:

In our audit of the consolidated financial statements, we first evaluated the executive directors’ assessment with respect to meeting the criteria to be classified as held for sale and discontinued operations as contained in IFRS 5 as of 31 December 2021. For this purpose, we obtained an understanding of the contractual agreements and examined the probability of meeting the conditions precedent for the completion.

In addition, we assessed the recognition of revenue that falls under the business activities within the scope of IFRS 5 on the basis of contractual agreements and verified the classification as held for sale and discontinued operations in the basis of consolidation including the adjustment of consolidation entries as well as prior-year figures in the consolidated income statement and notes to the consolidated financial statements.

Our audit procedures regarding the remeasurement related in particular to the assessment of the fair value calculation less any remaining costs of disposal and the determination of the carrying amount of VINCORION as of 31 December 2021. We therefore particularly examined the contractually fixed mechanisms for calculating the purchase price.

We also evaluated the disclosures on accounting for VINCORION as discontinued operations in the notes to the consolidated financial statements.

Our audit procedures did not lead to any reservations relating to the accounting treatment of VINCORION as discontinued operations in the consolidated financial statements.

Reference to related disclosures:

Additional disclosures on accounting for VINCORION as discontinued operations are contained in section 4.13 “Discontinued operations” of the notes to the consolidated financial statements.

Other information

The Supervisory Board is responsible for the Report of the Supervisory Board in section "1 Management" of the Annual Report. The executive directors and the Supervisory Board are responsible for the declaration pursuant to Sec. 161 AktG ["Aktengesetz": German Stock Corporation Act] on the German Corporate Governance Code, which is part of the corporate governance statement, and for the remuneration report pursuant to Art. 162 AktG. In all other respects, the executive directors are responsible for the other information. The other information comprises the corporate governance statement in section "2 Corporate Governance", the Combined Separate Non-financial Report (section 3) as well as other parts of the Annual Report, in particular sections

- 1 Management,
- 2 Corporate Governance (including the Remuneration Report), and
- 6 More information (including the Assurance by the Legal Representatives),

but not the consolidated financial statements, not the group management report disclosures whose content is audited and not our auditor's report thereon. We received a copy of this other information prior to issuing this auditor's report.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the executive directors and the Supervisory Board for the consolidated financial statements and the group management report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition,

the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group’s financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor’s responsibilities for the audit of the consolidated financial statements and of the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group’s position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor’s report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors’ use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor’s report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Report on the assurance on the electronic rendering of the consolidated financial statements and the group management report prepared for publication purposes in accordance with Sec. 317 (3a) HGB

Opinion

We have performed assurance work in accordance with Sec. 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the file "Jenoptik_AG_KA+KLB_ESEF-2021-12-31.zip" (SHA-256-Prüfsumme: 6549d9e98d0a4f5 ecbe64e15333a8d921721fbc3290-83072516fc95530545971) and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained within these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the file identified above and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinions on the accompanying consolidated financial statements and the accompanying group management report for the fiscal year from 1 January to 31 December 2021 contained in the “Report on the audit of the consolidated financial statements and of the group management report” above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

Basis for the opinion

We conducted our assurance work on the rendering of the consolidated financial statements and the group management report contained in the file identified above in accordance with Sec. 317 (3a) HGB and the IDW Assurance Standard: Assurance on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Sec. 317 (3a) HGB (IDW AsS 410) (10.2021) and the International Standard on Assurance Engagements 3000 (Revised). Our responsibility in accordance therewith is further described in the “Group auditor’s responsibilities for the assurance work on the ESEF documents” section. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the executive directors and the Supervisory Board for the ESEF documents

The executive directors of the Company are responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the group management report in accordance with Sec. 328 (1) Sentence 4 No. 1 HGB and for the tagging of the consolidated financial statements in accordance with Sec. 328 (1) Sentence 4 No. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have determined necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB for the electronic reporting format.

The Supervisory Board is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

Group auditor’s responsibilities for the assurance work on the ESEF documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.

- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e., whether the file containing the ESEF documents meets the requirements of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, on the technical specification for this file.
- Evaluate whether the ESEF documents enable an XHTML rendering with content equivalent to the audited consolidated financial statements and to the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Arts. 4 and 6 of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as group auditor by the Annual General Meeting on 9 June 2021 and were engaged by the Supervisory Board on 2 September 2021. We have been the group auditor of JENOPTIK AG without interruption since fiscal year 2016.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

In addition to the audit of the financial statements, we have provided to the audited Company the following services that are not disclosed in the audited consolidated financial statements or in the audited group management report:

In addition to the audit of the financial statements, we have performed permissible other assurance services in connection with the audit of the content of the remuneration report which comprises the formal audit of the remuneration report required by Sec. 162 (3) AktG.

Other matter – use of the auditor's report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited group management report as well as the assured ESEF documents. The consolidated financial statements and the group management report converted to the ESEF format – including the versions to be published in the Bundesanzeiger [German Federal Gazette] – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic form.

German Public Auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Mr. Steffen Maurer.

Stuttgart, 16 March 2022

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Maurer	Pester
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Executive Board

Dr. Stefan Traeger

President and CEO

Dr. Stefan Traeger has been the Chairman of the Executive Board of JENOPTIK AG since May 1, 2017. He is responsible for the divisions (operational business) and the regions as well as for the areas of Corporate Development (Strategy, Mergers & Acquisitions, Innovation), Corporate Communications and Marketing, Investor Relations and Sustainability, Legal and IP, Compliance & Risk and, as Human Resources Director, for HR.

Hans-Dieter Schumacher

Chief Financial Officer

Hans-Dieter Schumacher has been Chief Financial Officer (CFO) of JENOPTIK AG since April 1, 2015. He is responsible for the areas of Finance & Controlling (Corporate & Divisional), General Procurement, Treasury, Tax, IT & Data Security as well as Corporate Real Estate Management and Internal Audit.

Executive Management Committee

as at December 2021

Dr. Stefan Traeger

President & CEO

Dr. Ralf Kuschnereit

Executive Vice President
 Division Light & Optics

Hans-Dieter Schumacher

Chief Financial Officer

Jay Kumler

President Jenoptik North America

Kevin Chevis

Executive Vice President
 Division Light & Safety

Jonathan Qu

President Jenoptik Asia

Maria Koller

Executive Vice President
 Head of Global Human Resources

Markus Weber

Executive Vice President
 Corporate Controlling & Accounting

Glossary

B

Book-to-bill ratio – Ratio of order intake to revenue for a fiscal year. A ratio of over 1.00 indicates that the order intake surpassed revenue for the fiscal year, likely leading to an increase in order backlog.

C

Cash conversion rate – The percentage ratio of free cash flow to EBITDA for the respective year.

D

Debenture bond – In addition to bank loans and bonds, another form of (long-term) external financing for companies. The borrower is granted a loan against a debenture by large financial intermediaries (in general credit institutions) without having to access the organized capital market.

E

EBITDA – Earnings before interest, taxes, depreciation and amortization (including impairment losses and reversals of impairment losses).

Equity ratio – Indicator used in capital structure analysis stating the relative proportion of equity in total assets.

F

Frame contracts – These are contracts or framework agreements the amount and probability of which cannot yet be determined exactly.

Free cash flow – Available cash flow. The free cash flow is regarded by financing institutions as an indicator of the ability to repay loans and is therefore often used as a basis to calculate financing capacity. It is calculated from the cash flows from operating activities before income tax payments less capital expenditure in and income from the sale of property, plant, equipment and intangible assets.

G

Gross margin – The gross margin indicates how much (in percent of revenue) a company is earning after deducting cost of sales. The indicator helps to assess how efficiently a company is operating.

I

Innovation – a novelty or development that is based on a conscious and targeted process of change and is accompanied by social, technical and economic change. It can refer to products, services, structures or processes.

N

Net debt – Calculated by deducting cash and securities from the total of non-current and current financial debt.

P

Performance Shares – Share-based, performance-related remuneration which is based, on the one hand, on the achievement of certain operational targets, and on the other hand on the share price as an indicator for the increase in the company's value. It is paid out in cash after the end of the performance period.

PPA impacts – Amortization of the additional intangible assets identified in the course of purchase price allocation (e.g. customer base, order backlog, technologies), amortization effects from the revaluation of property, plant and equipment, and from the consumption of remeasured inventories (inventory step-up) recognized in profit or loss.

R

Relative total shareholder return – Difference in percentage points between the change in the share price of the Jenoptik share including reinvested dividends and the change in the TecDax Performance Index.

ROCE (Return on Capital Employed) – is calculated by dividing EBIT by the average tied operating capital. The total tied operating capital is calculated on the basis of the non-current non-interest-bearing assets (such as intangible assets including goodwill, property, plant and equipment and investment properties) plus the current non-interest-bearing assets (primarily inventories, receivables from the operating business activities and other current receivables) less non-interest-bearing borrowings (such as provisions – excluding pensions and taxes, liabilities from the operating business activities and other current liabilities). The calculation of the average takes into account twelve month-end balances in the period under review, and the opening balance at the start of the year.

S

Syndicated loan – The syndicated loan is a loan granted jointly by several banks (the "syndicate members") to a borrower. The lead bank may be one or more banks.

V

Vitality index – puts the revenue of products younger than three years in relation to total revenue.

W

Working capital – The total of trade receivables and contract assets as well as inventories minus trade payables and contract liabilities.

Key figures for Continuing Operations

		1/1–31/12/2021	1/1–31/12/2020	Change in %
Revenue	million euros	750.7	615.5	22.0
Light & Optics ¹	million euros	460.7	321.4	43.4
Light & Production ¹	million euros	176.2	175.5	0.4
Light & Safety ¹	million euros	110.1	114.0	–3.4
Other ^{1,2}	million euros	3.7	4.5	–17.8
EBITDA	million euros	155.7	92.8	67.9
Light & Optics	million euros	136.6	68.3	100.1
Light & Production	million euros	13.2	8.2	60.9
Light & Safety	million euros	19.2	22.3	–14.1
Other ²	million euros	–13.3	–6.1	–119.3
EBITDA margin	%	20.7	15.1	
Light & Optics ³	%	29.6	21.2	
Light & Production ³	%	7.5	4.7	
Light & Safety ³	%	17.4	19.6	
EBIT	million euros	108.1	47.4	128.2
Light & Optics	million euros	110.8	51.5	115.3
Light & Production	million euros	2.3	–4.1	n. a.
Light & Safety	million euros	14.1	15.2	–7.4
Other ²	million euros	–19.0	–15.1	–25.9
EBIT margin	%	14.4	7.7	
Light & Optics ³	%	24.0	16.0	
Light & Production ³	%	1.3	–2.4	
Light & Safety ³	%	12.8	13.3	
R + D output	million euros	63.6	56.9	11.8
Light & Optics	million euros	39.7	32.8	21.2
Light & Production	million euros	8.9	10.3	–13.6
Light & Safety	million euros	15.0	13.8	8.6
Order intake	million euros	936.7	594.2	57.6
Light & Optics ¹	million euros	631.1	343.4	83.8
Light & Production ¹	million euros	185.3	154.0	20.4
Light & Safety ¹	million euros	116.5	92.3	26.2
Other ^{1,2}	million euros	3.7	4.5	–17.8
Order backlog	million euros	543.5	299.8	81.3
Light & Optics ¹	million euros	408.5	179.1	128.1
Light & Production ¹	million euros	80.7	74.7	8.0
Light & Safety ¹	million euros	54.3	46.0	18.0
Employees	Head count	4,205	3,697	13.7
Light & Optics	Head count	2,535	1,845	37.4
Light & Production	Head count	878	1,040	–15.6
Light & Safety	Head count	491	489	0.4
Other	Head count	301	323	–6.8

¹ External figure

² Including consolidation

³ Based on the sum of external and internal revenue

Historical Summary of Financial Data

		Group					Continuing Operations	
		2015	2016	2017	2018	2019	2020	2021
Statement of Income								
Revenue	million euros	668.6	684.8	747.9	834.6	855.2	615.5	750.7
Foreign revenue	million euros	450.8	458.3	525.3	594.1	621.3	473.4	611.3
Share of foreign revenue	%	67.4	66.9	70.2	71.2	72.6	76.9	81.4
Cost of sales	million euros	442.5	446.9	484.0	541.5	563.4	390.7	493.8
Gross profit	million euros	226.2	237.9	263.9	293.1	291.8	224.7	256.9
Gross margin	%	33.8	34.7	35.3	35.1	34.1	36.5	34.2
R+D expenses	million euros	41.8	42.3	43.1	47.4	44.1	39.4	38.9
Selling expenses	million euros	72.6	73.6	80.3	87.0	89.3	77.1	89.7
Administrative expenses	million euros	54.0	57.6	55.8	56.1	60.5	53.9	53.5
EBITDA	million euros	88.8	96.9	106.9	127.5	134.0	92.8	155.7
EBITDA margin	%	13.3	14.2	14.3	15.3	15.7	15.1	20.7
EBIT	million euros	61.2	68.5	78.0	94.9	88.9	47.4	108.1
EBIT margin	%	9.2	10.0	10.4	11.4	10.4	7.7	14.4
EBT	million euros	57.4	64.7	80.1	91.4	85.2	42.3	102.5
EBT margin	%	8.6	9.5	10.8	11.0	10.0	6.9	13.7
Earnings after tax	million euros	49.9	57.5	72.7	87.4	67.6	34.0	92.9
EPS (Group)	euros	0.87	1.00	1.27	1.53	1.18	0.73 ²	1.43 ²
Cost of materials (incl. external services)	million euros	281.5	284.6	309.3	356.1	344.8	242.0	300.6
Material intensity	%	40.4	40.2	40.2	41.6	39.5	38.2	37.5
R+D output	million euros	53.1	57.4	66.6	69.1	68.4	56.9	63.6
R+D ratio	%	7.9	8.4	8.9	8.3	8.0	9.2	8.5
Financial result	million euros	-3.8	-3.7	2.0	-3.5	-3.7	-5.1	-5.6
Cash Flows and Capital Expenditure								
Free cash flow (before income tax)	million euros	71.8	80.4	72.2	108.3	77.2	52.5	43.2
Capital expenditures	million euros	24.7	27.5	37.9	42.5	55.6	38.1	49.9
Personnel								
Employees on average	Head count	3,421	3,404	3,500	3,714	3,961	4,049 ²	4,322 ²
Personnel expenses	million euros	244.2	252.4	265.4	289.3	310.7	238.5	281.8
Personnel intensity	%	36.5	36.9	35.5	34.7	36.3	38.7	37.5

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		2015	2016	2017	2018	2019	2020	2021
Statement of Financial Position								
Non-current assets	million euros	382.8	371.9	376.2	491.8	555.2	848.9	1,110.8
Intangible assets and property, plant and equipment	million euros	278.4	269.2	285.7	391.5	463.9	750.6	1,019.9
Investment property	million euros	4.5	4.4	4.4	4.4	4.3	4.2	3.6
Financial investments	million euros	21.7	19.0	4.4	6.8	8.3	16.3	17.3
Other non-current assets	million euros	4.5	5.0	2.9	2.9	1.1	3.3	6.6
Deferred tax assets	million euros	73.6	74.2	78.9	86.3	77.7	74.6	63.4
Current assets	million euros	386.3	441.2	512.9	494.1	528.1	489.9	646.3
Inventories	million euros	167.1	159.3	168.6	175.6	153.7	191.4	200.2
Trade and other receivables	million euros	135.0	139.3	147.4	169.8	205.8	230.2	232.9
Current financial assets and cash	million euros	84.2	142.5	196.9	148.7	168.7	68.3	56.4
Assets held for sale	million euros	0	0	0	0	0	0	156.8
Equity	million euros	435.1	476.4	529.9	598.0	655.4	689.4	780.7
Share capital	million euros	148.8	148.8	148.8	148.8	148.8	148.8	148.8
Non-current liabilities	million euros	169.5	175.4	162.1	170.3	176.0	233.0	503.1
Pension provisions	million euros	36.1	37.6	37.1	37.3	31.6	35.2	9.4
Other non-current provisions	million euros	10.3	12.3	15.9	16.3	17.9	17.0	17.9
Non-current financial liabilities	million euros	113.2	120.5	108.6	111.4	122.6	138.4	448.7
Other non-current liabilities	million euros	7.9	4.8	0.4	2.8	2.3	29.5	2.4
Deferred tax liabilities	million euros	2.0	0.1	0.1	2.5	1.7	12.9	24.7
Current liabilities	million euros	164.5	161.3	197.1	217.7	251.9	416.4	473.3
Tax provisions	million euros	3.3	3.4	8.9	9.0	6.4	2.6	6.9
Other current provisions	million euros	42.7	46.2	51.2	58.7	51.9	52.5	39.9
Current financial liabilities	million euros	14.9	4.1	19.3	10.1	37.0	130.9	149.0
Trade payables and other liabilities	million euros	103.6	107.7	117.6	139.9	156.6	230.4	183.8
Liabilities related to assets held for sale	million euros	0	0	0	0	0	0	93.6
Total equity and liabilities	million euros	769.2	813.1	889.1	985.9	1,083.3	1,338.8	1,757.0
Balance sheet ratios								
Equity ratio	%	56.6	58.6	59.6	60.6	60.5	51.5	44.4
Asset coverage		279.5	301.7	321.7	321.6	261.0	261.6	292.8
Gross debt	million euros	128.1	124.6	127.9	121.5	159.6	269.3	597.7
Net debt	million euros	43.9	-17.9	-69.0	-27.2	-9.1	201.0	541.4
Working capital	million euros	215.5	209.9	214.8	216.8	217.8	268.1	260.6
Working capital ratio	%	32.2	30.7	28.7	26.0	25.5	34.9	34.7 ¹
Debt to equity ratio		0.8	0.7	0.7	0.6	0.7	0.9	1.3
Total return on investment based on EBT	%	7.5	8.0	9.0	9.3	7.9	3.2 ¹	5.8 ¹
Return on equity based on EBT	%	13.2	13.6	15.1	15.3	13.0	6.1 ¹	13.1 ¹
ROCE	%	13.5	15.6	18.2	20.2	14.7	8.2 ¹	13.4 ¹
Dividend key figures								
Dividend per share	euros	0.22	0.25	0.30	0.35	0.13	0.25	0.25 ³
Pay out ratio on earnings attributable to shareholders	%	25.4	24.9	23.7	22.9	11.0	34.2	17.5 ³
Dividend yield based on year-end stock exchange price	%	1.5	1.5	1.1	1.5	0.5	1.0	0.7 ³

¹ Continuing operations² Continuing and discontinued operations³ Subject to approval by the annual general meeting

Summary by Quarter 2021 of Continuing Operations

		1st quarter 1/1–31/3	2nd quarter 1/4–30/6	3rd quarter 1/7–30/9	4th quarter 1/10–31/12
Revenue	million euros	150.6	178.7	190.2	231.3
Light & Optics ¹	million euros	94.2	113.1	117.0	136.4
Light & Production ¹	million euros	36.7	41.3	43.2	54.9
Light & Safety ¹	million euros	19.2	23.6	29.5	37.8
Other ^{1, 2}	million euros	0.5	0.6	0.4	2.2
EBITDA	million euros	16.5	50.1	43.0	46.1
Light & Optics	million euros	19.3	46.2	32.3	38.8
Light & Production	million euros	-0.2	3.9	9.0	0.6
Light & Safety	million euros	0.2	3.2	5.3	10.6
Other ²	million euros	-2.8	-3.1	-3.5	-3.8
EBITDA margin	%	11.0	28.1	22.6	19.9
Light & Optics ³	%	20.4	40.7	27.5	28.4
Light & Production ³	%	-0.5	9.4	20.7	1.0
Light & Safety ³	%	0.9	13.4	17.9	28.0
EBIT	million euros	4.3	38.4	31.6	33.9
Light & Optics	million euros	13.1	40.5	26.5	30.8
Light & Production	million euros	-3.0	1.1	6.3	-2.1
Light & Safety	million euros	-1.5	1.5	3.5	10.6
Other ²	million euros	-4.3	-4.6	-4.7	-5.4
EBIT margin	%	2.9	21.5	16.6	14.6
Light & Optics ³	%	13.9	35.7	22.5	22.5
Light & Production ³	%	-8.1	2.6	14.6	-3.8
Light & Safety ³	%	-7.6	6.4	11.8	28.0
Order intake	million euros	239.6	205.3	224.7	267.1
Light & Optics ¹	million euros	132.7	136.9	166.5	195.0
Light & Production ¹	million euros	64.4	45.2	34.0	41.7
Light & Safety ¹	million euros	41.2	23.3	22.1	29.8
Other ^{1, 2}	million euros	1.3	-0.1	2.1	0.5

¹ External figures

² Including consolidation

³ Based on the sum of external and internal revenue

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The contents of this publication address all genders equally. For better readability, the masculine forms are used normally.

This is a translation of the original German-language Annual Report of the Jenoptik Group. JENOPTIK AG shall not assume any liability for the correctness of this translation. In case of differences of opinion the German text shall prevail.

Dates

March 29, 2022

Publication of Financial Statements 2021

May 11, 2022

Publication of Quarterly Statement January – March 2022

June 15, 2022

Annual General Meeting of JENOPTIK AG 2022

August 10, 2022

Publication of Interim Report January – June 2022

November 10, 2022

Publication of Quarterly Statement January – September 2022

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