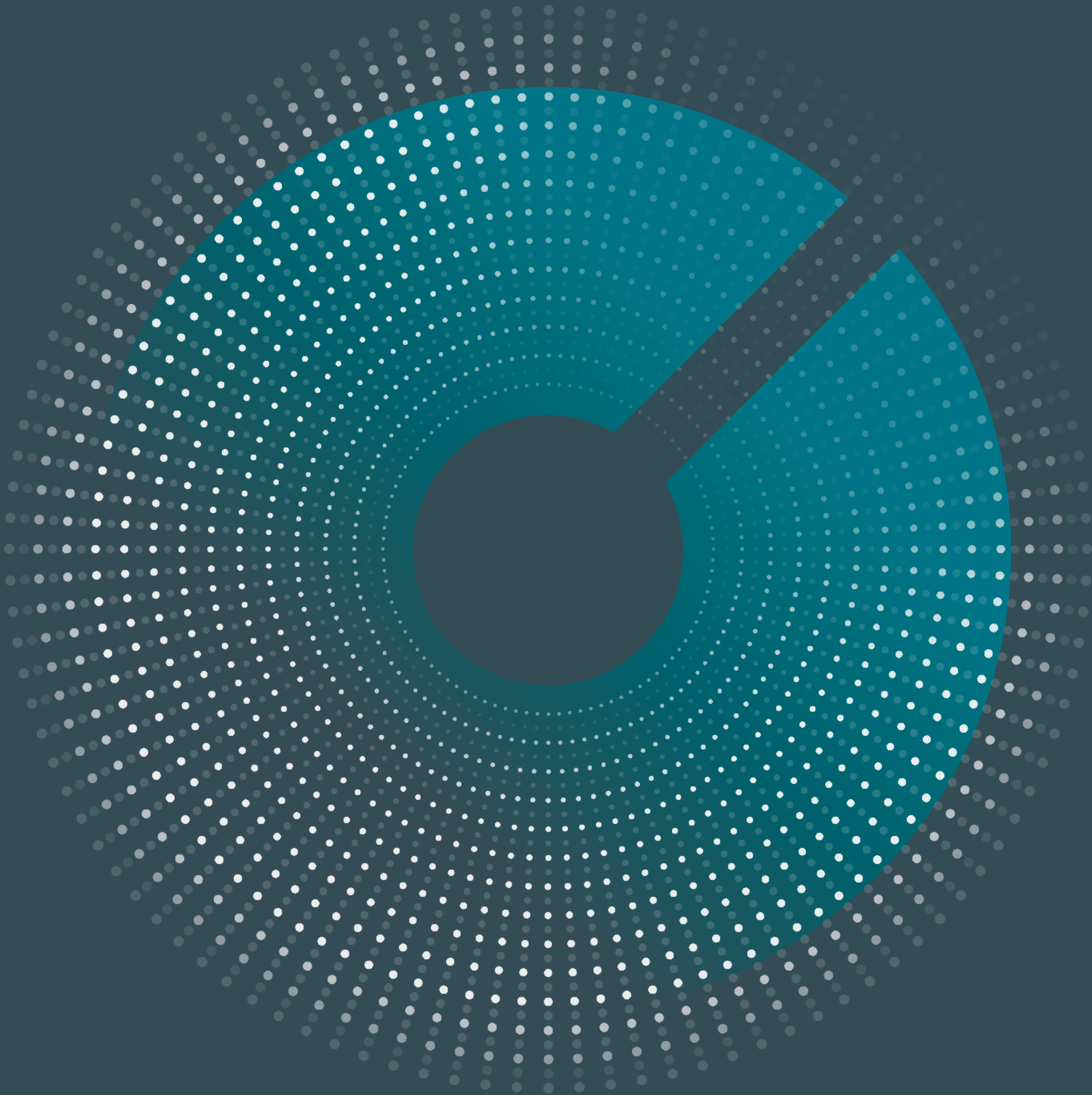
ENGINEERING
TOMORROW'S
PRODUCTION

2022 Annual Report

Growth Industries in Focus



manz

Manz AG

at a glance

2023 Financial Calendar

May 9, 2023	Publication of the 1st quarter 2023 quarterly report
July 4, 2023	Annual General Meeting 2023
August 3, 2023	Publication of the 2023 semi-annual report
November 7, 2023	Publication of the 3rd quarter 2023 quarterly report

Overview of Consolidated Net Profits

(in EUR million)	2022	2021	Change in %
Revenues	251.0	227.1	+10.5 %
Total operating revenues	281.8	237.8	+18.5 %
EBITDA	6.2	–5.6	+211.1 %
EBITDA margin (in %)	2.2	–2.3	4.5 pp
EBIT	–6.0	–39.9	+85.0 %
EBIT margin (in %)	–2.1	–16.8	14.7 pp
EBT	–7.7	–41.4	+81.5 %
Consolidated net profit	–12.1	–43.6	+72.2 %
Earnings per share, undiluted (in EUR)	–1.42	–5.6	+74.7 %
Cash flow from operating activities	–2.3	–25.8	+91.2 %
Cash flow from investing activities	–22.3	9.7	–329.0 %
Cash flow from financing activities	22.4	–18.9	+218.8 %

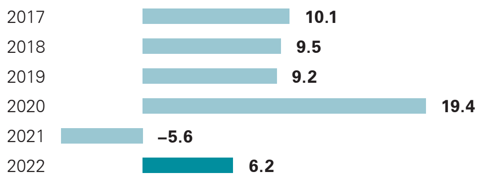
	Dec. 31. 2022	Dec. 31. 2021	Change in %
Total assets	344.8	284.5	+21.2 %
Shareholders' equity	102.3	88.0	+16.3 %
Equity ratio (in %)	29.7	30.9	–1.2 pp
Financial liabilities	44.3	49.3	–10.2 %
Liquid funds	33.6	36.1	–6.9 %
Net debt	10.7	13.2	–19.2 %

Revenues

(in EUR million)

EBITDA

(in EUR million)



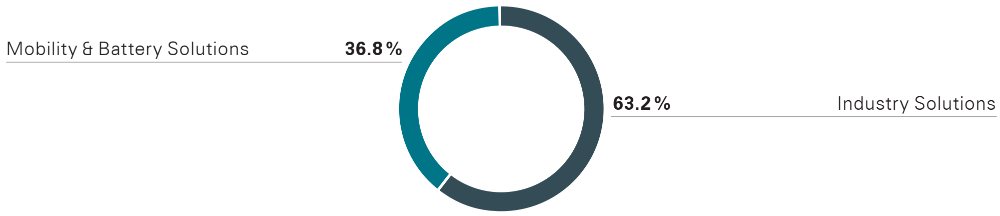
EBIT

(in EUR million)

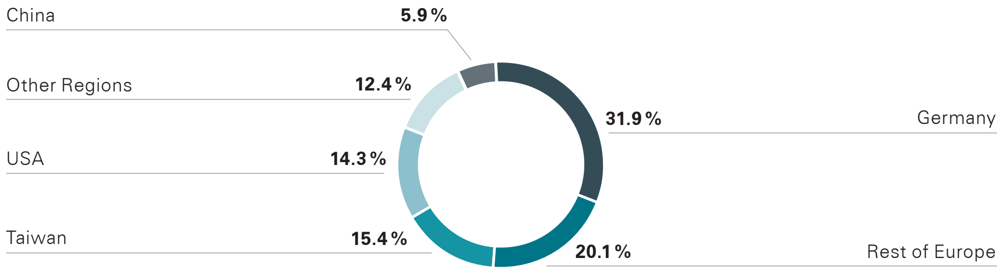
EBIT by Business Segment 2022

(in EUR million)

Revenues by Business Segment January 1 to December 31, 2022



Revenue Distribution by Region January 1 to December 31, 2022



2022
The year at a glance

Order from a new customer from the semiconductor industry for equipment for Fan-Out Panel Level Packaging in microchip production underscores expertise in this growth industry

January 18

Realignment of Group organization and adjustment of reporting segments

January 27

Manz AG opens up new growth market with investment in superconductor manufacturer

February 23

Manz AG receives follow-up order from Britishvolt

April 21

Daimler Truck AG acquires a stake in Manz AG as part of a strategic partnership

May 23

Manz AG opens up new customer groups with investment in CUSTOMCELLS

May 31

Daimler Truck AG places first multi-million order within the strategic cooperation

August 16

Manz, GROB-WERKE, and Dürr are entering into a unique European partnership in the field of production technology for lithium-ion batteries

September 15

Manz AG Mission Statement

With many years of expertise in the areas of automation, laser processing, wet chemistry, inspection systems and digital printing, we are a globally active high-tech engineering company that offers manufacturers and their suppliers innovative production equipment in the segments Industry Solutions and Mobility & Battery Solutions.

Our product portfolio includes customer-specific developments as well as individual machines and modules that can be linked together to form complete, individual systems. Above all, by being involved in customer projects at an early stage, we make a significant contribution to our customers' success with high-quality, demand-oriented solutions.

We pay particular attention to the automotive industry and electromobility. For example, we support economic and competitive plants for the manufacture of lithium-ion batteries – from cell to finished pack – and highly integrated assembly lines for cell contacting systems to support the industry in the transformation from the classic to the electric powertrain.

We are focused on five future industries. For new growth opportunities. And a stronger market position.

Automobile and electromobility. Battery manufacturing. Electronics. Energy. Medical Technology.

Systematically taking advantage of the opportunities that arise from dynamic growth markets – that is what Manz stands for. Therefore our technology and product portfolio is strongly aligned to the needs and challenges of selected industries in our two segments, and it will continue to be enhanced with an industry focus. Therefore, this year's annual report concentrates on our five target industries and their potential.

The entire annual report and additional information about our industry focus can be found on our website.

For the sake of better readability, we avoid gender-differentiating formulations (e.g. "his/her" or "he/she"). The corresponding terms apply to all genders for the purposes of equal rights. This is done solely for editorial purposes and does not imply a judgment of any kind.

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History
of Manz AG

Manz, GROB-WERKE, and Dürr are entering into a unique European partnership in the field of production technology for lithium-ion batteries

2022

Acquisition of Arcotronics in Bologna, Italy: Expansion of the technology portfolio for the production of Li-Ion batteries

2014

Development of the modular assembly platform "LightAssembly" for electronic products

2012

Entry on market for lithium-ion batteries

2009

Acquisition of R&D and production sites in Slovakia, Taiwan & China

2008

IPO on Entry Standard of Frankfurt stock exchange

2006

Foundation of Manz Hungary Kft.

2004

First automation system for fully automated production line of crystalline solar cells

2000

First delivery of an automation solution for FPD industry to Asia

1994

Foundation of Manz Automatisierungstechnik GmbH by Dieter Manz

1987

To Our

Shareholders

Letter from the Managing Board

Dear Shareholders,

The 2022 fiscal year definitely turned out differently to what we had expected at the beginning of the year. As part of our strategic focus, we had systematically orientated Manz in organizational terms to the new divisions Mobility & Battery Solutions as well as Industry Solutions, and began the year with high expectations. However, the consequences of Russia's war of aggression in Ukraine on the world economy, ongoing interruptions to supply chains as well as a significant increase in material and energy costs meant that we were unable to achieve everything that we had intended for the past fiscal year. In addition, there were significant sales shortfalls and associated negative effects on earnings as a result of the delay to the major project of our customer Britishvolt in the Mobility & Battery Solutions segment. The positive development of the Industry Solutions segment was, unfortunately, unable to compensate fully for this.

However, last year we also made some important progress and continued to strengthen our network of strategic partnerships with industry-leading companies. For example, in the second quarter of 2022 we gained a strong cooperation partner and new anchor shareholder with Daimler Truck AG. As part of this partnership, we are utilizing our know-how in the area of production equipment for lithium battery cells and modules. In addition, we entered into a unique European alliance with GROB-WERKE GmbH & Co. KG and Dürr AG in order to set innovative "made in Europe" machine standards in battery production. Together, we cover the entire value chain in battery production and can thus offer customers integrated solutions from Europe. In doing so, we are making an important contribution towards European independence in this strategically important future market.

Manz AG's operational development with revenue growth of 10.5 % to EUR 251.0 million was negatively affected by the effects mentioned at the beginning. In particular owing to the failure of the positive effect of the major order from Britishvolt to materialize, which was contrary to our expectations, and the effects of the overall economic conditions, we had to adjust our revenue and earnings forecast in August 2022. We were able to achieve the reduced revenue target of growth in the low to mid double-digit percent range. With earnings before interest and taxes of EUR –6.0 million, we missed the adjusted earnings forecast of a balanced EBIT.

With an order backlog of EUR 339.9 million and incoming orders of EUR 359.7 million at the end of the year, the dynamic development on the market for electromobility continues to underscore Manz AG's potential. We are therefore also confident for the current fiscal year and expect revenue growth in the lower double-digit percent range compared to 2022, an EBITDA margin in the medium positive single-digit percent range as well as an EBIT margin in the lower positive single-digit percent range.

We would like to sincerely thank our employees for their commitment and their huge level of motivation over the past year. Thanks to them, we see ourselves as being in the best possible position to achieve our goals for 2023.

We hope that you, dear shareholders, will continue to accompany us on the exciting journey that lies ahead of us and thank you for the trust you have placed in us!

The Managing Board

Martin Drasch

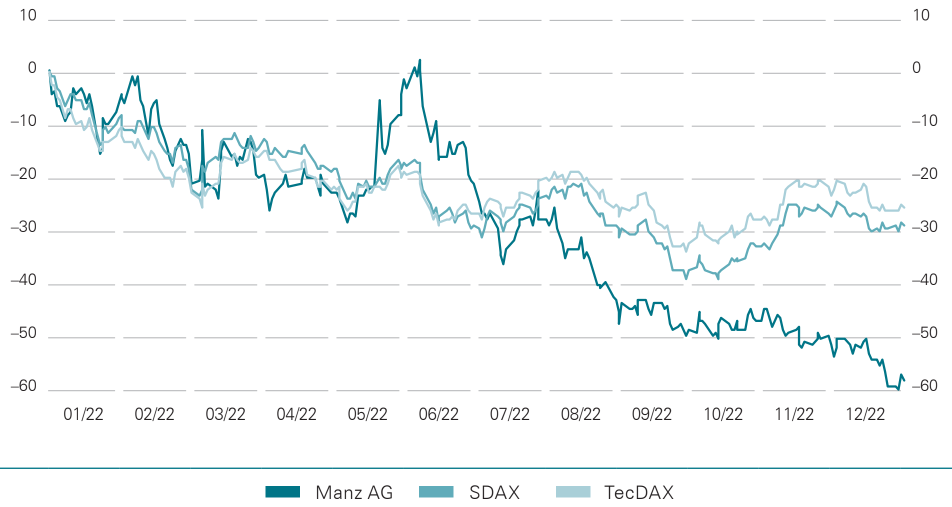
Manfred Hochleitner

Manz AG Stock

Change in share price

The Manz AG share began the financial year 2022 at a price of EUR 49.50 on January 3, 2022. By the middle of the year, the share price was falling, although it began to recover at the end of May, subsequently achieving the year's high of EUR 50.60 on June 8, 2022. After this, a continuous downward movement again set in. From September, the price stabilized but continued to fall. In the final trading days of the year, the share fell again more significantly, reaching the year's low of EUR 20.10 on December 28, 2022. On December 30, the share closed at EUR 21.05, corresponding to a market capitalization of EUR 179.8 million and a price decrease of –57.47% since the beginning of the year.

Chart Showing Manz AG Stock (XETRA, in %)



Stock Key Data and Performance Indicators

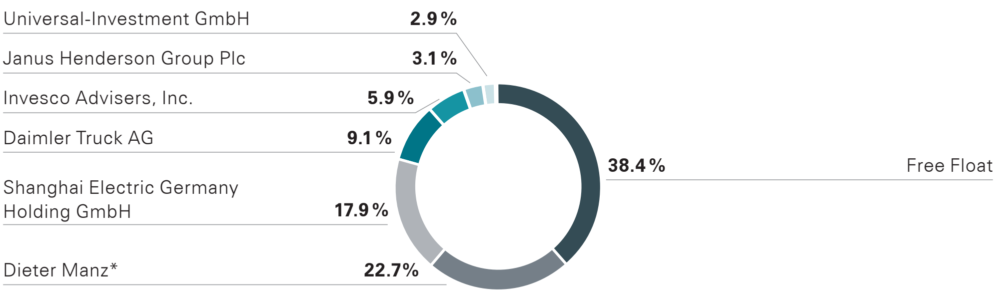
German Securities Identification Number	A0JQ5U
Ticker symbol	M5Z
Trading segment	Regulated market (Prime Standard)
Share types	Registered, common, no-par value bearer shares, each with a proportionate value of EUR 1.00 of capital stock
Capital Stock	**8,540,286 EUR**
IPO	September 22, 2006
Opening Price	EUR 19.00
Share price at the beginning of the reporting period*	EUR 49.50
Share price as at December 31, 2022*	EUR 21.05
Percentage change in the reporting period	**–57.47 %**
Period high	EUR 50.60
Period low	EUR 20.10

* Respectively the closing prices of the XETRA trading system of Deutsche Börse AG

Shareholder structure

As of December 31, 2022, Manz AG has a free float of 38.4 % and a broad shareholder base. Dieter Manz, founder and Supervisory Board member of Manz AG, holds a total of 22.7 % of the shares in the company together with his family. Shanghai Electric Germany Holding GmbH holds a total of 17.9 % of the shares as of December 31, 2022, and Daimler Truck AG holds 9.1 % of shares. The investment company Invesco Advisers, Inc. holds 5.9 % of the shares. In addition, Janus Henderson Group Plc holds 3.1 % and Universal Investment holds 2.9 % of the shares.

Shareholder Structure



* thereof direct (Section 33 of the German Securities Trading Act [WpHG]) 9.1 %, thereof attributed (Section 34 of the German Securities Trading Act [WpHG]) 13.6 %

Investor relations

Manz AG attaches great importance to active dialogue with shareholders, institutional investors, analysts and financial journalists, and has maintained a continuous, proactive exchange of information in the financial year 2022. The regular and prompt publication of reports relevant to the company underscores its goal of providing comprehensive information on the company's developments. In doing so, Manz AG, with its listing in the Prime Standard Segment of the Frankfurt Stock Exchange, fully complies with the highest transparency requirements. Manz AG strives to exceed this standard.

Further to its statutory obligations, Manz AG 2022 participated in six capital market conferences in Germany and abroad. Manz published 20 corporate news and press releases as well as three ad-hoc releases. Manz AG contributes to the greatest possible transparency in its capital market communications by regularly offering conference calls with a web cast for the publication of financial reports and audio displays as an online offer on the company website.

In the course of financial year 2022, Manz AG was covered by the following institutions:

- Pareto Securities
- Stifel Europe
- Bankhaus Lampe

Annual General Meeting

The Annual General Meeting 2022 took place on July 05, 2022 as a purely virtual event due to Corona. The Managing Board took advantage of the opportunities to report in detail to shareholders on the operational and strategic development of Manz AG in the 2021 fiscal year, for which the Managing Board and Supervisory Board were discharged by a large majority at the Annual General Meeting. Including participants by postal vote, attendance was 63.8 % of the voting capital (previous year: 57.2 %).

Detailed voting results can be found at any time on the company's website www.manz.com under Investor Relations/Annual General Meeting.

2023 Financial calendar

May 9, 2023	Publication of the 1st quarter 2023 quarterly report
July 4, 2023	Annual General Meeting 2023
August 3, 2023	Publication of the 2023 semi-annual report
November 7, 2023	Publication of the 3rd quarter 2023 quarterly report

At the end
of 2022, around

28 million

electric vehicles were
registered worldwide –
around 59 % more than in
the previous year*

*Source: EV-volumes.com

The car of the future is digital and electric

Advancing digitization and rapid innovations in e-mobility create a number of challenges for the automotive industry. Our mission is to actively contribute to this progress as a development partner and pioneer.

Intelligent, integrated and highly innovative

We focus particularly on intelligent and integrated production solutions for various components in the segments automotive electronics as well as conventional and electric power trains.

As a technology and process experts for the automotive industry, we bundle our expertise - e.g. in the vision, metrology and laser applications segments - into tailor-made and customer-specific production solutions for::

- Battery cells and battery modules (Li-Ion battery manufacturing)
- Cell contacting systems
- Battery management systems and inverters
- Displays
- Electronic components and controllers
- Sensors and cameras for assistance system

In our modular production lines, we integrate and combine a variety of technologies: from assembly, ultrasound welding, bonding and soldering to laser welding and automated function tests. In this way, we support OEMs and their suppliers with optimizing their production processes and making them more efficient using our machines and equipment.

Using creative and innovative engineering, we are working hard on new production solutions that contribute to raising the performance parameters of end products and ultimately to reducing costs for the automotive industry.

Our expertise and experience...

...in technology fields such as automation, assembly, laser and integrated testing systems are bundled into ground-breaking production solutions for the automotive industry.

Our task: To enable the e-mobility breakthrough.

Report from the Supervisory Board

Dear Shareholders,

In the 2022 reporting year, the company once again benefited from major growth potential in the e-mobility market and strengthened its position as a leading supplier of equipment for the production of lithium-ion battery cells and modules. The entry of Daimler Truck AG as a new anchor shareholder and the strategic cooperation with GROB-WERKE GmbH & Co. KG and Dürr AG in September 2022 for the joint acquisition and processing of projects for equipping complete battery factories have generated further momentum for this development. In the Industry Solutions division, new and follow-up orders for assembly lines for manufacturing electronic components and devices and implementing the innovative Fan-Out Panel Level Packaging (FOPLP) process in chip production are solid proof of the tremendous trust we enjoy among our customers.

During the 2022 reporting year, the Supervisory Board also advised the Managing Board on a regular basis with regard to the company's management, and continuously monitored its business activities. In doing so, we meticulously carried out the duties incumbent upon us by law, the company's Articles of Incorporation, and our rules of procedure, satisfying ourselves that the Managing Board's work was legally compliant, orderly, and appropriate. The Supervisory Board discussed the organization of the company with the Managing Board. The Managing and Supervisory Boards have also continuously agreed on the company's strategic alignment. The Supervisory Board was involved in all significant decisions regarding the company and the Group.

The Managing and Supervisory Boards remained in close and intensive contact throughout the 2022 fiscal year. In this context, the Managing Board complied with its duty to provide information as set out by law and the rules of procedure, notifying us in a regular, detailed and timely manner in both written and verbal form about all measures and events relevant to the company. The Managing Board also discussed deviations in the business performance from the plans and goals that had been set up and gave reasons for the deviations. As a result, the Supervisory Board was always kept informed with respect to the company's business situation and performance, the company's intended business policy, the short-term, medium-term, and long-term planning including investment, financial, and human resources planning, as well as the company's profitability and organizational measures, and the Group's overall situation. In addition, information regarding the company's risks and risk management activities was regularly provided.

The members of the Supervisory Board always had sufficient opportunity to critically discuss the reports presented and the resolutions proposed by the Managing Board and to present their own suggestions. In particular, we intensively discussed all business transactions significant to the company based on the Managing Board reports, and carefully examined them for their plausibility. The Supervisory Board approved individual transactions to the extent necessary for the Managing Board under the law, the Articles of Incorporation or the rules of procedure.

In addition to the Supervisory Board meetings, the Chairman of the Supervisory Board was also in regular contact with the Managing Board and obtained information concerning the current development of the business situation and significant business transactions.

The members of the Supervisory Board are supported by the company in the performance of training and continuing education measures within the scope of their own responsibility. In the year under review, for example, the members of the Supervisory Board received further training on strategically relevant technology topics at Supervisory Board meetings. They also took part in plant tours at the production sites.

Focus of deliberations in the Supervisory Board

The 2022 fiscal year for Manz AG was once again characterized by the ongoing strategic development of the company in its business divisions, in order to achieve the objective of a sustained profitable business model. The business situation, financial performance and cash flows, capacity utilization and the measures to improve profitability, as well as risk management, in addition to these and other strategic and operational issues, were regularly the focus of the Managing Board's reporting and the monitoring and advisory support provided by the Supervisory Board. The Supervisory Board's discussions focused on developments in the individual business divisions and major projects.

In the year under review, a total of four regular meetings were held, together with two resolutions adopted by video conference and two votes by written procedure, all of which were attended by all members of the Supervisory Board. Here, a meeting was held via a video conferencing system due to the COVID-19 pandemic. Three sessions were conducted as hybrid sessions, that is, face-to-face sessions with the option to participate in virtual form.

The following topics were the focus of deliberations at the Supervisory Board meetings and resolutions:

The meeting on March 24, 2022 focused on the annual financial statements and consolidated financial statements as of December 31, 2021, the management reports for the company and the Group, the plans for fiscal year 2022, and the auditors' report.

The annual and consolidated financial statements for fiscal year 2021 were discussed with the auditors. This discussion related, in particular, to the question of the recoverability of a company receivable from a supply transaction in the amount of approximately EUR 24 million with regard to the economic performance of a customer based in the PRC. In the opinion of the Managing Board, however, which the Supervisory Board shared after thorough examination, there were sufficient indications for the continued solvency of the

customer. However, as no agreement could subsequently be reached in the negotiations with the Chinese customer on the conclusion of the large-scale solar project CIGS*fab*, the Managing Board decided at the end of July 2022 to terminate negotiations with the customer and to recognize non-cash special write-downs of EUR 23.2 million on the contractual asset value from the solar project. Manz AG is now pursuing the goal of asserting its claims through the courts.

In addition, the Managing Board used the annual risk report to explain the main risks at the Manz Group, particularly with regard to the effects of the Russian war of aggression against Ukraine. The Managing Board also reported on current business developments, including the order backlog and prospects in the individual business areas in the current 2022 fiscal year. In this context, the Managing Board addressed, in particular, the existing challenges to achieving the planning targets. The Supervisory Board also amended the rules of procedure of the Supervisory Board and established an Audit Committee to replace the previous Economic Committee. Prof. Dr. Heiko Aurenz, Mr. Dieter Manz and Prof. Dr. Michael Powalla were elected to the Audit Committee.

On March 31, 2022, the annual and consolidated financial statements for the fiscal year and the report of the Supervisory Board were approved by way of written resolution.

At the meeting on May 5, 2022, the focus was on reporting by the Managing Board on the current liquidity and financial situation, business development and order intake, and the target figures. In this context, we again discussed, in particular, development in the individual business areas and their profitability, as well as the status of major projects. The planned strategic partnership with Daimler Truck AG was one focus of the discussions. The Supervisory Board also approved holding the 2022 Annual General Meeting as a virtual meeting and adopted the proposed resolutions. The Supervisory Board determined the compensation with regard to the short-term variable compensation components of the Managing Board members for the 2021 fiscal year on the basis of assessed target achievement. The Supervisory Board also approved the compensation report for the 2021 fiscal year. Approval was also given for the granting of the power of procuration.

On April 16, 2022 and again on May 23, 2022, the Supervisory Board approved – in each case by means of a resolution adopted by video conference – the capital increase from authorized capital excluding shareholders’ subscription rights and the admission of Daimler Truck AG to subscribe to the new shares.

At the meeting on July 28, 2022, the Managing Board reported on the financial position, results of operations and business performance. In particular, the effects of the investment in Customcells Tübingen GmbH on the balance sheet were discussed. The Managing Board also reported on the current status of major projects, sales activities and order intake in the individual business divisions. In this context, the Managing Board addressed the effects of the macroeconomic supply chain problem on Manz AG’s individual projects and possible solutions. In addition, the Supervisory Board approved the initiation of a tender procedure in accordance with Art. 16 of the EU Regulation on Statutory Auditors (Regulation (EU) No. 537 /2014).

At the last meeting of the reporting year on November 28, 2022, the Managing Board again reported on the current financial position and results of operations, as well as the business performance and order backlog in the individual business divisions. In this context, the Managing Board again addressed the effects and risks of the supply chain issue and earnings due to exchange rate developments of foreign currencies. The CIGS*lab* and CIGS*fab* projects and their execution were also discussed. The Supervisory Board verified Manz AG's compliance with the recommendations of the German Corporate Governance Code, and, together with the Managing Board, adopted the statement of compliance pursuant to Section 161 of the German Stock Corporation Act (AktG). The Supervisory Board dealt with the performance criteria for the variable compensation of the Managing Board in fiscal year 2023.

On December 20, 2022, by way of a resolution adopted by written procedure, Mr. Martin Drasch was reappointed as a member of the Managing Board for a new term of five years from August 1, 2023 to July 31, 2028. In this context, the conclusion of amendments to the service agreements between Manz AG and Mr. Martin Drasch and Mr. Manfred Hochleitner was approved.

The Work of the Audit Committee of the Supervisory Board

The Audit Committee, composed of three members of the Supervisory Board, performed certain monitoring duties in the 2022 fiscal year and prepared the deliberations and resolutions of the Supervisory Board, in particular, in the areas of accounting, auditing, finance including planning, Managing Board matters, corporate governance and compliance. Its members are Prof. Dr. Heiko Aurenz (Chairman), Dieter Manz and Prof. Dr. Michael Powalla.

The Audit Committee held nine meetings in the reporting year. A total of eight regular meetings and one constituent meeting were held, which were always attended by all members of the Audit Committee. Four meetings were held as face-to-face meetings and one meeting was held via a video conferencing system. Four additional sessions were conducted as hybrid sessions, i.e., face-to-face sessions with the option to participate in virtual format.

Regular focal points of the work were monitoring the accounting process and monitoring the effectiveness of the internal control system, the risk management system, and the internal audit system. The Audit Committee dealt with the annual and consolidated financial statements as of December 31, 2021, the half-year report as of June 30, 2022, the corporate governance statement and corporate governance report for fiscal 2021, the proposed resolutions for the 2022 Annual General Meeting, and the annual risk report.

The Audit Committee recommended to the Supervisory Board that Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart, be proposed to the Annual General Meeting for election as auditors for the 2022 fiscal year. It issued the audit engagement letter to the auditor elected by the Annual General Meeting for the 2022 fiscal year, determined the focal points of the audit, and set the auditor's fee. It monitored the selection, the quality of the audit, in particular, the independence, qualification, rotation and efficiency of the auditor, and the additional services provided by the auditor. In the course of preparing and conducting the audit of the financial statements, the Audit Committee held regular discussions with the auditors without the Managing Board being present. Outside the meetings, the Chairman of the Audit Committee regularly exchanged information with the auditor on the progress of the audit and reported on this to the Committee.

The discussions also focused on the current business, financial, and earnings situation, including the order backlog, the status of key projects, and strategic measures for the continued structural development of the Manz Group. The Audit Committee also prepared the decisions of the Supervisory Board with regard to Managing Board compensation and Managing Board contracts. Together with the Managing Board, the Audit Committee also discussed, in particular, R&D projects, measures to reduce costs, financing, cooperation with cooperation partners, the execution of the CIGS*lab* and CIGS*fab* projects, planning for fiscal years 2022 and 2023, the organizational structure of the Manz Group, and appointments to management positions in the company.

Another focus of the Audit Committee's work in fiscal year 2022 was on preparing (and implementing) a transparent and non-discriminatory process for selecting the auditor for fiscal year 2023. For this purpose, the Audit Committee has decided to initiate a tendering procedure in accordance with Art. 16 of the EU Regulation on Statutory Auditors.

Conflicts of interest

There are no conflicts of interest on the part of members of the Managing or Supervisory Boards that must be disclosed to the Supervisory Board, nor does the handling thereof have to be disclosed at the Annual General Meeting.

German Corporate Governance Code

In the 2022 fiscal year, the Managing and Supervisory Boards once again dealt in detail with the further development of corporate governance and the recommendations of the German Corporate Governance Code. The Managing Board and Supervisory Board have issued a joint declaration of compliance in accordance with Section 161 of the German Stock Corporation Act (AktG), according to which the company complies (and will comply with) the recommendations of the Code with a few exceptions. The statement of compliance from November 2022 is permanently available to the public on the Manz AG website.

Annual and consolidated financial statements for the 2022 fiscal year

The annual financial statements and consolidated financial statements as of December 31, 2022, as well as the management report and the Group management report for the 2022 fiscal year prepared by the Managing Board were audited by the auditors of the company and the Group, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, and issued with an unqualified audit opinion.

The documents mentioned above were provided to us by the auditor. The Supervisory Board examined the annual financial statements and the management report, the consolidated financial statements and the consolidated management report, as well as the non-financial consolidated statement including the auditor's reports submitted to the members of the Supervisory Board prior to the meeting. As part of a preliminary review, the aforementioned financial statements and reports were discussed in detail. At the meeting of the Audit Committee and the annual accounts meeting of the Supervisory Board on Thursday, March 23, 2023, the Managing Board explained the financial statements of Manz AG and the Group comprehensively in the presence of the auditors. The auditor reported on the scope, focus and significant findings in its audit, focusing in particular on the states of affairs particularly important to the audit and the audit procedures performed during the meeting of the Economic Committee and in the annual accounts meeting of the Supervisory Board. The auditor also provided information about its findings regarding the internal controlling and risk management systems in relation to the accounting process. Furthermore, the Audit Committee reported to the Supervisory Board on its own review of Manz AG's accounting and the consolidated financial statements, its discussions with the Managing Board and the auditor, and its monitoring of the accounting process.

After examining and discussing the annual financial statements and management report, the consolidated financial statements and the consolidated management report, as well as the non-financial consolidated statement along with the auditors' reports, the Supervisory Board approved the result of the audit conducted by the auditors. According to the final results of the Supervisory Board's examination, there are, therefore, no objections to be raised. In a resolution dated Thursday, March 23, 2023, the Supervisory Board approved the annual financial statements and consolidated financial statements as of December 31, 2022. Manz AG's annual financial statements as of December 31, 2022, are thereby adopted.

Changes in the Managing and Supervisory Boards

Managing Board member Jürgen Knie stepped down from the Managing Board effective March 31, 2022. The Supervisory Board would like to thank Mr. Knie for his work for Manz AG and its subsidiaries, and wishes him all the best for the future. The composition of the Managing Board and the Supervisory Board otherwise remained unchanged in the 2022 fiscal year.

Thanks and acknowledgment

The Supervisory Board wishes to thank the Managing Board for the constantly open and constructive collaboration in the past fiscal year. We would also like to express our gratitude to our employees for the commitment they have demonstrated during the 2022 fiscal year. Last but not least, we would like to thank you, our valued shareholders, for the trust you have placed in us and for your willingness to shape the future of Manz AG together with us.

Reutlingen, March 23, 2023

Aurenz

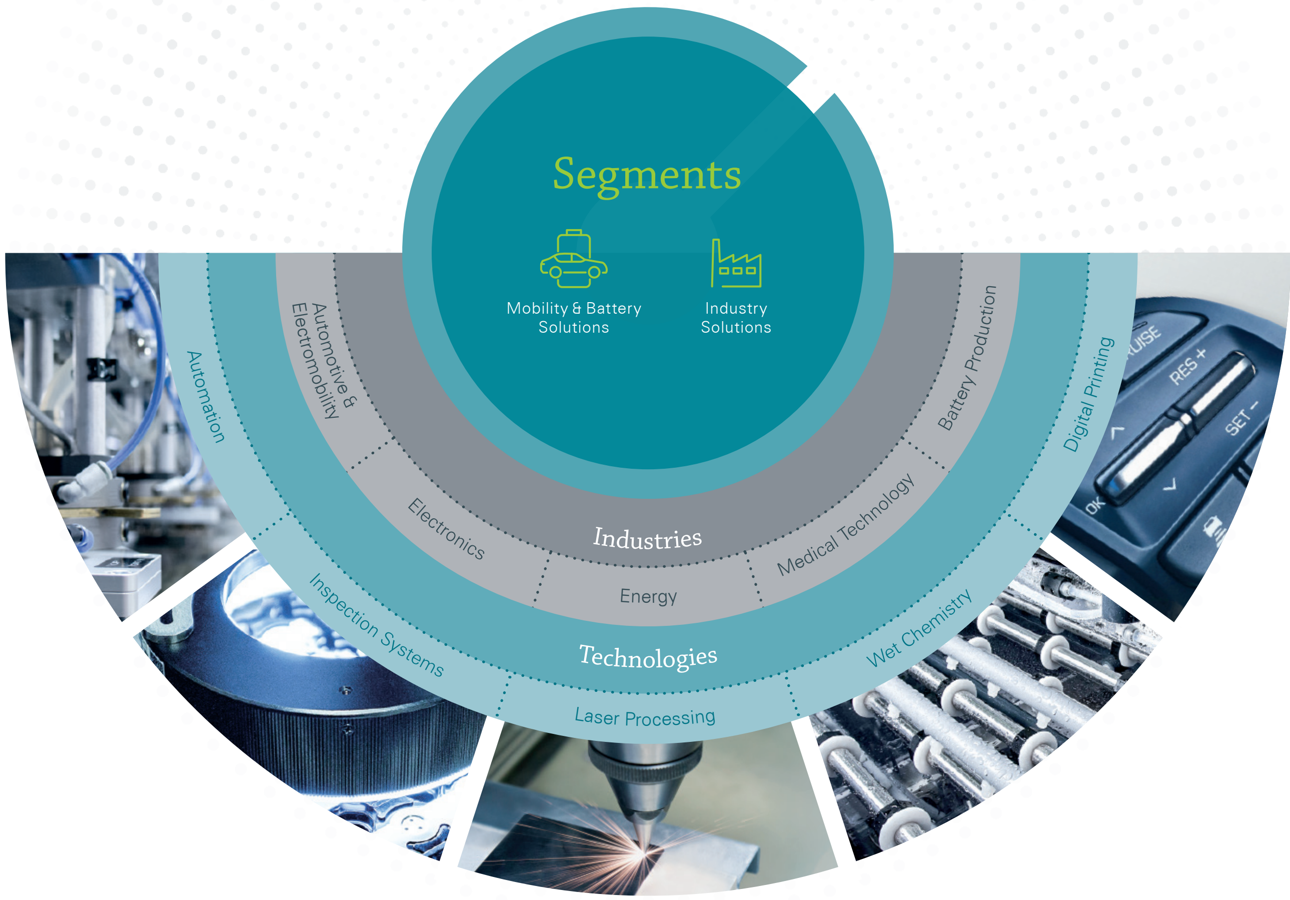
Prof. Dr. Heiko Aurenz
Chairman of the Supervisory Board

Group Management Report

Basic Group Information

Business model

Founded in 1987, Manz AG is a global high-tech engineering company with a focus on five industries: automotive & e-mobility, battery manufacturing, electronics, energy, and medical technology. The company reports on and manages its business activities in the two reporting segments of Mobility & Battery Solutions and Industry Solutions. This structure is the result of the company consistently aligning its portfolio of technology and products to the needs of its target industries, as well as the associated merger of the previous reporting segments Solar, Energy Storage, Electronics, Service and Contract Manufacturing on January 1st, 2022. With many years of expertise in automation, laser processing, digital printing, inspection systems and wet chemistry, the company offers manufacturers and their suppliers in these future-oriented industries a broad portfolio of products and solutions. In addition to customized production solutions, this also includes individual machines and modules that can be linked together to form complete, individual system solutions. The company also offers a comprehensive range of services around Manz AG's core techno-



logical competencies: From simulation and factory planning to process and prototype development, customer training and after-sales service. Manz AG is a development partner for industrial companies, and in this role helps to support new technologies to market maturity. Manz operates internationally and has development and production facilities in Germany, Slovakia, Hungary, Italy, China, and Taiwan, as well as additional sales and service offices in India and the USA.

Strategy

Manz AG's corporate strategy is subject to an annual review, and is based on four pillars.

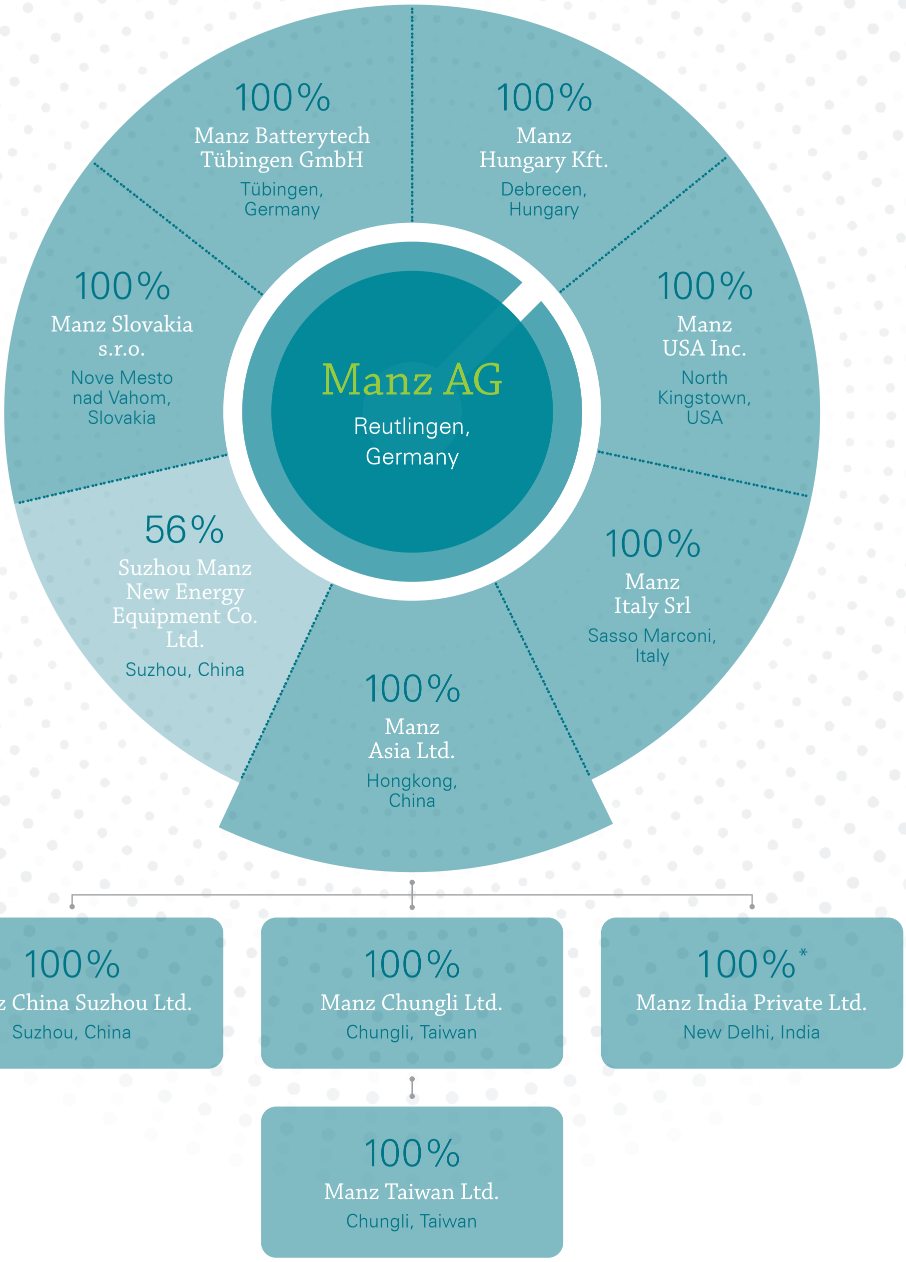
The first pillar is the development of Manz AG into a leading European provider and integrator for machines and plants used for battery production, as well as other components of the electric drive train. With innovative engineering, Manz works on production solutions that contribute to increasing the performance parameters and reducing the costs of the end products. By addressing different growth industries at the same time, synergies can be created and opportunities fully exploited. To do so, Manz relies on strategic cooperations and a concept of growth based on partnership with industry-leading companies. By combining their respective strengths, the company is able to address supply chains on a comprehensive basis via targeted collaboration, accelerating technological development. At the same time, Manz AG works to foster long-term customer relationships as a development partner, in order to participate with our customers in growth opportunities across their respective sectors through those partnerships.

One of Manz AG's other focal areas is continuously expanding the modular machine concept, with the goal of increasing its competitiveness and profitability in the long term.

Furthermore, Manz AG is dedicated to the topic of digital transformation in industry. Using new methods, such as digital twins, a new generation of fully automated production lines is to be developed. In this context, the use of artificial intelligence (AI) enables an innovative type of machine control and production control, with the goal of self-optimizing manufacturing.

In line with the company's claim "engineering tomorrow's production," Manz AG attaches great importance to continuously developing new future technologies and growth fields. To this end, Manz pursues a targeted M&A strategy that includes both majority and minority interests in companies and technologies worldwide.

Group structure and holdings



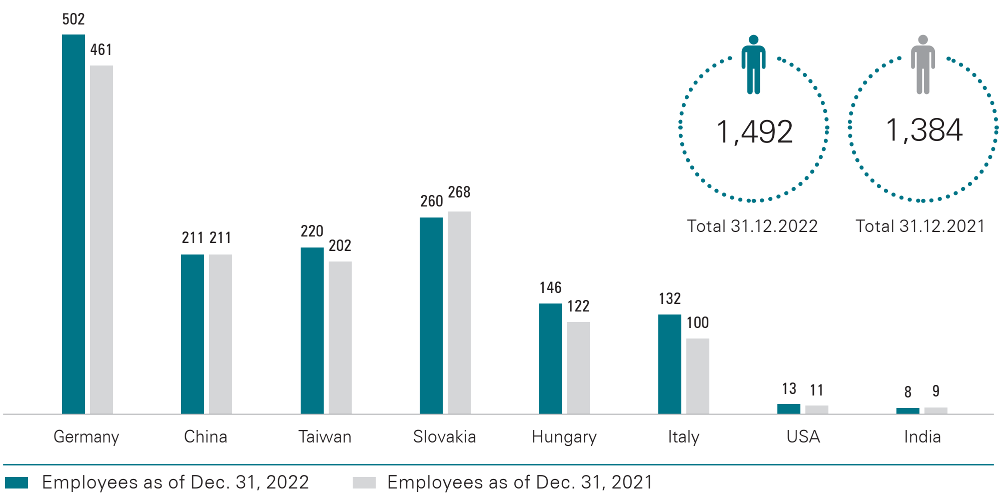
* 25% of the shares are held by Manz AG, 75% of the shares are held by Manz Asia Ltd.

Reporting segments

During the financial year 2022, Manz AG's operational business activities included the two reporting segments Mobility & Battery Solutions and Industry Solutions. The Mobility & Battery Solutions reporting segment focuses on intelligent production solutions for high-efficiency lithium-ion batteries. The Industry Solutions reporting segment is responsible for industrial assembly solutions to manufacture consumer electronics, power electronics, and other components of the electric drive train, as well as for systems in semiconductor back-end production, display manufacturing and implementing the Fan-Out Panel Level Packaging (FOPLP) chip packaging process.

Locations and employees

Employees by country



Control system and performance indicators

On the group level, Manz AG reported for the first time in the Mobility & Battery Solutions and Industry Solutions reporting segments for corporate management purposes during the financial year 2022. This structure was introduced on January 1st, 2022, and replaced the organizational structure consisting of five reporting segments which had existed up to that time. In order to decide on the allocation of resources and to control the profitability of the divisions, they were monitored separately by management. The entire Managing Board was kept informed of the business performance in detail by means of regular reports and management meetings. As a result, forward-looking management by the Managing Board was possible in a timely manner in financial year 2022.

Locations and Employees

34
Nations

Employees and managers from 34 different countries work in our Group's various subsidiaries.

Around a third of employees work in research and development worldwide.

1,492
Employees

Locations

1 **Germany**
Reutlingen, Tübingen
Production, Sales & Service

2 **Hungary**
Debrecen
Production & Service

3 **Slovakia**
Nove Mesto nad Vahom
Production, Sales & Service

4 **Italy**
Sasso Marconi
Production, Sales & Service

5 **USA**
North Kingstown, Cupertino
Sales & Service

6 **Taiwan**
Chungli
Production, Sales & Service

7 **China**
Shanghai, Suzhou, Hongkong
Production, Sales & Service

8 **India**
New Delhi
Sales & Service

Principles and objectives of financial management

Manz AG's key figures for corporate development are revenues, earnings before interest, taxes, depreciation and amortization (EBITDA), earnings before interest and taxes (EBIT), and the equity ratio.

The Managing Board has defined the following rolling target values for the long term (5 years):

- Revenues: An average annual increase in revenues of between 10% and 20% is envisaged.
- EBIT margin: A target value of 10% is defined for the EBIT margin.
- EBITDA margin: A target value of more than 15% is defined for the EBITDA margin.
- Equity ratio: The target corridor for the ratio of equity to total assets is between 40% and 60%.
- Gearing: Manz AG has defined gearing as the ratio of net financial liabilities (current and non-current liabilities to banks less cash and cash equivalents) to equity before minority interests of less than 50% as a target figure.

Performance indicators

in %	2022	2021	2020	2019
Revenue (in EUR million)	251.0	227.1	236.8	264.4
EBITDA margin	2.2	–2.3	8.0	3.6
EBIT margin	–2.1	–16.8	3.0	–2.9
Equity ratio	29.7	30.9	36.7	38.8
Gearing	10.5	15.0	5.5	10.5

Manz AG's financial management system is centrally organized. To minimize risks and leverage Group-wide optimization potential, the company bundles decisions on financing, cash investments and currency hedges of subsidiaries within the Group. In this context, the company follows value-based financing principles in order to secure its liquidity at all times, limit financial risks and optimize the cost of capital. In addition, Manz strives for a well-balanced debt maturity profile. Further information on the management of the individual financial risks can be found in the notes to the consolidated financial statements under "Reporting on financial instruments".

Research and development

For Manz as a high-tech equipment manufacturer, research and development (R&D) continued to play a central role in the financial year 2022. With over 500 engineers, technicians and scientists at its various development sites, Manz AG focuses on the development of manufacturing, assembly and handling technologies, integrated into modularized individual machines, tools and linked system solutions. The Manz AG interdisciplinary "R&D Council" is intended to enable the internal, cross-segment integration of competencies.

Manz maintains numerous cooperative arrangements with research institutions, universities and colleges. The company is, for instance, a member of the board for the "Kompetenznetzwerk Lithium-Ionen-Batterien" (KLiB – Lithium-ion battery competence network) and is active as a member of the advisory board for the "Batteries European Partnership Association" (BEPA). The goal in each case is to create the conditions within the European Union for the development of European battery production.

One R&D focus in 2022 was developing new technologies and procedures to manufacture battery cells and modules that go well beyond the current state of the art, facilitating major improvements in performance, safety and environmental protection. The Manz sites in Germany and Italy took part in this project. The project was funded in Germany by the BMWK (Bundesministerium für Wirtschaft und Klimaschutz – Federal Ministry of Economics and Climate Protection of the Federal Republic of Germany), and by the MiSE (Ministry of Economic Development) in Italy.

Another focal area was developing a modular transportation and digital printing system, with the goal of making classic printing processes in mass production much more efficient in terms of quality, throughput and flexibility through digital printing technology. This was achieved thanks to Manz's automation expertise in conjunction with the digital printing expertise of CADIS Engineering GmbH, in which Manz obtained a holding in 2021.

At the end of 2022, Manz AG acquired an interest in ThermAvant Technologies, L.L.C. ThermAvant is a US company that manufactures highly efficient cooling systems for the electronics and semiconductor industry, so-called oscillating heat pipes (OHP). The company produces small quantities for special applications, mainly in the aerospace sector. Manz is developing new system technologies for ThermAvant in order to be able to produce these OHPs cost-effectively and in large quantities. The addressed mass market concerns the industrial, consumer and automotive sectors. Strong demand for the OHPs is expected in the coming years, for which Manz intends to supply the corresponding turnkey production lines. A corresponding exclusivity agreement has been signed with ThermAvant.

Thanks to its holding in Metox Technologis Inc. in the USA, which manufactures superconductors, Manz has tapped into another key future field which will help overcome existing challenges in the energy infrastructure ecosystem. Manz develops the automated production systems necessary for this purpose, with a focus on inspection, laser processing and vacuum process technology to produce high temperature superconductors.

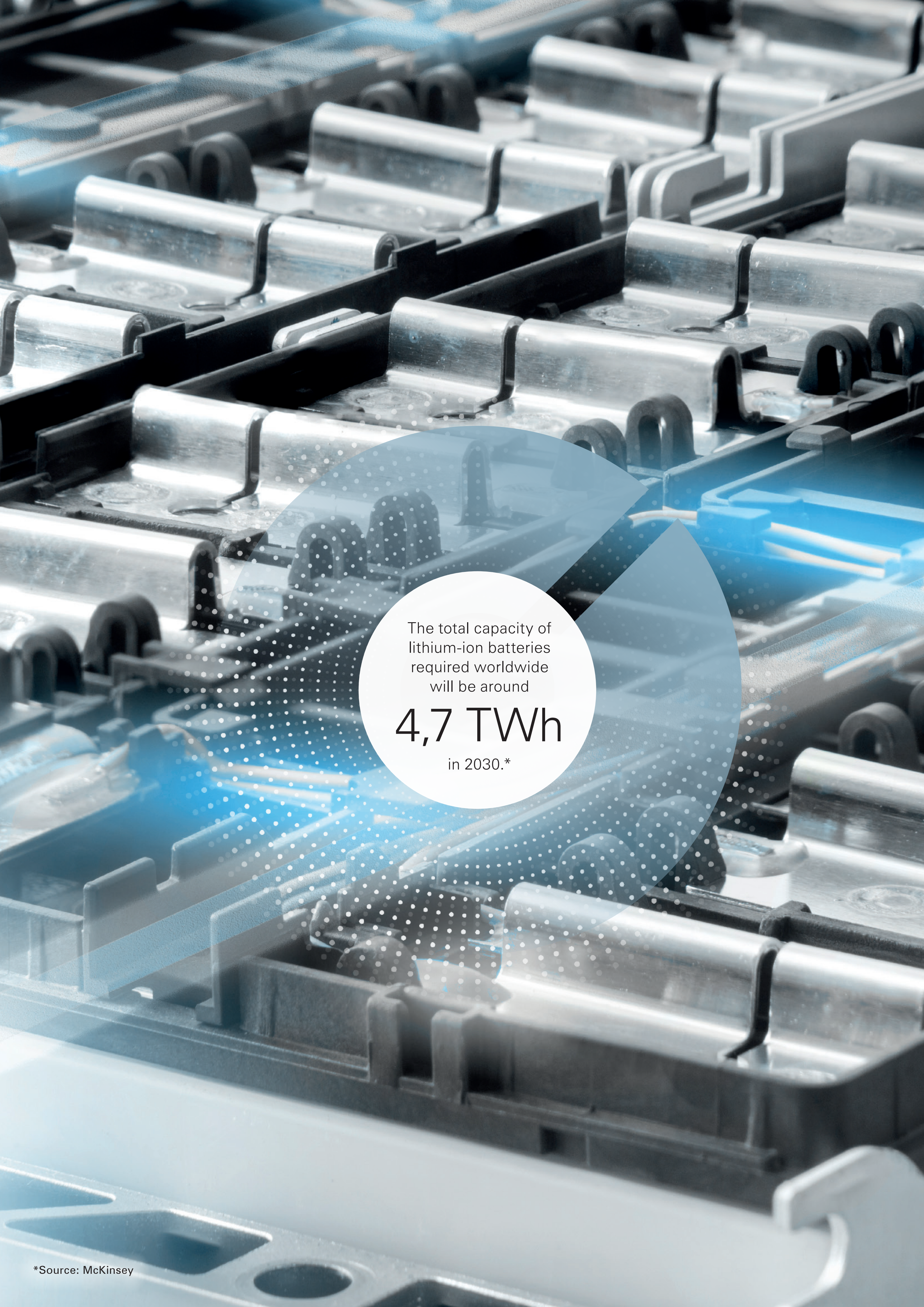
Furthermore, generating use cases for artificial intelligence (AI) was an important part of the Manz group's research and development work in 2022, and will be expanded successively over time. The use of AI is essential for almost all of Manz AG's process and automation projects.

In total, Manz AG recorded a ratio for research and capitalized development services of 11.7 % (previous year: 6.7 %). The significant increase is due to higher own work capitalised from the IPCEI project, which had less impact in the previous year. The capitalization ratio, i.e. the share of capitalized development costs in total R&D expenses, was 79.3 % (previous year: 63.1 %). Investments in R&D amount to EUR 33.0 million and are significantly above the previous year's level of EUR 16.0 million for the reasons described. Subsidies received are already taken into account here.

During the financial year 2022, the research and development costs offset affecting profit and loss were EUR 11.6 million and thus remained at the previous year's level of EUR 11.4 million. The company will also continue to place a clear emphasis on R&D activities in future. In order to consolidate its technological positioning in the relevant target markets and its innovative strength in a sustainable way and over the long term, Manz AG aims to achieve an annual R&D ratio of 5 % on average in its two segments. Including Manz AG's equity ratio in the development costs within the framework of the IPCEI project, in the coming years, this figure will average around 15 %.

Sustainability reporting and non-financial corporate statement

Manz AG is required to prepare a sustainability report or to submit a non-financial statement in accordance with the European Corporate Social Responsibility Directive and the provisions of Sections 315b and 315c in conjunction with Sections 289c and 289e of the German Commercial Code (HGB). The non-financial consolidated statement is published separately from the consolidated management report in a separate sustainability report. In this context Manz AG follows the recommendations of the German Sustainability Code (DNK) as well as the standards of the Global Reporting Initiative (GRI). The sustainability report and the non-financial Group statement can be viewed on our website www.manz.com in the "Investor Relations" section under "Publications" and in the "Company" section under the heading "Sustainability".



The total capacity of lithium-ion batteries required worldwide will be around

4,7 TWh

in 2030.*

*Source: McKinsey

Energy transformation, e-mobility, electronic products – nothing moves without batteries

Energy storage is one of the main growth fields for the future. With its novel technology portfolio for the production of lithium-ion battery cells, modules and systems, as well as capacitors, Manz is setting new standards worldwide.

The production of battery cells places high demands on precision and productivity. Every single process step, e.g. coating, cutting, stacking or winding, affects the battery's performance parameters.

With its highly-efficient and fully-integrated production solutions, Manz covers the entire value chain for the production of battery cells -–from wound button cells and prismatic cells to stacked pouch cells – and ensures that they can be produced in an efficient manner.

From individual cells to entire battery systems

The energy transformation and e-mobility require powerful all-in-one battery systems. In addition to our extensive know-how in process control, automation and laser technology, we offer our customers mature production solutions for all processes that are required for the assembly of battery modules.

With our solutions, we support our customers from the initial idea to the finished production process:

- Individual machines for e.g. laboratory production
- Equipment for pilot and small series production
- Turnkey production solutions for battery cell and module production.

Our mission: Maximum precision with maximum production speed

From
coating
to
module assembly...

... we cover all process steps for the production of Li-Ion batteries together with strong partners.

Business Report

Macroeconomic environment and sector-specific conditions

Economic market environment

The international economy was weakened primarily by high energy prices and a variety of uncertainties during the course of 2022. According to the Kiel Institut für Weltwirtschaft (IfW Kiel – Institute for World Economy), monetary policy has also dampened the overall economy, after being tightened rapidly due to the overall high inflation pressure. A drop in supply bottlenecks and increasing normalization of economic activities in areas of the economy particularly hard-hit by the Covid-19 pandemic helped production move in a positive direction into the fall. However, economic momentum dropped significantly again at the end of the year. Overall, the IfW experts calculated that the global economy would grow by 3.2 % over the course of 2022 compared with 2021 (previous year: 6.1 %). According to the IfW, economic output in the USA increased by 1.9 % in 2022 compared with 2021 (previous year: 5.9 %). According to the IfW, gross domestic product in China grew by 2.9 % in 2022 (previous year: 8.6 %). Economic output in the European Union is expected to increase by 3.5 % in 2022 (previous year: 5.3 %). The overall economic situation in Germany, as well, was shaped by the consequences of war in Ukraine and extreme hikes in energy prices during 2022. According to initial, preliminary calculations by the Federal Statistical Office, gross domestic product (GDP) in 2022 grew by 1.9 % over 2021 (previous year: 2.6 %). Thus, GDP in 2022 was still 0.7 % lower than in 2019, the year before the Covid-19 pandemic began.

Engineering industry

Based on information from the VDMA (Verband Deutscher Maschinen- und Anlagenbau – German Association of Mechanical and Plant Engineering) of December 2022, production in machinery and system engineering continued to be impacted notably by difficulties in supply chains and by material bottlenecks. The situation remains strained in particular for electronic components, although it is improving. While actual order intake during the first ten months of 2022 was 1 % below that of the previous year, actual production during the same period dropped by 0.4 % compared to the previous year. VDMA economists estimate that production growth for 2022 as a whole will be 1 % in price-adjusted terms compared with 2021 (previous year: 6.5 %). This corresponds to a total nominal production value in the mechanical engineering sector of EUR 238 billion.

Core segment sectors

Mobility & Battery Solutions

The automotive industry's shift toward electromobility is omnipresent and is being accelerated, in particular, by strict emissions requirements in key sales markets. The increasing move away from the combustion engine poses major challenges for automotive manufacturers and suppliers. A shortage of semiconductors remains one of the dominant issues in the automotive industry. This has a significant impact on production figures and is likely to continue affecting the industry negatively in coming years, based on expert assessments. According to IHS Markit, around 6.4 million pure electric vehicles were produced worldwide in 2022, an increase of 39 % compared to 2021. The battery capacity needed for this, according to IHS Markit, is around 380 gigawatt hours. Pure electric vehicles currently account for around eight percent of total automotive production worldwide.

The German Association of the Automotive Industry (VDA –Verband der Automobilindustrie) states that the total number of passenger cars produced in Germany in 2022 was 3.4 million vehicles, or 11 % more than in 2021.Despite this growth, production volume remains at a comparatively low level: production figures were significantly lower, by a full 26 %, than those from 2019, the year before the Covid-19 pandemic.

According to the Federal Motor Transport Authority (KBA – Kraftfahrt-Bundesamt), new passenger car registrations in Germany increased by 1.1 % year-on-year in 2022 to around 2.65 million. Over the course of the year, around 470,000 all-electric passenger cars (BEVs) were newly registered (+ 32 % year-on-year), resulting in a BEV share among all new registrations of around 18 %.

Electromobility is the biggest growth driver for lithium-ion battery demand in the coming years. According to Roland Berger, the automotive sector's share of total global battery capacity requirements will increase from about 65 % today to 77 % in 2030. Currently, Europe is still dependent on importing batteries from Asia. For example, according to IHS Markit, around one-third of electric passenger cars (BEVs) manufactured in Europe are still equipped with battery cells produced in Asia. In coming years, it indicates that the demand for lithium-ion batteries will increasingly be handled regionally within Europe, which will require the construction of multiple battery factories. By 2027, IHS Markit forecasts that 87 % of electric passenger cars manufactured in Europe will be equipped with battery cells produced in Europe.

According to a study by Interact Analysis, the market for production equipment in the battery assembly sector grew by around 78 % in 2022 to around 4 billion US dollars (previous year: 65 %). Manz AG was one of the ten largest providers in this market in 2021, with a global market share of 3.5 %.

Industry Solutions

Cell contacting systems are a central component of electric cars and plug-in hybrids: Depending on their size and capacity, several battery cells or modules are integrated in each battery-powered e-car and interconnected by cell contacting systems. With its high-tech production solutions, Manz covers all essential manufacturing steps for the automated production of cell contacting systems. According to estimates by Manz based on IHS Markit, a total of around 140 million cell contacting systems were produced worldwide in 2022 (+ 32 % compared to the previous year).

In the field of display manufacturing, Manz offers highly efficient production processes with machines and equipment in the areas of wet chemistry, automation, and laser process technology, which are used in the production of TFT-LCDs and OLEDs. Due to cancellations and the generally difficult economic framework conditions, Display Supply Chain Consultants (DSCC) reduced its growth figures for capacities for LCD and OLED displays in 2022, and now expects an increase of 7 % compared to the previous year.

For the production of printed circuit boards and chip carriers, Manz offers wet-chemical process technology, for example, for exposure or surface processing. The focus is on so-called IC substrates, which allow microprocessors to be packaged in a very small space. Such packages are used in high-performance computers, for example, and other fields of application include smartphones, cars and industry. The market for these substrates grew to around USD 17.7 billion in 2021 as a whole (up 23 % year-on-year), according to Prismark data from 2022.

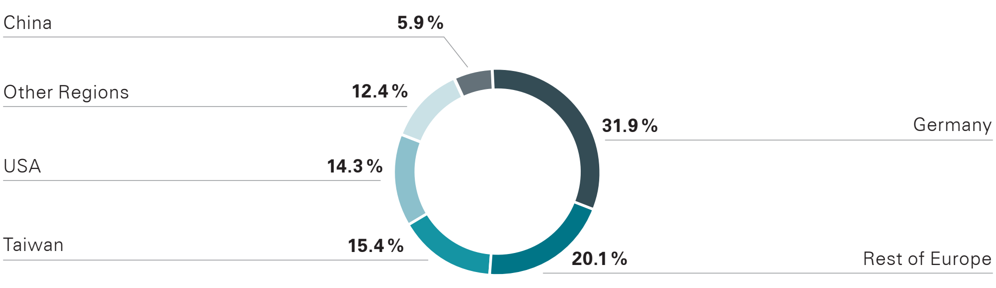
In the field of semiconductor manufacturing the chip packaging process Fan-Out Panel Level Packaging (FOPLP) is playing an important role due to miniaturization in the electronics industry. For the realization of the FOPLP with simultaneous coating of the microchips with an additional metal layer, in order to optimize the performance parameters (redistribution layer), Manz is one of the few suppliers of turnkey production lines. The market for FOPLP grew to USD 88 million in 2022 (+ 21 % compared to 2021), according to the Yole Group.

Analysis of the net assets, financial position and results of operations of the group

Earnings position

Based on consolidated revenues of EUR 227.1 million in fiscal year 2021, the Managing Board of Manz AG forecast a significant increase in revenues in the mid-double-digit percentage range for 2022 compared to 2021. Due to the ongoing challenges for the global economy and the fact that, contrary to expectations, the major order from the customer Power by Britishvolt Ltd. in the Mobility & Battery Solutions division was not processed to any significant extent due to customer-related postponements, which would have had a correspondingly positive effect on the development of revenues in the 2022 financial year, the Management Board adjusted the original revenues and earnings forecast on August 04, 2022 as part of the publication of the 2022 half-year report. The Management Board henceforth expected a revenue growth in the low to mid double-digit percentage range compared to the previous year and a balanced EBIT. With revenues for fiscal year 2022 of EUR 251.0 million (previous year: EUR 227.1 million), the adjusted revenue forecast was achieved.

Revenue Distribution by Region January 1 to December 31, 2022



Changes in inventories of finished and unfinished goods amounted to EUR 4.7 million (previous year: EUR 0.1 million) and mainly included a machine held for sale from Manz China Suzhou Ltd. which in 2022 alone caused an increase in inventories of EUR 2.4 million. Own work capitalized was significantly higher than in the previous year at EUR 26.2 million (previous year: EUR 10.6 million), mainly due to intensified development activities in connection with the "Lithium Battery Factory of the Future" funding project in the Mobility & Battery Solutions division. This resulted in a total operating performance of EUR 281.8 million (previous year: EUR 237.8 million).

At EUR 16.2 million, other operating income was down on the previous year's figure of EUR 21.4 million. The previous year's figure mainly included a one-time effect of EUR 15.2 million from the sale of shares in Talus Manufacturing Ltd. In the fiscal year 2022, other operating income included exchange rate gains of EUR 9.9 million (previous year: EUR 0.1 million), which mainly result from positive currency effects in connection with the Taiwan dollar and the US dollar, as well as from unrealized gains on open currency derivatives.

The cost of materials in fiscal year 2022 amounted to EUR 166.8 million (previous year: EUR 131.8 million), and the cost of materials ratio (ratio of cost of materials to total operating performance) increased slightly to 59.2 % (previous year: 55.4 %). In addition to a change in the product mix, this is also due to the general increase in the inflation rate in 2022, which, in addition to the shortage of materials, has had a negative impact on material purchase prices. At EUR 80.7 million, personnel expenses were up on the previous year's figure of EUR 75.5 million as a result of salary increases and a workforce expansion in connection with the "Lithium Battery Factory of the Future" development project, among other things, the personnel expense ratio (ratio of personnel expenses to total operating performance) fell to 28.6 % (previous year: 31.7 %).

Other operating expenses amounted to EUR 43.0 million (previous year: EUR 57.2 million) and included, among other things, costs for buildings and equipment of EUR 4.2 million (previous year: EUR 3.4 million), advertising and travel expenses of EUR 5.6 million (previous year: EUR 5.3 million), legal and consulting fees of EUR 4.6 million (previous year: EUR 2.7 million), and exchange rate losses of EUR 4.2 million (previous year: EUR 3.8 million). The adjusted prior-year figure of EUR 57.2 million for other operating expenses was impacted by a retrospective impairment of contract assets in connection with the large-scale project CIGS*fab*. An internal examination of the recoverability of the contract assets in the second quarter of 2022 resulted in an impairment requirement of EUR 22.7 million. The facts were presented incorrectly as of December 31, 2021, taking into account new knowledge and backward consideration of the case, in contradiction to the objective circumstances. In addition, the hints about the uncertain liquidity situation of the customer was already available at the time the consolidated financial statements were prepared. Since both requirements of IAS 8.5 are met cumulatively, this is an error from prior periods. As a result, the contract assets in the amount of EUR 22.7 million were retrospectively impaired. In addition, advance payments made in inventories in the consolidated financial statements as of December 31, 2021, were retrospectively impaired by 1.2 million euros in connection with the protective shield proceedings of Nice Solar Energy GmbH, which was a supplier to Manz AG for the large-scale CIGS*fab* project. The share in the result of associated companies burdened the 2022 result by EUR 1.3 million (previous year: EUR 0.2 million). The figure includes the negative earnings contributions of CADIS Engineering GmbH, Q.big 3D GmbH, and Customcells Tübingen GmbH.

Earnings before interest, taxes, depreciation and amortization (EBITDA) amounted to EUR 6.2 million, up on the previous year's figure of EUR –5.6 million. At 2.2 %, the EBITDA margin was up on the prior-year figure of –2.3 %. The prior-year figure is mainly due to the above-mentioned impairment loss on a contract asset in 2021.

At EUR 12.2 million, depreciation and amortization was significantly lower than the previous year's figure of EUR 34.4 million. The previous year's figure included one-time effects from impairment losses in the Solar segment, amounting to EUR 21.6 million on goodwill and a brand name. Earnings before interest and taxes (EBIT) amounted to EUR –6.0 million (previous year: EUR –39.9 million) due to the ongoing challenges for the global economy, such as material price increases or supply chain interruptions, as well as project postponements caused by customers, and were thus below both the original forecast of a low to mid-positive, single-digit EBIT margin and the forecast of a break-even result, adjusted by the Executive Board on August 04, 2022 in the course of the half-year report.

Finance income amounted to EUR 0.1 million in 2022 (previous year: EUR 0.5 million), and finance expenses to EUR 1.8 million. They were thus slightly below the previous year's level (previous year: EUR 2.0 million). Earnings before taxes (EBT) amounted to EUR –7.7 million (previous year: EUR –41.4 million). After deduction of income taxes of EUR 4.5 million (previous year: EUR 2.2 million), the consolidated result was EUR –12.1 million (previous year: EUR –43.7 million). Based on a weighted average of 8,082,499 shares, this resulted in basic earnings per share of EUR –1.42 (previous year: undiluted with 7,750,144 shares: EUR –5.62).

Asset position of the Group

The balance sheet total as at December 31, 2022 increased from EUR 284.5 million to EUR 344.8 million compared to the previous year's balance sheet date.

On the assets side, non-current assets totaled EUR 105.2 million as of December 31, 2022, slightly above the level as of the 2021 balance sheet date (EUR 101.5 million). This development reflects, in particular, the increase in investments accounted for using the equity method to EUR 7.6 million (December 31, 2021: EUR 3.2 million). The investments made in CADIS Engineering GmbH, Customcells Tübingen GmbH and Q.big 3D GmbH are reported under the item "Result from investments using the equity method". Financial assets amounted to EUR 3.8 million as at December 31, 2022, and include Manz AG's investment in MetOx Technologies Inc. and the new investment in ThermAvant Technologies Inc.

As of December 31, 2022, current assets of EUR 239.6 million were higher than the figure of EUR 183.0 million at the 2021 balance sheet date. Inventories and receivables increased to EUR 56.2 million (December 31, 2021: EUR 30.9 million) and EUR 47.6 million (December 31, 2021: EUR 33.7 million), respectively, as a result of the increased procurement of materials and receivables from advance payment due. In addition, due to several major projects in progress at Manz AG in Reutlingen and at the Asian subsidiaries, an increased value for contract assets of EUR 73.7 million was reported as of the reporting date compared to the previous year (December 31, 2021: EUR 63.4 million). Other current assets increased by EUR 8.8 million compared with the previous year. The main reason for this were receivables from the funding body of EUR 7.3 million submitted by Manz AG and the Italian subsidiary to the sponsors of the IPCEI project. There were no assets held for sale as of December 31, 2022. Cash and cash equivalents amounted to EUR 33.6 million as of December 31, 2022 (December 31, 2021: EUR 36.1 million). As of December 31, 2022, restricted cash in the amount of EUR 6.8 million (previous year: EUR 6.9 million) was reported under other current assets.

On the equity and liabilities side, equity amounted to EUR 102.3 million, up on the previous year's level of EUR 88.0 million. The increase is mainly attributable to the investment of Daimler Truck AG in the amount of EUR 30.6 million with a simultaneous total consolidated loss of EUR –17.3 million. The equity ratio was 29.7 % as of December 31, 2022 (December 31, 2021: 30.9 %).

Non-current liabilities were EUR 29.1 million as of December 31, 2022 (December 31, 2021: EUR 31.7 million). The decrease is mainly due to the partial reclassification of a bank liability of EUR 2.1 million from non-current to current financial liabilities. Current liabilities increased significantly to EUR 213.5 million as at December 31, 2022 (December 31, 2021: EUR 164.8 million), in particular, due to the increase in contract liabilities. Current financial liabilities amounted to EUR 37.5 million on the 2022 reporting date (December 31, 2021: EUR 41.0 million). Trade payables increased to EUR 73.6 million (December 31, 2021: EUR 66.4 million) due to the higher purchasing volume. Contract liabilities amounted to EUR 74.2 million as at December 31, 2022 and increased significantly compared to the previous year's figure, mainly due to advance payments received in connection with ongoing major projects (December 31, 2021: EUR 30.9 million).

Liquidity position of the Group

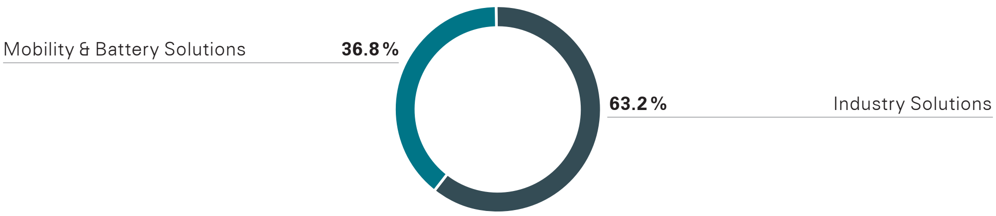
The starting point for cash flow from operating activities is the improved consolidated result of EUR –12.1 million (December 31, 2021: EUR –43.6 million). In the course of the increase in inventories, trade receivables and other assets, Manz recorded a significant cash outflow of EUR 31.4 million, compared to EUR 10.8 million in the same period of the previous year. The increase in trade payables, contract liabilities and other liabilities of EUR 26.4 million (December 31, 2021: EUR 12.2 million) had an offsetting positive effect on cash flow. Cash flow from operating activities increased by roughly EUR 23.5 million year-on-year, and totals EUR –2.3 million for fiscal year 2022.

Cash flow from investment activities amounted to EUR –22.3 million in the 2022 reporting period (previous year: EUR 9.7 million). The significant cash outflow resulted especially from payments for development projects and other intangible assets and property, plant and equipment, in particular, amounting to EUR 32.8 million (December 31, 2021: EUR 14.9 million). The previous year's figure included a cash inflow of EUR 28.0 million from the sale of Talus, which had previously been accounted for investments accounted for using the equity method.

Cash flow from financing activities in fiscal year 2022 amounted to EUR 22.4 million and resulted primarily from the capital increase with Daimler Truck AG of EUR 30.6 million, as well as an offsetting reduction in payments for the repayment of current financial liabilities of EUR 42.1 million (December 31, 2021: EUR 61.0 million). Taking exchange rate changes into account, Manz AG thus had cash and cash equivalents of EUR 33.6 million as of December 31, 2022 (December 31, 2021: EUR 36.1 million). Unused bank lines of credit amounted to EUR 22.5 million euros as of the 2022 balance sheet date (December 31, 2021: EUR 17.8 million).

Segment reporting

Revenues by Business Segment January 1 to December 31, 2022



Order intake

(in million EUR)

	2022	2021	Change in %
Mobility & Battery Solutions	115.0	153.3	–25.0
Industry Solutions	244.7	148.2	+65.1
Group total	**359.7**	**301.5**	**+19.3**

Order backlog

(in million EUR)

	2022	2021	Change in %
Mobility & Battery Solutions	192.9	170.0	+13.5
Industry Solutions	147.0	59.0	+149.1
Group total	**339.9**	**229.1**	**+48.4**

Industry Solutions

In the Industry Solutions segment, business for assembly automation equipment showed a positive development. In this context alone, Manz was able to record several incoming orders from SolarEdge Technologies Ltd. in the mid-double-digit million range, some of which have already been recognized in sales and earnings in fiscal year 2022.

Challenging conditions continued to prevail in the market for equipment to manufacture displays for LCD, OLED and AMOLED flat screens. Nevertheless, in the course of expanding its business to include production equipment for implementing interconnect applications and the Fan-Out Panel Level Packaging (FOPLP) packaging process in microchip manufacturing, Manz AG recorded a 9.4 % increase in revenues to EUR 158.6 million (previous year: EUR 145.1 million) in the segment Industry Solutions in 2022. The target of a sales increase in the lower double-digit percentage range was thus narrowly missed. Segment EBIT amounted to EUR 7.6 million compared to EUR –42.2 million in the previous year. The previous year's figure was impacted by non-cash impairment losses on goodwill and a brand name, and impairment losses on an asset in the solar business. As a result, the earnings forecast of an EBIT margin in the low to mid single-digit percentage range was achieved at 4.8 %.

Mobility & Battery Solutions

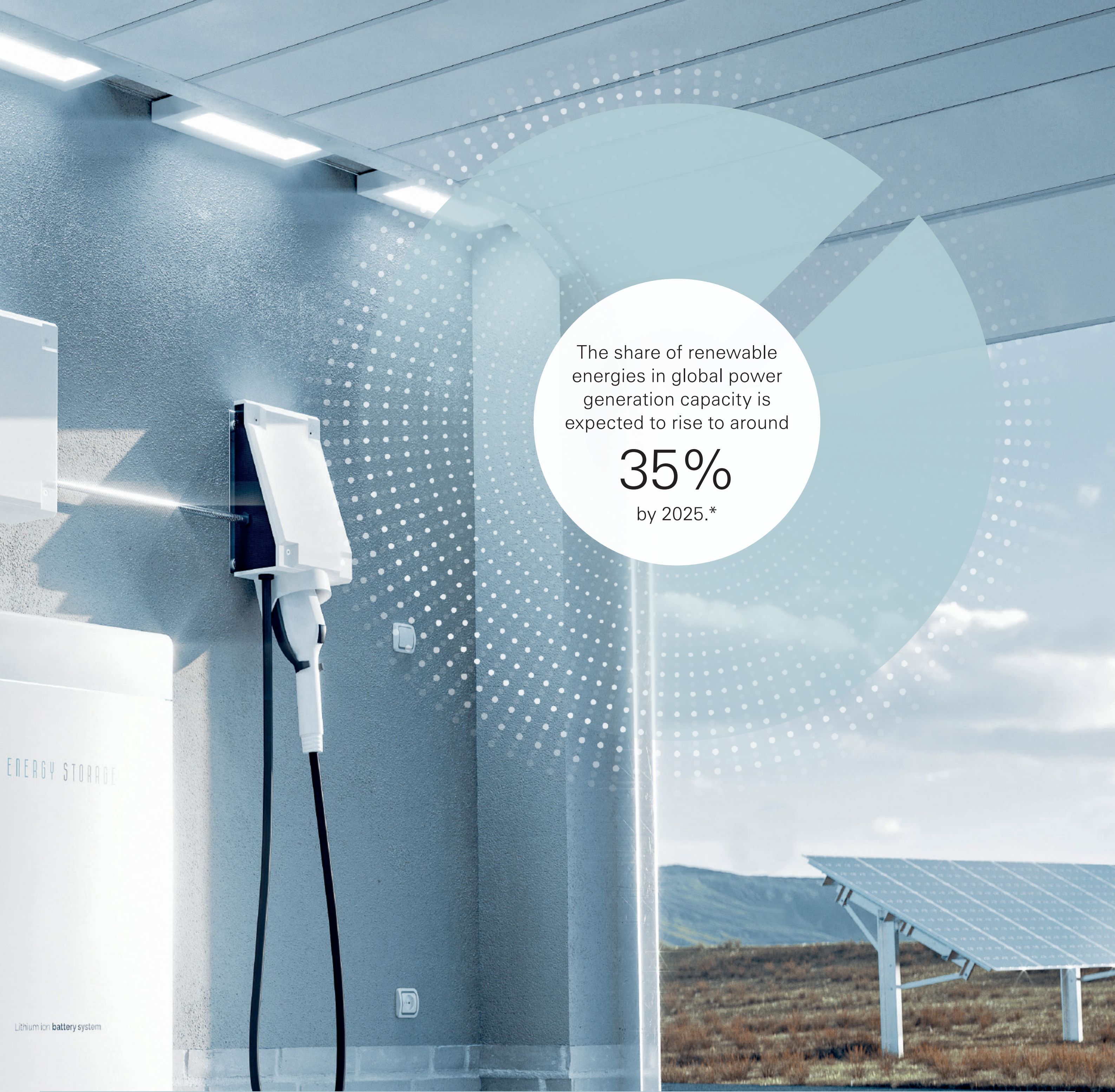
In fiscal year 2022, the Mobility & Battery Solutions segment developed positively in terms of order intake. For example, Manz AG was able to win five different major orders with an order value of between EUR 13.0 and 24.7 million, including from the new shareholder Daimler Truck AG. Through a form of cooperation with Dürr AG and GROB-WERKE GmbH & Co. KG, business prospects for production solutions for lithium-ion battery cells and modules for electromobility improved further.

The Mobility & Battery Solutions segment recorded sales growth of 12.6 % to EUR 92.3 million in fiscal year 2022. The target of doubling revenues compared to the previous year (EUR 82.0 million) was clearly missed. The shortfall in revenues was mainly due to the delay in processing the major order from the customer Power by Britishvolt Ltd. and the delayed receipt of other major customer orders. In addition, the unexpected increase in the cost of materials during the year had a negative impact on purchasing and thus also had a significant negative effect on segment EBIT. This amounted to EUR –13.6 million in the fiscal year, compared with EUR 2.2 million in the same period of the previous year. This corresponds to an EBIT margin of EUR –14.7 %. The target of an EBIT margin in the low to mid positive single-digit percentage range was, therefore, not achieved.

Overall statement on corporate development 2022

The overall unsatisfactory development of revenues and earnings in 2022 is essentially characterized by the continuing challenges for the global economy and by revenue shortfalls in the Mobility & Battery Solutions segment due to customer-related project postponements and thus, contrary to expectations, the failure to significantly process the major order from the customer Power by Britishvolt Ltd. and by a delay in the realization of revenues from individual projects due to late order intake.

With an order backlog of EUR 339.9 million as at December 31, 2022 (previous year: EUR 229.1 million) and an order intake of EUR 359.7 million as of December 31, 2022 (previous year: EUR 301.5 million), the dynamic development in the market for e-mobility and the solid demand for assembly automation solutions continue to underscore the potential for Manz AG and its production solutions.



The share of renewable energies in global power generation capacity is expected to rise to around

35%

by 2025.*

The share of renewable energies is growing worldwide.

The renewable energies sector will have to expand much more rapidly to ensure that growing global demand for energy and storage can be met and that the Paris climate targets can be achieved. That is what we are committed to.

*Source: International Energy Agency (IEA)

Using natural energy efficiently

Storage technologies are the foundation for a successful energy transition and a guarantee for an independent power supply. Manz is one of the industry's leading development partners in this area.

Our drive: Electricity should be reliable available

Of the

17

global sustainability goals set by the United Nations ...

... Manz addresses four of them with its solutions: decent work and economic growth; affordable and clean energy; industry, innovation, and infrastructure; and climate protection measures.

Energy must be available when it is needed. To achieve this, the high volatility of the power grids must be balanced by the increasing share of renewable energy. This creates an increasing demand for load balancing technologies and thus also for intelligent and powerful battery storage systems, which hold surplus energy that is not immediately needed or fed into the power grid.

The demand for energy storage is increasing

With our production solutions for battery storage systems, we ensure that renewably generated energy is available around the clock. The energy industry benefits from stationary energy storage systems for decentralized storage of energy from renewable sources - for a secure power supply.

Three market segments are in the foreground for us here

- Large storage
- Commercial storage
- Home storage

Our production solutions ensure that the required energy storage systems are more powerful and less expensive to produce. In this way, we make an important contribution to ensuring the necessary high security and quality of supply in the long term.

Corporate Governance

Declaration on corporate governance (unaudited)

The corporate governance declaration pursuant to Sections 289f and 315d of the German Commercial Code (HGB) was prepared jointly for Manz AG and the Manz Group and made publicly available under the title "Corporate Governance – Declaration of Manz AG for the 2022 financial year" on the company's website at www.manz.com in the "Investor Relations" section under the heading "Corporate Governance – Declaration on Corporate Governance". This also includes all key aspects of the compliance management system, which in the view of the Executive Board is aligned to the risk situation of the company.

Takover-relevant disclosures

(pursuant to Section 289a and Section 315a of the German Commercial Code [HGB] and explanatory report)

Composition of subscribed capital

The subscribed capital of Manz AG amounts to EUR 8,540,286.00 and is divided into 8,540,286 no-par value bearer shares with a proportional amount of the share capital of EUR 1.00. All shares are associated with the same rights and duties. Each share grants its holder one vote at the Annual General Meeting. Each share offers the same share of profits. This would exclude treasury shares held by Manz AG, which do not entitle the company to any rights. At the present time, the company does not hold any treasury shares. The rights and obligations of shareholders are, otherwise, governed by the provisions of the German Stock Corporation Act (AktG), in particular, Sections 12, 53a et seq., 118 et seq. and 186 of the German Stock Corporation Act (AktG).

Restrictions that apply to voting rights or the transfer of shares

The Managing Board of Manz AG does not know of any agreements pertaining to restrictions on the use of voting rights or the transfer of shares.

Shareholdings that exceed 10 % of voting rights

Based on the notifications received regarding significant voting rights pursuant to Sections 33 and 34 of the German Securities Trading Act (WpHG) and regarding transactions by executives on their own behalf pursuant to Article 19 of the Market Abuse Regulation, the Managing Board is aware of the existence of the following direct or indirect shareholdings in the capital of the company exceeding 10 % of the voting rights:

	Number of voting rights	Percentage of voting rights
Dieter Manz, Schlaitdorf	1,939,899	22.7 %
directly thereof (Section 33 of the German Securities Trading Act [WpHG])	775,942	9.1 %
of which attributable (Section 34 of the German Securities Trading Act [WpHG])	1,163,957	13.6 %
People's Republic of China, acting through the State-owned Asset Supervision Commission (SASAC) of the People's Government of Shanghai, People's Republic of China	1,523,480	17.9 %
Full chain of subsidiaries:		
Shanghai Electric (Group) Corporation		
Shanghai Electric Group Company Limited		
Shanghai Electric Hongkong Co. Limited		
Shanghai Electric Germany Holding GmbH (shareholder)		

Changes in the total number of voting rights in Manz AG in the sense of Section 41 of the German Securities Trading Act (WpHG) which occurred after the notifications were received were not included in the shares of voting rights indicated.

Shares with special rights that confer authority to exercise control

The company does not have shares with special rights that confer authority to exercise control.

Type of voting rights control if employees have an interest in the capital and do not exercise their control rights directly

Employees with a stake in Manz AG's capital can exercise the control rights to which they are entitled from the shares directly in accordance with the provisions of the Articles of Incorporation and prevailing laws.

Legal requirements and provisions of the Articles of Incorporation regarding the appointment and dismissal of members of the Managing Board and regarding amendments to the Articles of Incorporation

The appointment and dismissal of members of the Managing Board are governed by Sections 84 and 85 of the German Stock Corporation Act (AktG). Accordingly, members of the Managing Board are appointed by the Supervisory Board for a maximum of five years. Members may be repeatedly appointed or have their term extended, in either case for another period lasting a maximum of five years. Pursuant to Section 5 of the company's Articles of Incorporation, the Managing Board may consist of one or more persons. The Supervisory Board appoints the members of the Managing Board pursuant to the provisions of the German Stock Corporation Act and determines their number. The Supervisory Board may appoint a member as chairperson of the Managing Board. In accordance with Section 84 of the German Stock Corporation Act (AktG), the Supervisory Board may revoke the appointment of a member of the Managing Board and the appointment of the Chairman of the Managing Board for good cause.

Amendments to the Articles of Incorporation are governed by Sections 133 et seq. and 179 et seq. of the German Stock Corporation Act (AktG). In general, amendments require a resolution passed at the Annual General Meeting. A resolution passed at the Annual General Meeting requires a majority of at least three-quarters of the capital stock represented at the time the resolution is adopted. The Articles of Incorporation may determine a different, but only greater capital majority, for any amendment to the corporate purpose of the company.

Pursuant to Section 16 (1) of the company's Articles of Incorporation, resolutions are passed at the Annual General Meeting by a simple majority of the votes cast, unless mandatory provisions of the German Stock Corporation Act stipulate otherwise. Where the German Stock Corporation Act also stipulates that a majority of the represented capital stock is required to pass a resolution, a simple majority of the represented capital fulfills this requirement, as permitted by law.

Authority of the Managing Board to issue or repurchase company shares

The Managing Board may issue new shares only on the basis of resolutions passed at the Annual General Meeting in respect of an increase in capital stock or in respect of authorized and conditional capital. Purchasing treasury shares is governed by Section 71 et seq. of the German Stock Corporation Act (AktG) and, in certain cases, is permitted by operation of law or as a result of authorization given at the Annual General Meeting.

Authorized capital

Based on the resolution of the Annual General Meeting of 7 July 2021, the Managing Board of the company is authorized, in accordance with Article 3 (3) of the Articles of Incorporation, to increase the share capital of the company, with the approval of the Supervisory

Board, in the period up to July 6 2026, once or in partial amounts by a total of up to EUR 3,097,636.00 by issuing a total of up to 3,097,636 new bearer shares (no-par value shares) against cash or non-cash contributions (Authorized Capital 2021). In the course of the capital increase amounting to approximately 10 % of the share capital, in the context of which Daimler Truck AG acquired an interest in Manz AG, an amount of EUR 774,408.00 of this was utilized.

In principle, the new shares must be offered to shareholders for subscription. However, the Managing Board is authorized, with Supervisory Board approval, to disapply shareholders' preemptive rights,

- in the case of capital increases against contribution in kind for the acquisition of companies, parts of companies or participations in companies or other assets or for the purpose of business combinations;

- to the extent that it is necessary to give owners of warrant or convertible bonds, profit-sharing rights, or profit-sharing bonds (or combinations of these instruments) issued by the company or direct or indirect affiliates of the company a subscription right to new shares to the same extent as they would have upon exercising their option or conversion right or after fulfilling their conversion obligation;

- in order to exclude fractional amounts from subscription rights.

Authorization to issue partial debentures with options or conversion rights or conversion obligations, profit-sharing rights, and profit-sharing bonds (or combinations of these instruments), as well as Conditional Capital I

At the Annual General Meeting on July 2, 2019, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue bearer warrant or convertible bonds, profit-sharing rights and/or profit-sharing bonds, or a combination of these instruments (collectively referred to as "bonds"), up to a total nominal value of EUR 150 million, on one or more occasions until July 1, 2024. In addition, the Managing Board was also authorized to grant owners of warrant bonds option rights and owners of convertible bonds conversion rights for bearer shares of the company with a proportionate amount of capital stock totaling up to EUR 3,100,000.00, in accordance with the detailed terms and conditions of the warrant/convertible bonds.

The statutory subscription right is granted to the shareholders in the way that the bonds are underwritten by a bank or a syndicate of banks with the obligation to offer them for subscription to shareholders. If bonds are issued by one of Manz AG's subsidiaries pursuant to Section 18 of the German Stock Corporation Act (AktG), the company must ensure that the statutory subscription right is granted accordingly to shareholders of Manz AG.

However, the Managing Board is authorized, with the consent of the Supervisory Board, to exclude subscription rights to the extent necessary to grant the holders of previously issued bonds with option or conversion rights, or conversion obligations, respectively, subscription rights to the extent to which they would be entitled as shareholders after exercising their option or conversion rights or upon fulfillment of their conversion obligations.

Furthermore, the Managing Board is authorized, with Supervisory Board approval, to completely exclude shareholders' subscription rights to bonds issued with an option and/or conversion right or conversion obligation, provided the Managing Board, after dutiful examination, arrives at the view that the issue price of the bonds is not significantly below their hypothetical market value as calculated according to accepted and, in particular, actuarial methods. This authorization to exclude subscription rights applies to bonds issued with option and/or conversion rights or conversion obligations, with option and/or conversion rights or conversion obligations for shares with a pro rata amount of the capital stock which, in total, may not exceed 10 % of the capital stock, either at the time it takes effect or – if this value is lower – at the time this authorization is exercised. On the aforementioned 10 % limit new shares from authorized capital and treasury shares sold are counted in certain cases.

Where profit-sharing rights or profit-sharing bonds without an option right or conversion right/obligation are issued, the Managing Board is authorized, with Supervisory Board approval, to completely disapply shareholders' subscription rights if these profit-sharing rights or profit-sharing bonds have the characteristics of a debenture, i.e. do not give rise to any membership rights in the company, do not grant a share in the liquidation proceeds and the interest payable is not calculated on the basis of net income for the year, net retained profit or the dividend. Moreover, in such a case, the interest payment and the issue price of the profit-sharing rights or profit-sharing bonds must reflect current market conditions at the time of issue.

Pursuant to Section 3 (4) of the Articles of Incorporation, the capital stock of the company has been conditionally increased by up to EUR 3,100,000.00 through the issue of up to 3,100,000 no-par value bearer shares (Conditional Capital I).

The contingent capital increase will only be carried out to the extent that the holders of option or conversion rights or those obliged to convert from warrant or convertible bonds, profit participation rights or participating bonds issued by the company or a group company within the meaning of Section 18 of the German Stock Corporation Act (AktG) on the basis of issued or guaranteed at the Annual General Meeting on July 2, 2019 under agenda item 5, exercise their option or conversion rights or, if they are required to convert, fulfill their obligation to convert, unless a cash settlement is granted or treasury shares or shares of another listed company. The new shares are issued at the option or conversion price to be determined in each case in accordance with the authorization resolution described above. The new shares are to participate in profit from the beginning of the financial year in which they are created on the basis of the exercise of options or conversion rights or of the fulfillment of conversion obligations. The Managing Board is authorized, with Supervisory Board approval, to establish further details of the execution of the conditional capital increase.

Authorization to issue share subscription rights within the scope of the Manz Performance Share Plan 2015 as well as Conditional Capital II

At the Annual General Meeting held on July 7, 2015, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue a total of up to 59,000 subscription rights ("Performance Shares") for a total of up to 118,000 shares in the company to executives of affiliated companies as well as Manz's own managers below the executive level and managers of affiliated companies, both domestic and foreign, below the executive level on one or more occasions through June 30, 2020. The Supervisory Board was given authorization to issue a total of up to 56,000 subscription rights ("Performance Shares") for a total of up to 112,000 shares in the company to members of Manz's Managing Board, on one or more occasions, through June 30, 2020.

The subscription rights shall be granted, structured and exercised in accordance with the provisions set out in the resolution of the Annual General Meeting of July 7, 2015.

The authorization of July 7, 2015 was revoked by resolution passed at the Annual General Meeting of July 2, 2019, insofar as no subscription rights had yet been issued on the basis of the authorization.

Pursuant to Section 3 (5) of the Articles of Incorporation, the company's capital stock has been conditionally increased by up to EUR 208,210.00 through the issue of up to 208,210 no-par value bearer shares (Conditional Capital II). The conditional capital increase serves to secure the rights of the holders of subscription rights ("Performance Shares") granted on the basis of the authorization granted by the Annual General Meeting on July 7, 2015. The shares will be issued at the issue amount established in the authorization adopted at the Annual General Meeting on July 7, 2015. The contingent capital increase will be carried out only to the extent subscription rights are exercised and the company does not issue either treasury shares or a cash settlement for the purpose of fulfillment of the subscription rights. The new shares will be equivalent to already issued shares of the same class with respect to their dividend entitlement. The Managing Board and, to the extent members of the Managing Board are affected, the Supervisory Board are authorized to establish further details of the conditional capital increase and its implementation.

Authorization to issue share subscription rights within the scope of the Manz Performance Share Plan 2019 as well as Conditional Capital III

At the Annual General Meeting held on July 2, 2019, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue a total of up to 95,000 subscription rights for subscription of a total of up to 190,000 shares in the company to executives of affiliated companies of the company, as well as Manz's own managers below the executive level and managers of affiliated companies, both domestic and foreign, below the executive level on one or more occasions through June 30, 2024. The Supervisory Board was authorized to grant one or several times a total of up to 85,000 subscription rights for the purchase of up to 170,000 shares in the company to members of the company's Managing Board until June 30, 2024.

The subscription rights shall be granted, structured and exercised in accordance with the provisions set out in the resolution of the Annual General Meeting of July 2, 2019.

The Manz Performance Share Plan 2019 for members of the Managing Board and Manz AG executives and its group companies, which was approved during the Annual General Meeting 2019, was explained in a report by the Managing Board to the Manz AG Annual General Meeting on July 2, 2019.

Pursuant to Section 3 (6) of the Articles of Incorporation, the company's capital stock has been conditionally increased by up to EUR 360,000.00 through the issue of up to 360,000 no-par value bearer shares (Conditional Capital III). The conditional capital increase serves to secure the rights of the holders of subscription rights granted on the basis of the authorization granted by the Annual General Meeting on July 2, 2019.

The shares will be issued at the issue amount established in the authorization adopted at the Annual General Meeting on July 2, 2019. The contingent capital increase will be carried out only to the extent subscription rights are exercised and the company does not issue either treasury shares or a cash settlement for the purpose of fulfillment of the subscription rights. The new bearer shares will be equivalent to already issued shares of the same class with respect to their dividend entitlement. The Managing Board and, to the extent members of the Managing Board are affected, the Supervisory Board are authorized to establish the further details of the conditional capital increase and its implementation.

Furthermore, on June 30, 2020, the Annual General Meeting authorized the Managing Board and - if the shares are issued to members of the Managing Board - the Supervisory Board to use acquired treasury shares of Manz AG to service subscription rights that were or will be issued to members of the Managing Board and executives as part of the Manz Performance Share Plan 2015 resolved by the Annual General Meeting on July 7, 2015 under item 6 of the agenda or as part of the Manz Performance Share Plan 2019 resolved by the Annual General Meeting on July 2, 2019 under item 6 of the agenda (see below under the section "Treasury Shares"). This authorization to reissue clearly defines the group of people to whom the Manz shares can be transferred.

The option to grant Manz AG's own shares to those entitled to subscribe in fulfillment of their subscription rights is a suitable means of counteracting the dilution of capital holdings and voting rights that would occur if the subscription rights were fulfilled with newly created shares based on the contingent capital. To the extent that Manz AG makes use of this option, there is no need to make use of contingent capital II according to Section 3 (5) of the Articles of Incorporation or contingent capital III according to Section 3 (6) of the Articles of Incorporation. Whether and to what extent the authorization to issue treasury shares is used to fulfill the subscription rights or whether new shares are issued instead from the contingent capital, is to be decided by the Managing Board and – if a member of the Managing Board exercises the subscription right – by the Supervisory Board, which is guided by the interests of the company and its shareholders.

Authorization to purchase and dispose of treasury shares

The Annual General Meeting on June 30, 2020 authorized the Managing Board of the company to acquire treasury shares until June 29, 2025 in accordance with Section 71 (1) No. 8 of the German Stock Corporation Act (AktG) up to a total of 10 % of the company's capital stock existing at the time this authorization takes effect or – if this amount is lower – at the time this authorization is exercised. The shares acquired on the basis of this authorization, together with other shares in the company, which the company has already acquired and still holds or which are attributable to the company pursuant to Sections 71d and 71e of the German Stock Corporation Act (AktG), may at no time account for more than 10 % of the company's capital stock. The provisions in Section 71 (2), Sentences 2 and 3 of the German Stock Corporation Act (AktG) must be observed.

The acquisition may only be affected via the stock exchange or by means of a public purchase offer addressed to all shareholders and must comply with the principle of equal treatment of shareholders (Section 53a of the German Stock Corporation Act [AktG]).

The Managing Board was authorized to sell the treasury shares acquired on the basis of the above authorization also in manners other than through the stock exchange or through an offer to other shareholders, under the condition that the sale is for cash and is at a price that is not significantly below the stock-exchange price, at the time of the sale, of company shares with the same features. This authorization to use shares is limited to shares representing a proportionate amount of the capital stock which in total may not exceed 10 % of the capital stock of the company, either at the time this authorization becomes effective or – if this amount is lower – at the time this authorization is exercised. The maximum limit of 10 % of the capital stock shall be reduced by the pro rata amount of the capital stock attributable to those shares which are issued or sold during the term of this authorization subject to the exclusion of subscription rights, in accordance with (or pursuant to) Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG). The maximum limit of 10 % of the capital stock shall also be reduced by the pro rata amount of capital stock represented by those shares to be issued to service bonds with option or conversion rights, or option or conversion obligations, respectively, insofar as these bonds are issued during the term of this authorization to the exclusion of subscription rights in analogous application of Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG).

The Managing Board was further authorized to transfer treasury shares acquired on the basis of the above authorization to third parties insofar as this is for the purpose of acquiring companies, parts of companies or interests in companies or other assets, or to carry out business combinations.

The Managing Board and – to the extent there is an obligation with respect to members of the Managing Board – the Supervisory Board were further authorized to use the treasury shares acquired on the basis of the above authorization for the purpose of fulfilling the subscription rights that were or are issued in the framework of the Manz Performance Share Plan 2015 resolved at the Annual General Meeting of July 7, 2015, under item 6 of the agenda or in the framework of the Performance Share Plan 2019 adopted at the Annual General Meeting of July 2, 2019, under item 6 of the agenda.

The Managing Board was also authorized to use the treasury shares acquired on the basis of the above authorization for the purpose of fulfillment of the subscription and conversion rights that result from exercising option or conversion rights or fulfilling option or conversion obligations that have been granted or imposed within the framework of issuing convertible or warrant bonds, profit-sharing rights, or profit-sharing bonds (or combinations of these instruments) of the company or its subsidiaries.

The Managing Board was further authorized to transfer own shares acquired on the basis of the above authorization to employees of the company or employees or members of governing bodies of subordinate affiliates of the company within the meaning of Sections 15 et seq. of the German Stock Corporation Act (AktG).

Significant company agreements that are conditional on a change of control as a result of a takeover bid

Contracts with banks and bonding insurers for guarantee and cash credits

The agreements between Manz AG and a number of domestic and foreign banks and bonding insurers regarding the granting of guarantee and cash credits include extraordinary termination rights for the banks and bonding insurers in the event of a change of control at Manz AG. In case of termination, Manz AG’s guarantee and cash credits would no longer be available, which would have significant negative impacts on its business activities.

Apart from the agreements mentioned above and in the section below, there are no significant company agreements that are conditional on a change of control as a result of a takeover bid.

Compensation agreements of the company entered into with members of the Managing Board or with employees in the event of a takeover bid

In the event of a change of control, the employment contract of Managing Board member Martin Drasch stipulates that the Managing Board member is entitled to terminate the employment contract with a notice period of three months to the end of a calendar month and to resign from his office as member of the Managing Board with the same deadline. These rights may be exercised only within six months after the change of control has occurred.

A change of control occurs when the company receives a notification from a party subject to a reporting obligation pursuant to Section 33 (1) Sentence 1 of the German Securities

Trading Act (WpHG) that said party, including the voting rights attributable to it pursuant to Section 34 of the German Securities Trading Act (WpHG), has reached or exceeded 25 % or a higher proportion of the voting rights in the company.

In the event of a termination of the employment contract pursuant to the above provisions, the member of the Managing Board shall receive a severance payment. This consists of the total amount of the fixed salary owed for the remaining term of the employment relationship and the total amount of the cash bonus owed for the remaining term of the employment relationship, whereby the calculation of the amount is to be based as the EBIT margin on the average of the EBIT margin in the last financial year preceding the termination and the EBT margin expected to be achieved in the current financial year according to the company's planning. The severance payment is limited to the amount corresponding to 150 % of the severance payment cap. The value of two years' annual compensation is deemed to be the severance cap. If the remaining term of the employment relationship at the time the termination takes effect is more than two years, the severance payment, insofar as it is granted for the exceeding period, shall be reduced by 75 % for the purpose of offsetting, on a lump-sum basis, the other income of the Managing Board member to be expected for the period after termination of the employment relationship. In addition, the amounts to be taken into account for the severance payment shall be discounted at a rate of 3 % p.a. to the date on which the severance payment falls due.

Apart from that, the company has no agreements with members of the Managing Board that provide for compensation in the event of a takeover bid.


With a size of
well above
510 x 515 mm,
the largest FOPLP panels
can be produced on our
lines.

Electronics: A necessity for daily life and industry

Electronics have become a fixture of daily life. With our machines and equipment for producing electronic components, as well as performance and consumer electronics devices, we create the conditions for the continuous optimization of end products while also reducing production costs. This makes Manz a sought-after development and technology partner.

The electronics industry is a very dynamic sector. With its integrated and automated production solutions, Manz creates the conditions for rapid time-to-market while also improving the performance characteristics of end products and reducing production costs. Our customers profit from these advantages for the production of

- electronic components such as displays and touch screens, printed circuit boards and semiconductors
- consumer electronics such as smart watches, wearables, laptops, digital cameras or navigation equipment
- performance electronics e.g. inverter modules for solar power equipment, DC or frequency converters

Ever smaller, lighter – and more powerful

The main requirement for rapid digitization in many areas of our daily life is increased miniaturization, that is, ever smaller and ever more high-performance components. The mega trends of electromobility and autonomous driving, in addition to the driver assistance systems already installed in vehicles today, will cause major leaps in installed chips in the automotive industry.

Our equipment for implementing the innovative packaging method for microchips, fan-out panel level packaging, plays a major role in the realization of this trend. In addition to a significant reduction in volume, thickness, weight and manufacturing cost of the packaging while doubling the number of pins, the process also has significant positive effects on the thermal conductivity and speed of the components.

The market for automotive software and power electronics is expected to grow to …

$460 billion

by 2030.*

Our claim: Innovation and quality – from microchip to display

*Source: McKinsey

Report on Opportunities and Risks

Risk management and internal control system

The goal of Manz AG's risk management system is to identify possible risks early on and to initiate appropriate measures to avert any threat of damage. The risk management system records both risks and opportunities. The application of a risk management system integrated into corporate management is aimed at identifying and assessing potential risks throughout the Group in good time and countering them with appropriate measures. Risks cannot be avoided in principle within the scope of business activities, but are minimized or transferred as far as possible.

The company's risk management activities are managed centrally by the risk management officer, are regularly evaluated internally with regard to their effectiveness and appropriateness and they are the complete responsibility of the CFO. The Managing Board also monitors the effectiveness and appropriateness of the internal control systems at regular intervals. The Managing Board reviews the quarterly revision of the risk management system and communicates this review to the supervisory board. In addition, the controlling systems are subject to an annual comprehensive internal audit.

Responsibility for risk monitoring is organized on a decentralized basis and is the responsibility of both the Divisional Heads and the Managing Directors, depending on the risk category and scope. Regular written and oral inquiries are used to detect potential risks in all business segments and, at the same time, they also provide the opportunity to take prompt countermeasures to prevent any negative developments.

Risks are analyzed and assessed on the basis of a risk management system that is essentially unchanged from the previous year, consisting of a defined group of risk owners, specified risk categories and a risk classification that reflects the risk potential and the urgency of the need for action. Particular attention is paid to risks whose probability of occurrence is high and whose potential damage in the event of occurrence is high. The identification and handling of risks is anchored in the corporate principles and defined as the task of all Manz AG employees. By involving the entire workforce, the goal is that risks are identified and communicated to the respective risk manager, who must take appropriate action in line with the principles for action defined throughout the Group.

The risks are attributed to the following categories:

- Operational risks
- Strategic risks
- Market risks
- Environmental risks

In addition to this risk management system, as part of the planning process based on continuous technology and market observation, further activities are taking place both for risk identification and mitigation and for identifying opportunities.

The audit has shown that the Managing Board has taken the measures specified in Section 91 (2) of the German Stock Corporation Act (AktG) appropriately, in particular as regards setting up a monitoring system, and that the monitoring system is suitable in all significant respects for identifying at an early stage developments which pose a threat to the company's continued existence.

Risk management system for the financial reporting process (Section 289 [4] and Section 315 [4] of the German Commercial Code [HGB])

The goal of Manz AG's risk management system with regard to the accounting process is to identify and assess risks that might conflict with the compliance of the rules of the consolidated financial statements. Risk management encompasses the entirety of the organizational regulations and measures for detecting risks and for dealing with the risks associated with entrepreneurial activity. With regard to the accounting process, Manz has implemented the following structures and processes:

The CFO has total responsibility for the company's internal monitoring and risk management system with regard to the accounting process. All of the companies included in the consolidated financial statements are integrated via a defined management and reporting organizational structure. The separate annual financial statements of Manz AG and its subsidiaries are prepared in accordance with the corresponding national legislation and reconciled in financial statements in accordance with IFRS.

The purpose of the Group' s accounting policies and group accounting, which are regularly adapted to current external and internal developments, is to ensure uniform accounting and valuation on the basis of the regulations applicable to the parent company. Furthermore, companies in the Group get prescribed report packages that they are required to prepare. The SAP SEM-BCS tool is used for the monthly consolidation process. Automatic plausibility checks are already carried out during data collection in order to test the consistency of the data.

Consolidation measures and monitoring of adherence to chronological and process-related requirements are carried out by members of the consolidation department at Group level. Additional monitoring activities at Group level include analyzing, and if necessary, adjusting the separate financial statements submitted by the Group's subsidiaries, in accordance with the reports submitted by the auditors. Key elements of the company's strategy for monitoring risks in the accounting process also include the functional separation between entry, verification, and approval, as well as a clear allocation of responsibilities in the departments in question. The general use of SAP BCS and SAP BPS as an IT financial system is another important means of systematically preventing errors. Furthermore, the company should use a dual control system at all process levels. If there are special issues of a technical or complex nature, the company also involves external experts. Further monitoring activities include analyzing and conducting plausibility checks on transactions as well as continuously monitoring project calculations.

The illustrated structures, processes and features of the internal control and risk management system ensure that Manz AG's financial reporting is consistent and in accordance with legal requirements, generally accepted accounting principles, international accounting standards and consolidated internal guidelines. The Managing Board considers the established systems, which are reviewed annually for their ability to optimize and develop, to be appropriate. Any potential improvements identified are implemented by the Managing Board in conjunction with Manz AG's employees.

All risks are classified according to the matrix below, which includes both the probability of occurrence, as well as possible effects are quantified.

Impact				
High damage (> 5,000 TEUR)				
Medium damage (500 TEUR to 5,000 TEUR)				
Low damage (50 TEUR to 500 TEUR)				
Probability	**Low** (0 % to 20 %)	**Medium** (20 % to 40 %)	**High** (40 % to 70 %)	**Very high** (70 % to 99 %)

Risk report

The following overview shows the assessment of risks arising in the financial year 2023 (forecast period) and could lead to deviations in the development of revenues and/or earnings.

Risks		Impact	Probability of occurrence	Change to previous year
Operating risks	Project risks	medium	medium	→
	Personnel risks	medium	low	→
	Liquidity and financing risks	high	medium	↗
	Currency risks	medium	high	→
	Risks from IT	medium	low	→
Strategic risks	Risks from the strategic focus on dynamic growth markets	high	medium	→
	Dependence on major customers and industries	high	medium	→
Market risks	Risks in connection with international business activities	high	low	↗
	Risks due to increasing competition	low	low	→
	Risks arising from rapid technological change and the market launch of new products	high	low	→
Environmental risks	Risks related to pandemics	low	low	→
	Risks from the environment and nature	medium	low	→

Operating risks

Project risks

Project risks relate primarily to non-standardized major contracts. Here, risks from the possible failure to meet planned costs and schedule, the non-fulfillment of acceptance criteria, from order cancellations and associated non-acceptance of orders and resulting contractual risks, as well as from the possible default of individual key suppliers. By expanding the share of standardized machine components in the product portfolio, which can be modularly customized to assemblies or entire production equipment according to the customer's requirements, Manz AG intends to reduce the aforementioned project risks overall. In order to keep projects under control, costs, time and quality are coordinated in a gate process between business unit and operations. Design changes to non-standard machines that are necessary and unforeseeable at the beginning of an order could lead to higher costs than expected and thus erode project margins. In order to avoid additional work and associated additional costs for project completion, project and product specifications are to be already clearly and precisely defined in the contract offers through interdepartmental cooperation.

Major changes in the scope of orders or the unexpected termination of orders can have a negative impact on Manz AG's liquidity or earnings situation. Specific project risks also exist with respect to a contract for the delivery of production systems to manufacture cylindrical battery cells with British customer Power by Britishvolt Limited, headquartered in Blyth, Northumberland, Great Britain with a total order volume of EUR 95.4 million. The customer has made advance payments for this contract in the amount of EUR 17.1 million. In January 2023, the customer went into insolvency; therefore the future of the project is currently uncertain. According to press reports dated February 27, 2023, the company was taken over by the Australian battery manufacturer Recharge Industries Pty., which intends to push ahead with the construction of the battery factory of Power by Britishvolt Ltd. The extent to which the scope of our existing orders could be amended as a result is currently unclear.

The order backlog as of December 31, 2022 currently amounts to EUR 339.9 million (previous year: EUR 229.1 million). The order backlog includes the major order with the customer Power by Britishvolt Ltd., for which, despite the entry of the new investor, there are uncertainties regarding future order volumes due to the customer's insolvency.

Personnel risks

For the corporate success of a high-tech equipment manufacturer, qualified and motivated managers and employees are of decisive importance. The departure of executives or key employees could have a negative impact on the company's business performance, thereby affecting its net assets, financial position and operational results. At the same time, there is also a risk that the company will not be able to hire a sufficient number of new, suitable executives or additional employees. Manz aims to create a positive working environment with measures such as various working time models or employee financial participation in the company's success, and to thus retain employees and know-how in the company over the long term. As a listed company, Manz AG is more in the focus of potential employees than non-listed companies. This allows Manz AG to better present its offerings to employees, such as flat hierarchies, exciting activities, flexible working hours, and well-equipped workplaces. However, it also brings extra attention in economically challenging times, which can temporarily make it harder to recruit. Another positive aspect of stock market listing is the ability to bind employees more closely to the company through the issue of shares and a corresponding profit share.

Liquidity and financing risks

The Manz Group currently finances itself through bank deposits and cash credit lines. The subsidiaries in Slovakia, Hungary, Italy, China and Taiwan are financed primarily through short-term overdraft facilities and, to a lesser extent, long-term loans. As of December 31, 2022, the Manz Group had cash and cash equivalents of EUR 33.6 million (previous year:

EUR 36.1 million), as well as unused cash and guarantee credit lines of EUR 22.5 million (previous year: EUR 17.8 million). In general, in order to reduce liquidity and financing risks, the companies of the Manz Group are encouraged – where possible – to process orders "cash positively". Here, the deposits should exceed the payouts over the entire term of the respective project. Significant delays in incoming orders or payments, higher project costs or repayment obligations arising from projects may have a significant impact on the liquidity of Manz AG.

In order to promptly identify risks from delayed incoming payments, the Manz Group works with a rolling liquidity forecast that is updated every two weeks. The Managing Board carries out sensitivities with regard to short- and medium-term liquidity planning. In particular, scenarios are taken into account here by means of risk discounts of 70 % on potential order intake of around EUR 150 million for the forecast period up to the end of April 2024. The result of this analysis is that, with overwhelming probability, the through-financing over the forecast period can be maintained.

If there are significant deviations affecting liquidity beyond the assumptions taken into account in the sensitivity analysis and Manz AG is called upon as a result of the insolvency of the customer Power by Britishvolt Ltd. or other warranty guarantees, this will result in a liquidity shortfall that jeopardizes the continued existence of Manz AG. Management has identified countermeasures to counteract any liquidity shortage. These include in particular the sale of investments and other capital measures. In this respect, the continued existence of Manz AG, and thus also of the Group, depends decisively on the liquidity risks outlined above essentially not occurring.

Currency risks

Manz AG's currency risks arise from operating activities. These transactions of the Asian companies and Manz AG Reutlingen mainly pertained to the sale of machinery in the fiscal year 2022. The transaction-related exchange rate risk resulting from the appreciation or depreciation of the US Dollar and the Euro against the New Taiwan Dollar, the US dollar and the Euro against the Chinese Renminbi, as well as the Euro against the British Pound is generally hedged by forward exchange transactions wherever necessary and possible. Furthermore, economic currency risk should also be reduced by distributing the production locations over several countries.

Information technology risks

A large part of the processes and communication in the Manz Group is IT-supported. Therefore, the security of corporate data and the avoidance of interruptions to IT-supported business processes have high priority. To this end, IT systems are protected against possible cyber attacks by unauthorized third parties or by malware, and alternative solutions are developed in the event of stability problems.

Strategic risks

Risks from the strategic focus on dynamic growth markets

As a high-tech equipment manufacturer, Manz AG focuses on rapidly growing future markets with short product life cycles. With its production solutions, Manz contributes to the development of numerous technologies. Consumer electronics, power electronics and other components of the electric drive train and batteries for electric vehicles, consumer electronics and stationary energy storage are manufactured on Manz machines. This market positioning in highly competitive and innovation-driven markets entails the risk of a competitive disadvantage due to insufficient flexibility of structures, insufficient know-how or too slow pace of development. In order to avoid this, the respective segments therefore always endeavor to recognize customer requirements and future technological trends in the industries at an early stage. The company derives innovations from these findings, in order to stay one step ahead of the competition. The innovation approaches are presented and discussed by the business units in a group-wide strategy meeting every six months and their implementation is approved after a detailed, positive review.

Dependence on major customers and industries

The development of production equipment for industrial companies entails the risk of a concentration in the order volume on individual projects, sectors and customers. For example, Manz AG generated around 33% of its revenues with five customers in the 2022 financial year. If the loss of a major client cannot be compensated, negative effects on the Manz Group's results are to be expected. For this reason, Manz pursues the goal of achieving a balanced order structure within its two reporting segments. In this regard, modularly combinable machines and machine components, as well as "small lines" and major projects with a volume of > EUR 10 million should be balanced. The risk of a decline in major customers is to be reduced in principle by broadening the customer base and diversifying project volumes and the business model.

Market risks

Risks in connection with international business activities

Negative macroeconomic and financial developments in the international sales markets may have negative effects on business development. As a result, refinancing for Manz as a listed company via the capital market could become significantly more difficult. With potential clients of Manz AG in general, there is a risk that the necessary capital for investments in new equipment may not be available based on the markets, some of which are still young. As a result, Manz constantly monitors and analyzes the market and the competition in order to recognize such developments at an early stage and to counteract them. The flexibility of the entire corporate organization, the expansion of the product portfolio, the customer base and global sales capacities, and the focus on growth markets of the three core regions of Asia, Europe and the United States make it possible to react quickly to negative changes in individual markets. Increasing internationalization may also result in risks on the purchasing market side, for instance shortfalls due to trade wars, such as the one between China and the USA, as well as due to the ongoing situation with the war in Ukraine. Current rises in inflation may continue to cause significant price increases in purchasing, which cannot be fully passed on to the customer. Furthermore, interest rate hikes by the central banks may weaken the global economy, which will have corresponding impacts on the Manz Group. A high rate of inflation also generally results in the risk of a loss in buying power, as well as an associated deterioration in the group's earnings situation.

On the supplier side, Manz AG strives to avoid becoming dependent on individual suppliers or procurement markets through flexibility, such as avoiding single-source suppliers.

Risks due to increasing competition

Existing and potential competitors, in particular, Asian manufacturers, could attempt to gain market share in Manz AG's target industries – primarily through an aggressive pricing policy, an imbalance caused by local tax and subsidy policies of states and governments, or import restrictions to support national companies. A further risk is that there are too many new competitors, resulting in an oversupply on the market and, as a consequence, consolidation among companies. This could have a direct impact on the development of the company's market share and thus on Manz AG's sales, revenues and earnings. In order to counteract these risks effectively, the "Market Intelligence" division constantly conducts market and competitive surveys, which are discussed in detail in international sales meetings on a regular basis and serve as a basis for possible countermeasures. Furthermore, the CRM system (Customer Relationship Management System) provides leading indicators for assessing future market development. A detailed analysis of lost projects promptly provides clarity about the competitive situation. The process of "product invention, development and market launch" also aims to provide strategic innovations for the company's competitive edge in growth markets and to further strengthen Manz AG's positioning as a high-tech engineering company. With its local facilities in Taiwan and China, the associated production costs that are standard for the local area, and direct customer contacts, Manz counteracts any churn to domestic competitors.

Risks from rapid technological change and from launching new products

Research and development as well as an innovative product portfolio are of crucial importance for the company to maintain its technological positioning in the market. The industries for which Manz AG develops and manufactures its machines and equipment are characterized by rapid technological change. Substitutive or disruptive technologies may occupy substantial parts of an existing market. As a result, Manz AG's competitors may be able to react faster or better to changes in customer requirements by developing corresponding technologies or software, thus gaining a competitive advantage over Manz AG. In these cases, the demand for the products of Manz AG could be significantly impaired. Furthermore, the Manz Group could develop machines and equipment for which there is little or no demand on the market. There is also a risk that the completion of new products currently under development may prove to be more complex than expected in the future. Problems with, e.g., technical feasibility, quality assurance, failure to meet deadlines, increased costs, etc., could at worst lead to the loss of customers in conjunction with financial losses. Manz AG endeavors to maintain close contact with its clients and thus to recognize new trends at an early stage. Furthermore, in the Business Development area, we are also working on new application possibilities for the technologies developed by Manz. The proximity to the customer further enhances Manz AG through the constant expansion of the associated service business, in particular with after-sales service. On the basis of the risk analysis, Manz also aims to ensure that projects and products are realized in accordance with the contract. Manz AG also counters the fundamental risk associated with the development and introduction of new products for individual customers by expanding its product portfolio to include machine components that can be customized on a modular basis to form assemblies or complete production machines.

Environmental risks

Risks related to pandemics

As an internationally active high-tech engineering company, Manz AG has production facilities in Germany, China, Taiwan, Slovakia, Hungary, and Italy, as well as service subsidiaries in the USA and India. Activities in regions with less developed healthcare systems could have a negative impact on the company's business in the region in the event of pandemics and the resulting production stops, thus impacting the company's net assets, financial position and results of operations. In this context, pandemics could continue to have a negative impact on the execution of our customer projects in Asia, in particular.

Risk from the environment and nature

Natural disasters – such as earthquakes and floods or other events like fires – can lead to production stoppages, which could have a negative impact on the company's business development and thus impair its net assets, financial position and results of operations. In addition, there are risks of environmental pollution for which Manz AG could be held liable.

Opportunities report

Industry focus with competitive and customer-oriented, innovative technology portfolio

In recent years, the company has laid the foundations for its current growth potential by consistently focusing its technology and product portfolio on the needs and challenges of the automotive industry & electromobility, battery production, electronics, energy and medical technology. With the brand claim "engineering tomorrow's production" to sharpen its positioning and the realignment of the Group's organization that took place on January 1, 2022, Manz aims to make even better use of the opportunities offered by these dynamic growth markets. In the course thereof, the Group's organizational structure was optimized, the business areas reorganized and the reporting segments adjusted accordingly.

With this realignment, a clear assignment of responsibilities, a significant reduction in interfaces, and a strengthening of both the Group functions and the respective locations, Manz AG will be able to respond more quickly and agilely to its customers' requirements and scale its business activities.

Sustainable competitiveness and profitability through profitable growth

Manz AG's diversified business model forms the basis for the sustained stability and long-term growth we are striving for. With the goal of significantly expanding its customer base and thus further stabilizing its business model, Manz AG is working to steadily expand the share of modular machines in its product portfolio, in addition to customized solutions. These modular machines should be intelligently linked to complete, individual system solutions based on a modular system. This step should significantly reduce development risks, effort and duration and thus significantly shortens the amortization of development efforts. At the same time, this should create synergy effects for Manz AG which support the productivity of the entire Group.

In addition, Manz AG is driving forward the development of highly efficient machines and processes for the fully automated production of next-generation lithium-ion batteries with the "Lithium Battery Factory of the Future" project. Thanks to its proven project and development expertise, its goal is to significantly improve the performance and cost efficiency of production and significantly reduce the time-to-market for customers. This Manz AG project is supported by the German Federal Ministry for Economic Affairs and Climate Protection (BMWK) and the Baden-Württemberg State Ministry of Economics as part of the Important Projects of Common European Interest ("IPCEI") to promote research and innovation in the battery value chain. In addition, Manz Italy Srl also received a funding commitment from the Italian Ministry for Economic Development. As one of the few European engineering companies that already has extensive experience in the entire value chain of lithium-ion battery production, the IPCEI funding will allow Manz to further intensify its development activities and thus continuously expand its own competitiveness.

In addition, cost-conscious management is of central importance for the profitable development of a company. The diversified business model and ongoing measures to optimize costs are aimed at maintaining long-term competitiveness and profitability.

Cross-segment technology deployment offers possibilities for synergy effects and flexibility

In developing its production equipment, Manz AG carries out an active technology transfer between the relevant target industries. By applying its comprehensive technological know-how across all industries, the company creates synergies and thus strives to help minimize manufacturing costs for its customers and contribute to their economical production. At the same time, the synergy effects achieved between the segments should increase the Manz Group's productivity and profitability. By leveraging the synergy effects between the segments, Manz AG's business model is also flexibly positioned for new growth trends and sales markets with additional revenue and earnings potential.

Cooperation with strategic partners opens up growth potential

Manz AG initiated a strategic cooperation with GROB-WERKE GmbH & Co.KG in the lithium-ion battery area in 2021. The purpose of the partnership was to set innovative standards for machinery "made in Europe," combine market and customer access and bundle technical expertise.

This successful approach was further developed over the last fiscal year through the strategic cooperation of Manz AG, GROB-WERKE GmbH & Co.KG and Dürr AG. With the goal of acquiring and carrying out projects to equip complete battery factories, the three companies are combining their specific, complementary skills to create an alliance unique within Europe. In the course of the partnership, the companies plan to establish themselves jointly as a European system provider for battery production systems, and offer customers a high-performing alternative to existing, primarily Asian manufacturers. The objective is to utilize the enormous potential for growth in the area of production technology for lithium-ion batteries and to cover the entire supply chain.

Likewise, the investment by Daimler Truck AG in Manz AG as part of a capital increase and the cooperation agreement which was also signed in this context reflect Manz's strong position in the area of lithium-ion battery production. The first step is to develop a pilot line for manufacturing lithium-ion battery cells, as well as for installing batteries at the Daimler Truck location in Mannheim. In the future, the partners plan to combine their expertise to develop innovative battery technologies together, as well as associated production processes for trucks and buses.

Assessment and Summary of the Risk and Opportunity Situation

Manz AG's risk portfolio consists of both risks that can be influenced by the Group and risks that cannot be influenced, such as economic and industry developments. The company regularly monitors and analyses the situation in these areas. Risks that can be influenced are identified at an early stage by appropriate monitoring and control systems and should therefore be avoided. Significant risks, which are likely to have serious negative effects on the ecological or social aspects, cannot be deduced from the business model of Manz AG.

For information on risks to the Group's ability to continue as a going concern, please refer to the comments on liquidity and financing risks.

During the 2022 fiscal year, the risk and opportunity situation with respect to the impacts of the COVID-19 pandemic improved further. The fact that the Solar business area did not conclude the CIGS*fab* project during the previous financial year 2022, contrary to expectations, had a negative impact. In addition, delays in processing the order with the customer Power by Britishvolt Ltd. had a negative impact on sales and earnings.

For fiscal 2023, the liquidity risk in particular has increased compared with the previous year. For changes in other risks, please refer to the table at the beginning of the risk report. However, the extent to which the ongoing war in Ukraine will affect the overall economic and sector-specific conditions in 2023 cannot be reliably estimated at present due to considerable uncertainties and the highly dynamic nature of the situation. It is true that Manz does not maintain any direct business relationships with partners in Russia or in Ukraine; however, the consequences of this war can indirectly impact Manz AG in a negative way, for instance through rising energy costs, inflation, and supply chain disruptions. Risks which do not have any or little relevance according to the risk management system in comparison with the preceding year have not been shown in the current risk report. The risks and their possible effects are known, as are the measures to be introduced. The resulting opportunities are analyzed and, if necessary, implementation is initiated.

Opportunities	Impact	Probability of occurrence
Industry focus with competitive and customer-oriented, innovative technology portfolio	high	high
Sustainable competitiveness and profitability through profitable growth	high	medium
Cross-segmental use of technology offers synergy effects and flexibility	high	high
Cooperation with strategic partners opens up growth potential	medium	high

The Managing Board of Manz AG thus fulfills its obligation to inform the Supervisory Board and shareholders about the opportunities and risks of the company. It regards this reporting as an important element of corporate governance in practice.

Our reliable equipment guarantees compliance with the

strictest quality requirements

across all production steps.

From fitness tracker to insulin pump

Self-monitoring as well as the remote monitoring and control of vital functions are important growth drivers in the medical industry. Our extensive experience in the production of electronic products makes us an ideal partner in the Digital Health segment.

When wearables monitor blood pressure and heart rate.

So-called "smart medical devices" provide the technical technology sector with new opportunities for improving medical care and the quality of life. Maximum process accuracy and a high degree of production automation are required to take advantage of these opportunities.That is exactly what Manz stands for.

Our mission: To improve health and quality of life

... with unique identification of implants using fully automated laser engraving.

We bundle decades of experience and our extensive process know-how from the production of electronic components. The result: modular and scalable production systems that guarantee tremendous cost efficiency and excellent product quality.

- **Smart Medical Devices** to monitor health data or for dosing medication, e.g. fitness trackers, digital injection and inhalation systems, sensor-based glucose measurements or patch-based infusion systems.
- **Cardiac rhythm management systems** such as pace makers and defibrillators, as well as systems for at-home health monitoring (e.g. heart monitoring).
- **Orthopedics,** including implants for knee, shoulder, elbow and hips, dental and surgical screws, bone saws or surgical instruments.

Maximum product and patient safety

Our equipment guarantees compliance with the strictest quality requirements across all production steps. It also ensures the seamless tracking of components and process parameters. And it does so with a high degree of efficiency and reliability using integrated testing systems. In this way, it is also possible to test products such as cardiac rhythm systems in-line during the manufacturing process, and to document all process steps and process results thanks to automated testing methods.

Forecast Report

Economic and sectoral outlook

The Kiel Institute for the World Economy (IfW) assumes, in its Global economic outlook of December 2022, that negative influences on economic activity will increase, emanating primarily from the financial sector. On the one hand, investment and consumption will be slowed by higher financing costs. On the other hand, the financial cycle also seems to be turning in many countries, as evidenced by a drop in real estate prices, among other factors, following a long period of increases. In December 2022, IfW expert expected global economic activity to weaken initially. Global economic growth of 2.2 % is expected for the current year 2023 (previous year: +3.2 %). The IfW's economic researchers expect US economic output to shrink by 0.4 % in 2023 (previous year: +1.9 %). The economic situation in China will continue to be impacted by the Covid-19 pandemic and problems in the real estate sector. Overall, however, the Chinese economy is robust and is projected to grow by 4.6 % in 2023 (previous year: +2.9 %). Growth of 0.6 % is expected for the European Union in 2023 (previous year: +3.5 %). In light of the weak global economic environment, which is not sending positive signals for economic activity, the IfW expects the economy in Germany to stagnate in 2023 (previous year: +1.9 %).

In its forecast dated December 2022, the VDMA expects a slight actual drop in machinery production in 2023 of 2.0 % (previous year: +1.0 %), which is a moderate drop compared to earlier reductions in growth. The VDMA projects that the nominal production value in mechanical engineering in 2023 will reach an all-time high of 243 billion euros. Actual development will depend to a great extent on further developments with respect to supply chain bottlenecks, although these have eased slightly in recent months.

For the global automotive industry, addressed primarily in the Mobility & Battery Solutions segment, Boston Consulting Group (BCG) expects ongoing impacts due to the continuing semiconductor shortage, although demand in 2023 is likely to drop somewhat, while availability will increase thanks to tapping into new capacities, especially in China.

For 2023, IHS Markit projects global production of around 9.4 million battery electric vehicles (BEV), an increase of 47 % compared to 2022. The percentage of BEV's will, accordingly, increase to around 10 % (previous year: 8 %). This percentage is likely to continue increasing in the following years, and IHS Markit expects that the percentage of BEV's will reach 25 % by 2027. To cover increasing demand for lithium-ion batteries as central components of electric vehicles in coming years, production capacities for these batteries will be greatly expanded and developed. For the current year, IHS Markit puts the battery capacity needed to produce the aforementioned 9.4 million BEV's at around 617 gigawatt hours, an increase of around 62 % compared to 2022.

Interact Analysis projects growth of around 34 % for 2023 to around USD 5.4 billion (previous year: +78 %) for the production system market in the battery cell assembly area.

In the Industry Solutions segment, Manz addresses various markets with its machines. These include systems equipment for the electronics and display industries, as well as assembly lines for other industries, including the manufacture of cell contacting systems (CCS) for electric vehicles.

Due to the strong growth in the electric vehicle sector, demand for cell contacting systems, which are an essential component for the integration and interconnection of battery cells or modules, will also continue to increase. For 2023, Manz forecasts a total of around 192 million cell contacting systems produced based on figures from IHS Markit (previous year: 140 million).

Display Supply Chain Consultants (DSCC) expects that capacities on the global display market will stagnate in 2023 compared to 2022 (previous year: +7 %). DSCC notes delays and factory closures due to weak market conditions as the significant reasons for this.

In the area of circuit board production, Prismark expects very high growth rates in coming years as well for packaging substrates. By 2026 Prismark projects the market will grow to around USD 21.4 billion, corresponding to an average annual growth rate from 2022 to 2026 of 4.9 %.

The Yole Group projects that the global market for the chip packaging process Fan-Out Panel Level Packaging (FOPLP) will almost double to USD 175 million in 2023 (previous year: USD 88 million). Among the key growth drivers on the application side, Yole counts the ongoing increasing demand in the high-performance computing (HPC) area and high-end smartphones or smartwatches.

Expected development of the group and segments

Forecast revenue

	2021 actual	2022 forecast	2022 actual	2023 forecast
	Revenue in EUR million	Revenue trend	Revenue in EUR million	Revenue trend
Group	227.1	Revenue growth in the lower to mid-double digit percentage range compared to the previous year	251.0	Increase in revenues in the lower double digit percentage range compared to the previous year
Mobility & Battery Solutions	82.0		92.3	Increase in revenues in the mid-double digit percentage range compared to the previous year
Industry Solutions	145.1		158.6	Increase in revenues in the lower double digit percentage range compared to the previous year

Earnings forecast

	2021 actual	2022 forecast	2022 actual	2023 forecast
	EBIT in EUR million	Earnings trend	EBIT in EUR million	Earnings trend
Group	–39.9	Balanced earnings before interest and taxes (EBIT)	–6.0	EBIT margin in the low positive single-digit percentage range.
Mobility & Battery Solutions	2.2		–13.6	EBIT margin in the low positive single-digit percentage range.
Industry Solutions	–42.2		7.6	EBIT margin in the low positive single-digit percentage range.

For information on the risks and opportunities of further business development, please refer to the Risk and Opportunity Report, and for information on business development in 2021 and 2022, please refer to the comments in the section on the results of operations.

Given the overall positive outlook for the industry in the designated markets relevant to Manz AG, the Managing Board is confident that Manz AG will grow profitably in 2023. It is not possible to reliably predict the extent to which the consequences of the war in Ukraine, the current development of inflation, and the interest policy of the central banks will impact the overall economic and industry-specific framework conditions in 2023.

The Managing Board expects an increase in revenue in the lower double-digit percentage range compared to 2022, an EBITDA margin in the mid positive single-digit percentage range and an EBIT margin in the low positive single-digit percentage range. A value of around 30 % is expected for the equity ratio; with regard to Gearing, the Managing Board is anticipating a value in the lower double-digit percentage range.

At a segment level, the Managing Board expects revenue for Mobility & Battery Solutions to increase in the mid double-digit percentage range compared with the previous year and an EBIT margin in the low positive single-digit percentage range. For Industry Solutions, the Managing Board forecasts an increase in revenue in the lower double-digit percentage range with an EBIT margin in the low positive single-digit percentage range.

The Managing Board's goal is to further develop the comprehensive technology portfolio, on the one hand, and to strengthen and expand Manz AG's solid market position in both segments, on the other. With its technologies, Manz AG will continue to focus, in particular, on the automotive and e-mobility, battery manufacturing, electronics, energy, and medical technology industries.

Forward-looking statements

This report contains forward-looking statements, which are based on the current assumptions and forecasts of Manz AG's Managing Board. Such statements are subject to both risks and uncertainties. These and other factors could cause the actual results, financial position, developments or performance of the company to differ materially from the estimates given here. Our company assumes no obligation to update these forward-looking statements or adapt them to future events or developments.

Reutlingen, March 23, 2023

The Managing Board

Martin Drasch　　　Manfred Hochleitner

Consolidated Financial Statement

Consolidated Income Statement

(in TEUR)

	Notes	2022	2021[1]
Revenues	1	250,964	227,060
Inventory changes, finished and unfinished goods		4,666	110
Work performed by the entity and capitalized	2	26,216	10,643
Total operating performance		**281,846**	**237,812**
Other operating income[2]	3	16,156	21,403
Material expenses	4	–166,814	–131,821
Personnel expenses	5	–80,677	–75,481
Other operating expenses[3]	6	–43,000	–57,229
Result from investments using the equity method		–1,332	–245
EBITDA		**6,178**	**–5,561**
Amortization/depreciation	7	–12,176	–34,354
EBIT		**–5,998**	**–39,915**
Finance income	8	120	527
Finance costs	9	–1,799	–2,042
Earnings before taxes (EBT)		**–7,676**	**–41,430**
Income taxes	11	–4,472	–2,218
Consolidated net profit		**–12,149**	**–43,649**
thereof attributable to non-controlling interests	12	0	–19
thereof attributable to shareholders of Manz AG		–12,149	–43,630
Weighted average number of shares (undiluted)		8,082,499	7,750,144
Earnings per share			
undiluted in EUR per share	13	–1.42	–5.62
diluted in EUR per share	13	–1.42	–5.62

1 Adjustment after restatement due to additional impairment made on a contract asset. For further information, please refer to the section "Correction of errors in accordance with IAS 8".

2 This includes TEUR 911 (previous year: TEUR 0) reversal of impairment losses on contract assets.

3 This includes TEUR 144 (previous year: TEUR 24,005) impairment losses on contract assets.

Consolidated Statement of Comprehensive Income

(in TEUR)

	2022	2021[1]
Consolidated profit or loss	**–12,149**	**–43,649**
Difference resulting from currency translation	–5,808	6,372
Cash flow hedges	0	–15
Tax effect resulting from components not recognized in profit/loss	0	4
Total of expenditures and income recorded directly in equity capital with future reclassification with tax effect	**–5,808**	**6,361**
Financial assets measured at fair value through other comprehensive income (FVOCI)	0	–7,260
Revaluation of defined benefit pension plans	965	–133
Share of other comprehensive income from investments using the equity method	0	129
Tax effect resulting from components recognized directly in equity without future reclassification	–261	17
Total of expenditures and income recorded directly in equity without future reclassification with tax effect	**704**	**–7,247**
Group comprehensive income	**–17,253**	**–44,535**
thereof non-controlling interests	–5	6
thereof shareholders Manz AG	–17,248	–44,541

1 Adjustment after restatement due to additional impairment made on a contract asset. For further information, please refer to the section "Correction of errors in accordance with IAS 8".

Consolidated Balance Sheet

Assets (in TEUR)

	Notes	Dec. 31, 2022	Dec. 31, 2021[1]
Non-current assets			
Intangible assets	14	43,885	44,118
Property, plant and equipment	15	44,314	45,911
Investments accounted for using the equity method	16	7,632	3,206
Financial assets	17	3,829	1,798
Other non-current assets	18	2,681	2,161
Deferred tax assets	11	2,878	4,301
		105,220	**101,495**
Current assets			
Inventories	19	56,200	30,887
Trade receivables	20	47,588	33,691
Contract assets	21	73,696	63,441
Current income tax receivables		403	1,107
Derivative financial instruments	22	1,513	0
Other current assets	23	26,607	17,791
Cash and cash equivalents	24	33,604	36,086
		239,611	**183,004**
Total assets		**344,830**	**284,499**

1 Adjustment after restatement due to additional impairment made on a contract asset. For further information, please refer to the section "Correction of errors in accordance with IAS 8".

Shareholders' Equity and Liabilities (in TEUR)

	Notes	Dec. 31, 2022	Dec. 31, 2021[1]
Equity			
Issued capital	25	8,540	7,757
Capital reserves		20,088	19,297
Retained earnings		73,087	55,194
Accumulated other comprehensive income		342	5,441
Shareholders of Manz AG		**102,057**	**87,688**
Non-controlling interests		215	262
		102,272	**87,950**
Non-current liabilities			
Non-current financial liabilities	26	6,738	8,337
Non-current financial liabilities from leases	27	9,921	10,703
Pension provisions	28	4,603	6,140
Other non-current provisions	29	2,463	2,777
Other non-current liabilities		119	75
Deferred tax liabilities	11	5,234	3,682
		29,077	**31,715**
Current liabilities			
Current financial liabilities	30	37,541	40,959
Current financial liabilities from leases	30	4,095	3,260
Trade payables	31	73,641	66,373
Contract liabilities	32	74,243	30,923
Current income tax liabilities		2,252	1,426
Other current provisions	33	6,148	6,514
Derivative financial instruments	22	202	225
Other current liabilities	34	15,359	15,155
		213,481	**164,834**
Total liabilities		**344,830**	**284,499**

1 Adjustment after restatement due to additional impairment made on a contract asset. For further information, please refer to the section "Correction of errors in accordance with IAS 8".

Consolidated Cash Flow Statement

(in TEUR)

	Dec. 31, 2022	**Dec. 31, 2021[1]**
Net profit/loss after taxes	–12,149	–43,649
Amortization/depreciation	12,176	34,354
Increase (+) / decrease (–) of pension provisions and other non-current provisions	–1.147	–1,511
Interest income (–) and expenses (+)	1,679	1,515
Taxes on income and earnings	4,472	2,218
Other non-cash income (–) and expenses (+)	954	1,063
Gains (–) / losses (+) from disposal of assets	31	–14,644
Result from investments using the equity method	1,332	245
Increase (–) / decrease (+) in inventories, trade receivables, contract assets and other assets	–31,407	–10,797
Increase (+) / decrease (–) in trade payables, contract liabilities and other liabilities	26,396	12,191
Received (+) / paid (–) income taxes	–2,941	–5,267
Interest paid	–1,799	–2,042
Interest received	120	527
Cash flow from operating activities (1)	**–2,282**	**–25,795**
Cash receipts from the sale of fixed assets	37	442
Cash payments for the investments in intangible assets and property, plant and equipment	–32,802	–14,856
Government grants/subsidies received	12,457	0
Cash payments for investments in subsidiaries less liquid funds received	–25	0
Cash receipts for the sale of investments using the equity method less liquid funds withdraw	0	28,013
Cash payments for investments using the equity method less liquid funds received	–1,017	–2,251
Changes in investments on financial assets	–907	–1,627
Cash flow from investing activities (2)	**–22,257**	**9,721**
Cash receipts from the assumption of non-current financial liabilities	535	4,849
Cash payments for the repayment of non-current financial liabilities	0	0
Cash receipts from the assumption of current financial liabilities	37,541	40,971
Cash payments for the repayment of current financial liabilities	–42,145	–60,990
Purchase of treasury shares	0	0
Cash payment of lease liabilities	–4,111	–3,723
Cash receipts from equity increase	30,621	0
Cash flow from financing activities (3)	**22,442**	**–18,893**
Cash and cash equivalents at the end of the period		
Net change in cash funds (subtotal 1–3)	–2,098	–34,967
Effect of exchange rate movements on cash and cash equivalents	–385	1,311
Credit risk allowance on bank deposit	1	6
Cash and cash equivalents on January 1, 2022	36,086	69,736
Cash and cash equivalents on December 31, 2022	**33,604**	**36,086**

1 Adjustment after restatement due to additional impairment made on a contract asset. For further information, please refer to the section "Correction of errors in accordance with IAS 8".

Consolidated Statement of Changes to Equity 2021

(in TEUR)

					Other comprehensive income								
					Components which are not transferred to profit or loss			Components which may be transferred to profit or loss					
	Issued capital	**Capital reserves**	**Treasury Shares**	**Revenue reserves[1]**	Remeasurement of pensions	Financial assets measured at fair value through other comprehensive income (FVOCI)	Investment accounted for using the equity method	Cashflow hedges	Currency translation	**Other comprehensive income**	**Equity to shareholders of Manz AG[1]**	**Non-controlling interest**	**Total equity[1]**
As of Jan. 1, 2021	**7,744**	**33,234**	**0**	**83,824**	**–1,804**	**–16,985**	**–129**	**11**	**25,259**	**6,352**	**131,154**	**255**	**131,410**
Consolidated net profit[1]	0	0	0	–43,630	0	0	0	0	0	0	–43,630	–19	–43,649
Other comprehensive income	0	0	0	0	–116	–7,260	129	–11	6,346	–912	–912	25	–886
Consolidated income statement	0	0	0	–43,630	–116	–7,260	129	–11	6,346	–912	–44,541	6	–44,535
Issue of Shares	13	0	0	0	0	0	0	0	0	0	13	0	13
Withdrawal from Capital reserves	0	–15,000	0	15,000	0	0	0	0	0	0	0	0	0
Purchase of treasury shares	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of treasury shares	0	0	0	0	0	0	0	0	0	0	0	0	0
Share-based payment	0	1,063	0	0	0	0	0	0	0	0	1,063	0	1,063
As of Dec. 31, 2021[1]	**7,757**	**19,297**	**0**	**55,194**	**–1,919**	**–24,245**	**0**	**0**	**31,605**	**5,441**	**87.688**	**262**	**87.950**

1 Adjustment after restatement due to additional impairment made on a contract asset. For further information, please refer to the section "Correction of errors in accordance with IAS 8".

Consolidated Statement of Changes to Equity 2022

(in TEUR)

					Other comprehensive income								
					Components which are not transferred to profit or loss			Components which may be transferred to profit or loss					
	Issued capital	**Capital reserves**	**Treasury Shares**	**Revenue reserves**	Remeasurement of pensions	Financial assets measured at fair value through other comprehensive income (FVOCI)	Investment accounted for using the equity method	Cashflow hedges	Currency translation	**Other comprehensive income**	**Equity to shareholders of Manz AG**	**Non-controlling interest**	**Total equity**
As of Jan. 1, 2022	**7,757**	**19,297**	**0**	**55,194**	**–1,919**	**–24,245**	**0**	**0**	**31,605**	**5,441**	**87,688**	**262**	**87,950**
Consolidated net profit	0	0	0	–12,149	0	0	0	0	0	0	–12,149	0	–12,149
Other comprehensive income	0	0	0	0	704	0	0	0	–5,803	–5,099	–5,099	–5	-5,104
Consolidated income statement	0	0	0	–12,149	704	0	0	0	–5,803	–5,099	–17,248	–5	–17,253
Issue of shares	783	29,838	0	0	0	0	0	0	0	0	30,621		30,621
Withdrawal from Capital reserves	0	–30,000	0	30,000	0	0	0	0	0	0	0		0
Purchase of treasury shares	0	0	0	0	0	0	0	0	0	0	0		0
Use of treasury shares	0	0	0	0	0	0	0	0	0	0	0		0
Share-based payment	0	954	0	0	0	0	0	0	0	0	954		954
Change in scope of consolidation	0	0	0	42	0	0	0	0	0	0	42	–42	0
As of Dec. 31, 2022	**8,540**	**20,088**	**0**	**73,087**	**–1,215**	**–24,245**	**0**	**0**	**25,802**	**342**	**102,057**	**215**	**102,272**

Consolidated Notes for Financial Year 2022

General disclosures

Manz AG ("Manz AG" or "Group") is a stock corporation (Commercial Registration Stuttgart, Registration number 353 989) incorporated in Germany with its registered office at Steigäckerstrasse 5 in 72768 Reutlingen, Germany. Manz AG and its subsidiaries ("Manz Group" or "Manz") have many years of expertise in automation, laser processing, image processing and metrology as well as in wet chemistry and roll-to-roll processes. Manz AG's shares are traded on the regulated market (Prime Standard) of the Frankfurt Stock Exchange.

Manz AG's consolidated financial statements as of December 31, 2022 were prepared in accordance with International Financial Reporting Standards (IFRS), as applicable in the EU, and the supplementary provisions of German commercial and corporate law applicable in accordance with Section 315e(1) of the German Commercial Code (HGB). All mandatory standards and interpretations were taken into account. IFRS standards that have not yet become mandatory are not applied.

The notes to the consolidated financial statements have been prepared on a going concern basis. Material uncertainties associated with events or conditions that individually or in the aggregate cast significant doubt upon the company´s ability to continue as a going concern are discussed in the Group management report in the section "Liquidity and financing risks" and subsequently in the section "Liquidity risks" of the risk report.

To better clarity, individual items have been summarized in the balance sheet and the income statement and disclosed separately in the notes. The Manz Group's financial year covers the period from January 1 to December 31 of one year. The consolidated financial statements are prepared in EUR. Unless stated otherwise, the disclosures in the notes are made in thousands of Euro (TEUR). The income statement is prepared in accordance with the total cost method. The consolidated financial statements for 2022 were released for submission to the Supervisory Board by resolution of the Managing Board on March 23, 2023.

Bases of Accounting

Consolidated group

The consolidated financial statements of Manz AG include all domestic and foreign companies which Manz AG can exercise direct or indirect control. Control influence exists when Manz AG is exposed to, or has rights to, fluctuating returns on its investment and has the ability to influence these returns through its power over the company.

In addition to Manz AG, the group of consolidated companies includes the following domestic and foreign subsidiaries as of December 31, 2022:

		Shares in %
Manz Batterytech Tübingen GmbH	Tübingen/Germany	**100.0%**
Manz USA Inc.	North Kingstown/USA	**100.0%**
Manz Hungary Kft.	Debrecen/Hungary	**100.0%**
Manz Slovakia s.r.o.	Nove Mesto nad Vahom/Slovakia	**100.0%**
Manz Italy Srl	Sasso Marconi/Italy	**100.0%**
Suzhou Manz New Energy Equipment Co., Ltd.	Suzhou/P.R. China	**56.0%**
Manz Asia Ltd.	Hong-Kong/P.R. China	**100.0%**
Manz China Suzhou Ltd.	Suzhou/P.R. China	100.0%
Manz India Private Ltd.	New Delhi/India	100.0%
Manz Chungli Ltd.	Chungli/Taiwan	100.0%
Manz Taiwan Ltd.	Chungli/Taiwan	100.0%

The financial statements of the subsidiaries and associated companies are prepared on the reporting date of the consolidated financial statements, which corresponds to the reporting date of Manz AG.

On February 17, 2022, Manz AG increased its shares in Manz India private Ltd. from 75% to 100%. The purchase price was TEUR 25.

On May 20, 2022, Manz AG took a 40% stake in Customcells Tübingen GmbH. The acquisition costs are TEUR 5,767, which consisted of a cash contribution of TEUR 1,017 and an investment in kind of TEUR 4,750. The company's purpose is the development and series production of state-of-the-art lithium-ion battery cells.

There is also a 40% interest in CADIS Engineering GmbH, Schwendi, Germany. The company's purpose is the engineering, development and sale of printing systems, in particular consisting of tank systems and print heads.

There is also a 24.99 % interest in Q.big 3D GmbH, Aalen, Germany. The company's purpose is the development and distribution of 3D printers.

The shares in Customcells Tübingen GmbH, CADIS Engineering GmbH and Q.big 3D GmbH are included in the consolidated financial statements using the equity method.

On November 7, 2022, Manz AG acquired an 8.7 % interest in ThermAvant Technologies LLC, Columbia, United States of America. The purchase price amounted to TEUR 2,031. There is also an interest of 11.1 % (previous year: 11.1 %) in NICE PV Research Ltd., Beijing, PR China and an interest of 2.8 % (previous year: 3.26 %) in MetOx Technologies Inc., Houston, United States of America. In accordance with IFRS 9, the shares are included in the consolidated financial statements at fair value through other comprehensive income (equity instrument FVOCI).

Impact of Covid-19, Russia-Ukraine-war and climate-related issues

The Covid-19 pandemic shows considerable signs of easing as many countries have lifted travel bans, ended lockdowns and eased quarantine measures. The further direct effects of the Covid-19 pandemic on Manz AG´s consolidated financial statements depend on the further development of the virus variants and, in particular, their dangerousness, the development of global vaccination rates, and the effectiveness of the vaccines. The effects will also depend on the continued imposition of lockdowns.

The Russia-Ukraine-war also changed the world situation in economic terms. Shortages of raw materials, energy and additional supply chain problems were caused in particular by the sanctions against Russia. As a result, inflation rates and interest rates rose sharply and economic uncertainty increased significantly compared with the beginning of the year. The Russia-Ukraine-war had only minor direct impact on Manz AG´s financial position and results of operations in 2022, as Manz AG does not have any significant business activities or financial commitments in the countries in question.

Overall, no significant effects of the Covid-19 pandemic, the Russia-Ukraine-war or climate-related issues on the accounting or on the estimates, discretionary scope and planning assumptions underlying the accounting could be identified. However, indirect effects from the Russia-Ukraine war and the Covid-19 pandemic in particular were identified for Manz AG. Manz AG is exposed to a more complex and uncertain macroeconomic environment. The more complex macroeconomic environment is determined in particular by rising interest rates and inflation rates. The Russia-Ukraine-war and the Corona pandemic are causing distortions in global supply chains, markets, energy and raw material markets, and overall economic development. In addition, uncertainties in the forecast are increasing, leading to the application of estimate and assumption-sensitive accounting principles and to measurement decisions by management. The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed in more detail in the section "management estimates and judgments".

Consolidation principles

Capital consolidation uses the acquisition method. In this case, the acquired assets and liabilities are measured at their fair market values at the acquisition date. The acquisition costs for the acquired shares are then offset against the proportionate revalued equity of the subsidiary. Any remaining positive difference from offsetting the purchase price against the identified assets and liabilities is presented as goodwill in intangible assets. Costs incurred as part of a corporate merger are expensed and therefore are not part of the acquisition costs.

If a previous subsidiary is deconsolidated, the difference between the consideration received and the outgoing net assets at the time of the loss of control is recognized in profit or loss.

Expenses and income, receivables and payables as well as cash flows from transactions between consolidated companies are fully eliminated. The necessary tax deferrals are carried out on consolidation processes. Furthermore, guarantees assumed by Manz AG or one of its consolidated subsidiaries in favor of other consolidated subsidiaries are eliminated.

Non-controlling interests

Non-controlling interests represent that part of the result and the net assets that is not attributable to the Group. Non-controlling interests are presented separately in the consolidated income statement and the consolidated balance sheet. They are recognized within equity in the consolidated balance sheet, separately from the equity attributable to the shareholders of the parent company.

Associated companies

Companies which Manz can exercise significant influence pursuant to IAS 28 *Investments in Associates and Joint Ventures* are accounted for using the equity method and are initially carried at cost. Manz's share in the results of the associated company is shown in the consolidated income statement. Changes in the equity of the associated company which do not affect income are recognized proportionately in the consolidated equity. The carrying amount of the associated company is increased or reduced by the overall changes.

Currency translation

The financial statements of subsidiaries included in the Group which are prepared in foreign currency are translated into Euro in accordance with IAS 21. With one exception, the functional currency of the consolidated companies corresponds to the respective national currency, as these subsidiaries manage their business activities independently in financial, economic and organizational respects. For Manz Hungary Kft., the functional currency differs from the national currency Euro, as significant expenses and income are incurred or generated in Euro. Assets, liabilities, and contingencies are translated using the exchange rate on the reporting date, while equity is translated using historical exchange rates. The income statement and the expenses and income recognized directly in equity are translated at the average annual exchange rate. Translation differences resulting from the translation of the financial statements are directly recognized in accumulated other comprehensive income until the disposal of the subsidiaries.

In the annual financial statements of the companies included in the consolidated financial statements, foreign currency items are initially measured at cost. Exchange rate gains and losses as of the balance sheet date are recognized in profit or loss. Monetary assets and liabilities are valued at the exchange rate on the balance sheet date.

In determining the exchange rate, the date of the transaction is the date of initial recognition of the non-monetary asset or non-monetary liability arising from the prepayment. The exchange rate is the rate used to initially recognize the related asset, expense or income, and the related liability (or portion thereof) when the non-monetary asset or non-monetary liability arising from prepaid consideration is derecognized. If there are multiple prepayments or payments, the Group determines the transaction date for each prepayment or payment of prepaid consideration.

Exchange rates of the most important currencies

Corresponds to 1 EUR		Closing rate		Average rate	
		Dec. 31, 2022	**Dec. 31, 2021**	**2022**	**2021**
USA	USD	1.0709	1.1344	1.0539	1.1832
China	CNY	7.3881	7.2195	7.0824	7.6364
Hong-Kong	HKD	8.3607	8.8446	8.2519	9.1967
Taiwan	TWD	32.8886	31.4683	31.3565	33.0647

Accounting and valuation principles in the financial year 2022

Manz AG's assets and its fully consolidated liabilities are uniformly recognized and measured according to the accounting and valuation methods applicable in the Manz Group as of December 31, 2022.

Fixed assets

Intangible assets that are not acquired in a business combination are initially recognized at acquisition or manufacturing cost. The cost of intangible assets acquired in a business combination is their fair value on the acquisition date. Following initial recognition, intangible assets are carried at acquisition or manufacturing cost, less any accumulated amortization and impairment losses. Costs for internally generated intangible assets, with the exception of capitalized development costs, are not capitalized, but recognized in profit or loss in the period in which they are incurred.

A distinction was drawn between intangible assets with a finite useful life and those with an indefinite useful life.

Intangible assets with a finite useful life are amortized on a straight-line basis over their economic useful life and tested for possible impairment if there are indications that the intangible asset may be impaired. The period and method of amortization for intangible assets with a finite useful life are reviewed at least at the end of each financial year. Any necessary changes to the method or period of amortization due to changes in the anticipated useful life or to the anticipated use of the future economic benefit of the asset are accounted for as changes in estimates.

The useful lives for the individual classes of intangible assets are listed below:

	Years
Software	3 to 5
Patents	3 to 8
Capitalized development costs	3 to 9
Technologies	6 to 8
Non-current costs for obtaining a contract	1 to 5

Intangible assets with an indefinite useful life are not amortized. At Manz AG, all intangible assets with an indefinite useful life are brands. The indefinite nature of the useful life of brands is based on the assessment that the inflow of economic benefits from these assets cannot be attributed to a specific period (further information on subsequent measurement is provided in the section entitled "Impairment test"). Therefore, after the discontinuation of a product line for the production of displays, the product brand behind it can also be used for the next generations. As a result, an unlimited useful life is assumed for this. The useful life can only be considered to have ended when a business segment is discontinued or sold. Goodwill from business combinations and brands with an indefinite useful life are not amortized, but only tested for impairment.

Development costs for equipment and equipment components are capitalized as long as the conditions of IAS 38 are fulfilled. In this case, acquisition and manufacturing cost covers all the costs directly attributable to the development process, as well as a reasonable share of development-related overheads. Capitalized development costs are amortized on a straight-line method from the start of production over the expected product life cycle, which is usually three to nine years. If capitalized development costs are not yet amortized because they are not yet available for use, each individual asset or cash-generating unit is tested for impairment at least once a year. Research costs and development costs that cannot be capitalized are expensed as incurred.

Property, plant and equipment is measured at cost less scheduled depreciation in accordance with the useful life and any impairment losses. Costs for repairs and maintenance are recognized as current expenses. Straight-line depreciation is carried out according to the anticipated progress of the consumption of the future economic benefit. Systematic depreciation is based predominantly on the following useful lives:

	Years
Buildings	20 to 50
Technical equipment and machinery	2 to 21
Other equipment, operating and office equipment	2 to 23
Right-of-use assets	1 to 9

Residual values, useful lives, and depreciation methods of assets are reviewed at the end of a given financial year and adjusted prospectively if necessary. The parameters from 2022 correspond to the previous year.

If a considerable period of time is required for the acquisition or manufacture of a qualified asset to prepare it for its intended use, the directly attributable borrowing costs are capitalized until the asset is ready for its intended use. No borrowing costs were capitalized in the current and previous financial years.

IFRS 16 Leases

At the beginning of the contract, Manz AG assesses whether a contract constitutes or contains a lease. This is the case when the contract entitles the holder to control the use of an identified asset in exchange for payment of a fee for a certain period of time.

Lease liability

The lease liability is measured as the present value of the lease payments to be made over the lease term. In addition, payments in connection with purchase options are taken into account if it is sufficiently certain that they will be exercised, and penalties for terminating the lease if it is taken into account during the term that the Group will exercise the termination option. Variable lease payments that are not linked to an index or (interest) rate are recognized as an expense in the period in which the event or condition that triggers the payment occurs.

The lease payments are discounted using the incremental borrowing rate. The incremental borrowing rate is the interest rate that would have to be paid if the funds that would be required in a comparable economic environment for an asset with a value comparable to the right of use were borrowed for a comparable term with comparable security. The incremental borrowing rate is estimated using observable input factors, if these are available.

The lease liability is compounded in subsequent periods and reduced by the lease payments made.

In addition, the carrying amount of the lease liability is remeasured for changes in the lease, changes in the lease term, changes in lease payments, or a change in the assessment of a purchase option for the underlying asset.

Right-of-use assets

Right-of-use assets are valued at cost less any accumulated depreciation and any accumulated impairment losses and adjusted for any remeasurement of the lease liability. The cost of right-of-use assets includes the recognized lease liability, the initial direct costs incurred and the lease payments made at or before delivery, less any lease incentives received.

The right-of-use assets are amortized over the shorter of the two periods of the expected useful life and the term of the underlying lease. If ownership of the leased asset passes to the lease term or if the costs reflect the exercise of a purchase option, depreciation is determined based on the expected useful life of the leased asset.

The right-of-use assets are also checked for impairment.

For the development of right-of-use assets in the financial year, we refer to (15) property, plant and equipment.

Short-term and low value leases

Manz uses the exception rule for short-term leases, so that leases with a term of no more than twelve months from the date of availability and which do not contain any purchase options are expensed. In addition, the exemption for leases based on a low-value asset (max. TEUR 5) is applied, so that it is also recognized as an expense.

Manz as lessor

Leases where the Group does not transfer substantially all of the risks and rewards of ownership of an asset are classified as operating lease. Any rental income that arises is recognized on a straight-line basis over the term of the lease and, due to its operational nature, is reported under revenues. Initial direct costs incurred in negotiating and arranging an operating lease are included in the carrying amount of the leased asset and expensed over the lease term in the same manner as lease income. Conditional rental payments are recognized as income in the period in which they are generated.

Impairment test

Intangible assets with indefinite useful lives or an intangible asset not yet available for use and goodwill are not subject to scheduled amortization. However, the recoverable amount of the cash-generating unit is reviewed annually to determine impairment losses. These checks are based on detailed budget and forecast calculations. The underlying planning period for goodwill and intangible assets with indefinite useful lives is three years. Intangible assets with indefinite useful lives and goodwill are tested for impairment once a year as of December 31, unless there are specific indications that a cash-generating unit may be impaired. As of June 30, Manz AG also reviews whether there are any concrete indications of impairment. If there are concrete indications of impairment as of June 30, an additional impairment test is performed.

The recoverable amount is generally estimated separately for each asset. If this is not possible, it is determined on the basis of a group of assets that represents a cash-generating unit. The individual cash-generating units correspond to the management-relevant segments (Mobility & Battery Solutions and Industry Solutions). Due to the reorganization of the segment structure as of January 1, 2022, the impairment test as of December 31, 2021 has been performed for the old segment structure and the new segment structure. The Electronics, Solar and Contract Manufacturing segments have been combined to form the new Industry Solutions division. The Energy Storage segment forms the new Mobility & Battery Solutions division. The Service segment has been split between the two new divisions. The Service segment is allocated to the division in which the service was incurred. The corresponding information for prior periods is restated and disclosed for the new segmentation.

Capitalized development costs and other intangible assets with finite useful lives as well as property, plant and equipment are amortized over the duration of their useful lives. In addition, an impairment test is only carried out if there are concrete indications of any impairment. Manz AG assesses on each reporting date whether there are any concrete indications of impairment.

In an impairment test for goodwill, the recoverable amount of the cash-generating unit of the goodwill is compared to the carrying amount. If the carrying amount of the cash-generating unit allocated to goodwill exceeds the recoverable amount, an impairment loss must be recognized in profit or loss for that amount of goodwill. Any further impairments are allocated to the assets of the CGU in relation to their book values. The carrying amount of an asset shall not be reduced below the higher of its fair value less costs to sell (if determinable), its value in use (if determinable) or zero.

The recoverable amount of a cash-generating unit is the higher of its fair value less selling costs and its value in use. The value in use is determined using the discounted cash flow method on the basis of the estimated future cash flows expected to arise from the continuing use of an asset. An interest rate before taxes corresponding to market conditions is used as the discount rate.

If the reasons for an impairment recognized in previous years no longer apply, the impairment loss is reversed to the recoverable amount (with the exception of goodwill). The amount may not exceed the carrying amount that would have been determined, net of scheduled amortization, had no impairment loss been recognized for the asset in the past.

A sensitivity analysis was carried out, according to which a 1% higher WACC without assumed growth in perpetuity and a 20% reduction in EBIT over the entire planning period including the terminal value would not result in a need for impairment.

Inventories

Inventories are measured at the lower of cost or net realizable value in accordance with IAS 2 Inventories. Manufacturing cost includes not only direct costs, but also appropriate parts of the necessary material costs and production overheads, as well as production-related depreciation and proportionate administrative overheads, that can be directly allocated to the manufacturing process. Where required, the average cost method is used as the simplified measurement method. If the acquisition and manufacturing costs exceed the net realizable value, a write-down is made. The net realizable value is the estimated selling price in the ordinary course of business less estimated costs of completion and estimated selling expenses.

Revenues, trade receivables, contract assets, contract liabilities and additional costs for obtaining a contract

Revenue

Manz primarily generates revenues from customer-specific construction contracts in the equipment business. Services are also provided to a lesser extent.

Revenue from the performance obligations to construct the plants is regularly recognized over the performance period using the percentage of completion (POC) method in accordance with the stage of completion of a contract. The performance is rendered over the period in which the system is constructed and, accordingly, the revenues are recognized over the performance period, because the constructed system does not have any alternative use for Manz and Manz has a legal claim to payment for the performance already rendered during the period in which the performance is rendered. The percentage of completion is calculated as the ratio of the costs incurred to the overall expected costs of an order (Cost-to-Cost method). Under this method of measuring progress, both the revenue and the associated costs are systematically recorded and thus the results are realized appropriate to the period in which control of the goods and services is transferred. The Cost-to-Cost method provides an accurate picture of the progress of work because Manz uses an IT-supported project controlling system, which allows for a reliable estimation of planning costs and monitors overall costs. This also allows necessary adjustments to be made for costs that do not contribute to the progress of the performance in meeting the performance obligation or that are not in proportion to the progress of the performance in meeting the performance obligation.

Some of the contracts with customers provide for variable components of the consideration in the form of discount scales and penalties. In these cases, Manz determines the amount of the consideration that it is entitled to in exchange for the transfer of the goods and services to the customer. The variable consideration is estimated at the inception of the contract and may only be included in the transaction price if it is highly probable that the cumulative revenue recognized will not be significantly reversed once the uncertainty associated with the variable consideration no longer exists. Please refer to the *Management estimates and judgments, Determining the method for the estimation of the variable considerations and assessment of the limit*.

Contract assets

A contract asset is the claim to receipt of a return in exchange for goods or services transferred to a customer. If Manz fulfills its contractual obligations by transferring goods or services to a client before the client pays the consideration or before payment is due, a contractual asset is recorded for the contingent claim to consideration. For the application of the impairment model to contractual assets, please refer to the section, Financial instruments in accordance with IFRS 9.

Trade receivables

A receivable, on the other hand, is the Group's unconditional right to receive consideration (i.e., it becomes due automatically as time passes). Implicit and payable claims to prepayments are recorded as receivables. For the application of the impairment model to receivables, please refer to the section, Financial instruments in accordance with IFRS 9.

Contract liabilities

A contract liability is the obligation of the Group to transfer goods or services to a customer for which it receives a consideration (or will receive one). If a customer pays consideration before the Group transfers goods or services to the customer, a contractual liability is recognized when payment is made or due (whichever occurs earlier). Contract liabilities are recognized as revenue when the Group has fulfilled its contractual obligations.

Additional costs for obtaining a contract

Moreover, the additional costs for obtaining a contract are capitalized. This item represents sales commissions. The capitalized costs are amortized according to the stage of completion of the underlying project. Impairment losses on capitalized costs for obtaining a contract are recognized immediately in income statement if the residual book value of the capitalized costs for obtaining a contract is higher than the remaining part of the consideration less the costs directly associated with the delivery of the goods or provisions of services which have not yet been recognized in the income statement.

Service type warranties

In individual cases, a guarantee is offered in addition to the rectification of defects that existed at the time of sale. These service-type warranties can be defined independently in the context of the contract. Using the relative stand-alone selling price method, a portion of the transaction price is allocated to the service-type warranty and recognized as a contract liability. Service-type warranty revenue is recognized over the period in which the service is provided based on elapsed time.

Financial instruments in accordance with IFRS 9

A company shall recognize a financial asset or financial liability in its balance sheet when it becomes a party to the financial instrument. A financial asset is recognized as such if a contract gives the right to receive cash or another financial asset from the other contract party. Common market purchases and sales of financial assets are recognized at the time the risks and rewards are transferred (usually on the trade date). A financial liability is recognized as such if the obligation to transfer cash or other financial assets to the other party arises from a contract. With the exception of trade receivables without a significant financial component, financial instrument is initially measured at fair market value. Transaction costs are included. In the course of subsequent measurement, financial instruments are recognized either at amortized cost or at fair value.

Financial assets

Other non-current assets, financial assets, trade receivables from third parties and trade receivables from associated companies, derivative financial assets, other current financial assets and cash and cash equivalents are classified as financial assets. With the exception of trade receivables without a significant financing component, they are initially recognized at the fair value plus the transaction costs accrued, if the financial instruments are not classified under the category of Fair Value Through Profit or Loss (FVTPL). Trade receivables without a significant financing component are initially recognized at transaction price.

For financial assets carried at amortized cost, the carrying amounts reported in the balance sheet commonly correspond to the fair value of the financial assets. The classification and, derived from this, the valuation is carried out in accordance with the underlying business model and the contractually agreed cash flow conditions.

Measurement of financial assets and contract assets

The group recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. An allowance matrix was created based on past credit loss experience and adjusted for forward-looking factors specific to borrowers and economic conditions.

Financial liabilities

Financial liabilities include primary and derivative liabilities with a negative fair value. Primary financial liabilities are measured at fair value upon initial recognition. For subsequent measurement, they are measured at amortized cost or, for contingent consideration, at fair value. Derivative financial liabilities are measured at fair value through profit or loss.

Manz uses derivative financial instruments such as forward exchange contracts in order to hedge against currency risks. When IFRS 9 was applied for the first time on January 1, 2018, there was an option to continue to use either the hedge accounting regulations of IFRS 9 or those of IAS 39. Manz has opted to continue to use hedge accounting in accordance with IAS 39. Derivative financial instruments are measured at fair value on initial recognition and in subsequent periods. Recognition of these changes – whether through profit or loss or through other comprehensive income (hedge reserve) – depends on whether the derivative financial instrument is part of an effective hedge in accordance with IAS 39. Changes in fair value are recognized through profit or loss unless the special criteria of IAS 39 for hedge accounting are satisfied.

Cash and cash equivalents

Cash and cash equivalents comprise cash accounts and short-term deposits with banks with a remaining term of up to three months at the time of the addition. As a result of the application of IFRS 9, a risk provision is recognized.

Share-based compensation

As an additional incentive-based compensation for work performed, Manz Group employees (including executives) receive share-based compensation in the form of equity instruments. Equity instruments are measured at fair value at the date granted. This Performance Share Plan was first introduced in the financial year 2008. Currently, the Manz Performance Share Plan 2019 is being applied, which includes the achievement of performance targets. These new targets consist of the EBITDA margin and the development of company's value, measured by the change in the share price between the time the subscription rights are issued and the expiry of the vesting period. The stock awards expire when the employment relationship is terminated or a termination agreement is concluded. The share awards are not entitled to dividends during the vesting period. Fair value is determined by applying a measurement model based on the Black-Scholes model (We refer to (10) Share-based compensation).

The expenses resulting from the granting of equity instruments and the corresponding increase in equity are recognized over the period in which the exercise or performance conditions must be fulfilled (vesting period). This period ends on the date of the first exercise opportunity, i.e., the date when the employee concerned becomes irrevocably entitled to the award. The cumulative expense recognized at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The income or expense recognized in profit or loss for the period is the change in the cumulative expense recognized at the beginning and end of the reporting period.

No expense is recognized for compensation rights that do not vest. Exceptions to this are compensation rights for which certain market conditions must be met before they can be exercised. Irrespective of whether the market conditions are fulfilled, these are seen as exercisable, provided that all other performance conditions are fulfilled.

If the conditions of a compensation agreement compensated by equity instruments are modified, expenses are recognized in the amount in which they would have been incurred if the conditions of the agreement had not been modified. The company also recognizes the effects of modifications that increase the total fair value of the share-based compensation agreement or are associated with another benefit for the employee, measured at the time of the modification.

If a compensation agreement compensated by equity instruments is canceled, this is treated as if it had been exercised on the cancellation date. The previously unrecognized expense is recognized immediately. This applies to all compensation agreements if non-vesting conditions over which either the company or the counterparty has an influence are not fulfilled. However, if the canceled compensation agreement is replaced by a new compensation agreement and the new compensation agreement is declared as a replacement for the cancelled compensation agreement on the day it is granted, the cancelled and the new compensation agreement are accounted for as a modification of the original compensation agreement (see section above).

The dilutive effect of outstanding share awards is additionally considered as dilution in the calculation of earnings per share (we refer to (13) Earnings per share).

Treasury shares

Any treasury shares that the Group acquires are recognized at cost and deducted from equity. The purchase, sale, issue or withdrawal of treasury shares is not recognized in profit or loss.

Government grants

Government grants are recognized when there is reasonable assurance that the grants will be received and the company will comply with the conditions attached to them. Expenditurerelated grants are recognized as income on a scheduled basis over the period required to offset them against the corresponding expenses for which the grants are intended to compensate. Grants for capitalized development projects reduce the acquisition and manufacturing cost of the associated assets.

Actual income taxes

The amount of current tax assets and liabilities for the current period is calculated based on the tax rates and tax laws applicable on the reporting date in the countries in which the Group operates and generates taxable income.

Deferred taxes

Deferred taxes are recognized for temporary differences between the carrying amounts in the IFRS consolidated balance sheet and the tax base, as well as for tax loss carry-forwards and tax credits. Deferred tax assets are recognized if it is probable that they will be utilized to a large extent.

Deferred taxes are measured at the tax rates that apply or are expected to apply at the time of realization based on the current legal situation in the individual countries. Deferred taxes that relate to items directly recognized in equity are presented in equity. Deferred tax assets and liabilities are offset if the Group has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred taxes relate to income taxes levied by the same taxation authority on the same taxable entity.

Pension provisions

Defined contribution plans are shown under pension provisions. Provisions for pensions are determined according to the projected unit credit method pursuant to IAS 19. In addition to the pensions and acquired benefits known on the balance sheet date, this method also takes expected future salary and pension increases into account. If pension obligations have been re-insured using plan assets, these are reported net.

The calculation is based on actuarial expert opinions, taking biometric calculation principles into account. Actuarial gains and losses are recognized in other comprehensive income. The service cost is reported in personnel expense, the interest element of the allocation to reserves in the financial result.

Other provisions and accrued liabilities

Other provisions are recognized if a past event has led to a current legal or constructive obligation to third parties, which is expected to lead to a future outflow of resources that can be reliably estimated. Provisions are generally measured at the expected settlement amount, taking into account all identifiable risks. The calculation of the settlement amount is based on best estimates. The settlement amount also includes anticipated cost increases. Provisions with a term of more than one year are discounted to their present value at the market interest rate.

Accruals are not presented under provisions, but under trade payables or other liabilities, depending on their nature.

Liabilities

Non-current liabilities are recognized at amortized cost. Differences between their historical cost and their repayment amount are accounted for using the effective interest method. Current liabilities are recognized at their settlement amount.

Contingent liabilities

A contingent liability is a possible obligation to third parties that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Manz Group. A contingent liability may also be a present obligation that arises from past events but is not recognized because the outflow of resources is not probable, or the amount of the obligation cannot be estimated with sufficient reliability.

Management estimates and judgments

The preparation of consolidated financial statements requires assumptions and estimates that have an effect on the recognition, measurement, and presentation of assets, liabilities, income, and expenses, as well as contingent assets and contingent liabilities. The main circumstances affected by such discretionary judgments and estimates relate to the viability of receivables, determination of defining the percentage of completion of long-term manufacturing projects, assumptions about future cash flows from cash-generating units, and development projects, as well as the recognition and measurement of provisions. The values that actually occur may differ from the estimates in individual cases. The carrying amounts of assets and liabilities affected by estimates can be seen in the breakdowns of the individual balance sheet items.

The assumptions and estimates are based on premises that reflect the currently available level of knowledge. Specifically, the expected future business performance is based on the circumstances known at the date of preparation of the consolidated financial statements and a realistic assessment of the future development of the global and sector-specific environment. Manz AG faces a more complex and uncertain macroeconomic environment. The war in Ukraine and the Corona pandemic are causing disruptions in global supply chains, end markets, energy and commodity markets, and overall economic development. In addition, uncertainties in forecasts are increasing, leading to the application of estimate- and premise-sensitive accounting policies and discretionary decisions by management.

Developments in this environment that diverge from the assumptions and that are outside the control of management may result in amounts that differ from the original estimates. The key assumptions concerning the future and other sources of estimation uncertainty on the reporting date that entail a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

Goodwill and intangible assets with indefinite useful lives: Goodwill and other intangible assets with indefinite useful lives are not amortized; instead, an impairment test is performed at least once a year on the cash-generating units with the aim of adequately determining future cash surpluses. Parameters are defined for the calculation, such as the planning horizon (three years), the choice of interest rate or the weighting of the opportunities and risks to be considered. Please also refer to (14) Intangible Assets.

Revenues: Manz made the following discretionary decisions, which have a significant impact on determining the amount and timing of revenues from agreements with customers:

Determination of the method for estimating the variable considerations and assessing the limit

Scales of discounts and penalties result in variable fees for Manz. In the estimation of the variable considerations, the Group must use either the expected value method or most probable value method. The method to be selected is the one that allows the consideration due to the Group can be reliably estimated. The Group came to the conclusion that the expected value is the most suitable method for the estimation of the variable considerations for delivery of goods and services with scales of discount and contractual penalties. This estimation of the variable considerations is included in the transaction price to the extent that there will most probably not be a significant reversal of the realized sales revenues once the uncertainty associated with the variable consideration no longer exists.

Estimation of the overall cost of the project

The use of the POC method based on an estimation of the overall cost of the project. Due to the uncertainties, it is therefore possible that the estimates of the expenses required until completion may have to be subsequently adjusted. Such adjustments to income and expenses are recognized in the period in which the need for adjustment is identified.

Going concern: Assumptions regarding future order development, payments, project costs or repayment obligations were important for the going concern assumption and the assessment of going concern risks. Please refer to the section “Liquidity risks”.

Trade account receivables and contract assets: An impairment model in accordance with IFRS 9 is applied to trade receivables and contract assets, in which expected losses must be taken into account. For this, valuation models have been developed which are used to determine default rates for trade receivables and contract assets. An analysis of the historical default rates with different regions is performed. These historical default rates are adjusted by the influence of forward-looking information in the macroeconomic environment. In addition, the default rates are reviewed individually by the responsible management. Factors such as maturity structures of receivables balances, customer creditworthiness or macroeconomic data are included in the review.

Pension provisions: we refer to Notes to the Balance Sheet (28) Pension provisions.

Provisions for warranties: Provisions for warranties are recognized in accordance with past history or the estimated future level of claims. Non-current provisions are recognized at their settlement amount, discounted to the balance sheet date. The interest rate used is a risk-free pretax rate. The interest expense resulting from the unwinding of the discount is presented in finance costs. We refer to (29) Other non-current provisions.

Provisions for onerous contracts: The formation of provisions for onerous contracts is highly influenced by estimates, both in terms of reason and amount. Manz creates provisions for anticipated losses for customer orders for which the estimated total costs exceed the agreed consideration on the balance sheet date. Regular checks and assessments of the project progress of customer orders are carried out by project controlling, which is the basis for the creation of a provision for onerous contracts. We refer to (33) Other current provisions.

Income taxes: Estimates must also be made for the recognition of tax provisions and for the assessment of the recoverability of deferred taxes assets on loss carryforwards. In any assessment of the recoverability of deferred taxes, uncertainties exist with respect to the interpretation of complex tax regulations and the amount as well as timing of future taxable income. Deferred taxes assets are recognized for all unused tax loss carryforwards to the extent that it is probable that taxable income will be available to enable the loss carryforwards can be actually utilized. When calculating the value of deferred tax assets that can be recognized, management judgement is required with regard to the expected time of occurrence and the value of future taxable income, as well as the future tax-planning strategies. If income tax uncertainties exist, they are reviewed for possible effects on the consolidated financial statements and recognized accordingly.

Uncertain tax positions: If it is uncertain whether the responsible authorities will accept an income tax treatment of Manz, this is an uncertain tax position. For the valuation of uncertain tax items, Manz first assesses whether these have to be valued separately or together with other uncertain tax items. The decision is based on whether there is such a connection between the items that a common resolution of the uncertainty for the items can be expected. Then, based on the assumption that the tax authorities will review the uncertain tax position in full factual knowledge, an assessment is made as to whether the tax authorities accept Manz's tax treatment. If it is probable that the authorities will accept Manz's tax treatment, only this assessment of the uncertain tax position is used. Otherwise, the uncertain tax positions are measured based on the most probable amount or using the expected value method. If the possible results are binary or concentrated around one value, the uncertain tax position is valuated on the basis of the most probable amount, otherwise using the expected value method.

Development services of the Important Project of Common European Interest (IPCEI-project): An essential discretionary decision of the management is the determination of the relevant accounting unit. The requirements of IAS 38 regarding capitalization are assessed at their level. As part of the IPCEI-project, six technical developments in connection with battery production (cell assembly, battery electrolyte filling, laser application, module production line, lamination & Stacking of cells and Electrode production) were identified as independently identifiable development services. A total of 29 sub-product groups are included in the 6 main product groups mentioned above.

The capitalization of the IPCEI-related development costs is based on management´s assessment that the technical and economic feasibility has been proven. In this context, management makes assumptions, in particular, about the existence of future inflow of economic benefits. In case of existing customer orders, there are areas of application in relation to the above-mentioned technical developments with an associated direct future inflow of economic benefit. In addition, the management expects a further acceleration in the growth of the demand for machines for the production of battery cells, particularly in the next 5 years. Here, too, the basis for the associated future inflow of economic benefits is the technical advance developments.

Changes to accounting policies with insignificant impact on the current group´s financial statements

The following standards, interpretations and amendments that are to be applied in fiscal year 2022 but do not expected to have any material impact on the current consolidated financial statements:

- Amendments to IFRS 3, reference to the new framework dated March 29, 2018.
- Amendments to IAS 16, Revenue before an asset is ready for use.

- Amendments to IAS 37, onerous contracts – costs of fulfilling a contract: Clarification of the costs to be taken into account when assessing whether a contract is onerous or loss-making. The amendments were already taken into account by Manz AG in previous years.

- Annual improvements to IFRSs 2018-2020. Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41.

Published standards, interpretations and amendments not yet applicable

The following published but not yet applicable standards, interpretations and amendments probably do not have any material effect on future consolidated financial statements.

- IFRS 17 Insurance contracts

- Amendments to IAS 1: Classification of liabilities as current and non-current

- Amendments to IAS 8: Definition of accounting estimates

- Amendments to IAS 1 and IFRS Practice Statement 2: Disclosure of Accounting Policies

- Amendments to IAS 12: Deferred Taxes relating to assets and Liabilities Arising from Single Transactions. Manz AG already recognizes deferred taxes in these financial statements due to temporary differences resulting from the recognition of right-of-use assets and lease liabilities in accordance with IFRS 16. There are no significant effects on the current and future consolidated financial statements of Manz AG.

Corrections of Errors in Accordance with IAS 8

In the consolidated financial statements as of December 31, 2021, the Managing Board made an assessment regarding the recoverability of the contract assets of the large-scale CIGS*fab* project recognized on the basis of historical, public information which was available to them.

An internal examination of the recoverability of the contract assets in the second quarter of 2022 resulted in an impairment requirement of EUR 22.7 million. The facts were presented incorrectly as of December 31, 2021, considering new knowledge and backward considerations of the case, in contradiction to the objective circumstances. In addition, the information about the uncertain liquidity situation of the customer was already available at the time the consolidated financial statements were prepared. Since both requirements of IAS 8.5 are met cumulatively, this is an error from prior periods. As a result, the contract assets in the amount of EUR 22.7 million were retrospectively impaired.

In addition, the prepayments made for inventories in the consolidated financial statements as of December 31, 2021 were retrospectively impaired by EUR 1.2 million in connection with the protective shield proceedings of Nice Solar Energy GmbH pursuant to Section 270b of the German Insolvency Regulation.

The following tables emerge from those corrections:

Correction of affected items in the balance sheet according to IAS 8

(in TEUR)	Dec. 31, 2021 (published)	Correction of error according to IAS 8	Dec. 31, 2021 (adjusted)
Inventory	32,087	–1,200	30,887
Contract assets	86,092	–22,651	63,441
Current assets	206,855	–23,851	183,004
Total assets	308,350	–23,851	284,499
Retained earnings	76,416	–21,222	55,194
Shareholders of Manz AG	108,910	–21,222	87,688
Equity	109,171	–21,221	87,950
Deferred tax liabilities	6,312	–2,630	3,682
Non-Current liabilities	34,345	–2,630	31,715
Total equity and liabilities	308,350	–21,221	284,499

Correction of affected items in the income statement according to IAS 8

(in TEUR)	Jan. 1 to Dec. 31, 2021 (published)	Correction of error according to IAS 8	Jan. 1 to Dec. 31, 2021 (adjusted)
Other operating expenses	33,378	23,851	57,229
EBITDA	18,290	–23,851	–5,561
EBIT	–16,064	–23,851	–39,915
EBT	–17,579	–23,851	–41,430
Income taxes	–4,848	2,630	–2,218
Consolidated net profit	–22,427	–21,222	–43,649
Consolidated net profit attributable to shareholders of Manz AG	–22,408	–21,222	–43,630
Earnings per share undiluted in EUR per share	–2.89	–2.73	–5.62
Earnings per share diluted in EUR per share	–2.89	–2.73	–5.62

Correction of affected items in the statement of comprehensive income according to IAS 8

(in TEUR)	Jan. 1 to Dec. 31, 2021 (published)	Correction of error according to IAS 8	Jan. 1 to Dec. 31, 2021 (adjusted)
Consolidated profit or loss	–22,427	–21,222	–43,649
Group comprehensive income	–23,314	–21,221	–44,535
Thereof shareholder Manz AG	–23,320	–21,221	–44,541

Correction of affected items in the Cash Flow Statement according to IAS 8

(in TEUR)	Jan. 1 to Dec. 31, 2021 (published)	Correction of error according to IAS 8	Jan. 1 to Dec. 31, 2021 (adjusted)
Net profit/loss after taxes	–22,427	–21,222	–43,649
Taxes on income and earnings	4,848	–2,630	2,218
Increase (–) / decrease (+) in inventories, Trade receivables, contract assets and other assets	–34,648	23,851	–10,797
Cashflow from operating activities	–25,795	0	–25,795

Notes to the Income Statement

Revenues (1)

The breakdown of revenues by business segment and region is shown in the segment reporting. We also refer to our comments on segment reporting.

In 2020, Manz received follow up orders of around EUR 71 million from a long-term customer in the Mobility & Battery Solutions segment. In 2020 EUR 7 million, in 2021 EUR 22 million and in 2022 EUR 14 million revenues were recognized. The completion date for all orders is expected to be in 2023.

In 2021, Manz received follow up orders of around EUR 28 million from a long-term customer in the Industry Solutions segment. The completion date for all orders is expected to be in the second quarter of 2023.

Revenues are broken down in business units with the addition of the target sales region:

(in TEUR)		Germany	Rest of Europe	China	Taiwan	Rest of Asia	USA	Other Regions	Total
Mobility & Battery Solutions	2022	47,926	21,185	639	3	3,276	19,193	102	**92,324**
	2021	44,566	9,423	3,281	2	3,486	20,942	299	**81,999**
Industry Solutions	2022	32,065	29,153	14,160	38,606	23,179	16,816	4,661	**158,640**
	2021	58,147	9,773	31,105	28,671	12,895	4,461	9	**145,061**
Total	**2022**	**79,991**	**50,338**	**14,799**	**38,609**	**26,455**	**36,009**	**4,763**	**250,964**
	2021	**102,713**	**19,196**	**34,386**	**28,673**	**16,381**	**25,403**	**308**	**227,060**

Work performed by the entity and capitalized (2)

In the financial year 2022, development costs were capitalized in particular in the segments Mobility & Battery Solutions at TEUR 25,832 (previous year: TEUR 10,109). In addition, capitalization of TEUR 384 (previous year: TEUR 534) was made in the Industry Solutions segment.

Other operating income (3)

(in TEUR)	2022	2021
Exchange rate gains	9,864	53
Government grants/subsidies	1,721	2,515
Income from the reversal of provisions	2,000	865
Reversal of valuation allowances on contract assets	911	–
Lease and rental income	736	439
Insurance claim	65	576
Income from the disposal of fixed assets	31	17
Reversal of valuation allowances on receivables	10	63
Other operating income	818	1,254
Income from the sale of investments using the equity method	–	15,241
Right to reimbursement of court costs	–	380
Total	**16,156**	**21,403**

The sale of the shares in Talus Manufacturing Ltd., Chungli, Taiwan, resulted in a net gain of EUR 14.8 million in 2021. The purchase price amounted to EUR 44.7 million.

Of the TEUR 1,721 subsidies, TEUR 1,287 (previous year: TEUR 1,584) are tax credits from the Italian government for R&D projects.

The exchange rate gains of TEUR 9,864 include unrealized gains of TEUR 1,536 out of derivatives. The derivatives are used to hedge cash flows from operating projects. The remaining amount is mainly attributable to the subsidiary in Asia due to the development between TWD and USD.

Material costs (4)

(in TEUR)	2022	2021
Cost of raw materials, consumables, and supplies, and of purchased merchandise	133,479	110,375
Cost of purchased services	33,335	21,446
Total	**166,814**	**131,821**

Personnel expenses (5)

(in TEUR)	2022	2021
Wages and salaries	65,573	61,701
Share-based compensation	954	1,063
Social security, pension and other benefit costs	14,150	12,717
Total	**80,677**	**75,481**

Other operating expenses (6)

(in TEUR)	2022	2021
Advertising and travel expenses	5,605	5,303
Legal and consulting fees	4,631	2,682
Facility costs	4,229	3,352
Exchange rate losses	3,963	3,796
IT costs (IT costs and maintenance contracts)	3,754	3,142
Outgoing freight	3,721	2,030
Other personnel-related expenses	3,242	2,121
Research-related (project-based) other operating expenses	2,241	1,283
Insurance	1,358	888
Rent and leases	1,037	1,262
Increase of provisions	952	826
Impairment expenses on trade receivables	291	416
Impairment expenses on contract assets	144	24,005
Other	7,832	6,123
Total	**43,000**	**57,229**

The higher impairment expenses on financial assets and contract assets in 2021 is mainly driven by an impairment loss of TEUR 22,651 made for a project in Asia. For further information, please refer to section "Correction of errors in accordance with IAS 8".

The item "Others" consists mainly of bank guarantee commissions of TEUR 1,807 (previous year: TEUR 1,096), bank charges of TEUR 620 (previous year: TEUR 265), expenses of other taxes of TEUR 660 (previous year: TEUR 650) and expenses from stock exchange listing of TEUR 466 (previous year: TEUR 437).

The exchange rate losses of TEUR 3,963 include derivatives in the amount of TEUR 0. The derivatives are used to hedge cash flows from operating projects.

Amortization/depreciation and impairment (7)

(in TEUR)	2022	2021
Tangible and intangible assets	8,689	8,740
Right-of-use assets from leases	3,456	2,846
Non-current costs for obtaining a contract	–	734
Current costs for obtaining a contract	31	83
Amortization on development costs	–	311
Impairment on goodwill	–	19,801
Impairment on Trademark	–	1,839
Total	**12,176**	**34,354**

Current costs for obtaining a contract related to a project in Asia have been fully amortized in 2022 in the amount of TEUR 31.

Finance income (8)

(in TEUR)	2022	2021
Other interest and similar income	105	509
Interest income from subleases	15	19
Total	**120**	**527**

Finance costs (9)

(in TEUR)	2022	2021
Interest on current liabilities	1,251	1,385
Interest cost from financial liabilities arising from leases	388	490
Interest on non-current liabilities	112	33
Interest component of long-term provisions	48	27
Other interest expenses	–	107
Total	**1,799**	**2,042**

Share-based payment (10)

Performance share plan

The Group has set up a so-called "Performance Share Plan" for members of the Managing Board and other eligible employees. The performance targets relate to the EBITDA margin and the development of the company value, measured by the change in the share price between the issue of the subscription rights and the expiry of the vesting period. The share awards lapse if the employment relationship is terminated or a termination agreement is concluded. The share awards are not entitled to dividends during the vesting period. Manz AG can settle the stock awards with new issued shares or with treasury shares.

The share awards (subscription rights) are issued at the discretion of the Executive Board with the approval of the Supervisory Board - insofar as Executive Board members are concerned, at the discretion of the Supervisory Board - in annual tranches, within a period of three months after the expiry of four weeks following the publication of the consolidated financial statements for the previous financial year.

In the 2022 financial year, 18 (previous year: 20) employees and the 2 (previous year: 3) members of the Executive Board received 27,482 (previous year: 23,948) share awards/stock options. Of these, 11,553 (previous year: 12,101) share awards/stock options were granted to the Executive Board. In the 2022 financial year, 9,074 share awards/stock options (4,488 of which were exercised by the Executive Board) were exercised with a share price at the time of exercise of EUR 28.20 or EUR 34.35 for employees and EUR 26.75 or EUR 35.70 for the Executive Board. The subscription price was EUR 1 each.

The following table shows the development of the share awards/share options with the corresponding weighted average fair values per share awarded at the time they were granted:

	(in shares)	(in EUR)
	Share awards/ share options	**Weighted average fair value on the grant date**
Inventory at the beginning of the year (not vested)	177,424	28.20
Exercised in the reporting period	–9,074	17.09
Lapsed during the reporting period	–12,854	16.64
Granted during the reporting period	27,482	19.59
Inventory at the end of the year (not vested)	**182,978**	**28.28**

In accordance with IFRS 2, share awards are accounted for at the fair value of the awards at the grant date and are recongized in personnel expenses and a corresponding increase in equity (capital reserve). The fair values are determined using a measurement model based on the Black-Scholes model.

The calculation is based on the following parameters:

	2022	2021
Strike price	EUR 1.00	EUR 1.00
Risk-free annual interest rate	0.56 %	0 %
Volatility	52.8 %	52.9 %
EBITDDA-margin	6.5 %	8.7 %
Corporate development	20 %	30 %
Expected dividends	EUR 0.00	EUR 0.00
Fair value of each share award	28.28	28.20
Option term	4 years	4 years

Expected volatility is based on the assumption that future trends can be inferred from historical volatility over a period similar to the term of the options, although the volatility that actually occurs may differ from the assumptions made.

In the reporting year, personnel expenses of TEUR 954 (previous year: TEUR 1,063) were recongized from the performance share plan.

Income taxes (11)

Income taxes include both actual and deferred income taxes arising from temporary differences and existing tax loss carryforwards.

(in TEUR)	**2022**	**2021**
Actual tax expense		
Current period	818	2,744
Previous periods	995	–396
Deferred tax income/expenses (+)	2,659	–130
	4,472	**2,218**

The current income tax expense is calculated using the tax rates effective as of the balance sheet date. When calculating deferred taxes for domestic subsidiaries, the domestic tax rate of 29.13 % (previous year: 29.13 %) was applied. For the foreign companies, tax rates of 19 % – 26 % (previous year: 9 % – 26 %) were used.

The income tax expense in the reporting year in the amount of TEUR 4,472 (previous year: TEUR 2,218) is derived as follows from an "expected" income tax expense that would have resulted from the application of the statutory income tax rate of the parent company to earnings before income taxes:

(in TEUR)	**2022**	**2021**
Earnings before income taxes	–7,677	–41,430
Manz AG income tax rate	29.13 %	29.13 %
Expected income tax expense	**–2,236**	**–12,067**
International tax rate differences	–650	–1,471
Change of tax rate abroad	142	–158
Non-deductible expenses/tax-free income	1,996	6,792
Prior-period taxes	996	–396
Tax-free income	–1,260	–3,899
Non-recognition of tax loss carryforwards	8,043	13,160
Use of tax loss carryforwards	0	–53
Valuation allowance on deferred taxes	–2,556	–1,203
Foreign withholding tax	1	1,739
Other	–4	–226
Reported income tax expense	**4,472**	**2,218**
Effective tax rate	–58.26 %	–5.35 %

The following table shows deferred tax assets and liabilities:

(in TEUR)	Deferred tax assets		Deferred tax liabilities	
	Dec. 31, 2022	**Dec. 31, 2021**	**Dec. 31, 2022**	**Dec. 31, 2021**
Intangible assets	980	413	4,759	6,035
Property, plant, and equipment	2	3	429	647
IFRS 16	359	0	442	0
Contract assets, inventories and contract liabilities	6,594	4,357	8,172	4,429
Receivables	923	318	4,082	1,167
Cash and cash equivalents/ Derivative financial instruments	4	4	382	0
Pension provisions	421	721	12	0
Trade payables	1,701	2,176	1,387	631
Provisions	389	706	0	0
Tax loss carry forwards	5,935	4,830	0	0
Gross value	17,309	13,528	19,665	12,909
Offsetting	–14,431	–9,227	–14,431	–9,227
Balance according to consolidated balance sheet	**2,878**	**4,301**	**5,234**	**3,682**
Net amount of deferred tax assets/ deferred tax liabilities	**0**	**619**	**2.356**	**0**

For the retrospective restatement of the prior-year figure, please refer to the section "Corrections of errors in accordance with IAS 8".

The net amount of deferred tax assets/liabilities developed as follows:

(in TEUR)	2022	2021
As of January 1	**619**	**4**
Deferred tax expense (-) / income (+) in the income statement	–2,659	130
Changes in deferred taxes recognized in other comprehensive income in connection with:		
Revaluation of defined benefit pension plans	–261	17
Hedging future cash flows (cash flow hedges)	0	4
Difference from currency translation	–55	464
As of December 31	**–2,356**	**619**

Deferred taxes are only recognized for tax loss carryforwards and deductible temporary differences if their utilization can be expected with sufficient certainty. For two (previous year: two) companies have incurred tax losses in the current or previous period, a deferred tax asset on loss carryforwards of TEUR 116 (previous year: TEUR 176) was recognized. A deferred tax claim on temporary differences of TEUR 463 (previous year: TEUR 492) was reported in the year under review for Manz Italy Srl that suffered tax losses in the current or previous period. Based on the short-term and medium-term planning as well as the existing order backlog and the positive market prospects in the battery sector, Manz believes that in the future, Manz Italy Srl will have taxable income against which the unused tax losses and temporary differences can be offset.

As of the balance sheet date, the tax loss carryforwards totaled TEUR 298,020 (previous year: TEUR 268,181). Of this amount, TEUR 17,321 (previous year: TEUR 568) over five years and TEUR 0 (previous year: TEUR 16,371) is limited to ten years and the rest can be carried forward indefinitely. For loss carry forwards amounting to TEUR 278,218 (previous year: TEUR 251,153), no deferred tax assets were recognized since IAS 12 stipulates in the case of losses in the recent past, high recognition requirements are not met on the balance sheet date.

In accordance with IAS 12, deferred taxes for temporary differences in connection with shares in Group companies must be recognized (outside basis differences). No deferred tax liabilities were recognized for outside basis differences of EUR 56.9 million (previous year: EUR 53.4 million), as these profits are to be reinvested for an indefinite period.

Share of profits non-controlling interests (12)

The share of profits attributable to non-controlling interests consists of allocated earnings in the amount of TEUR 0 (previous year: TEUR –19).

Earnings per share (13)

The undiluted earnings per share are calculated by dividing Manz AG shareholders' share of earnings by the weighted average number of shares in circulation during the financial year. The earnings per share are diluted as a result of so-called "potential shares". These include option and subscription rights if such rights result in the issue of shares at a value below the share's average stock exchange price. There was a dilution effect from the share awards in the context of the Performance Share Plan (see (10) Share-based payment).

Earnings per share was calculated in accordance with IAS 33.

	2022	2021
Consolidated net profit allocable to Manz AG's shareholders (in TEUR)	–12,149	–43,630
Weighted average number of outstanding shares (undiluted)	8,082,499	7,750,144
Effect from share-based compensation shares	365,956	354,848
Weighted average number of outstanding shares (diluted)	**8,448,304**	**8,088,591**
Earnings per share in EUR (undiluted)	–1.42	–5.62
Earnings per share in EUR (diluted)	–1.42	–5.62

No other transactions in ordinary shares or potential ordinary shares took place in the period between the balance sheet date and the authorization to issue the consolidated financial statements.

Notes to Segment Reporting

Manz discloses the results of operations grouped by business segment and region in accordance with IFRS 8 (Operating Segments) within the framework of segment reporting. This grouping is based on internal management and takes the segments' different risk and earnings structures into account.

The breakdown of turnover by region is based on the location of the customer. I.e., if a customer based in China places an order, the turnover is allocated to the China region.

The segment structure was reorganized on January 1, 2022. The Electronics, Solar and Contract Manufacturing segments are combined to form the new Industry Solutions division. The Energy Storage segment forms the new Mobility & Battery Solutions division. The Service segment is split between the two new divisions. With the successful realignment of the corporate organization, Manz is aiming to make even better use of the opportunities in these dynamic growth markets. The service segment is broken down into the division in which the services accrued. The segment-specific disclosures for the comparative period are also given in the new segmentation format.

Mobility & Battery Solutions will essentially include the business activities of the former Energy Storage segment with a clear focus on the growth market of E-Mobility. The former Energy Storage business area reported on the business with equipment for the production of lithium-ion batteries. In the Industry Solutions reporting segment, Manz AG combines the activities of the two business areas Electronics (semiconductor backend production, fan out panel level packaging and display technologies) and Industrial Automation (industrial assembly solutions for the manufacture of consumer electronics, power electronics and other components of the electrical powertrain).

The primary factor used to evaluate and control a business segment's cash flow is the operating profit (EBIT).

Segment reporting shows revenues and profits in the Group's individual business segments. Delivery and service relationships exist only to a limited extent between the individual segments.

Revenues in the amount of TEUR 18,741 with one customer were included in the Mobility & Battery Solutions business segment. In addition, revenues of TEUR 16,358 with one customer were included in the Industry Solutions business segment.

In 2021, EUR 21.6 mio impairments on Goodwill and trademark were reported under the Industry Solutions segment (former Solar segment). For more detailed information, see the goodwill and trademark rights chapter (14).

Segment reporting business units

As of December 31, 2022

(in TEUR)	Mobility & Battery Solutions	Industry Solutions	Group
Total revenues			
2022	**92,324**	**158,640**	**250,964**
2021	**81,999**	**145,061**	**227,060**
Result from investments using the equity method			
2022	–671	–661	–1,332
2021	0	–245	–245
EBITDA			
2022	–8,363	14,542	6,178
2021*	6,176	–11,737	–5,561
Amoritization/depreciation and impairment			
2022	5,207	6,969	12,176
2021	3,932	30,422	34,354
EBIT			
2022	**–13,570**	**7,572**	**–5,998**
2021*	**2,244**	**–42,160**	**–39,915**
Financial results			
2022	–1,214	–465	–1,679
2021	–561	–953	–1,515
Earnings before taxes (EBT)			
2022	–14,784	7,107	–7,676
2021*	1,683	–43,113	–41,430
Income taxes			
2022	–1,082	–3,390	–4,472
2021*	1,594	–3,812	–2,218
Consolidated profit or loss			
2022	**–15,866**	**3,717**	**–12,149**
2021*	**3,277**	**–46,925**	**–43,649**

* Adjustment after restatement due to additional impairment made on a contract asset. For further information, please refer to the section Correction of errors in accordance with IAS 8.

Segment reporting regions

As of December 31, 2022

(in TEUR)	Revenues by customer location	Non-current assets (without deferred tax)
Germany		
2022	79,991	42,302
2021	102,713	42,745
Rest of Europe		
2022	50,338	29,659
2021	19,196	23,328
China		
2022	14,799	13,215
2021	34,386	13,994
Taiwan		
2022	38,609	14,473
2021	28,673	14,948
Rest of Asia		
2022	26,455	6
2021	16,381	17
USA		
2022	36,009	5
2021	25,403	1
Other Regions		
2022	4,763	0
2021	308	0
Group		
2022	250,964	99,660
2021	227,060	95,033

Notes to the Cash Flow Statement

The cash flow statement shows how cash has changed in the Manz Group over the course of the reporting year due to cash inflows and outflows. In accordance with IAS 7 Cash Flow Statements, cash flows are distinguished between operating activities, investing activities and financing activities. Effects from changes to the basis of consolidation and exchange rates are eliminated in the respective items. The change in liquid assets due to changes in exchange rates is presented separately.

The cash and cash equivalents reported in the cash flow statement comprise all cash and cash equivalents reported on the balance sheet, which consist of cash in hand and bank balances with a term of up to three months. Any fluctuations in the value of cash and cash equivalents were considered by means of a risk provision.

The cash inflows and outflows from investing and financing activities are presented in accordance with the direct method. The cash inflows and outflows from investing activities from current operations include additions and disposals of property, plant and equipment as well as additions and disposals of intangible assets. In financing activities, besides cash inflows from equity increases and the issuance of other financial liabilities, cash outflows from the repayment of loans are also included.

On the other hand, cash inflows and outflows from operating activities are derived indirectly from the consolidated net profit. For this purpose, the consolidated net profit is adjusted by non-cash expenses and income, mainly depreciation and changes in non-current provisions and deferred taxes and supplemented by changes in operating assets and liabilities.

According to IFRS 16, the payment of the redemption portion of leases is shown in financing activities. The payment for the interest portion of the lease liability and payments for current leases and leases involving an asset of minor value and variable lease payments that are not recognized as part of the liability are shown under operating activities.

Investing and financing processes which have not led to a change in cash are not part of the cash flow statement.

Development of liabilities from financing activities

(in TEUR)	Carrying amount as of Jan 1, 2022	cashflows	Non-cash changes: Foreign exchange movement	Non-cash changes: Others	Non-cash changes: Transfer	Non-cash changes: Changes in fair values	Carrying amount as of Dec. 31, 2022
Non-current financial liabilities							
from financial institutions	8,337	535	0	0	–2,134	0	6,738
from lease	10,703	0	–30	2,918	–3,670	0	9,921
Current financial liabilities							
from financial institutions	40,959	–4,604	–948	0	2,134	0	37,541
from lease	3,260	–4,111	–2	1,278	3,670	0	4,095
Derivative financial instruments	225	0	0	0	0	–23	202
	63,484	**–8,180**	**–980**	**4,196**	**0**	**–23**	**58,497**

(in TEUR)	Carrying amount as of Jan 1, 2021	cashflows	Non-cash changes: Foreign exchange movement	Non-cash changes: Others	Non-cash changes: Transfer	Non-cash changes: Changes in fair values	Carrying amount as of Dec. 31, 2021
Non-current financial liabilities							
from financial institutions	5,677	4,849	0	0	–2,189	0	8,337
from lease	12,609	0	8	826	–2,740	0	10,703
Current financial liabilities							
from financial institutions	54,992	–20,031	3,809	0	2,189	0	40,959
from other companies	16,306	0	1,552	–17,858[1]	0	0	0
from lease	3,446	–3,723	29	768	2,740	0	3,260
Derivative financial instruments	0	0	0	225	0	0	225
	93,030	**–18,905**	**5,398**	**–16,039**	**0**	**0**	**63,484**

1 This is the settlement of the previously granted loan from Lam Research International B.V. to Manz Taiwan Ltd. as part of the sale. For the profit from the sale of Talus Manufacturing Ltd., please see chapter (3) "Other operating income".

Notes to the Balance Sheet

Intangible Assets (14)

(in TEUR)	Licenses, software, and similar rights	Capitalized development costs	Goodwill	Advance payment	Non-current capitalized contract costs	Total
Acquisition/manufacturing costs						
As of January 1, 2021	**33,743**	**81,932**	**34,768**	**597**	**5,143**	**156,183**
Currency adjustment	5,531	341	1,569	0	0	7,441
Additions	554	10,091	0	0	0	10,645
Disposals	–52	–1,249	0	0	–5,143	–6,444
Reclassifications	597	0	0	–597	0	0
As of December 31, 2021	**40,373**	**91,115**	**36,337**	**0**	**0**	**167,825**
Amortization/Depreciation						
As of January 1, 2021	**28,712**	**63,943**	**0**	**0**	**4,409**	**97,064**
Currency adjustment	4,283	292	0	0	0	4,575
Additions[1]	2,416	5,511	19,801	0	734	28,462
Disposals	–52	–1,199	0	0	–5,143	–6,394
Reclassifications	0	0	0	0	0	0
As of December 31, 2021	**35,359**	**68,547**	**19,801**	**0**	**0**	**123,707**
Acquisition/manufacturing costs						
As of January 1, 2022	**40,373**	**91,115**	**36,337**	**0**	**0**	**167,825**
Currency adjustment	–750	–102	–962	0	0	–1,814
Additions	643	5,739	0	67	0	6,449
Disposals	–160	–558	0	0	0	–718
Reclassifications	0	0	0	0	0	0
As of December 31, 2022	**40,106**	**96,194**	**35,375**	**67**	**0**	**171,742**
Amortization/Depreciation						
As of January 1, 2022	**35,359**	**68,547**	**19,801**	**0**	**0**	**123,707**
Currency adjustment	–625	–99	0	0	0	–724
Additions	806	4,786	0	0	0	5,592
Disposals	–160	–558	0	0	0	–718
Reclassifications	0	0	0	0	0	0
As of December 31, 2022	**35,380**	**72,676**	**19,801**	**0**	**0**	**127,857**
Residual carrying amount Dec. 31, 2021	5,014	22,568	16,536	0	0	44,118
Residual carrying amount Dec. 31, 2022	**4,726**	**23,518**	**15,574**	**67**	**0**	**43,885**

1 Thereof TEUR 19,801 impairment of goodwill and TEUR 1,839 impairment of trademark in 2021.

Capitalized development costs

Development costs are capitalized in accordance with the requirements of IAS 38 Intangible Assets in the accounting and valuation methods presented. For the purpose of determining the amounts to be capitalized, management must make assumptions about the amount of anticipated future cash flows from assets, the discount rates to be applied and the period of the inflow of expected future cash flows that generate assets.

As part of the annual review of capitalized development costs that have not yet been amortized, impairments of TEUR 0 were recognized in the reporting year (previous year: TEUR 311).

The following amounts were recognized in profit or loss:

(in TEUR)	2022	2021
Total research and development costs	–33,048	–16,003
Scheduled depreciation on development costs	–4,786	–5,511
Capitalized development costs before offset of subsidies	26,216	10,091
Research and development costs charged to income	**–11,618**	**–11,423**

Through the European batteries Innovation project (EUBatIn project), which is being carried out on the IPCEI platform, the European Commission is to promote the establishment of a European Li-Ion battery production with highly innovative and sustainable production technology for Lithium-ion battery cells and modules. At Manz AG, the project is subsidized by the federal government and the state of Baden-Württemberg. Likewise, Manz Italy Srl also receives subsidies from government-related institutions. A prerequisite for the disbursement of the subsidies at Manz AG was formal proof of the financing of the company´s own share. Manz AG was able to provide this proof in the 2022 fiscal year. The aim of the project is the development of innovative production processes on the associated systems based on a new, digitized and more cost-effective business model.

The expenses incurred for development services are capitalized. The associated scope for discretion is described in the chapter "Estimates and assessments by the management". In 2022, development services related to the IPCEI project in the amount of TEUR 8,179 were performed at Manz Italy Srl and TEUR 17,017 at Manz AG in Germany. Subsidies of TEUR 2,150 granted to Manz Italy Srl and TEUR 17,445 to Manz AG in Germany.

Up to and including 2027, there are funding entitlements for the IPCEI project of a maximum of EUR 71.3 million at Manz AG in Germany and EUR 48.7 million at Manz Italy Srl. Grants for capitalized development projects reduce the acquisition and production costs of the assets concerned. The subsidy from the funding agency is recognized when there is sufficient certainty that the conditions will be met, and the subsidy will be granted.

In the context of funded development projects, there is a risk that the funding agency may demand repayment due to non-achievement of the agreed project objectives. Similarly, reclaims can arise if financial returns from technologies subsidized by the funding agency develop better than originally expected ("claw-back clause"). Manz AG assumes that the agreed project goals will be achieved. It also considers the risk of the claw-back mechanism to be manageable: A significant ex-post improvement in customer returns from subsidized projects compensates for the risk of repayments of the funding bodies.

Government grants/subsidies received in 2022 and 2021 are shown in the table below.

(in TEUR)	2022	2021
As of January 1	–	–
Granted during the year	21,833	3,512
Capitalized R&D projects	–20,112	–997
Charged in income statement	–1,721	–2,515
As of December 31	–	–

Goodwill and trademark rights

Goodwill and intangible assets with indefinite useful lives (brand rights) are allocated to the individual business units as follows:

(in TEUR)	Goodwill		Trademark rights	
	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	31.12.2Dec. 31, 2021021
Mobility & Battery Solutions	6,682	6,682	0	0
Industry Solutions	8,892	9,854	2,773	2,898
	15,574	**16,536**	**2,773**	**2,898**

Goodwill and trademarks rights are tested for impairment at least once a year by comparing the carrying amounts of the units underlying the respective goodwill and trademark rights with the value in use. The Goodwill is impaired if the carrying amount of a cash-generating unit exceeds its value in use. The segments Mobility & Battery Solutions and Industry Solutions are used as cash-generating unit.

The value in use is determined by using the discounted cash flow method. The starting point is the current three-year plan for the respective business segment.

As part of this test, estimates must be made in relation to future cash surpluses. For the development of estimates in the current uncertain macroeconomic environment, we refer to the chapter “Impact of Covid-19, Russia-Ukraine-war and climate-related issues”. To determine the recoverable amount, an appropriate discount rate needs to be selected.

The calculation of discount rates takes into account the circumstances of the peer groups and is based on its weighted average cost of capital (WACC). The average cost of capital takes debt and equity into account. The cost of equity is determined on the basis of a peer group. They include the basic interest rate including country risk and a market risk premium. The segment-specific risk is included by applying individual beta factors. The cost of debt is based on interest-bearing debt. They include the debt spread, base interest rate and country risk. The debt spread was calculated on the basis of the interest difference between the yield of a basket of industrial companies rated BBB+ to BBB- and the yield on German government bonds.

The key planning assumptions include, above all, the anticipated market development in relation to the Manz Group’s development, the development of key production and other costs, as well as the discount factor and growth rates. General market forecasts, current developments and experience are taken into account in establishing the assumptions. For the development of estimates in the current uncertain macroeconomic environment, we refer to the chapter “Impact of Covid-19, Russia-Ukraine-war and climate-related issues”.

The demand for electric cars is constantly increasing, which is accompanied by an increase in the demand for battery drives. Manz AG should benefit from this positive market development with its broad customer base in the segment Mobility & Battery Solutions. A significant improvement in earnings and an increase in sales in the Mobility & Battery Solutions segment is therefore expected. The Mobility & Battery Solutions division is therefore expected to further expand revenues and improve earnings in the future. The current order backlog suggests that there will be an expand in revenues and improvement in results.

In the Industry Solutions segment, Manz AG offers its customers production, assembly and handling equipment for the manufacture of displays for LCD, OLED and AMOLED flat screens, touch sensors, printed circuit boards and chip carriers, as well as smartphones, tablet computers, notebooks, wearables and other consumer electronics. Furthermore, the automated assembly solutions offer “Tier 1 and Tier 2 companies” in the automotive industry transformation solutions from the classic powertrain to the future e-drive train. A further increase in revenues and improvement in earnings in the Industry Solutions segment is therefore expected in the future. The current order backlog suggests that there will be an expand in revenues and improvement in results.

Cash flows are predicted individually for each business segment to which goodwill and trademark rights are allocated to it based on revenue and cost planning. Growth rates were set at 0.5 % (previous year: 0.5 %) for the Industry Solutions division and at 1.0 % (previous year: 1.0 %) for the Mobility & Battery Solutions division. The discount rate after tax used for discounting (weighted average cost of capital (WACC)) is 10.8 % (previous year: 7.9 %) for the Mobility & Battery Solutions division and 11.7 % (previous year: 8.9 %) for the Industry Solutions division. In this context, the cost of equity is calculated based on a comparable group (peer group). The discount rates and growth rates are listed in the following table:

(in %)	Discount rate before taxes		Growth rate	
	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
Mobility & Battery Solutions	15.3	11.1	1.0	1.0
Industry Solutions	16.6	12.5	0.5	0.5

Equity and borrowing cost rates calculated in this way were weighted on the basis of the peer group's average capital structure.

The value in use of the respective cash-generating unit determined in the impairment test is recognizably higher than the respective carrying amount in both cases, so that the fair value less costs to sell was not determined. Overall, no impairment of recognized goodwill or intangible assets without definite useful lives was identified for the above-mentioned segments in the financial year 2022.

For the Industry Solutions segment (former Solar segment), impairment losses of EUR 21.6 million were recognized on goodwill and on a brand name in 2021. Of this amount, EUR 19.8 million was attributable to goodwill and EUR 1.8 million to the brand name. The calculated value in use represents the recoverable amount, which was compared with the carrying amount in the impairment test. The recoverable amount amounted to EUR 8.5 million as of December 31, 2021. The impairment resulted mainly from the fact that the focus of business activities in the Solar segment in the financial year 2021 continued to be on the completion of the large CIGS*fab* order. However, as a continuation of the business relationship with the customer was still uncertain at the time the financial statements were prepared and this could also affect follow-up orders with this customer and new customer relationships first have to be established in the course of the realignment of the segment, impairment losses were recognized. The impairment losses were recognized in the income statement under depreciation, amortization and impairment losses.

A WACC that is 1 % higher and a calculation without assumed growth in perpetuity does not influence the intrinsic value of goodwill. Even an additional 20 % reduction in EBIT over the entire planning period would not have led to an impairment of the remaining goodwill or trademark rights in the 2022 or 2021 financial year.

Costs for obtaining a contract

Intangible contract assets include non-current costs for obtaining a contract if they are covered by income from the contract and can be clearly allocated to a project. The capitalized costs for obtaining a contract are amortized according to the stage of completion of the underlying project. The balance as of December 31, 2022 was TEUR 0 (previous year: TEUR 0). In the reporting period, an amortization of TEUR 0 (previous year: TEUR 734) was recognized for this purpose.

Property, plant, and equipment (15)

(in TEUR)	Land and buildings	Technical equipment and machinery	Other equipment, operating and business facilities	Right-of-use assets	Equipment under construction/Advance payment	Total
Acquisition/manufacturing costs						
As of January 1, 2021	**24,960**	**23,569**	**13,164**	**21,235**	**5,369**	**88,297**
Currency adjustment	1,900	266	288	111	7	2,572
Additions	750	1,875	939	1,032	1,214	5,810
Disposals	–1,307	–1,129	–605	–871	–67	–3,979
Reclassifications	347	54	12	0	–413	0
As of December 31, 2021	**26,650**	**24,635**	**13,798**	**21,507**	**6,110**	**92,700**
Amortization/Depreciation						
As of January 1, 2021	**8,428**	**20,028**	**8,430**	**5,985**	**0**	**42,871**
Currency adjustment	647	109	253	111	0	1,120
Additions	1,154	917	893	2,846	0	5,810
Disposals	–1,042	–515	–592	–863	0	–3,012
Reclassifications	0	0	0	0	0	0
As of December 31, 2021	**9,187**	**20,539**	**8,984**	**8,079**	**0**	**46,789**
Acquisition/manufacturing costs						
As of January 1, 2022	**26,650**	**24,635**	**13,798**	**21,507**	**6,110**	**92,700**
Currency adjustment	–445	–61	–61	–51	0	–618
Additions	1,320	1,840	1,614	3,648	1,857	10,279
Disposals	–46	–332	–607	–247	–4,938	–6,170
Reclassifications	135	41	73	0	–249	0
As of December 31, 2022	**27,614**	**26,123**	**14,817**	**24,857**	**2,780**	**96,191**
Amortization/Depreciation						
As of January 1, 2022	**9,187**	**20,539**	**8,984**	**8,079**	**0**	**46,789**
Currency adjustment	–159	–35	–56	–33	0	–283
Additions	859	1,233	1,004	3,456	0	6,552
Disposals	–45	–300	–605	–231	0	–1,181
Reclassifications	0	0	0	0	0	0
As of December 31, 2022	**9,842**	**21,437**	**9,327**	**11,271**	**0**	**51,877**
Residual carrying amount Dec. 31, 2021	17,463	4,096	4,814	13,428	6,110	45,911
Residual carrying amount Dec. 31, 2022	**17,772**	**4,686**	**5,490**	**13,586**	**2,780**	**44,314**

The right-of-use assets from leases are subdivided as follows:

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Right of use-assets – building	12,321	12,361
Right of use-assets – vehicles	1,118	791
Right of use assets – IT	147	276
	13,586	**13,428**

Depreciation of right of use assets have been recorded in accordance with the below breakdown.

(in TEUR)	2022	2021
Depreciation of right of use-assets – building	2,738	2,105
Depreciation of right of use-assets – vehicles	589	613
Depreciation of right of use assets – IT	129	128
	3,456	**2,846**

Land and buildings of Manz Slovakia s.r.o. with a carrying amount of TEUR 3,074 (previous year: TEUR 3,302), are used as collateral for bank loans.

Investments accounted for using the equity method (16)

Manz AG holds 40 % of voting rights and shares in CADIS Engineering GmbH, Schwendi, Germany. Manz AG has call options to buy the shares of the other shareholders. The call options are classified as insubstantial because the instrument is not in the money and Manz AG does not benefit from exercising the instrument for other reasons either. One of the former shareholders can demand the assignment of the shares from Manz AG through his call options. As the call options are deemed substantial, the shareholder holding them has gained control over the company. In contrast, Manz AG´s call option is not classified as substantial as of the balance sheet date.

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Current assets	949	1,172
Non-current assets	2,707	2,515
Short-term debts	1,208	467
Non-current liabilities	1,297	1,462
Shareholders`equity	**1,151**	**1,758**
Stake of Group in equity capital	40 %	40 %
Book value of the share in the Group	**2,011**	**2,300**

(in TEUR)	Jan. 1 to Dec. 31, 2022	Jan. 1 to Dec. 31, 2021
Revenues	2,024	767
Operating earnings (EBIT)	–556	–275
Earnings before taxes (EBT)	–607	–329
Income tax expense	–	–
Earning after tax	–607	–329
Other comprehensive income	–	–
Overall result for the financial year	**–607**	**–329**

Manz AG holds 24.99 % of voting rights and shares in Q.big 3D GmbH, Aalen, Germany. Manz AG has call options to acquire the shares of the previous shareholder. The required revenue threshold to exercise the purchase options is significantly above the current revenue level of the company. This means that the company would need to achieve a significant increase in revenue to meet the conditions for exercising the options. Since the rights cannot be exercised on the balance sheet date, the purchase option is not considered substantial.

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Current assets	518	889
Non-current assets	611	447
Short-term debts	811	175
Non-current liabilities	503	253
Shareholders`equity	**–185**	**908**
Stake of Group in equity capital	24.99 %	24.99 %
Book value of the share in the Group	**496**	**905**

(in TEUR)	Jan. 1 to Dec. 31, 2022	Jan. 1 to Dec. 31, 2021
Revenues	527	102
Operating earnings (EBIT)	–1,093	–713
Earnings before taxes (EBT)	–1,093	–713
Income tax expense	–	198
Earning after tax	–1,093	–515
Other comprehensive income	–	–
Overall result for the financial year	**–1,093**	**–515**

Manz AG holds a 40 % interest in Customcells Tübingen GmbH, Tübingen, Germany.

(in TEUR)	Dec. 31, 2022
Current assets	2,717
Non-current assets	5,398
Short-term debts	741
Non-current liabilities	4,056
Shareholders`equity	**3,318**
Stake of Group in equity capital	40 %
Book value of the share in the Group	**5,125**

(in TEUR)	Jan. 1 to Dec. 31, 2022
Revenues	1,971
Operating earnings (EBIT)	–1,996
Earnings before taxes (EBT)	–2,070
Income tax expense	–
Earning after tax	–2,070
Other comprehensive income	–
Overall result for the financial year	**–2,070**

As of December 31, 2022, the associated companies had no (previous year: no) contingent liabilities or capital commitments.

Financial assets (17)

Manz AG holds an investment of 11.1 % in NICE PV Research Ltd. Beijing, PRC. The fair value of the investment as of December 31, 2022 was TEUR 0 (previous year: TEUR 0).

Manz AG holds an investment of 2.8 % in MetOx Technologies Inc., Houston, United States of America. The fair value of the investment amounted to TEUR 1,798 as of December 31, 2022 (previous year: TEUR 1,798).

Manz AG holds an investment of 8.7 % in ThermAvant Technologies LLC, Columbia, United States of America. The entity valuation carried out at the end of the year did not result in any change in the fair value of the shares of TEUR 2,031.

Other non-current assets (18)

The other non-current assets contains of non-current recivables of leases of TEUR 371 (previous year: TEUR 575) and tenant's loan of TEUR 1,836 (previous year: TEUR 1,291). The receivables of leases are corresponding to their fair value and not impaired. The tenant's loan will be repaid at the end of the lease agreement.

Inventories (19)

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Materials and supplies	29,174	16,855
Unfinished goods and products	12,023	6,669
Finished goods and merchandise	1,364	1,308
Advance payments	13,639	6,055
	56,200	**30,887**

The total valuation allowances on inventories increased to TEUR 4,836 (previous year: TEUR 4,708) after taking into account exchange rate differences, scrapping and write up of inventory. In the reporting period, a write down of TEUR 408 (previous year: TEUR 773) and a write up of TEUR 281 (previous year: TEUR 568) were recognized. The carrying amount of inventories pledged as collateral amounts to TEUR 6,375 (previous year: TEUR 4,074).

The amount of advance payments in 2021 has been adjusted due to a restatement, further information please refer to the section "Correction of errors in accordance with IAS 8".

The carrying amount of inventories recognized at fair value less costs to sell is TEUR 56,200 (previous year: TEUR 30,887).

Trade receivables (20)

Trade receivables do not bear interest and are usually due within one year.

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Trade receivables from third parties	47,204	33,691
Trade receivables from associates	384	0
	47,588	**33,691**

Impairments on trade receivables have developed as follows:

(in TEUR)	Dec. 31, 2022		Dec. 31, 2021	
	Stage 2	Stage 3	Stage 2	Stage 3
As of January 1	129	1,306	165	1,162
Currency translation	–16	–3	11	14
Utilization	–	–	–	91
Reversal	–	10	63	–
Reclassification	–	23,827	–	–
Addition	229	60	16	221
As of December 31	**342**	**25,181**	**129**	**1,306**

The reclassification in the table above in the amount of TEUR 23,827 corresponds to the reclassification of contract assets in note (21).

Trade receivables by maturity as follows:

(in TEUR)	Dec. 31, 2022		Dec. 31, 2021	
	Stage 2	Stage 3	Stage 2	Stage 3
Gross value	47,774	25,337	33,814	1,312
thereof				
Not due	38,962	43	28,616	–
Overdue 1–30 days	1,501	23,827	1,811	–
Overdue 31–60 days	1,437	–	158	–
Overdue 61–90 days	1,237	–	199	–
Overdue 91–180 days	446	–	128	212
Overdue more than 180 days	4,191	1,467	2,902	1,100
Valuation allowance and impairment	–342	–25,181	–129	–1,306
Net carrying amount	**47,432**	**156**	**33,685**	**6**

In stage 2, a provision matrix is used to calculate a portfolio based valuation allowance. Receivables in stage 3 were impaired based on an individual risk assessment. Receivables in stage 2 are subject to the risk level with a low credit risk (not affected by credit rating), while receivables in impairment stage 3 are subject to the risk level with a high credit risk (affected by credit rating).

Contract assets (21)

Contract assets consisted of the following amounts:

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Manufacturing costs, including profit or loss on the construction contracts	237,010	348,821
Minus advance payments received	–163,314	–285,380
	73,696	**63,441**

Impairments on contract assets developed as follows:

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
As of January 1	30,955	6,615
Currency translation	–232	464
Utilization	0	129
Reversal	911	0
Reclassification	–23,827	0
Addition	144	24,004
As of December 31	**6,129**	**30,954**

The additions in the table above in 2022 relate to the increased impairment requirement for contract assets for the large-scale CIGS*fab* project in 2021. For a description of the retrospective impairment of these contract assets as of December 31, 2021, please refer to the section "Correction of errors in accordance with IAS 8".

Derivative financial instruments (22)

On the balance sheet date, the following forward exchange transactions were used to hedge the exchange rate of USD/EUR transactions and GBP/EUR transactions (previous year: USD/EUR transactions) in the course of the following financial year:

(in TEUR)	Dec. 31, 2022		Dec. 31, 2021	
	Currency hedging	Interest rate derivatives	Currency hedging	Interest rate derivatives
Change in fair value	1,536	0	–225	0
Nominal value	59,485	0	4,682	0
Positive fair value	1,513	0	0	0
Negative fair value	202	0	225	0
Remaining term	max. 12/2024	–	max. 03/2023	–

Other current assets (23)

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Receivables from IPCEI Funding	7,266	0
Restricted cash	6,782	6,893
Tax receivables (not income and income taxes)	4,763	1,795
Other deferrals (primarily insurance policies)	3,551	2,270
Receivables for employees	441	269
Current receivables of leases	219	219
Receivables from legal case claim	0	3,750
Other	3,585	2,595
	26,607	**17,791**

The receivables from IPCEI funding in the amount of TEUR 7,266 are costs incurred that have not yet been submitted to the funding agency. These are submittable development costs with reasonable assurance of reimbursement.

The other current assets are not overdue and no impairment losses were recognized. "Other" mainly includes tax credits of TEUR 3,098 (previous year: TEUR 2,345) related to a grant for royalty, research and development activities in Italy. "Restricted cash" comprises cash deposits to banks as security for credit facilities in individual cases.

Cash and cash equivalents (24)

Cash and cash equivalents include cash on hand, cash accounts, and short-term bank deposits. On bank deposits and current cash investments a risk provision in the amount of TEUR 23 (previous year: TEUR 24) was recorded.

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Cash and cash equivalents	33,604	36,086

Equity (25)

Changes in the equity and comprehensive income are presented separately in the "Consolidated Statement of Changes in Equity" (Appendix 5).

The Managing Board and Supervisory Board have defined a minimum equity ratio of 40 % and gearing of less than 50 % as targets. Gearing is defined as the quotient of net debt and equity of the shareholders of Manz AG.

Issued capital

The subscribed capital of the parent company, Manz AG, is reported as issued capital. The issued capital of EUR 8,540,286.00 (previous year: EUR 7,756,804.00) is divided into 8,540,286 (previous year: 7,756,804) no-par-value registered shares with a proportional amount of subscribed of EUR 1.00 per share.

In the financial year 2022, 774,408 new no-par value shares were subscribed and issued as part of a capital increase from authorized capital. In addition, 9,074 new no-par value shares were subscribed and issued from conditional capital (Conditional Capital II) in the financial year 2022 as a result of the exercise of subscription rights ("performance shares").

Authorized capital

By resolution of the Managing Board of May 23, 2022, with the approval of the Supervisory Boards, the share capital of Manz AG was increased by 774,408.00 Euros from 7,756,804.00 Euros to 8,531,212.00 Euros by issuing 774,408 new no-par value bearer shares against cash contribution, partially exercising the authorization of the Annual General Meeting of July 7, 2021, in accordance with Article 3 (3) of the Articles of Incorporation (Authorized Capital 2021). The new shares were issued at the lowest issue price of EUR 1.00 per share, i.e. at the total issue price of EUR 774,408.00, plus a premium of EUR 38.53 per share, i.e. at the placement price of EUR 30,612,348.24. The shareholders' statutory subscription rights were excluded in accordance with Article 203, Paragraphs 1 and 2, Article 186, Paragraph 3, Sentence 4, and Article 3, Paragraph 3, Second Subparagraph, Sentence 3, First Indent, of Manz AG's Articles of Incorporation. The implementation of the capital increase will be used to finance the further growth of Manz AG.

After the partial exercise, the authorized capital continues to exist to the following extent:

Based on the resolution of the Annual General Meeting of July 7, 2021, the Executive Board of the company is authorized, with the consent of the Supervisory Board, pursuant to Article 3 Paragraph 3 of the Articles of Incorporation, to increase the share capital of the company in the period until July 6, 2026 once or in partial amounts by an additional of up to EUR 3,097,636.00 by issuing a total of up to 3,097,636 new bearer shares (no-par value shares) against cash or non-cash contributions (Authorized Capital 2021).

In principle, the new shares are to be offered to the shareholders for subscription. The new shares may also be taken over by banks designated by the Executive Board with the obligation to offer them to the shareholders for subscription (indirect subscription right). However, the Executive Board was authorized, with the consent of the Supervisory Board, to exclude the shareholders' subscription rights

- in the case of a capital increase against contributions in kind for the acquisition of enterprises, parts of enterprises or participations in enterprises or of other assets or for the implementation of mergers;

- to the extent necessary to grant to the holders of bonds with warrants or convertible bonds, profit participation rights or participating bonds (or combinations of these instruments) issued by the company or direct or indirect group companies of the company a subscription right to new shares to the extent to which they would be entitled after exercising their option or conversion right or after fulfilment of their conversion obligation;

- to exclude fractional amounts from the subscription right.

The Executive Board is authorized, with the consent of the Supervisory Board, to determine the further details of the implementation of capital increases from the authorized capital.

The Supervisory Board is authorized to amend the wording of the Articles of Incorporation in accordance with the implementation of the increase in the share capital through the exercise of the authorized capital and after the authorization period has expired.

Conditional capital

Authorization to issue bonds with option or conversion rights or conversion obligations, profit participation rights and participating bonds (or combinations of these instruments) as well as Conditional Capital I

The Annual General Meeting of July 2, 2019 authorized the Executive Board, with the consent of the Supervisory Board, to issue bearer bonds with warrants or convertible bonds, profit participation rights or participating bonds or a combination of these instruments (together "bonds") with a total nominal value of up to EUR 150 million on one or more occasions until 1 July 2024 and to grant option rights to the holders of bonds with warrants or conversion rights to the holders of convertible bonds for bearer shares in the company with a proportionate amount of the share capital of up to EUR 3,100,000.00 in total in accordance with the more detailed provisions, to grant the holders of convertible bonds conversion rights for bearer shares of the company with a proportionate amount of the share capital of up to EUR 3,100,000.00 in total in accordance with the terms and conditions of the bonds with warrants or convertible bonds.

The statutory subscription right is granted to the shareholders in such a way that the bonds are taken over by a credit institution or a syndicate of credit institutions with the obligation to offer them to the shareholders for subscription. If bonds are issued by a group company of Manz AG within the meaning of Section 18 of the German Stock Corporation Act (AktG), the company must ensure that the statutory subscription right is granted to the shareholders of Manz AG accordingly.

However, the Executive Board is authorized, with the consent of the Supervisory Board, to exclude fractional amounts from the shareholders' subscription right and to exclude the subscription right also to the extent necessary to grant the holders of previously issued bonds with option or conversion rights or conversion obligations a subscription right to the extent to which they would be entitled as shareholders after exercising the option or conversion rights or upon fulfilment of the conversion obligation.

The Executive Board is further authorized, with the consent of the Supervisory Board, to fully exclude the subscription right of the shareholders to bonds issued with option and/or conversion rights or conversion obligations, provided that the Executive Board, after due examination, comes to the conclusion that the issue price of the bonds is not significantly lower than their hypothetical market value determined in accordance with recongized, in particular financial mathematical methods. This authorization to exclude subscription rights applies to bonds issued with option and/or conversion rights or conversion obligations, with option and/or conversion rights or conversion obligations on shares with a pro rata amount of the share capital which in total may not exceed 10 % of the share capital, either at the time the authorization becomes effective or – if this value is lower – at the time the present authorization is exercised. The following shall be counted towards the aforementioned ten percent limit:

- new shares issued from authorized capital excluding subscription rights pursuant to Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG) during the term of this authorization until the issue of the bonds with option and/or conversion rights or conversion obligations without subscription rights pursuant to Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG), as well as

- such shares which are acquired on the basis of an authorization of the general meeting and which are sold in accordance with Section 71 (1) No. 8 Sentence 5 of the German Stock Corporation Act (AktG) in conjunction with Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG) during the term of this authorization until the issue of the bonds with option and/or conversion rights or conversion obligations without subscription rights in accordance with Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG), excluding subscription rights.

Insofar as profit participation rights or participating bonds without option rights or conversion rights/obligations are issued, the Executive Board shall be authorized, with the consent of the Supervisory Board, to exclude the shareholders' subscription rights altogether. If these profit participation rights or participating bonds have bond-like features, i.e., do not establish any membership rights in the company, do not grant any participation in the liquidation proceeds and the amount of interest is not calculated based on the amount of the net profit for the year, the balance sheet profit or the dividend. Furthermore, in this case the interest rate and the issue amount of the profit participation rights or participating bonds must correspond to the current market conditions at the time of issue.

Pursuant to Article 3 Paragraph 4 of the Articles of Incorporation, the share capital of the company is conditionally increased by up to EUR 3,100,000.00 by issuing up to 3,100,000 new bearer shares (no-par value shares) (Conditional Capital I). The conditional capital increase shall only be carried out to the extent that the holders of option or conversion rights or those obliged to convert from option or convertible bonds, profit participation rights or participating bonds issued by the company or a group company of the company within the meaning of Section 18 of the German Stock Corporation Act (AktG) on the basis of the resolution passed by the Annual General Meeting of July 2, 2019 under agenda item 5. The shareholders may exercise their option or conversion rights or, if they are obliged to convert, fulfil their conversion obligation, provided that no cash settlement is granted and no treasury shares or shares of another listed company are used for servicing. The new shares shall be issued at the option or conversion price to be determined in accordance with the aforementioned authorization resolution. The new shares shall participate in the profits from the beginning of the financial year in which they come into existence due to the exercise of option or conversion rights or the fulfilment of conversion obligations. The Executive Board is authorized, with the consent of the Supervisory Board, to determine the further details of the implementation of the conditional capital increase.

Authorization to issue share subscription rights as part of the Manz Performance Share Plan 2015 and Conditional Capital II

The Annual General Meeting of July 7, 2015 authorized the Executive Board, with the consent of the Supervisory Board, to grant up to 59,000 subscription rights ("performance shares") for a total of up to 118,000 shares in the company to members of the management of affiliated companies of the company as well as to executives of the company below the Executive Board and executives of affiliated companies of the company below the management, in each case in Germany and abroad, on one or more occasions up to and including 30 June 2020. The Supervisory Board was authorized to grant up to 56,000 subscription rights ("performance shares") for a total of up to 112,000 shares in the company to members of the Executive Board of the company on one or more occasions until June 30, 2020 inclusive.

The granting, structuring and exercise of the subscription rights shall be carried out in accordance with the provisions set out in the resolution of the Annual General Meeting of July 7, 2015.

The Manz Performance Share Plan 2015 for members of the Managing Board and executives of Manz AG and its group companies was explained in a report by the Managing Board to the Annual General Meeting on July 7, 2015.

The authorization of July 7, 2015 was revoked by resolution of the Annual General Meeting of July 2, 2019, insofar as no subscription rights have yet been issued on the basis of this authorization.

As a result of the exercise of subscription rights, a total of 21,790 new no-par value shares have been issued to date from conditional capital (Conditional Capital II).

Pursuant to Article 3 (5) of the Articles of Incorporation, the share capital of the company is conditionally increased by up to EUR 208,210.00 by issuing up to 208,210 no-par value bearer shares (Conditional Capital II). The conditional capital increase serves to secure the rights of the holders of subscription rights (“performance shares”), which were granted on the basis of the authorization of the Annual General Meeting of July 7, 2015. The shares will be issued at the issue price stipulated in the authorization resolution of the Annual General Meeting of July 7, 2015. The conditional capital increase will only be implemented to the extent that subscription rights are exercised and the company does not grant treasury shares or a cash settlement to fulfil the subscription rights. The new shares are equal to the already issued shares of the same class with regard to their dividend entitlement. The Executive Board and, insofar as members of the Executive Board are concerned, the Supervisory Board are authorized to determine the further details of the conditional capital increase and its implementation.

Authorization to issue stock subscription rights as part of the Manz Performance Share Plan 2019 and Conditional Capital III

The Annual General Meeting on July 2, 2019 authorized the Management Board, with the consent of the Supervisory Board, to issue 95,000 subscription rights for a total of up to 190,000 shares in the company to the members of the management of affiliated companies of the company on one or more occasions up to and including June 30, 2024 as well as to executives of the company below the Management Board and executives of affiliated companies, both in Germany and abroad. The Supervisory Board was authorized to grant a total of up to 85,000 subscription rights for a total of up to 170,000 shares in the company to members of the company´s Management Board on one or more occasions up to and including June 30, 2024.

The subscription rights are granted, structured and exercised in accordance with the provisions laid down in the resolution of the Annual General Meeting of July 2, 2019.

Pursuant of Section 3 (6) of the Articles of Incorporation, the company´s share capital is conditionally increased by up to EUR 360,000.00 through the issue of up to 360,000 no-par value bearer shares (Conditional Capital III). The conditional capital increase serves to secure the rights of the holders of subscription rights, which were granted on the basis of the authorization of the Annual General Meeting on July 2, 2019. The conditional capital increase will only be carried out to the extend that subscription rights are exercised and the company grants neither treasury shares nor cash compensation to fulfill the subscription rights. With regard to their entitlement to dividends, the new no-par value bearer shares are the same as the shares of the same class that have already been issued. The Management Board and, insofar as members of the Management Board are affected, the Supervisory Board are authorized to determine the further details of the conditional capital increase and its implementation.

Furthermore, the general meeting on June 30, 2020 authorized the Managing Board – for the issue of shares to members of the Managing Board – the Supervisory Board, to use own shares for servicing subscription rights, applying Manz Performance Share Plan 2015, which was resolved under item 6 of the agenda according to the Annual General Meeting on July 7, 2015 or Manz Performance Share Plan 2019, which was resolved under item 6 of the agenda according to the Annual General Meeting on July 2, 2019 for the issue of shares to members of the Managing Board and executive personnel. This reissuing authorization defines the group of people, to whom Manz shares can be transferred to.

The possibility to fulfill subscription rights by granting own shares of Manz AG to those entitled, is a suitable way to counteract the dilution of capital holdings and voting rights, which occurs when fulfilling subscription rights using newly created shares from conditional capital. As long as the company uses this possibility, the Conditional Capital II set forth in Article 3, Paragraph 5 of the Articles of Incorporation and accordingly the Conditional Capital III set forth in Article 3, Paragraph 6 need not be used. Whether or not and to what extent the authorization to dispense treasury shares when fulfilling subscription rights will be used, or whether new shares from conditional capital will be dispensed instead, will be decided by the Managing Board, and in cases where a member of the Managing Board is exercising subscription rights then by the Supervisory Board, both of which when doing so will act in the best interests of the company and its shareholders.

Capital reserves

The capital reserves mainly contain the premium from payments by shareholders less the cost of raising capital after taxes. Furthermore, the value of the share-based remuneration granted as a salary component to executives (including the Executive Board) in the form of equity instruments is recognized.

In the 2022 financial year, a total of EUR 30.0 million (previous year: EUR 15.0 million) was withdrawn from the capital reserve and transferred to retained earnings. The withdrawal was unanimously approved by the Management Board.

Treasury shares

As of December 31, 2022, Manz AG held no (previous year: no) treasury shares. In the 2022 fiscal year, Manz AG acquired no (previous year: no) treasury shares.

The Annual General Meeting of June 30, 2020 authorized the Executive Board of the company to acquire own shares until June 29, 2025 in accordance with Section 71 (1) No. 8 of the German Stock Corporation Act (AktG) with a proportionate amount of the share capital attributable to them of up to 10 % of the share capital of the company existing at the time this authorization becomes effective or – if this amount is lower – at the time this authorization is exercised. The shares acquired on the basis of this authorization, together with other shares of the company which the company has already acquired and still holds or which are attributable to the company pursuant to Sections 71d and 71e of the German Stock Corporation Act (AktG), may at no time account for more than 10 % of the share capital of the company. The provisions of Section 71 (2) Sentences 2 and 3 of the German Stock Corporation Act (AktG) shall be observed.

The acquisition may only be made on the stock exchange or by means of a public purchase offer addressed to all shareholders and must comply with the principle of equal treatment of shareholders (Section 53a of the German Stock Corporation Act (AktG)).

The Executive Board was authorized to sell the treasury shares acquired on the basis of the above authorization in a manner other than via the stock exchange or by means of an offer to all shareholders, provided that the sale is made in return for a cash payment and at a price that is not significantly lower than the stock exchange price of the company's shares of the same class at the time of the sale. This authorization to use shares is limited to shares with a proportionate amount of the share capital that may not exceed a total of 10 % of the share capital of the company, either at the time this authorization becomes effective or – if this amount is lower – at the time this authorization is exercised. The maximum limit of 10% of the share capital shall be reduced by the pro rata amount of the share capital attributable to those shares that are issued or sold during the term of this authorization under exclusion of the subscription right pursuant to or in accordance with Section 186 (3) Sentence 4 of the German Stock Corporation Act. The maximum limit of 10 % of the share capital shall also be reduced by the proportionate amount of the share capital attributable to those shares that are to be issued to service bonds with option or conversion rights or option or conversion obligations, insofar as these bonds are issued during the term of this authorization under exclusion of the subscription right in analogous application of Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG).

The Executive Board was also authorized to transfer the treasury shares acquired on the basis of the above authorization to third parties, provided this is done for the purpose of acquiring companies, parts of companies or participations in companies or other assets or to carry out business mergers.

The Managing Board and – insofar as the obligation exists towards members of the Managing Board – the Supervisory Board were also authorized to use the treasury shares acquired on the basis of the above authorization to fulfill subscription rights that were granted within the scope of the Annual General Meeting on July 07, 2015 under item 6 Manz Performance Share Plan 2015 resolved on the agenda or as part of the Manz Performance Share Plan 2019 resolved by the Annual General Meeting on July 2, 2019 under item 6 of the agenda. The Management Board was also authorized to transfer the treasury shares acquired on the basis of the above authorization to third parties, insofar as this is done for the purpose of acquiring companies, parts of companies or interests in companies or other assets or to carry out business combinations.

The Executive Board was further authorized to use the treasury shares acquired on the basis of the above authorization to fulfil subscription or conversion rights arising from the exercise of option or conversion rights or to fulfil option or conversion obligations granted or imposed in connection with the issue of bonds with warrants or convertible bonds, profit participation rights or participating bonds (or combinations of these instruments) of the company or its group companies.

The Executive Board was also authorized to transfer the treasury shares acquired on the basis of the above authorization to employees of the company or employees or members of governing bodies of subordinate affiliated companies of the company within the meaning of Sections 15 et seq. of the German Stock Corporation Act (AktG).

Revenue reserves

Revenue reserves include the earnings generated in the past by the companies included in the consolidated financial statements, insofar as they have not been distributed. It should be noted that both withdrawals from the capital reserve and transfer to the revenue reserve have been made and must therefore also be included in the calculation of the revenue reserve.

Accumulated other comprehensive income

Accumulated other comprehensive income includes reserves for the revaluation of pensions, financial assets measured at fair value through other comprehensive income (FVOCI), reserves for the subsequent measurement of cash flow hedges, income and expense recognized directly in equity from financial assets accounted for using the equity method, and currency translation adjustments from the translation of the financial statements of foreign subsidiaries.

Non-controlling interests

The non-controlling interests relate to the minority shareholders of Suzhou Manz New Energy Equipment Co. Ltd. in which Manz AG holds a 56% interest. The share of equity and annual profit/loss attributed to the minority shareholders is disclosed separately in the balance sheet and/or income statement. In the previous year, non-controlling interests related to the minority shareholders of Manz India Private Limited, in which Manz Asia Ltd. held a 75 % interest.

Proposed appropriation of profits

In accordance with Section 58 (2) of the German Stock Corporation Act (AktG), Manz AG's dividend payout is based on the retained profits disclosed in Manz AG's annual financial statements (individual financial statements) as of December 31, 2022. Manz AG's annual financial statements as of December 31, 2022 closed with a net loss for the year of TEUR 7,360 (previous year: net loss of TEUR 6,464).

Information regarding capital management

The objectives, methods and processes of capital management are described in the report on opportunities and risks in the management report.

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Cash and cash equivalents	33,604	36,086
Financial liabilities	44,279	49,296
Net financial liabilities	10,675	13,210
Total Manz AG shareholders equity capital	**102,057**	**87,688**
Equity ratio (in %)	29.66 %	30.91 %
Gearing (in %)	10.5 %	15.1 %

In the financial year 2022, net financial liabilities decreased as a result of repayment of bank liabilities. Cash and cash equivalents are lower than the level of financial liabilities. This shortfall is due to a delay in the project schedule for major orders. Furthermore, the equity ratio fell slightly despite the capital increase. It is below the targeted minimum equity ratio of 40 %. As a result of the decrease in net financial liabilities and increase in equity, the ratio of net financial liabilities to equity before non-controlling interests, has decreased to 10.5 % (previous year: 15.1 %). The Managing and Supervisory Boards have defined gearing of less than 50 % as a target. The specified target figure was achieved in the year under review.

Significant uncertainties in the assessment of the company´s ability to continue as a going concern are discussed in the section “Liquidity risk” and in the Group management report in the risk report under the section “Liquidity and financing risks”.

Non-current financial liabilities (26)

Non-current financial liabilities totaling TEUR 6,738 consist of long-term loans of TEUR 6,290 from Manz Italy Srl which have a remaining term of up to five year and long-term loans of TEUR 448 from Manz Hungary Kft. which have a remaining term of up to six years.

Non-current financial liabilities from leases (27)

Of the non-current financial liabilities from leases, TEUR 3,970 have a remaining term of more than one year and TEUR 5,951 of more than two years.

Pension provisions (28)

In the calculation of pension provisions, the selection of the discount rate or trend assumptions plus the formation of biometric probabilities, leads to differences in comparison to the actual obligations emerging over the course of time.

The components of expenses for pension benefits recognized in the Group’s income statement and the amounts carried in the balance sheet are presented in the following tables.

The present value of performance-based obligations at the end of the year is balanced against the plan assets at fair market value (financing status).

Pension provisions

(in TEUR)	2022	2021
Changes in the present value of benefits		
Present value of performance-based obligations as of Jan. 1	**6,850**	**7,216**
Service cost	7	8
Interest cost	53	33
Benefits paid	–470	–634
Actuarial losses (+) / gains (–)		
due to changes in demographic assumptions	22	–36
due to changes in financial assumptions	–854	77
due to adjustments based on past experience	0	–1
Currency differences from international plans	–94	187
Present value of performance-based obligations as of Dec. 31.	**5,512**	**6,850**
Change in plan assets		
Value of plan assets as of Jan. 1	**710**	**508**
Income from plan assets	5	2
Company contributions	377	326
Benefits paid	–200	–178
Actuarial losses (+) / gains (–)	45	8
Currency differences from international plans	–29	44
Value of plan assets as of Dec. 31	**909**	**710**
Financing status (= pension provisions)	**4,603**	**6,140**
which apply to:		
Manz AG, Reutlingen	2,730	3,509
Manz Italy Srl, Sasso Marconi/Italy	894	1,110
Manz Taiwan Ltd., Chungli/ Taiwan	980	1,521

The pension obligations of Manz AG, Reutlingen consist of two different pension commitments:

1. a pension plan of the Maier company in Tübingen, which was purchased by Manz. All company employees over the age of 25 were pension beneficiaries. The pension plan was closed as of July 15, 1997. A reinsurance policy exists for this pension plan and the resulting claims.

2. a direct commitment with reinsurance for the former Executive Board member Otto Angerhofer. Mr. Angerhofer received a monthly benefit from this commitment until his death. His widow continues to receive 60 % of this benefit.

In addition, there is a reinsured provident fund for the Executive Board with a defined contribution plan.

The obligations at Manz Italy Srl include the statutory compensation for the separation of employees in each employment relationship.

There are currently two different pension funds in Taiwan. The Old Labor Pension fund (OLPF) for pension commitments from 1984 to 2005 and the New Labor Pension fund (NLPF) for pension commitments since 2005. With the introduction of the new one, the old pension fund was closed. Under the OLPF, only around 10 % of the employees registered in the private sector were eligible for benefits as a result of the payment requirement of 25 years of service. Eligible employees do not have individual accounts, but only company accounts, which were often not funded. With the NLPF, the system was changed to a defined contribution system. Each employee now has an account and old contributions from former employers are transferred. In addition, employees can make additional contributions of their own without obligation. The government also provides guarantees for a minimum return of 2 %. Employees have the opportunity to transfer from the OLPF to the NLPF during the period from 2005 to 2010. In the NLPF, the employer pays in 6 % minimum of the salary of its employees and the employees can pay in additional personal contributions of up to 6 % of their salary.

The following amounts have been included in the income statement:

(in TEUR)	2022	2021
Current service costs	–7	–8
Net interest costs	–48	–31

The service cost is reported in personnel expenses, while the interest cost is reported under financial expenses.

In the next financial year, the employer contributions to plan assets are expected to increase by TEUR 0 (previous year: TEUR 52) and the expected pension payments are TEUR 1,410 (previous year: TEUR 1,471). In the next two to five years, total expected pension payments are TEUR 1,046.

The plan assets for German pension obligations consist exclusively of reinsurance policies. The plan assets for Manz Taiwan Ltd. are legally required by law that must be paid into an external central trust (Taiwan's Labor Pension Fund). The fund's assets comprise reinsurance policies (Germany) and trust assets (Taiwan), which make up 3 % and 97 % of the fund's total assets, respectively. The assets held in trust are investment funds. The plan assets are measured at fair value.

For defined contribution plans, payments were made in the financial year under review in the amount of TEUR 554 (previous year: TEUR 389). In addition, the domestic companies also paid contributions to the state pension insurance fund in the amount of TEUR 2,915 (previous year: TEUR 2,799).

The calculation of pension reserves was carried out based on the following underlying assumptions:

(in %)	Germany		Italy		Taiwan	
	2022	**2021**	**2022**	**2021**	**2022**	**2021**
Discount rate	3.32	0.91	3.63	0.44	1.70	0.80
Salary and wage increases	2.80	2.50	2.30	1.75	5.00	4.00
Pension increases	2.30	1.70	3.23	2.81	1.70	0.80

An increase or decline in key actuarial assumptions would have the following effect on the present value of financing status:

(in TEUR)		**2022**	**2021**
Discount rate sensitivity	+0.50 %	–1,065	–884
Discount rate sensitivity	–0.50 %	1,144	1,359
Sensitivity for pension dynamics	+0.50 %	1,047	1,105
Sensitivity for pension dynamics	–0.50 %	–998	-1,117
Sensitivity for salary development	+0.50 %	895	
Sensitivity for salary development	–0.50 %	–895	

The sensitivity analyses have been determined based on a method that extrapolates the impact on the defined benefit obligation because of reasonable changes in key assumptions occurring at the end of the reporting period. The sensitivity analyses are based on a change in a significant assumption, keeping all other assumptions constant. The sensitivity analyses may not be representative of an actual change in the defined benefit obligation as it is unlikely that changes in assumptions would occur in isolation from one another.

In case of one year higher life expectancy, the pension obligation would be increased of TEUR 2,902.

The weighted average term of the defined benefit obligations at the end of the reporting year is 10.2 years (previous year: 12.0 years).

Other non-current provisions (29)

Other non-current provisions developed as follows (in TEUR):

(in TEUR)	Jan 1, 2022	Currency adjustment	Utilization	Reversal	Discount rate	Addition	Dec. 31, 2022
Warranties	2,419	–61	395	659	–8	774	2,086
Personnel	358	0	28	0	0	47	377
	2,777	**–61**	**423**	**659**	**–8**	**821**	**2,463**

(in TEUR)	Jan 1, 2021	Currency adjustment	Utilization	Reversal	Discount rate	Addition	Dec. 31, 2021
Warranties	3,370	94	2,204	602	–8	1,753	2,419
Personnel	349	0	103	0	0	112	358
	3,719	**94**	**2,307**	**602**	**–8**	**1,865**	**2,777**

Long-term personnel obligations include obligations arising from partial retirement and long-service and anniversary bonuses. The provision for partial retirement in the amount of TEUR 28 was netted against the planned assets.

Provisions for warranty obligations are recognized based on past experience. It is expected that the costs will be incurred within the next two financial years.

Current financial liabilities (30)

Basically current financial liabilities are due within one year. Due to the long-standing co-operation with the financing partners, the experience from the past that the credit lines were extended, as well as on the basis of the existing order situation, it is expected that the financing lines will continue to be available.

For the presentation of current financial liabilities, please refer to table “Development of liabilities from financing activities”

Trade payables (31)

Trade payables are accounted for at amortized cost. Their balance sheet values generally correspond to their market values and they are due within one year.

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Trade payables to third parties	73,641	66,373
	73,641	**66,373**

Contract liabilities (32)

Contract liabilities, which represent the surplus of advance payments from customer orders, consisted of the following amounts as of December 31, 2022:

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Contract liabilities	74,243	30,923

The increase in contract liabilities is due to an increase in advance payments compared to the project work performed. The increase on contract liabilities is mainly due to the contract liabilities of a major customer in the amount of TEUR 16,672. The contract liabilities from January 1, 2022 of TEUR 30.870 were recognized as revenue in the period ending December 31, 2022.

Other current provisions (33)

Other current provisions developed as follows:

(in TEUR)	Jan 1, 2022	Currency adjustment	Utilization	Reversal	Addition	Dec. 31, 2022
Personnel	2,067	–19	1,009	562	1,096	1,573
Sales comissions	486	–21	278	21	0	166
Reworking	1,479	0	632	0	718	1,565
Other	2,482	–33	1,691	758	2,844	2,844
	6,514	**–73**	**3,610**	**1,341**	**4,658**	**6,148**

(in TEUR)	Jan 1, 2021	Currency adjustment	Utilization	Reversal	Addition	Dec. 31, 2021
Personnel	2,782	72	1,235	184	632	2,067
Sales comissions	1,620	144	1,241	38	1	486
Reworking	313	0	313	0	1,479	1,479
Other	2,860	151	2,363	41	1,875	2,482
	7,575	**367**	**5,152**	**263**	**3,987**	**6,514**

Costs of the annual financial statements of TEUR 474 (previous year: TEUR 404), provisions for warranties of TEUR 420 (previous year: TEUR 355) and anticipated losses of TEUR 439 (previous year: TEUR 637) are recognized in the area “Other”.

The provisions will be settled in the next year.

Other current liabilities (34)

(in TEUR)	Dec. 31, 2022	Dec. 31, 2021
Personnel-related liabilities	6,481	6,396
Tax liabilities	1,672	3,464
Other	7,206	5,295
	15,359	**15,155**

The tax liabilities are primarily made up of value added tax liabilities. TEUR 1,200 outstanding contribution in kind to CADIS Engineering GmbH was reported under "Others". The contribution in kind is to be provided as a service to CADIS Engineering GmbH over a period of 30 months from the date of the investment February 3, 2021. TEUR 1,012 outstanding cash contribution to ThermAvant was reported under "Others", the payment has been made in January 2023. All liabilities are due within one year.

Leases

Presentation of the income statement

The following amounts were recognized in profit or loss in the financial year:

(in TEUR)	2022	2021
Income from subleases	15	18
Amortization expense for right-of-use assets	–3,456	–2,846
Interest expenses for lease liabilities	–388	–490
Expenses for current leases	–608	–825
Expenses for low-value lease assets	–86	–122
Variable lease payments	–342	–315
Total amount recognized in profit or loss	**–4,866**	**–4,580**

For the presentation of leases in the consolidated cash flow statement, please refer to Notes to the Cash Flow Statement. The cash outflows for leases are included in the cash flow from financing activities and amount to TEUR 4,111 (previous year: TEUR 3,723) in the reporting year. Payments for short-term leases and for leases based on a low-value asset or for variable lease payments that are not recognized in the lease liabilities are allocated to cash flow from operating activities.

In financial year 2019 subleases were concluded for parts of the building of the Tübingen location. It is identified as a finance lease contract as the terms of the sub-leases cover the major part of the economic life of the right of use asset. Accordingly, the right of use was reduced and at the same time receivables from subleasing relationships were recognized at the present value of EUR 795 thousand.

In the reporting period finance income of lease receivables of TEUR 15 (previous year: TEUR 18) were recorded.

Below the maturity analysis shows the lease receivables consisting of the non-discounted annual lease payments expected after the balance sheet date:

(in TEUR)	2022	2021
less than one year	219	219
one to two years	173	219
two to three years	148	173
three to four years	75	148
four to five years	0	75
more than five years	0	0
Total of non-discounted annual lease payments	**615**	**834**

Report on Financial Instruments

Trade receivables, other current assets, cash and cash equivalents, trade payables and the majority of other liabilities within the scope of IFRS 7 have short remaining terms. The carrying amounts of these financial instruments are therefore assumed to equate approximately to their fair market values.

The following table shows the reconciliation of balance sheet items to the categories of financial instruments, broken down according to the carrying amounts and fair values of the financial instruments.

Assets as of Dec. 31, 2022

IFRS 9 – Financial Assets (in TEUR)	Carrying amounts by measurement category					
	Fair value	At continued acquisition cost	Fair value through other comprehensive income (equity instruments)	Fair value through profit or loss	Not in the scope of IFRS 7, IAS 9	Carrying amount Dec. 31, 2022
Investments	3,829	0	3,829	0	0	3,829
Other non-current assets	2,681	2,310	0	0	371	2,681
Trade receivables from third parties	47,204	47,204	0	0	0	47,204
Trade receivables from associates	384	384	0	0	0	384
Derivative financial instruments	1,513	0	0	1,513	0	1,513
Other current assets	21,624	21,624	0	0	0	21,624
Cash and cash equivalents	33,604	33,604	0	0	0	33,604
	110,839	**105,126**	**3,829**	**1,513**	**371**	**110,839**

Liabilities as of Dec. 31, 2022

IFRS 9 – Financial Liabilities (in TEUR)	Carrying amounts by measurement category					
	Fair value	Fair value through profit or loss	At continued acquisition cost	Designated hedge instruments	Not in the scope of IFRS 7, IAS 9	Carrying amount Dec. 31, 2022
Financial liabilities	44,279	0	44,279	0	0	44,279
Trade payables to third parties	73,641	0	73,641	0	0	73,641
Derivative financial instruments	202	202	0	0	0	202
Other liabilities	7,205	0	7,205	0	0	7,205
	125,327	**202**	**125,125**	**0**	**0**	**125,327**

Assets as of Dec. 31, 2021

IFRS 9 – Financial Assets	Carrying amounts by measurement category					
(in TEUR)	Fair value	At continued acquisition cost	Fair value through other comprehensive income (equity instruments)	Designated hedge fund instruments	Not in the scope of IFRS 7, IAS 9	Carrying amount Dec. 31, 2021
Investments	1,798	0	1,798	0	0	1,798
Other non-current assets	2,161	1,586	0	0	575	2,161
Trade receivables from third parties	33,691	33,691	0	0	0	33,691
Other current assets	15,743	15,743	0	0	0	15,743
Cash and cash equivalents	36,086	36,086	0	0	0	36,086
	89,479	**87,106**	**1,798**	**0**	**575**	**89,479**

Liabilities as of 31.12.2021

IFRS 9 – Financial Liabilities	Carrying amounts by measurement category					
(in TEUR)	Fair value	At continued acquisition cost	Fair value through other comprehensive income (equity instruments)	Designated hedge fund instruments	Not in the scope of IFRS 7, IAS 9	Carrying amount Dec. 31, 2021
Financial liabilities	49,296	0	49,296	0	0	49,296
Trade payables to third parties	66,373	0	66,373	0	0	66,373
Derivative financial instruments	225	225	0	0	0	225
Other liabilities	5,295	0	5,295	0	0	5,295
	121,189	**225**	**120,964**	**0**	**0**	**121,189**

Measurement classes

The Group uses the following hierarchy to determine fair values of financial instruments for each valuation method:

Level 1: (unadjusted) prices for identical assets or liabilities quoted on active markets.

Level 2: input data that is observable either directly (i.e., as prices) or indirectly (i.e., derived from prices) for the asset or liability and that does not represent any quoted price as described in Level 1.

Level 3: input data that is not based on observable market data for the measurement of the asset or liability (unobservable input data).

The financial assets and liabilities recognized by Manz at fair market value are broken down by the fair market value hierarchy levels as follows:

Assigned to fair market value hierarchy levels

(in TEUR)	Dec. 31, 2022	Fair value hierarchy Level 1	Level 2	Level 3
Assets at fair value – affecting net income				
Derivatives	1,513	0	1,513	0
Assets at fair value – not affecting net income				
Investments	3,829	0	0	3,829
Liabilities at fair value – affecting net income				
Derivatives with a balance sheet hedging relationship	29	0	29	0
Derivatives	173	0	173	0
Liabilities at fair value – not affecting net income				
Derivatives with on-balance-sheet hedging relationship	0	0	0	0

(in TEUR)	Dec. 31, 2021	Fair value hierarchy Level 1	Level 2	Level 3
Assets at fair value – affecting net income				
Derivatives with a balance sheet hedging relationship	0	0	0	0
Assets at fair value – not affecting net income				
Investments	1,798	0	0	1,798
Derivatives with a balance sheet hedging relationship	0	0	0	0
Liabilities at fair value – affecting net income				
Derivatives	225	0	225	0
Liabilities at fair value – not affecting net income				
Derivatives with on-balance-sheet hedging relationship	0	0	0	0

The measurement of the fair market value of the financial instruments in levels 1, 2, and 3 held as of December 31, 2022, resulted in the following total income and expenses:

(in TEUR)	2022	2021
Assets		
included in the income statement	1,513	0
recorded in equity	0	–7,260
Liabilities		
included in the income statement	23	–225
recorded in equity	0	0

Financial assets of the fair market value hierarchy level 3

Development (in TEUR)	2022	2021
As of January 1	1,798	7,260
Additions	2,031	1,798
Disposals	0	0
Change in fair value	0	–7,260
As of December 31	**3,829**	**1,798**

The Group holds a non-controlling 11.1 % stake in NICE PV Research Ltd. Beijing, PR China. This company is not listed on the stock exchange. The Group holds these shares as a strategic investment and has therefore measured them at fair value through other comprehensive income.

As of December 31, 2021, the fair value of NICE PV Research Ltd. has been decreased to zero. This decrease is due to the high reported liabilities and low cash position as of December 31, 2021, combined with minimal earning prospects.

If the underlying parameters (Equity) had been 10 % higher (lower) in the current periods, the value of the stake would have been TEUR 0 higher (lower).

The Group holds 2.8 % (previous year: 3.26 %) share in MetOx Technologies Inc., Houston, United States of America. This company is not listed on the stock exchange. The Group holds these shares as a strategic investment and has therefore measured them at fair value through other comprehensive income.

If the underlying parameters (EBIT) of MetOx Technologies Inc. had been 10 % higher (lower) in the current periods, the value of the share would have been TEUR 106 higher and TEUR 12 lower, respectively. The fair value of the investment as of December 31, 2022 is TEUR 1,798.

The Group holds 8.7 % share in ThermAvant technologies LLC, Columbia, United States of America. This company is not listed on the stock exchange. The Group holds these shares as a strategic investment and has therefore measured them at fair value through other comprehensive income.

If the underlying parameters (EBIT) of ThermAvant Technologies LLC had been 10 % higher (lower) in the current periods, the value of the share would have been TEUR 386 higher and TEUR 386 lower, respectively. The fair value of the investment as of December 31, 2022 is TEUR 2,031.

Net results according to IFRS 9 valuation categories

(in TEUR)	Net profits/ losses	Total interest income/ expenses	Total interest income	Total interest expenses
Financial year 2022				
Amortized cost (AC)	5,064	–1,306	104	–1,410
thereof:				
Financial liabilities	–5,499	–1,410	0	–1,410
Financial assets	10,563	104	104	0
Derivatives	1,536	0	0	0
	6,600	**–1,306**	**104**	**–1,410**

(in TEUR)	Net profits/ losses	Total interest income/ expenses	Total interest income	Total interest expenses
Financial year 2021				
Amortized cost (AC)	–4,741	–1,043	509	–1,552
thereof:				
Financial liabilities	–3,796	–1,552	0	–1,552
Financial assets	–1,170	509	509	0
Derivatives	–225	0	0	0
	–5,191	**–1,043**	**509**	**–1,552**

The net gains and losses from the category “amortized costs (AC)” primarily include gains and losses from currency translation and changes in valuation allowances on receivables as well as losses on receivable from construction contracts.

Interest income for financial instruments in the “amortized costs (AC)” category is the result of investing liquid funds. The interest expenses within the category “amortized cost (AC)” relate to financial liabilities to banks.

Accounting and disclosure of hedge accounting

As described in the section “Consolidated group”, Manz AG acquired an 8.7 % interest in ThermAvant Technologies LLC, Columbia, United States of America, on November 7, 2022. Part of the purchase price is not due until January 2023. In order to hedge the portion of the purchase price amount in US dollars, Manz AG concluded a forward exchange transaction. The forward exchange contract hedges the full amount of the payment. The hedge effectiveness is therefore 100 %. The transaction was classified as a fair value hedge.

The hedge rate of the forward exchange contract is 1.037478. The nominal amount of the forward exchange contract is TEUR 1,012 and TUSD 1,050.

Disclosures of forward exchange contracts in fair value hedges

(in TEUR)	**2022**	**2021**
Carrying amount of the hedged items	1,012	0
Cumulative fair value hedge adjustment	0	0
Statement of financial item	Other liabilities	N/A

Financial risk management and financial derivatives

As a company which operates internationally, the Manz Group is exposed to credit, liquidity, and market risks during the course of its ordinary business activities. Market risks particularly result from changes to exchange rates and interest rates. Financial risk management measures are designed to manage and limit these market risks within the scope of operating and financial activities. Depending on the risk assessment, derivative hedging instruments are used. To reduce the default risk, hedging transactions are entered into only with leading financial institutions which have excellent credit ratings.

The basic principles of Manz financial policy are regularly determined by the Managing Board and monitored by the Supervisory Board.

For information on risk concentration, please refer to the Risk Report in the Group Management Report.

The sensitivity analyses in the following sections refer to the situation as of December 31, 2022 and 2021 respectively. The sensitivity analyses were carried out based on the hedging relationships existing as of December 31, 2022, and on the premise that net debt, the relationship between the fixed and variable interest rates of liabilities and derivatives, and the proportion of financial instruments held in foreign currencies will remain constant.

The sensitivity analyses were prepared under the assumption that the relevant items of the income statement reflect the effect of assumed changes in the corresponding market risks.

Credit risks

Credit risk is the risk that business partners will not be able to meet their contractual obligations, resulting in a financial loss for the Manz Group. Within the scope of its operating activities, the Group is particularly exposed to default risks when it comes to trade receivables and contract assets, as well as risks associated with its financing activities, including cash investments with banks and derivative financial instruments.

The credit risk from receivables from customers is managed (locally) at the company level and monitored continuously. In project business, the risk of default is minimized by advance payments. If default risks are noticeable in the case of financial assets, these risks are recognized by means of valuation allowances. The risk of default with regard to cash investments and derivative financial instruments is reduced by distributing the investments across various banks.

The maximum credit risk of financial assets (including derivatives with a positive market value) corresponds to the carrying amount recognized in the balance sheet. As of the balance sheet date December 31, 2022, the maximum credit risk was TEUR 110,839 (previous year: TEUR 89,479).

In certain cases, Manz may assume that a financial asset will default if there are internal or external indications that the outstanding amounts will not be paid in full. Such information is available, e.g., if the debtor's financial difficulties become known or if the borrower becomes insolvent or goes bankrupt. A financial asset is impaired if there is certainty that the contractual cash flows will not be realized.

There were no indications of an impairment requirement for the trade receivables that were not impaired. In order to determine the recoverability of trade receivables, valuation models are used to determine possible default rates. Both the use of default rates under consideration of different regions and an examination of individual default rates by the responsible management were carried out. The recoverability of receivables that are neither overdue nor impaired is considered very high. For special effects in 2022 for impaired receivables, please refer to the section "Corrections of errors in accordance with IAS 8". This assessment based primarily on the long-standing business relationship with most of the customers and the creditworthiness of the customers.

The other assets are not overdue.

Liquidity risks

Liquidity risks, i.e., the risk that Manz will not be able to fulfill its financial obligations, were limited by setting up financial reserves and using appropriate financial instruments to manage our future liquidity situation.

Manz Group currently finances itself through bank balances and cash credit lines. The subsidiaries in Slovakia, Hungary, Italy, China and Taiwan are financed primarily through short-term overdraft facilities and, to a lesser extent, through long-term loans. As of the reporting date December 31, 2022, the Manz Group had cash and cash equivalents of EUR 33.6 million (previous year: EUR 36.1 million), as well as unused cash and guarantee credit lines of EUR 22.5 million (previous year: EUR 17.8 million). In general, in order to reduce liquidity and financing risks, the companies of the Manz Group are required – wherever possible – to process orders in a “cash positive” manner. In this context, incoming payments should exceed outgoing payments over the entire term of the respective project. Significant delays in incoming orders or payments, higher project costs, or repayment obligations from projects can have a significant impact on the liquidity of Manz AG.

In order to promptly identify risks from delayed incoming payments, the Manz Group works with a rolling liquidity forecast that is updated every two weeks. The Managing Board carries out sensitivities with regard to short- and medium-term liquidity planning. In particular, scenarios are taken into account by means of risk discounts of 70 % on possible incoming orders in the amount of approximately 150 million euros for the forecast period until the end of April 2024. The result of this analysis is that it is highly probable that the financing can be maintained over the forecast period.

If there are significant deviations affecting liquidity beyond the assumptions taken into account in the sensitivity analysis and Manz AG is called upon as a result of the insolvency of the customer Power by Britishvolt Ltd. or other warranty guarantees, this would result in a liquidity shortfall that could jeopardize the continued existence of Manz AG. Management has identified countermeasures to counteract any liquidity shortages. These include in particular the sale of investments and other capital measures. In this respect, the continued existence of Manz AG as well as the Group is that the liquidity risks described above are unlikely to occur.

Based on current corporate planning and an order backlog of EUR 339.9 million as of December 31, 2022 (previous year: EUR 229.1 million), the Managing Board assumes that Manz AG will be able to meet its payment obligations in fiscal years 2023 and 2024. The order backlog includes major orders with the customer Power by Britishvolt Ltd. with a total order volume of EUR 95.4 million, uncertainties about future order volume due to the customer filing for insolvency.

The following lists show the contractually agreed, non-discounted interest and principal payments for the primary financial liabilities covered by IFRS 7. If the maturity date is not fixed, the liability is applied to the earliest maturity date. We mainly assume that the cash outflows will not occur earlier than shown.

(in TEUR)	Total	2023	2024	>2025
Dec. 31, 2022				
Financial liabilities	46,052	38,652	2,454	4,946
Trade payables	73,641	73,641	0	0
Financial liabilities arising from leases	15,956	4,483	4,358	7,114
Derivative financial instruments	59,485	18,597	40,889	0
Other liabilities	7,205	7,205	0	0
	202,339	**142,578**	**47,701**	**12,061**

(in TEUR)	Total	2022	2023	>2024
Dec. 31, 2021				
Financial liabilities	51,577	42,508	3,433	5,636
Trade payables	66,373	66,373	0	0
Financial liabilities arising from leases	16,413	3,750	3,410	9,253
Derivative financial instruments	4,682	3,829	853	0
Other liabilities	5,295	5,295	0	0
	144,340	**121,755**	**7,696**	**14,889**

Some of the Manz Group's cash and guarantee credits with banks that were utilised on the balance sheet date are secured in the form of pledges on land charges on buildings (see chapter (15) "Property, plant and equipment"), inventories (see chapter (19) "inventories"), receivables (in the amount of TEUR 1,483) and contract assets (in the amount of TEUR 3,736).

Currency risks

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in exchange rates. The Manz Group is primarily exposed to this risk from its business activities (if revenues and/or expenses are denominated in a currency other than the functional currency of the respective Manz company). In order to reduce the effects of exchange rate fluctuations, Manz AG continually quantifies exchange rate risks and hedges all major risks with forward exchange contracts and foreign exchange swaps whenever this is possible and economically meaningful. The hedging of value fluctuations of future cash flows from expected transactions involves planned sales in foreign currency. Differences resulting from the translation of financial statements into the Group currency are disregarded.

To present market risks, IFRS 7 requires sensitivity analyses which show possible effects of changes in relevant risk variables (e.g., exchange rates, interest rates) might have on earnings and equity. To determine the periodic effects, a possible change in the risk variables on the financial instruments held by the company on the reporting date is undertaken. It is assumed that the instruments held at the end of the year are representative for the financial year. Foreign currency derivatives are always assigned to hedged items so that no currency risks arise from these instruments.

With regard to foreign currency risks, in the 2022 fiscal year Manz was particularly exposed to exchange rate fluctuations of the Taiwanese Dollar to the US Dollar, the Chinese Renmimbi to the US Dollar, and the Euro to the British Pound, since a significant portion of the goods and services were traded in these currency pairs in the reporting year.

If the USD had appreciated by 5% against the TWD as of December 31, 2022 (2021), the consolidated result would have been TEUR 2,867 higher (previous year: TEUR 2,653 higher). Equity before tax would have been correspondingly higher by TEUR 2,867 (previous year: TEUR 2,653 higher). If the USD had been devalued by 5% against the TWD as of December 31, 2022 (2021), the consolidated result would have been TEUR 2,867 lower (previous year: TEUR 2,653 lower). Equity before taxes would have been reduced accordingly by TEUR 2,867 (previous year: TEUR 2,653 reduced).

If the USD had appreciated by 5% against the CNY as of December 31, 2022 (2021), the consolidated result would have been TEUR 928 lower (previous year: TEUR 781 lower). Equity before taxes would have been correspondingly lower by TEUR 928 (previous year: TEUR 781 lower). If the USD had been devalued by 5% against the CNY as of December 31, 2022 (2021), the consolidated result would have been TEUR 928 higher (previous year: TEUR 781 higher). Equity before taxes would have been increased accordingly by TEUR 928 (previous year: TEUR 781 higher).

If the GBP had appreciated by 5% against the Euro as of December 31, 2022 (2021), the consolidated result would have been TEUR 2,403 lower (previous year: TEUR 0 lower). quity before taxes would have been correspondingly lower by TEUR 2,403 (previous year: TEUR 0 lower). If the GBP had been devalued by 5% against the Euro as of December 31, 2022 (2021), the consolidated result would have been TEUR 2,403 higher (previous year: TEUR 0 higher). Equity before taxes would have been increased accordingly by TEUR 2,403 (previous year: TEUR 0 higher).

Interest rate risks

Interest rate risk is the risk that the fair value or future cash flow of a financial instrument will fluctuate due to changes in market interest rates. The risk of fluctuations in market interest rates to which the Group is exposed results primarily from loans with variable interest rates.

Manz has loans with variable interest rates that were subject to interest rate changes as of December 31, 2022. A hypothetical increase in these interest rates by 100 basis points (previous year: 25 basis points) per year would have led to an increase in interest expenses of TEUR 511 (previous year: TEUR 147). A hypothetical reduction of 100 basis points (previous year: 25 basis points) per year would have led to a reduction in interest expenses of TEUR 511 (previous year: TEUR 147).

Manz holds a balanced portfolio of fixed-rate and variable-rate loans to manage interest rate risk. To ensure this balance, Manz enters into interest rate swaps in which variable and fixed interest amounts are exchanged with the contractual partner.

The interest rates of the Manz Group´s financing agreements are based in part on reference interest rates such as EURIBOR and LIBOR. The current reform of the reference interest rates is of very minor importance for Manz, as the financing affected is largely short-term and the Group does not hold any derivatives in its portfolio that relate to reference interest rates. In the event of a significant change or the omission of the reference interest rates that affect the Group´s financing contracts, Manz intends to mutually agree on a standard market alternative with the banks.

Contingencies and Other Financial Obligations

As of December 31, there are partially reinsured total performance guarantees for the CIGS orders of Manz AG in the amount of EUR 21 million to the customer Chongqing Shenhua Thin Film Solar Technology Co. Ltd.

Following the decision of an arbitration court, the customer Chongqing Shenhua Thin Film Solar Technology Co., Ltd. may not submit a payment request from the bank guarantee during the arbitration proceedings taking place due to the settlement of the discussions regarding outstanding payments relating to the order between the customer Chongqing Shenhua Thin Film Solar Technology Co., Ltd. and Manz AG. At this point, we refer to the explanations in the chapter "Liquidity risks".

Events after Reporting Period

On March 14, 2023, Manz AG entered into an agreement to exchange its 40 % interest in Customcells Tübingen GmbH for a 5 % interest in Customcells Holding GmbH. Following the execution of the exchange, the shares in Customcells Holding GmbH will be included in the consolidated financial statements at fair value through other comprehensive income (equity instrument FVOCI) as of March 14, 2023 in accordance with IFRS 9. The investment is allocated to the Mobility & Battery Solutions division. Furthermore, as part of the new agreement, there is a call and a put option for the transfer of the shares in Customcells Holding GmbH in addition to a drag-along obligation. Manz AG expects a profit in the mid single-digit million range from this transaction.

Related Party Disclosures

IAS 24 requires disclosures of relationships, transactions and outstanding balances (including obligations) with related parties.

Natural related persons include the Supervisory Board and the Managing Board of Manz AG including their family members as related persons. In addition, the Manz family together holds 22.7 % of the shares in Manz AG:

It also includes companies that are controlled by a related party or are under the joint control of a related company or are involved with a related party, to the related company. The companies accounted for using the equity method are also assigned to related companies.

Accordingly, the associated companies Cadis Engineering GmbH, Schwendi, Germany, Q.big 3D GmbH, Aalen, Germany and Customcells Tübingen GmbH, Tübingen, Germany was identified as related party.

At the balance sheet date, contract assets of TEUR 0 (previous year: TEUR 102) existed with Cadis Engineering GmbH as of the balance sheet date. In fiscal year 2022 there were sales of goods in the amount of TEUR 222 (previous year: TEUR 0). There was a balance of TEUR 1,503 advance payment paid to Cadis Engineering GmbH as of the balance sheet date. This result from the purchase of a machine from Cadis Engineering GmbH, which is required for a customer project. There is an outstanding contribution in kind in the amount of TEUR 1,200, which is to be provided as a service to CADIS Engineering GmbH over a period of 30 months from the date of the investment on February 3, 2021.

At the balance sheet date, contract assets of TEUR 408 (previous year: TEUR 0) existed with Q.big 3D GmbH. In fiscal year 2022 there were sales of goods in the amount of TEUR 490 (previous year: 0 TEUR). In addition, Manz AG granted a loan in the amount of TEUR 200 (previous year: TEUR 0). There was an outstanding balance of TEUR 384 trade receivables against Q.big 3D GmbH as of the balance sheet date.

At the balance sheet date, contract assets of TEUR 583 existed with Customcells Tübingen GmbH as of the balance sheet date. There were no other outstanding balances as of the balance sheet date. Manz AG has a lease agreement with Customcells Tübingen GmbH since 2019, in 2022, the total lease payment is TEUR 98.

In addition, Manz GmbH Management Consulting and Investment, Schlaitdorf, is a related party. No consulting services were obtained from this company in the 2022 financial year (previous year: 0 TEUR). There were no outstanding balances as of the balance sheet date.

Managing Board

The following persons were appointed as members of the Managing Board in the financial year 2022.

- Martin Drasch, Chief Executive Officer
- Manfred Hochleitner, Chief Financial Officer
- Jürgen Knie, Chief Operations Officer (resigned on March 31, 2022)

Compensation of the Managing Board

The total compensation of the Managing Board in accordance with Section 314 Subsection 1 No. 6a) of the German Commercial Code amounted to TEUR 1.243 for the financial year 2022 (previous year: TEUR 1,563). The non-performance-related benefits amount to TEUR 732 (previous year: TEUR 877) and the performance-related benefits amount to TEUR 22 (previous year: TEUR 28). In the financial year 2022, this includes severance payments of TEUR 103 (previous year: TEUR 0). In the year under review, a total of 11,553 (previous year: 12,101) subscription rights to shares were granted to members of the Managing Board as part of the Performance Share Plan with a total fair value of TEUR 386 (previous year: TEUR 658).

The subscription rights to shares of Manz AG based on the 2019 Manz Performance Share Plan and the 2015 Manz Performance Share Plan (tranches 2016, 2017 and 2018) were measured at fair value using recognized financial mathematical methods.

Managing Board member Martin Drasch has a defined contribution plan. For this purpose, TEUR 12 (previous year: TEUR 12) p.a. are paid into an externally funded pension fund.

Managing Board member Manfred Hochleitner has a defined contribution plan. For this purpose, TEUR 12 (previous year: TEUR 12) p.a. are paid into an externally funded pension fund.

There is a defined contribution plan for former Managing Board member Jürgen Knie. For this purpose, TEUR 6 (previous year: TEUR 12) p.a. are paid into an externally funded pension fund. The TEUR 3 is to be accounted on a pro rata basis due to the departure of Jürgen Knie as of March 31, 2022.

The Board member Jürgen Knie (until March 2022) has been a member of the Board of Directors of Christian Maier GmbH & Co. KG Maschinenfabrik, Heidenheim an der Brenz and member of the Board of Directors of CMH Maschinenfabrik GmbH, Heidenheim an der Brenz since July 17, 2021.

The former Executive Board member Otto Angerhofer (deceased in Oct. 2020) and his widow received a pension payment of TEUR 6 (previous year: TEUR 6) in fiscal year 2022.

There is a pension obligation to the former Executive Board member or his widow in the amount of TEUR 99 (previous year: TEUR 99).

The following table provides an overview of the compensation paid to the members of the Managing Board for performing their duties in the financial year 2022 according to IAS 24.17:

(in TEUR)	Total 2022	Total 2021
Short-term employee benefits	**754**	905
Post-employment benefits	**0**	0
Benefits on termination of employment	**0**	0
Share-based compensation	**290**	542

Supervisory Board

Prof. Dr. Heiko Aurenz, Dipl. oec., Chairman of the Supervisory Board.

Dieter Manz, Dipl. Ing. (FH), Managing Director of Manz GmbH Management Consulting and Investment, Schlaitdorf, Deputy Chair of the Supervisory Board.

Prof. Dr.-Ing. Michael Powalla, Director of the Photovoltaics Division and a member of the Board of directors of the Center for Solar Energy and Hydrogen Research in Baden-Württemberg (ZSW) and professor of thin-film photovoltaics at the Karlsruhe Institute of Technology (KIT), Institute of Light Technology, Faculty of Electrical Engineering and Information Technology.

Dr. Zhiming Xu, Chief Technical Officer of the Shanghai Electric Automation Group of Shanghai Electric Group Company Ltd., Shanghai, PR China and Managing Director of Shanghai Electric Group Automation Engineering Co, LTD, Shanghai, PR China.

The Chairman of the Supervisory Board Heiko Aurenz is also Chairman of the Supervisory Board of Know How! Aktiengesellschaft für Weiterbildung, Leinfelden-Echterdingen, Germany; Dep. Chairman of the Supervisory Board of MQ Result AG, Tübingen; member of the Supervisory Board of Anna-Haag-Mehrgenerationenhaus e.V., Stuttgart; member of the Supervisory Board of Anna Haag Stiftung GmbH, Stuttgart; member of the Supervisory Board of TanDiEM gGmbH, Stuttgart; member of the Foundation Board of the Foundation Aufbruch und Chance, Stuttgart; Advisory Board Chairman of Bumüller GmbH & Co Backbetriebe KG, Hechingen; member of Advisory Board of Herrmann Ultraschalltechnik GmbH & Co. KG, Karlsbad and member of the Advisory Board of Herrmann Ultraschalltechnik Holding KG, Karlsbad.

The Deputy Chairman of the Supervisory Board Dieter Manz is a member of the Supervisory Board of TecInvest Holding AG, Puchheim, member of Advisory Board of Adlatus Robotics GmbH, Ulm, member of Advisory Board of Q. big 3D GmbH, Aalen and member of the Board of Directors of Scrona AG, Zürich, Switzerland.

Supervisory Board member Prof. Dr.-Ing. Michael Powalla does not hold any mandates in other statutory Supervisory Boards or comparable domestic and foreign supervisory bodies of commercial companies.

Supervisory Board member Dr. Zhiming Xu is a member of the Supervisory Board of Suzhou Manz New Energy Equipment Co., Ltd., Suzhou, People's Republic of China, Deputy Chairman of the Supervisory Board of NICE PV Research Ltd., Beijing, People's Republic of China and Chairman of the Supervisory Board of Shanghai Tanzhen Laser Technology Co., Ltd., Shanghai, People's Republic of China.

Compensation of the Supervisory Board

For the financial year 2022 the members of the Supervisory Board were paid a basic compensation and additional compensation for committee activities and this was a total, including attendance fees, of TEUR 246 (previous year: TEUR 192).

Employees

The annual average number of employees in the Manz Group for fiscal year 2022 was as follows:

Average headcount during the year	2022	2021
Commercial employees	659	611
Production	799	760
Total employees	**1,458**	**1,371**

Auditor fees

The auditor fees assessed for services is split up in the following table:

(in TEUR)	2022	2021
Audit services	398	280
Other attestation services	6	6
Tax services	0	0
Other services	0	0

The other attestation services relate to the fee for the formal review of the compensation report, which was carried out in accordance with Section 162 of the German Stock Corporation Act (AktG).

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart audited the consolidated financial statements of the financial years 2022 and 2021.

In addition to the agreed fee, the fee for the audit of financial statements includes expenses for additional expenses incurred in connection with the audit of the 2021 financial statements.

Corporate Governance Code

Manz AG's Managing Board and Supervisory Board have issued the declaration required by Section 161 of the German Stock Corporation Act (AktG) and made it permanently available to shareholders on Manz AG's website at www.manz.com.

Reutlingen, March 23, 2023

The Managing Board of Manz AG

Martin Drasch

Manfred Hochleitner

Responsibility Statement

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 financial position, cash flows and profit or loss of the Group, and the Group management report, which is combined with the management report of Manz AG, includes a true and fair view of the development and performance of the business position of the Group together with a description of the principal opportunities and risks associated with the expected development of the Group.

Reutlingen, March 23, 2023

The Managing Board of Manz AG

Martin Drasch　　　Manfred Hochleitner

Independent Auditor’s Report

To Manz AG

Report on the audit of the consolidated financial statements and of the group management report

Opinions

We have audited the consolidated financial statements of Manz AG, Reutlingen, and its subsidiaries (the Group), which comprise the consolidated income statement, and the consolidated statement of comprehensive income for the fiscal year from 1 January to 31 December 2022, the consolidated balance sheet as at 31 December 2022, consolidated cash flow statement flows and consolidated statement of changes in equity for the fiscal year from 1 January to 31 December 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Manz AG for the fiscal year from 1 January to 31 December 2022. In accordance with the German legal requirements, we have not audited the content of the combined declaration on corporate governance, which is published on the website stated in the group management report and is part of the group management report (Sections 289f and 315d of the German Commercial Code [HGB]).

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 Section 315e (1) of the German Commercial Code [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 2022, and of its financial performance for the fiscal year from 1 January to 31 December 2022, 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. We do not express an opinion on the content of the combined declaration on corporate governance referred to above.

Pursuant to Section 322 (3) Sentence 1 of the German Commercial Code [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 Section 317 of the German Commercial Code [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.

Material uncertainty regarding the Group's ability to continue as a going concern

We refer to the sections "General disclosures" and "Liquidity risks" in the notes to the consolidated financial statements and the section "Risk report" in the group management report, in which the executive directors state that the Manz Group (Manz AG and its subsidiaries) is currently financed via bank balances and cash credit lines. Significant delays to incoming orders or payments, higher project costs or refund obligations from projects could have a significant impact on the liquidity of Manz AG. The Managing Board carries out sensitivity testing in respect of short- and medium-term liquidity planning. These take into account scenarios with risk discounts of 70 % on potential incoming orders in the amount of around EUR 150m for the forecast period until the end of April 2024. Should there be significant deviations with an effect on liquidity in excess of the assumptions taken into account in the sensitivity testing and claims are asserted against Manz AG from the insolvency of the customer Power by Britishvolt Ltd. or from other warranty guarantees, this would result in a liquidity shortfall, which would jeopardize Manz AG's ability to continue as a going concern. Consequently, the ability of Manz AG, and therefore also the Group, to continue as a going concern is dependent upon the liquidity risks outlined above generally not materializing. This draws attention to the existence of a material uncertainty that may cast significant doubt on the Group's ability to continue as a going concern and that represents a going concern risk pursuant to Section 322 (2) Sentence 3 of the German Commercial Code [HGB].

In accordance with Art. 10 (2) c) ii) of the EU Audit Regulation, we summarize our audit response to this risk as follows: As part of our audit procedures, we analyzed the short- and medium-term liquidity planning of Manz AG until the end of 2024 on a monthly basis along with corporate planning for 2023 and 2024 with the involvement of internal experts from the area of Strategy and Transactions, and discussed and assessed the plausibility of the underlying assumptions with the executive directors. In doing so, we in particular analyzed the planning variance of the underlying assumptions in the prior year and assessed the planned assumptions underlying incoming orders after 31 December 2022, existing orders on hand as of the reporting date and our understanding of the business. In addition, there was also a particular focus on the analysis of management's liquidity planning and in particular on the auditability of the sensitivity testing that was carried out. In order to assess the likelihood of liquidity outflows from a project with the client Power by Britishvolt Ltd. and from other warranty guarantees, we obtained the assessment of external lawyers as audit evidence and discussed this with the executive directors. We also evaluated the disclosures in the notes to the consolidated financial statements and group management report in respect of the material uncertainty regarding the Group's ability to continue as a going concern.

Our opinions are not modified in respect of this matter.

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 2022. 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. In addition to the matter described in section "Material uncertainty regarding the Group's ability to continue as a going concern," we determined the following matters to be key audit matters, which are disclosed in our auditor's report.

1. Revenue recognition on construction contracts

Reasons why the matter was determined to be a key audit matter:

Construction contracts account for a significant share of the Group's business activities. Revenue from construction contracts is recognized in accordance with IFRS 15, Revenue from Contracts with Customers, generally based on the percentage of completion.

We consider the accounting for construction contracts to be an area posing a significant risk of material misstatement (including the potential risk of management override of internal controls) and thus a key audit matter, because the assessments made by the executive directors significantly affect the calculation of the percentage of completion. This particularly applies to the estimated total costs, remaining costs to completion, estimated total revenue as well as contract risks including technical risks. Revenue, estimated total contract costs and revenue recognition may deviate significantly from original estimates based on new knowledge about cost overruns and changes in project scope over the term of a construction contract.

Auditor's response:

As part of our audit procedures, we obtained an understanding of the company's internally established methods and processes of project management in the bid and execution phase of construction contracts.

As part of our substantive audit procedures, we evaluated the executive directors' estimates and assumptions based on a risk-based selection of a sample of contracts. Our audit procedures included, among others, the review of contracts and their terms and conditions, including contractually agreed termination rights and damages. We conducted interviews with project managers on the selected projects as regards the development of the projects, the reasons for deviations between planned and actual costs, the current estimated costs to complete the projects, and the assessments of the executive directors on probabilities that contract risks will materialize. To identify anomalies in margin development throughout the projects' execution, we also used data analytics.

Moreover, we examined the billable revenue as of the reporting date and the related cost of sales recognized in profit or loss according to the percentage of completion to assess whether income is calculated in the correct period and evaluated the accounting treatment of relevant items in the balance sheet.

In the analysis performed by the executive directors for the significant customer projects, we evaluated in particular whether the requirements to recognize revenue over a period of time have been met based on a sample of construction contracts.

Our audit procedures did not lead to any reservations relating to revenue recognition on construction contracts.

Reference to related disclosures:

Additional disclosures on revenue recognition of construction contracts as well as the associated accounting policies and judgments are included in the notes to the consolidated financial statements in the sections "Bases of accounting" as well as "Notes to the balance sheet," note 21 "Contract assets".

2. Recoverability of goodwill and trademarks

Reasons why the matter was determined to be a key audit matter:

Goodwill of EUR 15.6m (prior year: EUR 16.5m) and trademarks of EUR 2.8m (prior year: EUR 2.9m) with an indefinite useful life were recognized in the consolidated financial statements of Manz AG as of 31 December 2022 and are subject to an annual impairment test pursuant to IAS 36.

The result of the impairment test depends chiefly 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 checked on a sample 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 Managing Board. In addition, we verified the growth rates for income and expenses used to roll forward the budget using internal data, in particular related to the expected future orders. We also analyzed the forecasts with regard to adherence to the budget in the past and obtained evidence substantiating the individual assumptions of the forecasts.

We verified the individual components used to determine the discount rate with the support of our internal valuation experts 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 verified the significant assumptions used in the sensitivity calculations prepared by the company in order to estimate any potential impairment risk associated with a change in one of the significant assumptions used in the valuation.

Our audit procedures did not lead to any reservations regarding the recoverability of goodwill.

Reference to related disclosures:

Additional disclosures on the impairment of goodwill as well as the associated recognition and measurement policies and judgments are included in the notes to the consolidated financial statements in the sections " Bases of accounting " as well as "Notes to the balance sheet," note 14 "Intangible assets".

Other information

The Supervisory Board is responsible for the Report from the Supervisory Board. The executive directors and the Supervisory Board are responsible for the declaration pursuant to Section 161 of the German Stock Corporation Act (AktG) on the German Corporate Governance Code, which is part of the declaration on corporate governance. In all other respects, the executive directors are responsible for the other information. The other information comprises the combined declaration on corporate governance referred to above. Furthermore, the other information, of which we received a version prior to issuing this auditor's report, comprises the following components designated for the annual report:

the disclosures in the section "To Our Shareholders" of the annual report, the non-financial consolidated statement and the Responsibility Statement.

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 Section 315e (1) of the German Commercial Code (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 (i.e., fraudulent financial reporting and misappropriation of assets) 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 Section 317 of the German Commercial Code (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 the risk of not detecting a material misstatement 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 Section 315e (1) of the German Commercial Code (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

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 Section 317 (3a) of the German Commercial Code (HGB).

Opinion

We have performed assurance work in accordance with Section 317 (3a) of the German Commercial Code (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 "MANZ _ AG _ KA+KLB _ ESEF-2022-12-31.zip" and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) of the German Commercial Code (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 Section 328 (1) of the German Commercial Code (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 2022 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 Section 317 (3a) of the German Commercial Code (HGB) and the IDW Assurance Standard: Assurance on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Section 317 (3a) of the German Commercial Code (HGB) (IDW AsS 410 (06.2022)). 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 Section 328 (1) Sentence 4 No. 1 of the German Commercial Code (HGB) and for the tagging of the consolidated financial statements in accordance with Section 328 (1) Sentence 4 No. 2 of the German Commercial Code (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 Section 328 (1) of the German Commercial Code (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 Section 328 (1) of the German Commercial Code (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 Section 328 (1) of the German Commercial Code (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 5 July 2022. We were engaged by the Supervisory Board on 2 August 2022. We have been the group auditor of Manz AG without interruption since fiscal year 2018.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Supervisory Board pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

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 Unternehmensregister [German Company Register] – 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 Steffen Maurer.

Stuttgart, March 23, 2023

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Maurer	Ilg
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

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This Annual report is also available in an English translation. If there are any discrepancies, the German version of the report shall take precedence over the English translation.

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