2020 Annual Report

Growth Industries in Focus

manz

Manz AG
at a glance

2021 Financial Calendar

May 4, 2021	Publication of the 1st quarter 2021 quarterly report
July 7, 2021	Annual General Meeting 2021
August 5, 2021	Publication of the 2021 semi-annual report
November 9, 2021	Publication of the 3rd quarter 2021 quarterly report

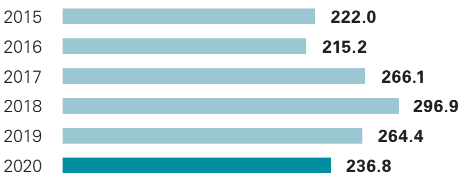
Overview of Consolidated Net Profits

(in EUR million)	2020	2019	Change in %
Revenues	236.8	264.4	–10.4 %
Total operating revenues	241.7	259.5	–6.9 %
EBITDA	19.4	9.2	+110.9 %
EBITDA margin (in %)	8.0	3.6	+4.4 pp
EBIT	7.2	–7.6	+194.7 %
EBIT margin (in %)	3.0	–2.9	+5.9 pp
EBT	5.0	–9.9	+150.5 %
Consolidated net profit	3.4	–11.2	+130.4 %
Earnings per share, undiluted (in EUR)	0.44	–1.43	+130.8 %
Cash flow from operating activities	20.6	–24.1	+185.5 %
Cash flow from investing activities	–9.4	6.3	–249.2 %
Cash flow from financing activities	14.7	10.3	+42.7 %

	Dec. 31, 2020	Dec. 31, 2019	Change in %
Total assets	357.9	341.5	+4.8 %
Shareholders’ equity	131.4	132.4	–0.8 %
Equity ratio (in %)	36.7	38.8	–2.1 pp
Financial liabilities	77.0	57.9	+33.0 %
Liquid funds	69.7	44.0	+58.4 %
Net debt	7.2	13.9	–48.2 %

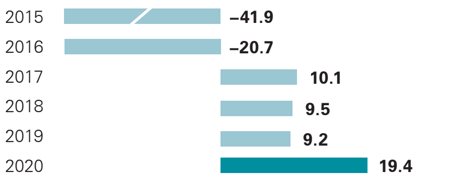
Revenues

(in EUR million)



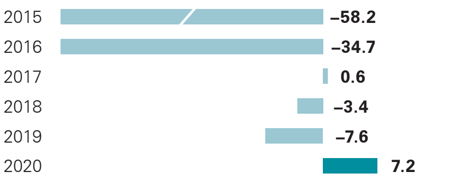
EBITDA

(in EUR million)



EBIT

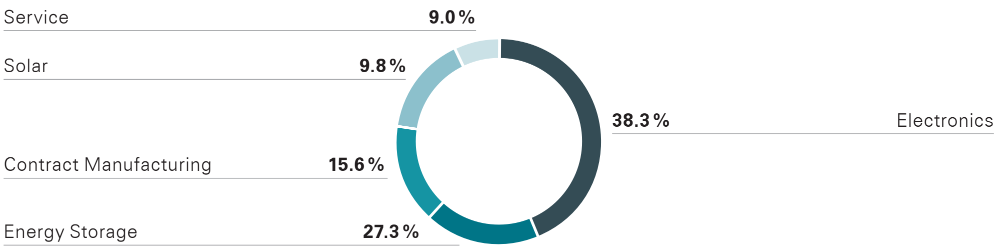
(in EUR million)



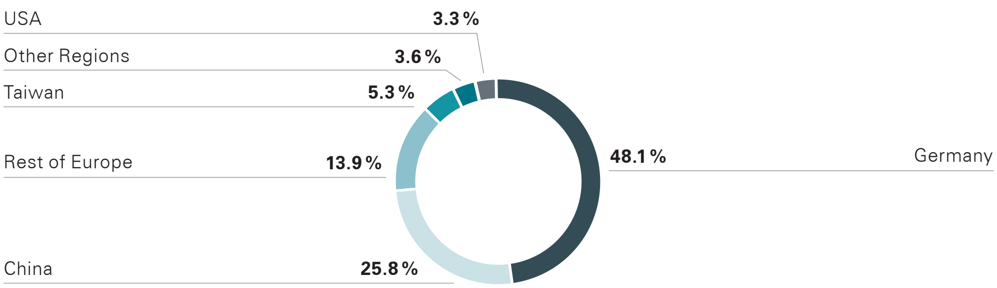
EBIT by Business Segments 2020

(in EUR million)

Revenues by Business Segment January 1 to December 31, 2020



Revenue Distribution by Region January 1 to December 31, 2020



2020

The year at a glance

Manz and Shenzhen Yinghe Technology agree on strategic cooperation in the field of lithium-ion cell and module production

January 14

Manz reacts to corona pandemic and suspends business operations at its German and Italian locations until Easter

March 20

Manz expands its successful partnership with a leading global battery manufacturer in the Energy Storage segment with a follow-up order in the mid-double-digit million-euro range

July 7

Sale of shares in Talus Manufacturing Ltd. to finance further growth

November 11

Contract conclusion for follow-up order for assembly line for cell contacting systems in the field of electromobility

November 17

Manz AG Mission Statement

With many years of expertise in automation, laser processing, vision and metrology, wet chemistry, and roll-to-roll processes, we as a high-tech equipment manufacturing company offer manufacturers and their suppliers innovative production solutions in the areas of photovoltaics, electronics and lithium-ion battery technology. Our product portfolio includes both customer-specific developments and single machines and modules that can be linked together to form individual system solutions. We are involved in customer projects from a very early stage, and thus contribute significantly to the success of our customers with high quality, needs-oriented solutions.

In addition to the CIGS*fab* turnkey production line in the Solar segment, we focus specifically on the automotive industry in the Electronics and Energy Storage segments. With our efficient and competitive lithium-ion battery manufacturing equipment – from cell to the finished pack – and automated assembly lines for cell contacting systems, we are an important industry partner for the conversion 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 will be even more aligned to the needs and challenges of selected industries in all 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, which has been redesigned and relaunched as part of our new alignment on growth industries.

For the sake of better readability, we consistently 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.

Index

History
of Manz AG

Manz further expands strong market position in Energy Storage segment

2020

Shanghai Electric becomes strategic anchor investor of Manz AG

2016

Acquisition of mechanical engineering division of Kemet Electronics Italy (formerly Arcotronics) for enlargement of technology portfolio in Battery division

2014

Acquired the CIGS innovation line from Würth Solar
Opened facility for solar and display production systems in Suzhou, China

2012

Entered the market for lithium-ion batteries

2009

IPO on the Entry Standard market of the Frankfurt Stock Exchange

2006

Entered the thin-film market with equipment for mechanically scribing solar panels

2005

Shipped the first automation system for a completely automated production line for crystalline solar cells

2000

Shipped the first automation solution for the FPD industry to Asia

1994

Company founded by Dieter Manz

1987

To Our Shareholders

Letter from the Managing Board

Dear Shareholders,

in the extraordinary year that was 2020, Manz AG focused on its strengths – these being innovation, quality and efficiency, and managed to deliver a remarkable performance. The challenges arising from the COVID-19 pandemic were met with a forward-looking, flexible and pro-active response. Our organization was carefully prepared for this special situation, we implemented an innovative approach to remote working, and we adjusted numerous processes in our group. In this way, we maintained continuous and trust-based communications with our customers, and we were able to consistently work through on-going projects while also taking advantage of the opportunities that were presented to us in our role as an innovative high-tech equipment manufacturer, for example, in the battery segment. Customers around the world are impressed with our products, which are in high demand.

Despite the expected decline in revenues due to the challenging macro-economic situation, we were nevertheless able to significantly improve profitability. Earnings before interest, taxes, depreciation and amortization (EBITDA) increased to almost 20 million EUR. This resulted in a markedly improved EBITDA margin of 8.0 % (after 3.6 % in the previous year). Earnings before interest and taxes (EBIT) also increased by approximately 14 million EUR to over 7 million EUR.

An examination of the various segments paints a more nuanced picture. While revenues in the Solar and Electronics segments declined, partly because of the impact from COVID-19, the segment Energy Storage did very well, even though some of the orders for planned projects were – contrary to our initial planning – delayed. Overall, we were able to report numerous major orders in the high double-digit million euro range. In the future, continued growth in the e-mobility market will offer opportunities not just for our battery production equipment, but also for our assembly solutions for other electric power train components.

We believe that the very positive developments in e-mobility in 2020 are only the beginning, and we want to continue to benefit from this trend with our segments Electronics and Energy Storage. With decades of experience in assembly automation and the development of high-efficiency production equipment in the battery segment, we are ideally positioned for further growth in the context of the global mobility transformation. The speed with which capacities in the market are being expanded bears testament to the dynamic nature of this market and to the degree of demand for new technological fields of application. The support commitment from the European Commission for the further development of the Li-Ion battery technology in the context of the Important Projects of Common European Interest (IPCEI), which was obtained in January 2021, has once more confirmed our alignment to this growth market. We want to use European financial support to implement the "Lithium-ion battery factory of the future" project. The disposal of the shares in Talus Manufacturing Ltd.

(a company that we built together with Lam Research Corporation), which was approved in November 2020, is also part of this focus strategy. The profits, which are in the middle double-digit million euro range, will also be invested in the battery and e-mobility growth segments.

We believe that the positive earnings development in a very challenging market environment dominated by the coronavirus crisis has confirmed our long-term optimization process and the visionary strategic decisions that have been taken. Our goal is to continue to enhance the extensive technology portfolio and to strengthen and expand our market position in all segments with an even stronger focus on selected industries. As a result, our technology and product portfolio will be aligned particularly to the needs of the automotive and e-mobility, battery production, electronics, energy and medical technology industries.

With an order backlog of EUR 202 million, developments in the e-mobility market, in particular, underscore the current potential for Manz AG. Therefore, we look forward to 2021 with optimism. We expect a slight to moderate increase in revenues compared with 2020, an EBITDA margin in the upper positive single-digit percentage range, and an EBIT margin in the low to mid positive single-digit percentage range.

At the same time, the performance of the past year and the future-oriented alignment of Manz AG would not have been possible without the commitment and engagement of our employees. For that, we would like to express our sincere thanks to all of them!

We hope that you, as our valued shareholders, will continue to accompany us along this exciting path – and stay healthy!

Reutlingen, March, 2021

The Managing Board

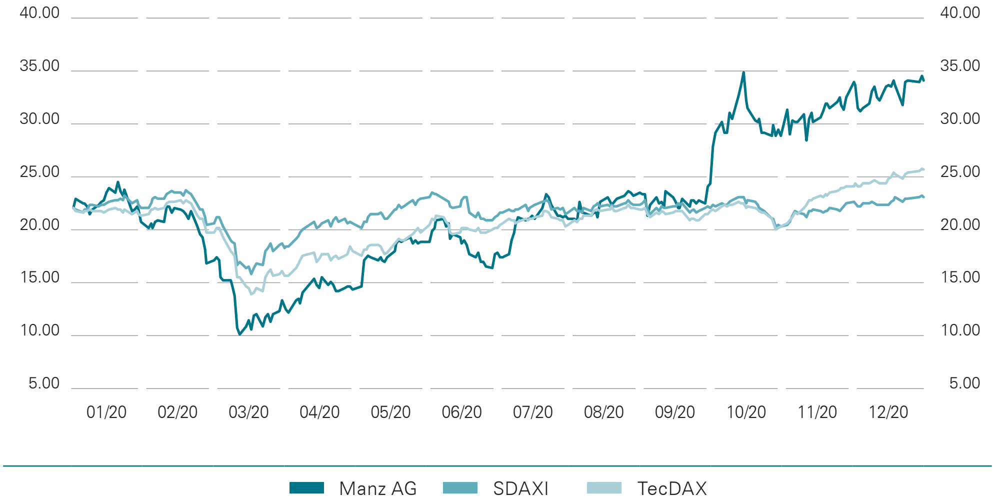
Martin Drasch   Manfred Hochleitner   Jürgen Knie

Manz AG Stock

Change in share price

The Manz AG share began the financial year 2020 on January 2, 2020 at a price of EUR 21.95. As a result of the Covid-19 related market crash, the shares reached their lowest price on March 12, 2020 at EUR 10.08. This was followed by a strong rally until the peak price of EUR 34.70 was reached on October 14, 2020. The shares closed on December 30, 2020 at a price of EUR 34.00, which corresponds to a market capitalization of around EUR 263.2 million and a price increase of 55 %. The price continued to climb at the start of 2021 and reached a new peak of EUR 56.00 on February 3rd.

Chart Showing Manz AG Stock (XETRA, in EUR)



Stock Key Data and Performance Indicators

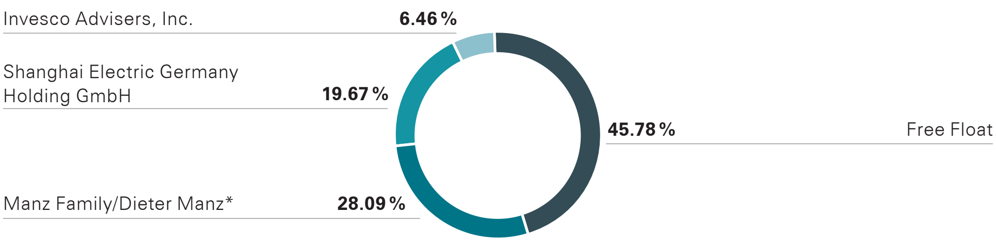
German Securities Identification Number	A0JQ5U
Ticker symbol	M5Z
Trading segment	Regulated market (Prime Standard)
Share types	Registered, common, no-par value bearer shares, each with a proportionate value of EUR 1.00 of capital stock
Capital Stock	**EUR 7,744,088**
IPO	September 22, 2006
Opening Price	EUR 19.00
Share price at the beginning of the reporting period*	EUR 21.95
Share price as at December 31, 2020*	EUR 34.00
Percentage change in the reporting period	**+54.90 %**
Period high	EUR 34.70
Period low	EUR 10.10

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

Shareholder structure

As of December 31, 2020, Manz AG had a free float of 45.78 % and a broad shareholder base. Dieter Manz, founder and member of the Supervisory Board of Manz AG, and his family hold a total of 28.09 % of the shares in the company; Shanghai Electric Germany Holding GmbH held 19.67 % of the company's shares as of December 31, 2020. Investment company Invesco Advisers, Inc. holds 6.46 % of the shares.

Shareholder Structure



* Dieter Manz 12.32 %, Ulrike Manz 5.44 %, Stephan Manz 5.16 %, Laura Manz 5.16 %

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 2020. 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.

In addition to the legal obligations, Manz AG participated in nine capital market conferences and three road shows in Germany and abroad in 2020. Manz published 23 corporate news and press releases as well as one ad-hoc release. 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 2020, Manz AG was covered by the following institutions:

- Pareto Securities
- Stifel Europe
- Bankhaus Lampe

Annual General Meeting

In light of the Covid-19 pandemic, the Manz AG Annual General Meeting 2020 was held as a purely virtual event for the first time on June 30, 2020. The board used the new opportunities to report the operational and strategic development of Manz AG for financial year 2019 to the shareholders in detail even under such extraordinary circumstances. The Managing Board and Supervisory Board received a discharge from the Annual General Meeting by a large majority. A total of 61.0 % of capital stock with voting rights was represented (previous year: 60.35 %).

Detailed voting results can be found at any time on the company's website www.manz.com under Investor Relations/annual general meeting.

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RT MA 400E
10.9 million
electric vehicles were registered globally in 2020 – over 30 % more than in the previous year.

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,

the 2020 reporting year was a year shaped by great challenges for the company, challenges which company employees overcame by virtue of their extraordinary efforts. The company was able to achieve very positive results because of these efforts despite the effects of the COVID-19 pandemic. During the course of the 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 strategic alignment of the company. 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 2020 financial 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 oral 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 and the short-, medium- 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 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.

Focus of Deliberations in the Supervisory Board

The 2020 financial year for Manz AG was characterized by the strategic further development of the company in its various business segments to achieve the objective of a sustained profitable business model. The business situation, financial performance and cash flows, the 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 discussions in the Supervisory Board were dominated by the large CIGS orders in the Solar business segment and the developments in the other business segments. Furthermore, the Supervisory Board approved individual transactions during the reporting year to the extent necessary for the Managing Board under the law, the Articles of Incorporation or the rules of procedure.

During the reporting year, a total of four meetings were held in which all members of the Supervisory Board participated. As a result of the pandemic, some of these meetings were held by video conference. Members of the Managing Board also attended Supervisory Board meetings, insofar as these meetings did not include discussions of those members' personal matters. In addition, six written resolutions were adopted by the Supervisory Board.

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

At the meeting on March 23, 2020, the Managing Board reported on current business developments, including the orders on hand, and planning for the individual segments and concerning the effects of the COVID-19 pandemic on the company along with countermeasures undertaken in the current financial year 2020. The focal points of this meeting were the annual financial statements as of December 31, 2019, the management report, the consolidated financial statements as of December 31, 2019 and the consolidated management report, as well as the audit report of the auditor. Following a discussion with the auditor, the Supervisory Board approved the annual and consolidated financial statements for the financial year 2019. The Supervisory Board also discussed and approved the report from the Supervisory Board to the annual general meeting, the Corporate Governance Statement and the Corporate Governance Report for the financial year 2019. The draft resolutions for the 2020 Manz AG Annual General Meeting were discussed at the meeting and were adopted by the Supervisory Board on May 7, 2020, by written ballot. In addition, the Managing Board discussed the main risks at the Manz Group on the basis of the annual risk report.

The meeting on May 7, 2020 focused on the report by the Managing Board regarding the end of the first quarter of 2020 and a discussion of the current business and financial situation subject to particular consideration of the financial effects of the pandemic. We also discussed the company's financial position in this context, particularly regarding the development of the segments and their contributions to the result. Other topics included the liquidity and financial situation, incoming orders and proposed resolutions for the Annual General Meeting. In addition, the Supervisory Board approved of the resolution of the

Managing Board to hold the Annual General Meeting as a virtual meeting and approved the partial salary waiver on the part of the Managing Board in the amount of 10 % as a sign of solidarity during the pandemic. The salary waiver is determined by resolution of the Supervisory Board as an addendum to the employment contracts for members of the Managing Board.

At the meeting on July 21, 2020, the Managing Board reported on the interim financial statements for the first six months of 2020, as well as financial performance and cash flows along with current business performance, incoming orders and, in particular, the effects of the COVID-19 pandemic. In this context, the Board addressed the Energy Storage and Electronics segments, in particular, along with trends related to their opportunities and distribution activities. The Managing Board also reported on developments related to CIGS major orders in the Solar segment and the current status of material projects.

At the last meeting for the reporting year on November 24, 2020, the Managing Board reported on the business developments in the first three quarters, the liquidity and earnings situation, as well as the business outlook for the entire year. We placed particular focus on a detailed examination of the planning and profitability in the individual segments, taking into account the incoming orders. The Supervisory Board discussed the financial and liquidity planning of the Manz Group and the related risk management based on the Managing Board report.

On the basis of the audit of the compliance with the recommendations of the German Corporate Governance Code by Manz AG, the Supervisory Board together with the Managing Board adopted the statement of compliance pursuant to section 161 of the German Stock Corporation Act (AktG) on November 24, 2020.

Work in the Economic Committee of the Supervisory Board

Manz AG’s Economic Committee, which consists of two members, is to assume certain supervisory tasks and prepare the deliberations and draft resolutions of the Supervisory Board, particularly in the areas of accounting, auditing, finance including planning, Managing Board matters, corporate governance and compliance. Prof. Dr. med. Heiko Aurenz and Dieter Manz are members of the committee.

The Economic Committee met seven times during the reporting year. Regular discussion topics included the current business situation, liquidity and earnings situation, including orders on hand, the status of major projects as well as strategic measures for the further structural development of the Manz Group. In addition, it also discussed the annual and consolidated financial statements for December 31, 2019, the Corporate Governance Statement and the Corporate Governance Report for the financial year 2019, the proposed resolutions for the regular 2020 Manz AG Annual General Meeting and the annual risk report. The

Economic Committee and the Managing Board also discussed measures to reduce costs, potential cooperation partners in all segments, the planning for the financial year 2020 and the filling of executive positions within the company.

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 financial year 2020, 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 and Supervisory Boards issued a joint statement of compliance pursuant to section 161 Stock Corporation Act (AktG), according to which the company complies and will comply with the recommendations in the Code with only one exception. The statement of compliance from November 2020 is permanently available to the public on the Manz AG website.

Annual and consolidated financial statements for the financial year 2020

The annual and consolidated financial statements as of December 31, 2020, prepared by the Managing Board, and the management report and consolidated management report for the financial year 2020 were audited by the company's and Group's auditor, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, and given an unqualified auditor's 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. The financial statements and reports shown above were discussed in detail at the meeting of the Economic Committee on January 25, 2021, as part of a preliminary examination. At the meeting of the Economic Committee and the annual accounts meeting of the Supervisory Board on March 23, 2021, 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. The Economic Committee also reported to the Supervisory Board on its own audit of Manz AG's financial reporting and 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.

No objections were raised based on the definitive finding of the Supervisory Board's review. In a resolution dated March 23, 2021, the Supervisory Board approved the annual financial statements and consolidated financial statements as of December 31, 2020. Manz AG's annual financial statements as of December 31, 2020, are thereby adopted.

Changes in the Managing and Supervisory Boards

The composition of the Supervisory Board and the Managing Board remained unchanged in the financial year 2020.

Thanks and Acknowledgment

The Supervisory Board wishes to thank the Managing Board for the constantly open and constructive collaboration in the past financial year. We would also like to express our gratitude to our employees for the commitment they have demonstrated during the financial year 2020. 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 24, 2021

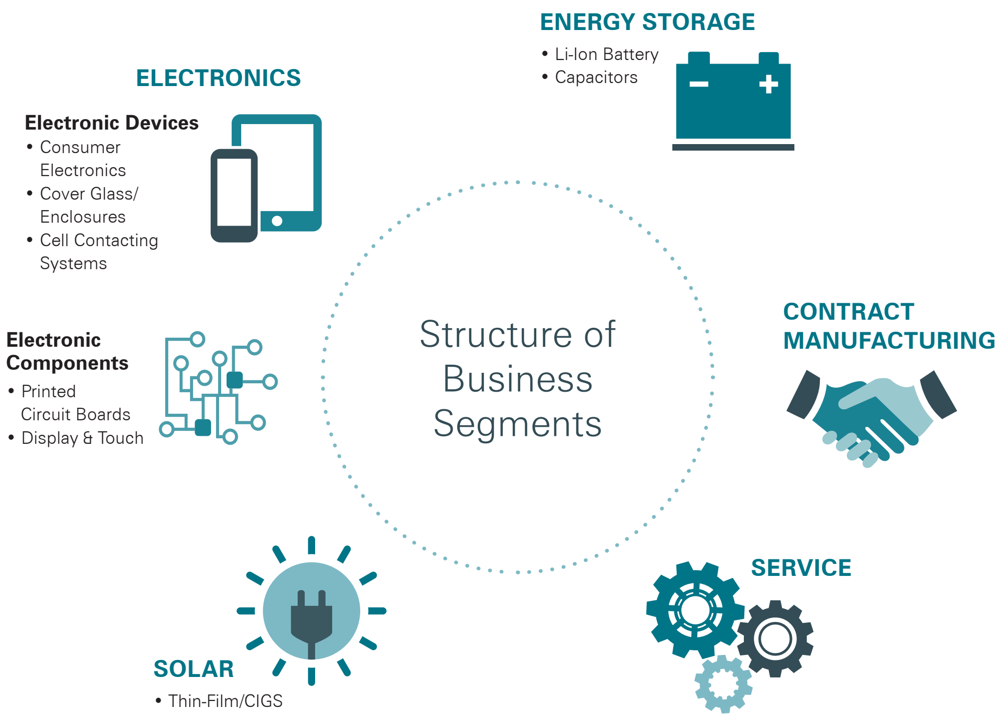
Prof. Dr. Heiko Aurenz
Chairman of the Supervisory Board

Group Management Report

Basic Group Information

Business model and strategy

Founded in 1987, Manz AG is a global high-tech equipment manufacturing company. Its business activities comprise five segments: Electronics, Energy Storage, Solar, Contract Manufacturing and Service. With many years of expertise in automation, laser processing, vision and metrology, as well as wet chemistry, the company offers a broad portfolio of products and solutions to manufacturers and their suppliers in various industries. 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 technological 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.

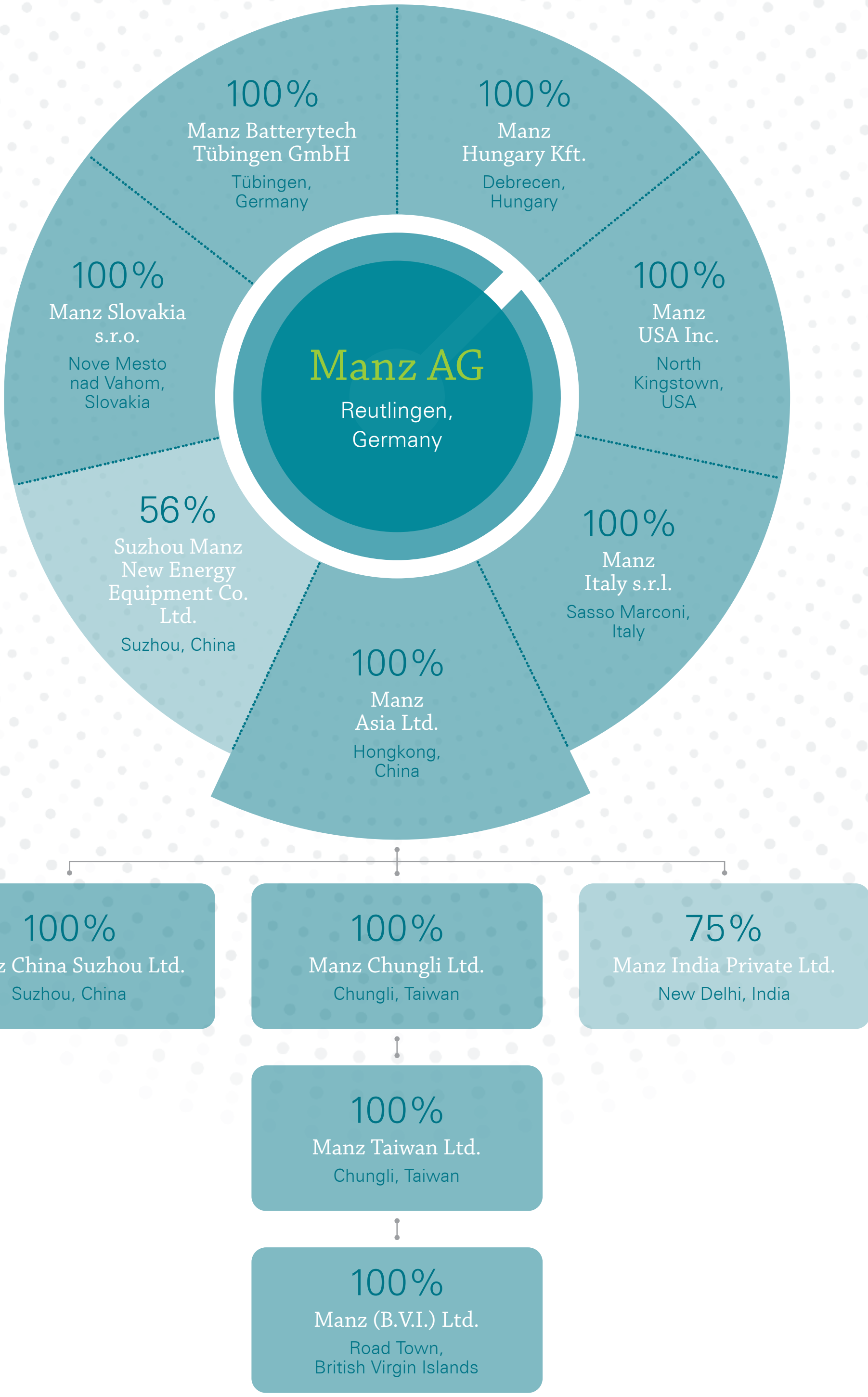


The core of the company's strategy is to make use of the technology portfolio across all industries and regions. This cross-segment exchange of technology and expertise not only offers a high level of flexibility in the realization of individual customer solutions, but also the possibility of generating internal synergies and making economic use of them.

Manz AG maintains business relationships with manufacturers and their suppliers, especially in the automotive and electro-mobility, battery manufacturing, electronics, energy, and medical technology industries. As a high-tech equipment manufacturing company, Manz operates internationally and has development and production sites in Germany, Slovakia, Hungary, Italy, China and Taiwan as well as further sales and service branches in India and the US. Manz AG also has long-standing customer relationships and a strong presence, above all in the global economic hub that is the Asian region: approx. 450 employees at its locations in Taiwan and China, comprising roughly 30 % of Manz employees in this region, offer excellent access to this growth market.

Manz AG's goal is to achieve a sustained increase in competitiveness with earnings-oriented growth. Manz AG aims to increase its competitiveness and profitability through a strong focus on fully interlinked, individual system solutions and equipment, and by expanding its global customer base. The cross-regional use of technological expertise and its standardization beyond industry boundaries significantly reduces development effort and time and continuously creates new unique selling points, creating opportunities for additional possible applications. Growth opportunities likewise arise from individual development projects for customer-specific pilot lines with corresponding scaling potential. In addition, continuous targeted organizational, procedural and process improvements in all segments of the Group are intended to contribute to further increasing the competitiveness and profitability of the company.

Group structure and holdings



Locations and Employees

26
Nations

Employees and managers from 26 different countries work in our Group's various subsidiaries.

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

1,382
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

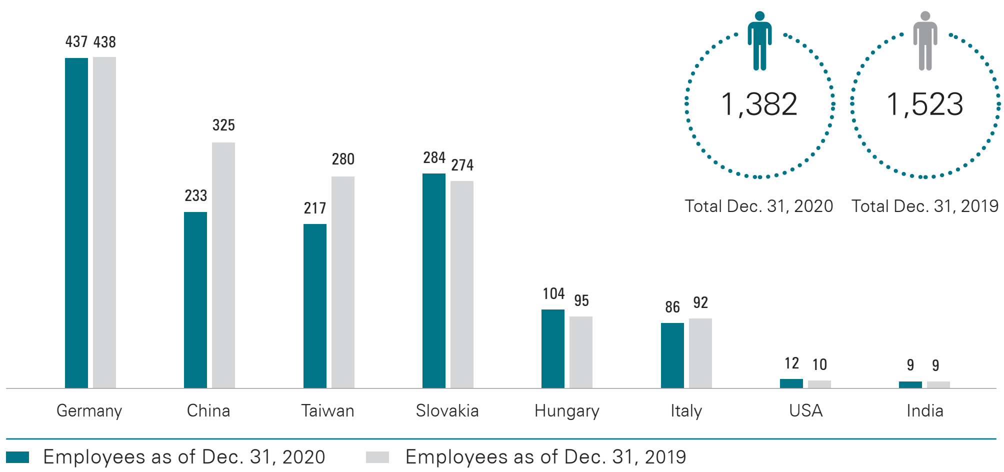
6 **Taiwan**
Chungli
Production, Sales & Service

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

8 **India**
New Delhi
Sales & Service

Locations and employees

Employees by country



Control system and performance indicators

Manz AG is organized, for corporate management purposes, by product and service segment at Group level and has the five business segments "Electronics," "Energy Storage," "Solar," "Contract Manufacturing," and "Service." In order to decide on the allocation of resources and control the profitability of the divisions, they are monitored separately by management. Details of the course of business are provided to the entire Managing Board through regular reports and management meetings. As a result, it is possible for the respective Managing Board to control the company in a timely manner.

Principles and goals of the 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 annual average revenue increase of between 10 % and 20 % is forecast.
- EBIT margin: A target margin of 10 % is defined for the EBIT margin.
- EBITDA margin: a target of more than 15 % is defined for the EBITDA margin.
- Equity ratio: the target corridor for shareholders' equity as a percentage of total assets is between 40 % and 60 %.

- Gearing: Manz AG has defined gearing as a ratio of net financial liabilities (short-term and long-term bank liabilities less cash and cash equivalents) to equity before minority interests of less than 50 % as a target.

Performance indicators

in %	2020	2019	2018
Revenue (in EUR million)	236.8	264.4	296.9
EBITDA margin	8.0	3.6	3.2
EBIT margin	3.0	–2.9	–1.1
Equity ratio	36.7	38.8	43.4
Gearing	5.5	10.5	–5.1

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 continued to play an important role in the financial year 2020. 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 AG maintains numerous cooperative arrangements with research institutions, universities and colleges. For example, the company is active in the segment Energy Storage in the Lithium-Ion Battery (KLiB) competence network and as a committee member of the European Technology and Innovation Platform (ETIP). The goal in each case is to create the conditions for establishing European battery production within the European Commission.

In addition, Manz AG has an advisory role in the European LIPLANET project under the umbrella of the European Commission's "Horizon 2020 Project". This project aims to coordinate the European research and pilot lines for the production of lithium-ion battery cells and to ensure better efficiency of European battery research.

At the EU level, Manz AG, in addition to Saft S.A., Solvay S.A. and Siemens AG, is also a member of the “EU Battery Alliance”, a complementary initiative to the “Horizon 2020” EU program.

From the beginning of 2018 to the end of March 2020, Manz AG had conducted research and development efforts in processes for the large-scale production of lithium-ion battery cells as part of the Fab4Lib project. Other project partners include BMZ Battery Assembly Group GmbH, SGL CARBON GmbH, Umicore AG & Co. KG, Siemens AG, ThyssenKrupp System Engineering GmbH and RWTH Aachen University. The aim of the project is to define or develop the basis for a competitive production line with an annual capacity of 6 GWh. This modular line is then to be set up where the corresponding capacity is required. Fab4Lib combines necessary competencies in order to completely plan German mass battery cell production and to realize cell production in a timely and cost-effective manner.

Another national research project related to battery manufacturing in which Manz is participating with research tasks is the STACK project. Here, Manz is further developing, among other things, laminating and stacking technology, which is judged to be a key technology for the manufacture of solid-state batteries, in particular. The partners are ZSW and the company Freudenberg.

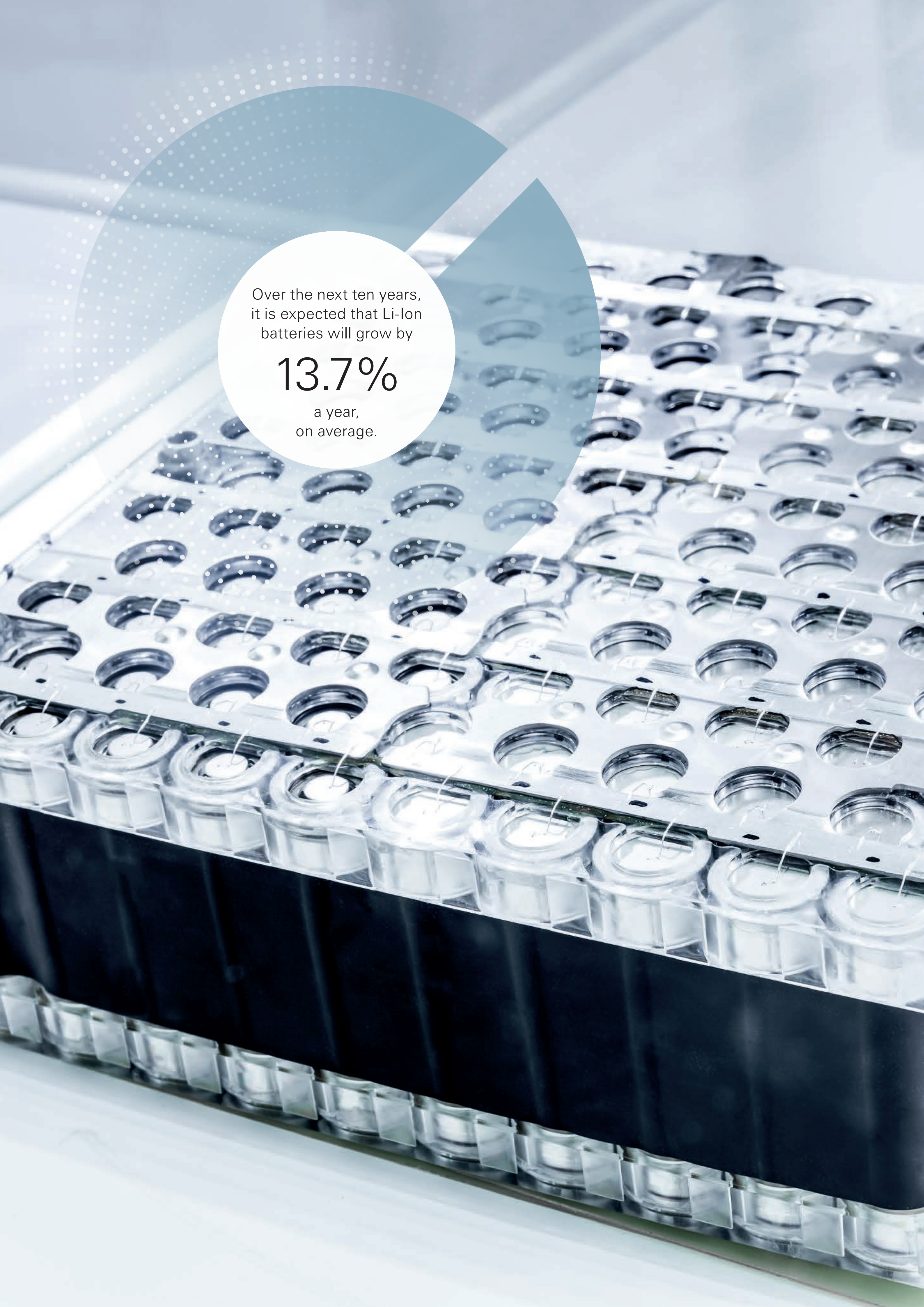
In another project funded by the BMWi, Manz is working on the development of innovative housing technologies for the production of prismatic battery cells together with the Technical University of Munich, Elring-Klinger and RWTH Aachen University.

Overall, Manz AG has a ratio of 7.5 % for research and capitalized development services for the reporting period (previous year: 7.3 %). The increase in the ratio is due to the fact that development expenses remained roughly the same, while total operating revenues decreased. The capitalization ratio, i.e. the proportion of capitalized development costs in the total R&D expenses is 32.0 % (previous year: 25,7 %). R&D investments amounting to EUR 18.1 million are similar to the previous year’s level of EUR 18.9 million.

Scheduled depreciation on activated development services of EUR 4.7 million (previous year: EUR 4.7 million) was charged in the reporting period 2020. The company will also continue to place a clear emphasis on R&D activities in future. Manz AG strives for an annual rate of R & D to revenues of 5 % on average in order to provide sustained and long-term consolidation of its technological positioning and its innovations in the relevant target markets.

Sustainability report and non-financial 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 section 289c HGB (German Commercial Code). The non-financial consolidated statement is published separately from the consolidated management report in a separate sustainability report. For this purpose, the Managing Board of Manz AG has decided to use the German Sustainability Code (DNK) as a framework. 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."



Over the next ten years, it is expected that Li-Ion batteries will grow by

13.7%

a year, on average.

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
pack
assembly…

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

Business Report

General economic environment and industry-specific conditions

Economic market environment

Global economic activity in 2020 was dominated by the COVID-19 pandemic. According to the Kiel Institute for the World Economy (IfW), the global slump in economic activity in March and April was initially followed by strong catch-up effects as the pandemic situation began to ease, along with the associated easing of the economic situation. In the wake of the second wave of infection, countries around the world, including Germany, took numerous measures in November and December, which again had a noticeable impact on economic development in the fourth quarter of 2020. However, global trade was more robust this time than in the first half of the year. In December 2020, the IfW estimated that the global economy would contract by –3.8 % for the year as a whole (2019: increase of +3.0 %). According to the IfW, economic output in the USA decreased by –3.6 % compared with 2019 (increase of +2.3 %). According to the IfW, the Chinese economy expanded by 1.8 % in 2020, compared with economic growth of 6.2 % in 2019. By contrast, the European economy recorded a sharp decline in economic output of –6.7 % (previous year: increase of +1.2 %). The German economy also suffered from the restrictions resulting from the COVID-19 pandemic. According to the IfW, economic output fell by –5.6 % compared with growth of 0.5 % in the previous year.

Engineering industry

In November 2020, the German Engineering Federation (VDMA) predicted a global decline in industry revenues for 2020 of between –7 % and –9 %. In 2019, there had still been zero growth. The main reason for the decline was the COVID-19 pandemic, which caused a sharp drop in machinery production, particularly during the first lockdown in April and May. By contrast, the industry in China recorded growth of 5 % in 2020, up from 4 % in 2019 , as the measures taken by the country largely brought the COVID-19 pandemic under control during the year. Germany was hit harder by the dislocations caused by the COVID-19 pandemic: Here, according to the VDMA's December forecast, the mechanical engineering sector fared significantly worse than in the previous year (–2.6 %), with a 15 % drop in revenues. From January to November 2020, the German mechanical engineering sector also received 7 % fewer orders than in the previous year, although according to a VDMA release from November, the order situation improved again slightly toward the end of the year.

Core segment sectors

In the VDMA's photovoltaic production equipment sector, incoming orders in Germany were weaker during the first COVID-19 wave in the second quarter of 2020 than at the beginning of the year. However, the order situation in the third quarter of 2020 recovered significantly to the level of the first quarter. The revenue trend in the third quarter also points to a sustained market recovery in the second half of 2020. Supported by catch-up effects from the second quarter, revenues in the period from July to September were more than 40 % higher than in the previous quarter. For the final quarter of 2020, the VDMA expected a further stabilization of overall revenues.

In the segment Electronics, Manz AG addresses several industries with its machines, which developed differently in 2020. These include equipment for the electronics and display industries, as well as assembly lines for other industries, including, for example, the production of cell contact systems (CCS) for electric vehicles.

In the VDMA business climate survey at the end of the third quarter of 2020, German manufacturers of equipment for electronics production expected a 13.1 % decline in revenues for the year as a whole. The majority of the electronics industry's revenues generated in the first nine months of 2020 came from Germany, at 40.7 % (9M 2019: 29 %). Europe accounted for 28.8 % of revenues (9M 2019: 22 %). By contrast, Asia's importance declined sharply with a 16.0 % share of revenues (9M 2019: 33 %).

With regard to the market for LCD and AMOLED displays, Display Supply Chain Consultants (DSCC) expects global revenues to stagnate at an anticipated USD 103 billion in 2020. In this context, OLED technology will be able to expand its share compared to LCD technology, which is more widespread in terms of volume, due to the greater stability of its price level. According to Prismark revenues of printed circuit boards grew 6.4 % globally in 2020 compared to the previous year.

The market for assembly, assembly systems and industrial robots in Germany was characterized by a difficult overall environment in 2020. In the first quarter of 2020, revenues already fell by 31.9 % to EUR 1.8 billion compared with the fourth quarter of 2019. This development continued in the second and third quarters, with revenues of EUR 1.6 billion and EUR 1.7 billion, respectively. Overall, revenues in this sector amounted to EUR 5.1 billion in the first three quarters of 2020. In contrast, the market segment served by Manz for assembly lines for the manufacture of cell contacting systems was able to benefit from the dynamics in the market for electric vehicles. The Samsung EV Research Center estimates that global revenues of electric vehicles (EVs) will reach 2.79 million vehicles by 2020. This means EVs will account for 3.8 % of global car revenues (2019: 2.6 %). EV turnover showed particular momentum in Europe in the third quarter, rising 171 % to 380,000 units. EVs thus accounted for 10 % of European turnover volume. This is due not only to government subsidies, but also to additional offerings by automakers in the lower price segment. For the fourth quarter of 2020, the Samsung EV Research Center expects a decline in demand compared to the previous quarter, as some EU countries had imposed lockdown measures again due to a second COVID-19 wave.

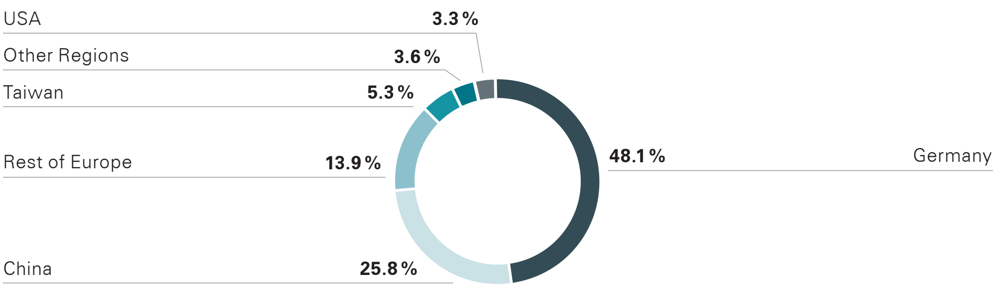
The market environment in the segment Energy Storage was also positive. The machine manufacturers benefited, in particular, from the very positive development in the market for electric vehicles described above. According to the VDMA, the revenue growth forecast for the Battery Production Equipment segment in 2020 was 6.1 % (as of September 2020). Accordingly, the largest markets for revenues in 2020 were Asia with a 36 % share of revenues, and Germany and Europe around 50 %. For EV batteries shipped, Samsung EV Research Center expects a volume of 140 GWh worldwide in 2020, which corresponds to an increase of 29 % compared to the previous year. For Europe, the turnover estimate is 52 GWh, an increase of 104 % year-on-year.

Analysis of the financial, liquidity and earnings position of the group

Earnings position

Based on consolidated revenues of EUR 264.4 million in the financial year 2019, Manz AG's Managing Board had forecast a slight to moderate increase in revenues for 2020 compared to 2019, a positive EBITDA margin in the mid-single-digit percentage range, and an EBIT margin in the low, positive single-digit percentage range. The forecast took into account the impact of the COVID-19 pandemic on the company's economic development, which was assessable at the time, but was based on the assumption that the further spread of the virus would not have any additional negative impact on the development of business activities. Because of the revenue shifts in the segment Electronics due to the COVID-19 pandemic, customer delays and revenue shifts as a result of the COVID-19 pandemic in the segment Solar, as well as delayed order intake in the segment Energy Storage, in November 2020 the Managing Board corrected its revenue forecast for the financial year 2020 and was now expecting a slight decline in revenues in comparison with the preceding year while maintaining an unchanged positive earnings contribution.

Revenue Distribution by Region January 1 to December 31, 2020



Subsequently, revenues decreased by 10.5 % to EUR 236.8 million (previous year: EUR 264.4 million). The original revenue forecast of a slight to moderate increase in revenues compared to the financial year 2019 was therefore not achieved. By contrast, the earnings forecast was met in a financial year characterized by macroeconomic challenges, with an EBITDA margin of 8.0 % and EBIT of EUR 7.2 million, an improvement of around EUR 15 million, corresponding to an EBIT margin of 3.0 %.

Changes in inventories of finished goods and work in progress amounted to EUR –0.9 million (previous year: EUR –9.7 million). Own work capitalized amounted to EUR 5.8 million (previous year: EUR 4.9 million) and is attributable to the activities developing new technologies in the segments Solar and Energy Storage. This resulted in a total operating performance of EUR 241.7 million (previous year: EUR 259.5 million).

At EUR 7.2 million, other operating income was lower compared to the previous year's figure of EUR 9.7 million and includes EUR 2.8 million from subsidies and EUR 1.2 million in exchange rate gains.

Material costs in the financial year 2020 amounted to EUR 130.3 million (previous year: EUR 160.8 million); the material cost ratio declined to 53.9 % (previous year: 62.0 %) as a result of changes in project composition, and as a result of the effects from the ongoing optimization projects. Personnel expenses remained virtually unchanged at EUR 71.9 million (previous year: EUR 71.6 million). Due to the lower revenue level, the personnel expenses ratio increased from 27.6 % in the previous year to 29.8 %.

At EUR 36.6 million, other operating expenses were slightly higher than the previous year's figure of EUR 36.4 million, mainly due to the depreciation of an order with a customer in Asia.

The share of profit from associates increased to EUR 9.4 million (previous year: EUR 8.8 million) in light of positive business performance by Talus Manufacturing Ltd. in the Contract Manufacturing segment.

Earnings before interest, taxes, depreciation and amortization (EBITDA) amounted to EUR 19.4 million, more than double the previous year's figure of EUR 9.2 million. This is largely due to improved and more efficient order processing. The EBITDA margin increased to 8.0 % from 3.6 % in the previous year. Among others because of a lower amortization in value of the costs of obtaining a contract, the depreciation of EUR 12.1 million was below the previous year's level of EUR 16.8 million. Earnings before interest and taxes (EBIT) of EUR 7.2 million reflect the positive development in results and are above the previous year's figure of EUR –7.6 million by EUR 14.8 million.

Financial income amounted to EUR 91 thousand in 2020 (previous year: EUR 94 thousand), financial expenses to EUR 2.3 million and were thus roughly at the previous year's level (previous year: EUR 2.4 million). Earnings before taxes (EBT) were at EUR 5.0 million (previous year: EUR –9.9 million). After deducting income taxes of EUR 1.5 million (previous year: EUR 1.3 million), Manz AG's consolidated net income amounted to EUR 3.4 million (previous year: EUR –11.2 million) and thus is finally positive again. Based on a weighted average of 7,440,088 shares, this results in undiluted earnings per share of EUR 0.44 (previous year undiluted: EUR –1.43).

Financial position of the Group

The balance sheet total as at December 31, 2020 increased from EUR 341.5 million to EUR 357.9 million compared to the previous year's balance sheet date.

On the assets side, non-current assets, amounting to EUR 120.4 million as of December 31, 2020, were above the level of the 2019 balance sheet date (EUR 144.8 million). This development resulted mainly from the reclassification of investments in associates accounted for using the equity method in the course of the planned disposal of the shares in the joint venture Talus Manufacturing Ltd. (December 31, 2019: EUR 21.4 million) to current assets.

As of December 31, 2020, current assets, standing at EUR 237.5 million, were above the value on the balance sheet date 2019 of EUR 196.7 million. Inventories and receivables decreased to EUR 29.9 million (December 31, 2019: EUR 35.7 million) and EUR 27.2 million, respectively, as of the reporting date (December 31, 2019: EUR 42.8 million). In addition, contract assets of EUR 68.9 million were recognized (December 31, 2019: EUR 59.9 million). This increase was attributable to positive incoming orders during the reporting period. As a result of the planned disposal of the shares in Talus Manufacturing Ltd., which was completed in January 2021, assets held for sale in the amount of EUR 30.0 million have been recognized for the first time. As of the reporting date 2020, cash and cash equivalents amounted to EUR 69.7 million and due to advance payments received increased considerably compared to the previous year's reporting date (December 31, 2019: EUR 44.0 million). As of December 31, 2020, restricted cash in the amount of EUR 7.1 million (previous year: EUR 6.8 million) was reported under other current assets.

On the equity and liabilities side, equity of EUR 131.4 million was at the same level as the previous year (December 31, 2019: EUR 132.4 million). The equity ratio as of December 31, 2020 was 36.7 % (December 31, 2019: 38.8 %) with an increased balance sheet total.

Non-current liabilities increased from EUR 29.3 million as of December 31, 2019 to EUR 35.6 million as of December 31, 2020. Reason for the increase is the inclusion of new loans. Current liabilities also increased to EUR 191.0 million as of December 31, 2020 (December 31, 2019: EUR 179.8 million). Current financial liabilities amounted to EUR 71.3 million on the 2020 reporting date (December 31, 2019: EUR 57.2 million). The increase in this case resulted from the utilization of additional credit lines for purposes of working capital financing. Trade payables decreased to EUR 47.0 million at the end of the 2020 reporting period (December 31, 2019: EUR 57.4 million) as a result of consistent completion of current projects. The company had contract liabilities of EUR 43.9. million as of December 31, 2020 (December 31, 2019: EUR 35.8 million).

Liquidity position of the Group

The starting point for the cash flow from operating activities is the consolidated net profit of EUR 3.4 million. In the previous year, Manz AG recorded a cash outflow of EUR 19.6 million from the decrease in trade payables, contract liabilities, and other liabilities.

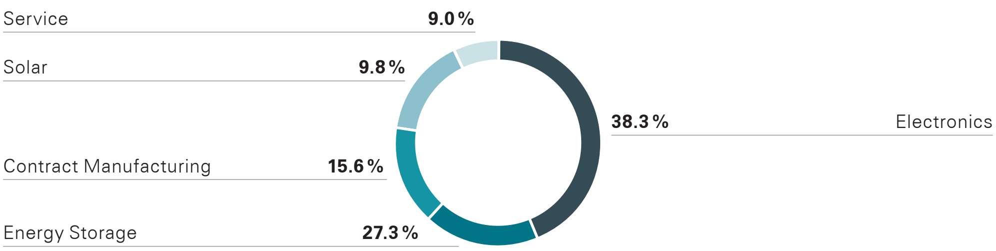
In the financial year 2020 this cash outflow amounted to EUR 3.7 million. Manz also recorded a cash inflow of EUR 12.0 million from the decrease in inventories, trade receivables, contract assets, and other assets, compared to an outflow of EUR 10.0 million in the previous year. Cash flow from operating activities thus improved significantly by around EUR 45 million compared to the previous year and totaled EUR 20.6 million for the financial year 2020.

Cash flow from investment activities amounted to EUR -9.4 million in the 2020 reporting period (previous year: EUR 6.3 million). The cash outflow mainly results from investments in intangible assets and equipment.

Cash flow from financing activities in the financial year 2020 amounted to EUR 14.7 million and resulted primarily from the change in current and non-current financial liabilities from borrowing. Taking exchange rate changes into account, Manz AG thus had cash and cash equivalents of EUR 69.7 million as of December 31, 2020 (December 31, 2019: EUR 44.0 million). Unused bank lines of credit amounted to EUR 16.9 million as of the 2020 balance sheet date (December 31, 2019: EUR 18.0 million). The considerably improved net debt amounted to EUR 7.2 million with a bank balance of EUR 69.7 million (Dezember 31, 2019: EUR 13.9 million).

Segment report

Revenues by Business Segment January 1 to December 31, 2020



Order intake

(in million EUR)

	2020	2019	Change in %
Solar	0.7	8.1	–91.0
Electronics	85.4	74.3	+14.9
Energy Storage	129.5	84.8	+52.8
Contract Manufacturing	34.9	37.5	–7.0
Service	21.2	19.1	+11.0
Group total	**271.7**	**223.7**	**+21.4**

Electronics

Manz AG offers its customers production, assembly and handling systems for the production of LCD, OLED and AMOLED flat screen displays, touch sensors, printed circuit boards and chip carriers, as well as smart phones, tablet computers, laptops, wearables and other consumer electronics in the Electronics segment. In addition, the automated assembly solutions provide "tier 1 and tier 2 companies" in the automotive industry with transformation solutions from the classic drive train to the future e-drive train. Here, the company would like to profit from the increasing digitization and automation of production and final assembly.

Overall, Manz AG recorded a mixed segment performance in 2020. Demand for machines for electronic components declined noticeably in 2020, partly due to the COVID-19 pandemic, after the strong business performance in this segment had benefited from the completion of a major order in the area of displays in the previous year. However, business with customers from the assembly automation segment developed positively, particularly in the cell contacting systems segment.

At EUR 90.7 million, revenues in the Electronics segment in 2020 were down on the previous year's figure of EUR 115.7 million. This corresponds to a 38.3 % share of consolidated revenues (previous year: 43.7 %). However, the decline in revenues of around 20 % was more significant than forecast. This is due to the declining business in Asia for production equipment for the manufacture of displays. At EUR –5.4 million, the segment EBIT showed an improvement over the previous year (EUR –7.6 million), but remained well below the target of a balanced EBIT.

Energy Storage

In the segment Energy Storage, Manz AG offers production, assembly and handling equipment for lithium-ion battery cells, modules, and packs, as well as for capacitors. The product portfolio encompasses production solutions for lithium-ion batteries and (super) capacitors in the areas of electronic end devices such as tablet PCs, mobile phones and laptops, battery-powered power tools and gardening equipment, stationary energy storage for private households and large-scale photovoltaic systems as well as in the focus market e-mobility.

In the 2020 financial year, the segment Energy Storage developed very positively. For example, Manz AG was able to report numerous major orders in the high double-digit million euro range overall. The clients include AKASOL AG, a German manufacturer of battery systems for hybrid and fully electric commercial vehicles, and an internationally active battery manufacturer from the consumer electronics sector.

The segment Energy Storage achieved revenue growth of 59 % to EUR 64.7 million (previous year: EUR 40.7 million). This corresponds to a revenue contribution to the Group of 27.3 % after 15.4 % in the previous year. Despite the strong increase in revenues, the forecast growth of between +110 % and + 130 % could not be achieved due to

COVID-19-related order deferrals. At EUR 6.9 million, segment EBIT increased significantly compared to the previous year (2019: EUR –11.3 million), thus exceeding the forecast EBIT margin in the low single-digit percentage range.

Solar

The focus within the Solar segment in the 2020 financial year continued to be on the implementation of the large CIGS orders from China Energy Investment Corporation Limited. Manz was able to install the majority of the machines at the CIGS*fab* turnkey tools at the beginning of the year, but had to interrupt further work soon thereafter due to the COVID-19 pandemic. Despite these difficulties, Manz AG remained in close contact with the client and was able to resume the installation of additional machines during the third quarter to a limited extent. The installation start of the CIGS*lab* research facility was also delayed by COVID-19 and customer delays. Due to the delays in both projects, the full completion of the two CIGS orders is expected to be postponed to the end of financial year 2021.

As a result, Solar segment revenues of EUR 23.2 million fell short of original expectations of a revenue decline of up to 35 % compared to 2019. The segment's share of revenues thus corresponds to 9.8 % of consolidated revenues (previous year: EUR 47.5 million or 18.0 %). As a result of the delayed realization of revenues, segment EBIT totaled EUR –7.8 million compared to EUR –2.0 million last year.

Contract Manufacturing

In 2020, the operating activities in the Contract Manufacturing segment were mainly carried out by the sites in Slovakia, Hungary, China and by the associated company Talus Manufacturing Ltd. at the Taiwan site. Among other things, equipment for the semiconductor industry is built there. Furthermore, at these locations Manz AG is also a high-tech partner for equipment manufacturing, parts manufacturing and assembly work for clients from a wide range of industries.

In 2020, revenues in this segment totaled EUR 37.0 million; this represents a 15.6 % share of consolidated revenues (previous year: EUR 41.5 million or 15.7 %). This development corresponds to the forecast revenue decline of between 20 % and 25 %. At EUR 12.3 million (previous year: EUR 11.5 million), the EBIT target of a margin in the low single-digit percentage range was exceeded. This includes the result from Talus Manufacturing Ltd. of EUR 9.4 million (previous year: EUR 8.8 million). The share of profit of Talus was recognized until the beginning of November 2020. At this time, Manz AG was informed by its American business partner of the exercise of a contractual call option so that it would take over the share in Talus Manufacturing Ltd. held by Manz Taiwan Ltd. Furthermore, thanks to the outstanding development seen with other customer projects, Manz AG achieved a positive segment EBIT in the fourth quarter of 2020. For example, a long-term cooperation agreement was concluded with a German manufacturer from the electronics industry at Manz AG's Slovakian location in 2020. A cooperation agreement with another leading semiconductor specialist was successfully launched at the Suzhou, China site.

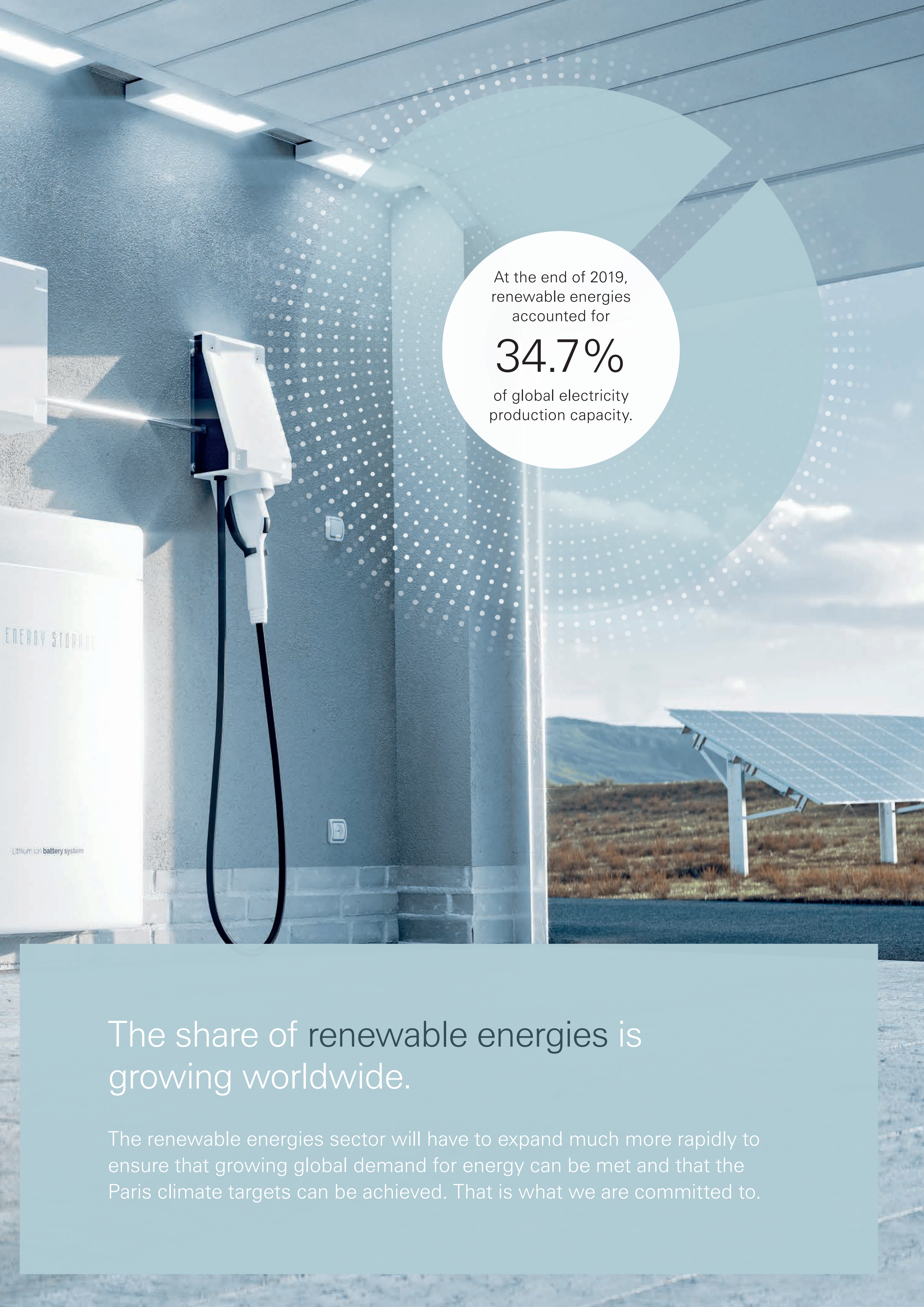
Service

In the Service segment, Manz AG combines all of its after-sales services, such as repairs and maintenance or the conversion and upgrade of machines and assemblies. In 2020, the Service segment contributed 9.0 % of the Group's total revenues with revenues amounting to EUR 21.2 million (previous year: EUR 19.1 million or 7.2 %). With the increase in revenues compared to the previous year, Manz AG was able to achieve its 2020 forecast. The segment EBIT in 2020 was EUR 1.3 million and therefore below the previous year's level of EUR 1.6 million. Margin development remained below expectations due to increasing competition in the display market.

Overall statement on corporate development 2020

Revenue trend in 2020 fell short of original expectations due to the effects of the COVID-19 pandemic and customer delays. Projects in the segments Solar and Electronics were delayed during the course of the year, in some cases considerably, and contract awards for planned projects in the segment Energy Storage were likewise pushed back in some cases. Accordingly, some of the revenues that had already been budgeted for 2020 will not be realized until 2021. Despite the fall in revenues, Manz AG reported a profitable business development with a positive EBIT margin in 2020, among other things because of a considerable improvement in internal processes.

As a result of the positive earnings development in a difficult market environment characterized by the COVID-19 crisis, Manz AG sees itself confirmed in its long-term optimization process and the forward-looking strategic development of recent years. With an order backlog as of December 31, 2020 of EUR 202.3 million (previous year: EUR 168.5 million) and incoming orders of EUR 271.7 million as of December 31, 2020 (previous year: EUR 223.7 million), the developments on the market for electromobility in particular underline the potential for Manz AG. Further information on the achievement of targets can be found in the corresponding section of the forecast report.



At the end of 2019, renewable energies accounted for

34.7%

of global electricity production capacity.

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 can be met and that the Paris climate targets can be achieved. That is what we are committed to.

Making efficient use of the sun's energy

The production of electricity using photovoltaics equipment and the storage of energy are important components of a successful energy transformation. In both of these areas, Manz is among the leading development partners to industry.

Our motivation: Electricity supplies should be reliable – even when the sun does not shine.

Of the

17

global sustainability targets of the United Nations...

... three are addressed by Manz solutions: affordable and clean energy; industry, innovation and infrastructure; climate protection measures.

With our turnkey production lines for CIGS thin-film solar modules, we play a role in the production of climate-friendly electricity. And our production solutions for battery storage systems ensure that this electricity is available around the clock. The energy industry profits from

- thin-film solar modules based on the CIGS technology, i.e. a semiconductor consisting of copper, indium, gallium and selenium
- stationary energy storage systems for the decentralized storage of energy from renewable sources for secure electricity supplies.

Making sure that electricity remains secure, clean and affordable

As one of the pioneers in photovoltaics machine building, Manz plays a major role in ensuring that solar companies are able to bring their products to market at more affordable prices and with a greater degree of efficiency, which means that solar electricity can be offered at competitive prices.

The greater the share of renewable energies in the electricity mix, the greater the demand for load balancing technologies. These include storage systems that keep available excess energy that is not required or that cannot be fed into the grid immediately. Our production technology increases the performance of the required energy storage systems and also makes them cheaper to produce.

Corporate Governance

Declaration on corporate governance in accordance with section 289f and section 315d HGB

The corporate governance statement in accordance with sections 289f and 315d of the German Commercial Code (HGB) was prepared jointly for Manz AG and the Manz Group and published under the heading "Manz AG Corporate Governance Statement and Corporate Governance Report for the Financial Year 2020" on the company's website www.manz.com in the Investor Relations section under the heading "Corporate Governance – Corporate Governance Statement."

Disclosures in accordance with section 315a (1) HGB and notes pursuant to section 176 (1), Sentence 1 Stock Corporation Act (AktG) on the disclosures in accordance with sections 289a (1) and 315a (1) HGB

Composition of subscribed capital

Manz AG's subscribed capital is valued at EUR 7,744,088.00 and is divided into 7,744,088 no-par value bearer shares. 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. In other respects, shareholders' individual rights and duties result from the provisions of the German Stock Corporation Act (AktG), particularly sections 12, 53a et seqq., 118 et seqq., and 186.

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

As a result of notifications received regarding major holdings of voting rights pursuant to sections 33 and 34 of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG) and transactions involving company shares executed by managers pursuant to Article 19 of the Market Misuse Directive, the Managing Board is aware of the following direct and indirect holdings in the company's capital that exceed 10 % of the voting rights:

	Number of voting rights	Percentage of voting rights
Dieter Manz, Schlaitdorf	2,175,199	28.09 %
thereof, directly (33 WpHG)	953,942	12.32 %
thereof, attributed (34 WpHG)	1,221,257	15.77 %
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	19.67 %
Full chain of subsidiaries:		
Shanghai Electric (Group) Corporation		
Shanghai Electric Group Company Limited		
Shanghai Electric Hongkong Co. Limited		
Shanghai Electric Germany Holding GmbH (shareholder)		

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 right controls when employees are issued shares of company stock and do not directly exercise their control rights

Employees with holdings in the capital of Manz AG may directly exercise any control rights to which they are entitled based on the shares transferred to them in accordance with provisions of the company's Articles of Incorporation and the law.

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 is governed by sections 84 and 85 of the German Stock Corporation Act. These sections stipulate that members of the Managing Board are to be appointed by the Supervisory Board for a period lasting 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. Pursuant to section 84(3) 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 a chairperson of the Managing Board for good cause.

Amendments to the Articles of Incorporation are governed by sections 133 et seqq. and 179 et seqq. 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 Article 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 seqq. 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

On the basis of a resolution passed by the Annual General Meeting of July 12, 2016 pursuant to Article 3, sentence 3 of the Articles of Incorporation, the Managing Board is authorized to increase the company's capital stock, with Supervisory Board approval, in the period until July 11, 2021, on a one-time basis or in partial contributions, up to a total of EUR 3,872,044.00 through the issuance of a total of 3,872,044 new bearer shares (no-par-value shares) by means of cash or non-cash contributions (Authorized Capital 2016).

In principle, the new shares must be offered to shareholders for subscription. The new shares may also be assumed by banks designated by the Managing Board with the obligation to offer them to the shareholders for subscription (indirect Reference right). However, the Managing Board was authorized, with Supervisory Board approval, to exclude shareholders' subscription rights

- in the event of a capital increase for cash consideration, if the issue amount of the new shares is not significantly less, within the meaning of section 203 (1) and (2) and section 186 (3) sentence 4 of the German Stock Corporation Act (AktG), than the stock exchange price of shares of the company of the same type at the time of establishment of the issue price, which is to be as close in time as possible to the time of issue of new shares. This authorization to exclude the subscription right applies only to the extent that shares to be issued in the capital increase do not in total represent a proportionate amount of the capital stock of more than EUR 774,408.00 and overall do not comprise more than 10% of the capital stock at the time the authorization is exercised. The proportionate amount of capital stock of shares which are issued or sold during the period of this authorization based on other authorizations in direct or corresponding application of section 186 (3), sentence 4 of the German Stock Corporation Act (AktG), with exclusion of subscription rights, is to be credited toward this maximum amount for the exclusion of subscription 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.

The Managing Board is authorized, with Supervisory Board approval, to determine the further details of the implementation of the capital increases based on the authorized capital.

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, the company must ensure that the statutory subscription right is granted accordingly to shareholders of Manz AG.

The Managing Board is however authorized, with Supervisory Board approval, to exclude fractional amounts from shareholders' Right of occupation and also to exclude the shareholders' subscription rights to the extent necessary in order to give holders of already issued bonds with options or conversion rights and/or conversion obligations a subscription right to the extent to which they would be entitled after exercising their options or conversion rights or upon fulfilling their conversion obligation.

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 the subscription right applies to bonds issued with an option and/or conversion right or a conversion obligation, carrying an option and/or conversion right or a conversion obligation for shares with a total proportionate amount of the capital stock, which may not exceed 10 % of the capital stock, either at the time the authorization becomes effective or – in the event that this amount is lower – at the time this authorization is exercised. The following are offset against the aforementioned ten percent limit:

- new shares issued from authorized capital excluding subscription rights in accordance with section 186 (3) sentence 4 Stock Corporation Act (AktG) during the term of this authorization up to issue of bonds with option and/or conversion rights or conversion obligations pursuant to section 186 (3) sentence 4 Stock Corporation Act (AktG), such as

- such shares as are acquired on the basis of an authorization granted at the Annual General Meeting and are disposed of, with exclusion of the subscription right, pursuant to section 71 (1) no. 8 sentence 5 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 up to the issue, subject to the exclusion of subscription rights pursuant to section 186 (3) sentence 4 of the German Stock Corporation Act (AktG), of the bonds carrying an option and/or Conversion right or conversion obligation.

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 exclude 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 the 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 Article 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 AktG on the basis of issued or guaranteed at the Annual General Meeting on Tuesday, 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 the 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 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.

Subscription rights are to be granted, structured and exercised in accordance with the provisions in the resolution of the Annual General Meeting on July 2, 2019.

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

Pursuant to Article 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 Tuesday, 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.

Authorization to issue share subscription rights within the scope of the 2015 Manz Performance Share Plan 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.

Subscription rights are to be granted, structured and exercised in accordance with the provisions in the resolution of the Annual General Meeting on July 7, 2015.

Pursuant to Article 3 (5) of the Articles of Incorporation, the company's capital stock has been conditionally increased by up to EUR 230,000.00 through the issue of up to 230,000 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 Tuesday, 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 the further details of the conditional capital increase and its implementation.

In addition, the Managing Board and – when issuing shares to members of the Managing Board – the Supervisory Board were authorized on June 30, 2020, to use acquired Manz AG treasury shares to service subscription rights that have been or will be issued to members of the Managing Board and executives as part of the Manz Performance Share Plan 2015 approved by the Annual General Meeting on July 7, 2015, under Item 6 on the agenda, or as part of the Manz Performance Share Plan 2019 approved by the Annual General Meeting on July 2, 2019, under Item 6 on the agenda. This authorization to reissue clearly defines the group of people to whom the Manz shares can be transferred.

The Manz Performance Share Plan 2015 for Managing Board members and Company executives as well as the Company or its subsidiaries was explained in a report from the Managing Board at the Annual General Meeting on July 7, 2015. Likewise, the Manz Performance Share Plan 2019 for members of the Managing Board and Company 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.

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 the Company 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 held on June 30, 2020, authorized the Managing Board of the company to acquire treasury shares until July 1, 2024, pursuant to section 71 (1) number 8 of the German Stock Corporation Act (AktG) with a proportional value of up to 10 % of the capital stock at the time this authorization becomes effective or of the existing capital stock of the company at the time of exercise of the authorization, if such amount is lower, whereby at no point in time more than 10 % of the capital stock of the company may be represented by the shares acquired on the basis of this authorization together with other shares of the company, which the company has already acquired and still possesses or which are attributable to it pursuant to sections 71d and 71e AktG. The provisions in Section 71 (2), sentences 2 and 3 AktG must be observed.

The acquisition may take place only through the securities exchange or by means of a public purchase order and must satisfy the principle of equal treatment of shareholders (section 53a 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 of use is restricted to shares with a proportionate amount of capital stock that in total does not exceed 10 % of the capital stock of the Company, neither at the time of coming into effect of this authorization, nor – if such amount is lower – at the time of exercise of the above authorization. The maximum limit of 10 % of the capital stock is reduced by the proportionate amount of the capital stock that is attributable to those shares that are issued or sold during the term of this authorization with exclusion of the subscription rights pursuant to or in accordance with section 186 (3) sentence 4 AktG. The maximum limit of 10 % of the capital stock is further reduced by the proportionate amount of the capital stock represented by those shares that were to be issued in order to service bonds with option or conversion rights and/or option or conversion obligations to the extent such bonds are issued during the term of this authorization with exclusion of subscription rights in analogous application of section 186 (3) sentence 4 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 seqq. AktG.

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

Patent and expertise license agreement with ZSW

There is a patent and expertise license agreement from the year 2017 between Manz AG and the Center for Solar Energy and Hydrogen Research Baden-Württemberg (Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg, ZSW), which is a foundation under German civil law and a research institution of the state of Baden-Württemberg, under which the ZSW grants Manz AG certain licenses to its patents and expertise with regard to CIS and/or CIGS technology for the manufacture of thin-film solar cells. The new patent and expertise license agreement can be terminated by ZSW for good cause if a competitor of ZSW acquires or exceeds 30 % of voting rights in Manz AG in terms of section 33 et seqq. WpHG.

Patent and expertise license agreement with NICE Solar Energy GmbH

In addition, Manz AG and NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH), a subsidiary of NICE PV Research Ltd., in which China Energy Investment Corporation Limited (formerly Shenhua Group), Shanghai Electric Group Co. Ltd , and Manz AG, a patent and expertise licensing agreement from 2017, according to which NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH) of Manz AG has granted certain patents and expertise regarding the CIS or CIGS technology for the production of thin-film solar cells. The patent and expertise licensing agreement can be terminated by NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH) for good cause if a third party directly or indirectly acquires at least 30.0 % of the shares in Manz AG where a direct or indirect purchase of shares by Shanghai Electric Group Co. Ltd., China Energy Investment Corporation Limited (formerly Shenhua Group) exceeding 30.0 % or such acquisition by Dieter Manz does not give rise to the right of termination. NICE Solar Energy GmbH filed for protective shield proceedings at the Heilbronn District Court in accordance with Section 270b of the German Insolvency Code in 2021. As a result, the company is now in the process of restructuring, but business operations will continue unchanged. The licenses granted for the production of thin-film solar cells of the CIS and CIGS technology remain valid. At the current time, Manz AG does not expect any significant effects on the assets, financial and earnings situation from the protective shield proceedings of NICE Solar Energy GmbH.

Talus Manufacturing Ltd.

An agreement existed between the subsidiary Manz Taiwan Ltd. and Lam Research Corporation, a leading US manufacturer of equipment for the semiconductor industry regarding Talus Manufacturing Ltd. in Chungli, Taiwan, in which Manz Taiwan Ltd. held an 80.5 % stake and the partner held a 19.5 % stake. The partner has informed Manz AG that it will acquire the shares held by Manz Taiwan Ltd. in Talus Manufacturing Ltd. By exercising the contractually agreed purchase option, the partner acquires this 80.5 %. Regulatory approval for the sale of the shares was granted at the end of January 2021.

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 that have been made in the event of a takeover bid with members of the Managing Board or with employees

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 is to be deemed to have taken place when the company receives notification from a notifying party in accordance with section 33 (1), sentence 1 WpHG that the notifying party, with inclusion of the voting rights attributable to him pursuant to section 34 WpHG, has reached or exceeded a 25 % or higher share of 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 severance payment shall consist of the total amount of the fixed salary owed for the remaining term of the employment contract and the total amount of the cash bonus owed for the remaining term of the employment contract, whereby for the calculation of the amount, the average of the EBT return in the last financial year before the termination and the EBT return that is expected to be realized in the current financial year according to the forecast of the company are to be taken as the basis. The severance payment is limited to the amount that corresponds to 150 % of the severance cap. The value of two years' annual compensation is deemed to be the severance cap. If the remaining employment term on the date the resignation becomes effective amounts to more than two years, the severance payment is reduced, insofar as it is being granted for the exceeding period, by 75 % for the purposes of offsetting the severance payment with a lump sum equal to the member's expected income from other sources after ending employment. In addition, the amounts used in the calculation of the severance payment must also be discounted at 3 % p.a. each to the date on which the severance payment is due.

In other respects, the company has not entered into any agreements with members of the Managing Board or with employees that make provision for compensation payments in the event of a takeover bid.

Compensation report

The following compensation report presents the basic principles of the compensation systems for the Managing and Supervisory Boards of Manz AG, as well as the salaries earned by the members of the Managing and Supervisory Boards in the financial year 2020.

System of compensation for the Managing Board

The aim of the compensation system is to compensate the members of the Managing Board commensurately according to their area of activity and responsibility, taking into account not only the personal performance of each respective Managing Board member, but also the company's overall situation and business success. The compensation structure is geared toward sustainable corporate growth.

The compensation paid to members of the Managing Board consists of fixed and variable components. When assessing the amount of the remuneration elements, a distinction is made between the Chairman of the Managing Board and the other members of the Managing Board.

Fixed elements of compensation

The fixed components of Managing Board compensation consist of a fixed monthly salary, benefits in kind, and contributions to a company retirement scheme.

The fixed salary is paid in twelve equal monthly installments. These fixed payments function as a base salary to cover Managing Board members' and their families' ongoing cost of living expenses irrespective of the company's performance.

An appropriate company car, which can also be used for private purposes, is provided to Managing Board members as a benefit in kind. In addition, the company has taken out accident insurance policies with appropriate benefits for each of the Managing Board members. These policies also cover non-work-related accidents. Furthermore, there is a directors and officers pecuniary damage liability insurance policy (so-called D & O insurance) for the members of the Managing Board at the company's expense.

The company has undertaken to pay pension contributions to members of the Managing Board, Martin Drasch, Manfred Hochleitner and Jürgen Knie, by paying annual contributions to a support fund.

Variable elements of compensation

General

The variable compensation comprises an annual component linked to the company's success in the form of an annual cash bonus (short-term variable compensation) on the one hand, and on the other hand, a share-based component with a multi-year assessment in the form of annual stock options based on the 2019 Manz Performance Share Plan (long-term variable compensation).

The variable components complement the fixed elements of compensation, serving as a specific incentive to achieve sustained corporate growth while contributing to the Managing Board members' accumulation of personal assets and financial independence. In the interest of an alignment of variable compensation with sustainable corporate development, the fair value of the subscription rights granted on the basis of the recognized 2019 Manz Performance Share Plan outweighs the annual cash bonus.

Annual cash bonus

The aim of the annual cash bonus is to allow the members of the Managing Board to participate in the company's success in a given financial year as a result of their own personal management performance.

The cash bonus is granted annually, depending on the EBIT margin of the respective financial year. The EBIT margin is calculated as the ratio of earnings before interest and taxes (EBIT) to total revenues in accordance with the consolidated financial statements in accordance with IFRS. Moreover, the cash bonus is calculated based on the fixed salary of the particular Managing Board member for the given financial year (fixed annual salary).

The granting of cash bonuses requires an EBIT margin of at least 0.1 %, depending on the contractual agreement with the board member. The Managing Board member receives a cash bonus of 1 % of the annual fixed salary with an EBIT margin of 0.1 %. Accordingly, the percentage applicable for calculating the cash bonus increases by one percentage point for each full 0.1 percentage point by which the achieved EBIT margin exceeds 0.1 %. Therefore, the Managing Board member receives, for example, a cash bonus of 50 % of the annual fixed salary with an EBIT margin of 5.0 %, and, with an EBIT margin of 10 %, a cash bonus of 100 % of the annual fixed salary. The upper limit is set at an EBIT margin of 16.0 %, at which the cash bonus is 160 % of the annual fixed salary.

The Supervisory Board has set an EBIT margin of 6 % as the medium target of short-term variable compensation for the purpose of determining the ratio between the individual compensation elements. At this middle value, the cash bonus is 60 % of the fixed annual salary.

Manz Performance Share Plan 2019

The rights to Manz shares granted and to be granted on the basis of the 2019 Manz Performance Share Plan in the years 2019 to 2022 are intended to stimulate the Managing Board members to increase their internal and external company value in a sustainable way and, therefore, their interests with those of the shareholders, but also with the other stakeholders.

The Supervisory Board may in principle determine the number of subscription rights to be granted to the individual members of the Managing Board at its own discretion – in line with the legal requirements for the appropriateness of the compensation. There is no contractual claim for the granting of performance shares.

However, the Supervisory Board has specified as a guideline that the annual long-term variable compensation in the form of performance shares (allocation value) should, as a rule, amount to 50 % of the annual total cash compensation of the respective Managing Board member. In this case, total cash compensation consists of the member's annual fixed salary, as well as the middle target value of the annual cash bonus equal to 60 % of the annual fixed salary. The performance shares to be granted shall be valued upon issuance through the price of the Manz share in Xetra trading on the Frankfurt Stock Exchange on the basis of an appropriate period of time at the beginning of the particular issuing period.

Further details of the 2019 Manz Performance Share Plan and the subscription rights to shares of the Company issued on the basis thereof are set out in the "Corporate Governance Statement and Corporate Governance Report of Manz AG for the Financial Year 2020" in section VI, which can be downloaded from the Manz AG website at www.manz.com, in the Investor Relations section under the heading "Corporate Governance".

Severance cap in the event of early termination of Managing Board duties

The service contracts of the Managing Board members stipulate that, in the event of early termination of the term of office and service which is not based on cause, severance payments to the Managing Board member, including fringe benefits do not exceed two years' compensation (severance payment cap) and not more than the remainder of the employment relationship. The calculation of the severance payment cap will be based on the total compensation of the past financial year and, if applicable, the expected total compensation for the financial year in progress at the time of early termination.

Provisions in the event of a change of control

In the event of a change of control, the employment contract of CEO Martin Drasch stipulates that the member of the Managing Board is entitled to terminate the employment contract with three months' notice to the end of a calendar month and to resign from his office as member of the Managing Board with the same deadline. In principle, a change of control occurs when the company receives a notice from a party that the party, including the voting rights attributable to it, 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.

Further details on the change of control provisions in the service contracts of the named members of the Managing Board are provided in this consolidated situation report in the "Disclosures pursuant to section 315a paragraph (1) HGB and explanatory report pursuant to section 176 (1) sentence 1 of the Stock Corporation Act (AktG) on the disclosures pursuant to section 289a (1) and section 315a (1) HGB" in the subsection" Compensation Agreements of the Company, which have been concluded in the event of a takeover bid with members of the Management Board or with employees ".

Compensation in the financial year 2020

Compensation of the Managing Board

Compensation of the Managing Board according to DRS 17

The members of the Managing Board received total compensation of TEUR 2,250 for carrying out their duties in the financial year 2020 (previous year: TEUR 996).

The following table provides an overview of the compensation paid to individual members of the Managing Board according to DRS 17 for performing their duties in the financial year 2020:

Managing Board compensation in the Financial Year 2020

	Non performance-related components		Performance-based components (short-term incentive)		Components with long-term incentive	
(in TEUR) Previous year's figures in brackets	**Fixed salary**	**Other benefits[1]**	**Discretionary bonus**	**Cash bonus**	**Subscription rights to shares (fair value)**	**Total**
Martin Drasch Chairman of the Managing Board	310 (307)	23 (37)	0 (0)	90 (0)	436 (110)	**859 (454)**
Manfred Hochleitner Chief Financial Officer	241 (240)	21 (24)	20 (0)	72 (0)	349 (88)	**703 (352)**
Jürgen Knie Chief Operations Officer	242 (124)	25 (10)	0 (0)	72 (0)	349 (56)	**688 (190)**
Total	**793** (671)	**69** (71)	**20** (0)	**234** (0)	**1,134** (254)	**2,250** (996)

1 In particular, monetary advantages of benefits in kind and contributions to the company pension scheme (support fund).

The subscription rights to shares of Manz AG on the basis of the Manz Performance Share Plan 2019 were measured at fair value using recognized mathematical finance methods.

Compensation of the Managing Board according to the German Corporate Governance Code

The compensation of the Managing Board for the financial year 2020 is also disclosed on the basis of the presentation recommended by the German Corporate Governance Code in the framework of exemplary tables broken down by the benefits granted and the allocation.

The following table shows the benefits, including fringe benefits, granted to the individual members of the Managing Board for the reporting year and the previous year in accordance with the recommendations of the German Corporate Governance Code. The target values (payment at 100 % target achievement) as well as the minimum and maximum compensation achievable for the reporting year are specified for the variable compensation.

	Martin Drasch Chairman of the Managing Board					**Manfred Hochleitner** Chief Financial Officer					**Jürgen Knie** Chief Operations Officer				
Benefits granted (in TEUR)	**2019** Actual value	**2020** Actual value	**2020** Target	**2020** (Min)	**2020** (Max)	**2019** Actual value	**2020** Actual value	**2020** Target	**2020** (Min)	**2020** (Max)	**2019** Actual value	**2020** Actual value	**2020** Target	**2020** (Min)	**2020** (Max)
Fixed compensation	307	310	313	313	313	240	241	245	245	245	124	242	245	245	245
Fringe benefits	19	11	11	11	11	12	9	9	9	9	4	13	13	13	13
Total	**326**	**321**	**324**	**324**	**324**	**252**	**250**	**254**	**254**	**254**	**128**	**255**	**258**	**258**	**258**
Single-year variable compensation	0	90	180	0	480	0	92	144	0	384	0	72	144	0	384
Multi-year variable compensation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manz Performance Share Plan 2019 – Tranche 2020 (Term to 2022)	110	436	240	0	480[2]	88	349	192	0	384[2]	56	349	192	0	384[2]
Total	**436**	**847**	**744**	**324**	**1,284**	**340**	**691**	**590**	**254**	**1,022**	**184**	**676**	**594**	**258**	**1,026**
Pension expense[1]	18	12	12	12	12	12	12	12	12	12	6	12	12	12	12
Total compensation	**454**	**859**	**756**	**336**	**1,296**	**352**	**703**	**602**	**266**	**1,034**	**190**	**688**	**606**	**270**	**1,038**

1 Contribution-based payments to the support fund for Martin Drasch, Manfred Hochleitner and Jürgen Knie.
2 The value of the performance shares is limited to 300 % of the grant value upon exercise.

The following table shows the allocation of the compensation granted to the individual members of the Managing Board in or for the reporting year and the previous year in accordance with the recommendations of the German Corporate Governance Code.

	Martin Drasch Chairman of the Managing Board		**Manfred Hochleitner** Chief Financial Officer		**Jürgen Knie** Chief Operations Officer	
Allocation (in TEUR)	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Fixed compensation	310	307	241	240	242	124
Fringe benefits	11	19	9	12	13	4
Total	**321**	**326**	**250**	**252**	**255**	**128**
Single-year variable compensation	0	0	20	0	0	0
Multi-year variable compensation	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total	**321**	**326**	**270**	**252**	**255**	**128**
Pension expense[1]	12	18	12	12	12	6
Total compensation	**333**	**344**	**282**	**264**	**267**	**134**

1 Contribution-based payments to the support fund for Martin Drasch, Manfred Hochleitner and Jürgen Knie.

The following table contains the proportion of the total expenses for share-based compensation (IFRS 2.51a) recorded in the reporting period for each individual director:

(in TEUR)	**Martin Drasch** Chairman of the Managing Board	**Manfred Hochleitner** Chief Financial Officer	**Jürgen Knie** Chief Operations Officer	**Total**
Total compensation				**689**
Per Executive Board member	160	86	73	**319**

Compensation of the Supervisory Board

The Supervisory Board compensation regulated in the Articles of Incorporation was amended by resolution of the Annual General Meeting on July 3, 2018.

According to the regulation in force until July 3, 2018, each member of the Supervisory Board receives fixed compensation payable after the end of the financial year amounting to EUR 12,000.00, in addition to the reimbursement of expenses. The compensation for the chairperson of the Supervisory Board is EUR 24,000.00, while, for the deputy chairperson, it is EUR 18,000.00. Supervisory Board members who are only members during a portion of a financial year receive proportionately less compensation.

The applicable rules since July 4, 2018 stipulate that each member of the Supervisory Board receives fixed compensation of EUR 16,000.00, payable after the end of the financial year. The members of the Supervisory Board receive an additional fixed compensation for each financial year for their work on Supervisory Board committees, which amounts to EUR 8,000.00 for each member of a committee. Committee activities are to be considered for a maximum of two committees. In addition, the members of the Supervisory Board receive an attendance fee of EUR 1,500.00 for each attendance at a meeting of the Supervisory Board and its committees. Attendance fees are to be granted only once when several sessions take place in one day. The Chairman of the Supervisory Board receives three times the aforementioned compensation. His deputy receives double the fixed compensation mentioned in the first sentence.

The company also reimburses Supervisory Board members for any VAT to be paid on their compensation. Moreover, the company can insure Supervisory Board members at its own expense against civil and criminal recourse in connection with the execution of their official duties; the company can also take out corresponding liability insurance against legal expenses and property loss (D&O insurance policy).

The following table provides an overview of the compensation paid to individual members of the Supervisory Board for performing their duties in the financial year 2020 (previous year's values in parentheses):

Supervisory Board Compensation in Financial Year 2020

Fixed salary (in TEUR) Previous year in parentheses	
Prof. Dr. Heiko Aurenz, Chairperson	101 (130.5)
Dieter Manz Vice Chairperson	48 (59.5)
Prof. Dr.-Ing. Michael Powalla	20 (23.5)
Dr. Zhiming Xu	20 (23.5)
Total	**189** **(237)**

Furthermore, the company also covered the cost of D&O insurance for each member of the Supervisory Board.

As in the previous years, no loans or advances were granted to members of the Supervisory Board and no contingencies were entered into for their benefit.


Displays of a
size of up to
2,940 mm by
3,370 mm
can be produced
with our euipment.

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.

Electromobility and autonomous driving are responsible for the sudden jump from 60–100 sensors per car in the year 2016 to …

… over

200

sensors per car in the year 2020.

Our challenge: From microchip to solar power facility

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 with regard to their effectiveness and appropriateness and they are the complete responsibility of the CFO. Responsibility for risk monitoring, on the other hand, is decentralized and, depending on the risk category and scope, is the responsibility of both the divisional managers and managing directors as well as Manz AG's Managing Board members. 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. The Managing Board and the Supervisory Board are presented with an overall report at regular intervals for a comprehensive assessment of the risk situation.

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. Integrating the company's entire workforce enables risks to be identified quickly and communicated to the appropriate risk officer, who must then take appropriate steps in accordance with the principles of action defined across the Group.

The risks are attributed to the following categories:

- Operating 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 effectiveness and appropriateness of our risk early detection system have been assessed by the public auditor. He noted that the Managing Board has taken the measures required under section 91 (2) of the Stock Corporation Act (AktG), in particular with regard to the establishment of a monitoring system, in an appropriate manner, and that the monitoring system is capable of identifying developments that endanger the continued existence of the company at an early stage.

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 financial reporting process is to identify and assess risks that could prevent the consolidated financial statements from conforming to the rules. 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:

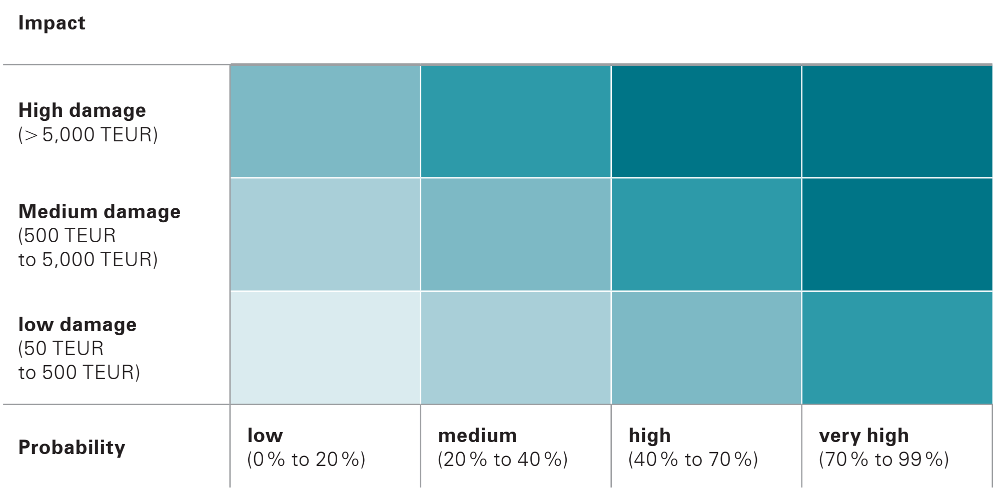
The CFO has total responsibility for the company's internal monitoring and risk management system as it pertains to the accounting process. All of the companies included in the consolidated financial statements are integrated via a defined management and reporting organizational structure. The separate 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 are 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 use of SAP 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 quantifies both probability of occurrence (likelihood) and potential effect (impact).



Risk report

The following summary shows the evaluation of the risks, which could occur in the financial year 2021 (forecast period) and could lead to deviations in the development of the revenues and/or results.

Risks		Impact	Probability of occurrence	Change to previous year
Operating risks	Project risks	high	medium	↗
	Personnel risks	medium	low	↘
	Liquidity and financing risks	high	low	→
	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 customersand industries	high	medium	↗
Market risks	Risks in connection with international business activities	high	medium	↗
	Risks due to increasing competition	low	medium	↘
	Risks arising from rapid technological change and the market launch of new products	high	medium	→
Environmental risks	Risks related to pandemics	medium	medium	→
	Risks from the environment and nature	medium	low	—

Operating risks

Project risks

Project risks relate primarily to non-standardized major contracts. In such contracts, risks arise from potential missing planned costs or schedules, the non-fulfillment of the acceptance criteria and order cancellations and the associated non acceptance of contracts as well as contract risks. By expanding the share of standardized machine components in the product portfolio, which can be modularly customized to modules 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. Specific project risks also exist, in particular with regard to contracts concluded with Shanghai Electric Group and China Energy Investment Corporation Limited for the supply of a CIGS production line, and a CIGS research line with a total order volume of EUR 263 million. The expertise required for the commissioning of the equipment is currently not available in its entirety in the Manz Group and must, therefore, be built up, for example, through new hires or purchases. Project handling risk is reduced through the use of external project management experts experienced in such major projects, some of whom are also temporarily engaged, as well as through a monthly steering committee, which also includes all members of the Managing Board. The large CIGS projects are currently suspended because of the construction work caused by the customer at the corresponding production sites. As of December 31, 2020 there were contractual assets from these orders of EUR 21.5 million. To date, the customers have fulfilled all the contractual obligation, notably the payment obligations. Manz expects a temporary interruption and a continuation of the orders in the course of 2021.

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 creates a positive working environment with measures such as flexible working time models or employees' financial participation in the success of the company, and can therefore retain employees and expertise in the company in the long term. As a listed company, Manz AG enjoys greater attention from potential employees than do unlisted 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

At present, parent company Manz AG, is financing itself via bank balances and a small 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 the reporting date December 31, 2020, the Manz Group had surplus cash and cash equivalents in the amount of EUR 69.7 million as well as free cash and guarantee credit lines in the amount of EUR 16.9 million (previous year: EUR 18.0 million). The Manz companies are required, where possible, to process orders cash positive in order to reduce liquidity and financing risks. Here, the deposits should exceed the payouts over the entire term of the respective project. If normal in project-based business, a delay on incoming orders or payments has significant effects on liquidity or the relevant company and possibly also on the Group. In order to recognize risks from delayed payments in a timely manner, the Manz Group works with a rolling liquidity forecast, which is updated bi-weekly. Based on current corporate planning and an order backlog of EUR 202.3 million as of the reporting date December 31, 2020 (previous year: EUR 168.5 million), which leads to future the payment receipts, the Managing Board assumes that Manz AG will be able to meet its future payment obligations.

Currency risks

Manz AG's currency risks arise from operating activities. In financial year 2020, these mainly related to transactions of the Asian companies from the sale of machinery. The transaction-related exchange rate risk resulting from the appreciation or depreciation of the US dollar against the New Taiwan Dollar, the euro against the New Taiwan Dollar and the euro against the Hong Kong Dollar is generally hedged by forward exchange transactions wherever necessary and possible. Furthermore, economic currency risk is generally also reduced by distributing the production locations over several countries (natural hedging).

Information technology risks

A large proportion of the processes and communication in the Manz Group are IT-based. For this reason, the security of corporate data and the avoidance of interruptions to IT-supported business processes have high priority. For this purpose, IT systems are protected against possible unauthorized access by third parties, as well as against 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. For instance, components for smartphones and tablet computers, batteries for electrical vehicles, consumer electronics and stationary energy storage systems as well as solar modules are produced on Manz machines. This market positioning on highly competitive and innovation-driven markets bears the risk of a competitive disadvantage due to insufficient structural flexibility, insufficient expertise or a 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. Based on this knowledge, the company derives innovations with unique selling points 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 42 % of its revenues with three customers in the 2020 financial year. If the loss of a major client cannot be compensated for, 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 three strategic segments. In this regard, modularly combinable machines and machine components, as well as "small lines" and major projects (> EUR 10 million order volume) 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. In addition, Manz accepts third-party business in the Contract Manufacturing segment in order to achieve balanced capacity utilization despite the cyclical development of its strategic business divisions.

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.

Risks due to increasing competition

Existing and potential competitors, especially Asian manufacturers, could seek to gain market share in Manz AG's target industries, notably through aggressive pricing, imbalances through local tax and subsidy policies by states and governments, or through 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 provides clarity about the competitive situation in a timely manner. The process of "product identification, development and market launch" also aims to provide the necessary competitive advantage on growth markets with strategic innovations and to further strengthen Manz AG's position as a high-tech equipment manufacturer. 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. Strategic cooperations, e.g., in the segment Energy Storage with the Chinese company Shenzhen Yinghe Technology Co. Ltd. are also aimed at streamlining the individual service portfolio by focusing, thereby reducing the cost base and increasing the company's competitiveness.

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 segment, 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. Based on our risk analysis, Manz also pursues the goal of ensuring that projects and products are implemented in line with contractual agreements. Manz AG also counters the fundamental risk involved in developing and launching new products for individual customers by expanding its product portfolio to include machine components which can be customized to form modular assemblies or complete production machines at the customer's request.

Environmental risks

Risks related to pandemics

As an internationally active high-tech equipment manufacturer, Manz AG has production facilities in Germany, China, Taiwan, Slovakia, Hungary, and Italy, as well as global service branches. 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, the COVID-19 pandemic could continue to have a negative impact on the execution of our customer projects in the segments Solar and Electronic Components 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

With many years of proven expertise in automation, laser processing, vision processing, metrology, wet chemistry and roll-to-roll processes, Manz AG is active in the segments Solar, Electronics and Energy Storage. Manz AG offers a broad portfolio of innovative products to producers and their suppliers in a wide variety of industries worldwide. This includes customer-specific production systems right up to machines that can be linked together to form complete, individual system solutions based on a modular system. Manz AG also offers services around its core technological competencies. Diversification in technologies, industries and regions is aimed at adjusting production capacities in line with the investment cycles of individual industries and using them by other segments within the Group. This should create the stability necessary for sustainable corporate development. At the same time, this diversified business model gives the company the opportunity to benefit from the growth potential of several dynamic target markets. The company has, for example, opened up a further significant area in connection with the electric power trains in electric vehicles with a major order from a Tier 1 automotive supplier for machines for the automated assembly of cell contacting systems for battery cells.

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 aim of significantly expanding its customer base and thus further stabilizing its business model, Manz AG is constantly expanding the proportion of modular machines in its product portfolio for all segments, 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.

Cost-conscious management is of crucial 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 using its extensive technological expertise across industries, the company generates synergies and thus aims to make a contribution to minimizing its customers' production costs, thus contributing to their economic production. At the same time, the synergy effects achieved between the segments should increase the Manz Group's productivity and profitability. By leveraging the synergies between the individual segments, Manz AG's business model is also flexibly positioned for new growth trends and sales markets with additional revenues and earnings potential.

Strategic cooperation with Chinese partners opens up growth potential

Manz also entered into a strategic alliance with a Chinese partner in the segment Energy Storage at the start of 2020. Shenzhen Yinghe Technology Co. Ltd. was formed in 2006 and is engaged in research and development, production and sales of intelligent automation solutions for the manufacture of lithium-ion battery cells. As part of this cooperation, Manz and Yinghe will jointly offer their customers the best equipment technology from their respective product portfolios in the form of a licensing arrangement. In addition to joint project management, both partners have agreed to provide mutual support for research and development activities in conjunction with production equipment for lithium-ion batteries. With this step, Manz is pursuing the goal of significantly improving its own starting position when placing orders for projects to be implemented in future, and thus being able to benefit from the market potential.

Assessment and Summary of the Risk and Opportunity Situation

Manz AG's risk portfolio consists of risks that can be influenced by the Group as well as risks that cannot be influenced, such as economic activity and sector development. 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.

The identification of risks and opportunities has not given rise to any risks that could jeopardize the continued existence of the entire Group or its Group companies for the financial year 2020 or for the forecast period 2021. A going concern risk is derived from the risk-bearing capacity key figure, which takes into account the cumulative expected value of all risks with a probability of occurrence of more than 40 %. If this key figure exceeds half of the previous year's consolidated or individual financial statement equity, this is defined as a going concern risk.

In the financial year 2020, the risk and opportunity situation has improved in respect of the effects of the COVID-19 pandemic, while the current temporary interruption of work on the CIGS orders in China is having a detrimental effect. For the other risks, the situation has not changed materially compared to the previous year. 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
Strategic cooperation with Chinese 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.

From today's perspective, there are no existential risks to the future development of Manz AG that could have a material adverse effect on the Group's assets, financial and earnings situation.

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

100%

tracing in the production of artificial joints...

...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

According to the forecast of the Kiel Institute for the World Economy (IfW), a significant part of the decline in production levels in the first half of the year was able to be recovered in the third quarter of 2020. While parts of the world again had to contend with rising infections in the winter, other regions such as the Asian region remained largely unaffected. Assuming a progressive normalization due to falling infection figures, the International Monetary Fund (IMF) forecasts global economic growth of 5.5 % in 2021, following a decline of 3.5 % in 2020. In contrast to most other nations, China showed positive economic growth of +2.3 % in 2020, and the IMF expects growth of 8.1 % for the current year. The projected growth of the USA is 5.1 % (2020: –3.4 %). The euro area was hit far harder than the global average in 2020 with –7.2 %, while expected growth in 2021 is put at 4.2 %. For Germany, growth of 3.5 % is assumed for 2021 following a slump of –5.4 % in 2020.

For global mechanical engineering revenues, the VDMA expects a recovery of 7 % in 2021 after a decline of 6 % in 2020 if the restrictions are lifted soon. Accordingly, the industry's revenue growth will be 6 % in the USA (2020: –8 %) and 7 % in the Chinese market (2020: 5 %). In Germany, revenue growth is expected to be 10 % (2020: –15 %). In the event of a rapid upswing due to a quick return to normality, lifting of travel restrictions and fiscal incentives, the VDMA believes that higher growth of 10 % in industry revenues worldwide is also possible. A global third wave with renewed lockdowns, on the other hand, would result in lower revenue growth of 3 %, according to VDMA.

In the fall of 2020, German manufacturers of PV production equipment were much more positive about the future than they were in 2019, expecting an average increase in revenues of 8.6 % in 2021. Globally, the International Energy Agency expects record growth in PV expansion in its baseline scenario for 2021, with around 117 GW installed. This would represent growth of 10 % compared to 2020, based primarily on a strong upswing in large-scale installations outside China, where expiring subsidies are slowing PV expansion. In contrast, large-scale development is resuming in India and the main EU markets (France and Germany).

As of Q3 2020, German electronics production manufacturers expect revenues to increase by 1.4 % in 2021 after a decline in 2020, according to VDMA. Similarly, Display Supply Chain Consultants (DSCC) expects global revenues of LCD and AMOLED displays to increase by 13.6 % to USD 117 billion in 2021. And Prismark is also forecasting growth of 8.6 % for the global PCB industry in 2021 due to the recovery in demand for computers, communication devices, consumer electronics and automotive electronics.

Manz expects strong demand for its assembly lines for the production of cell contacting systems in the coming years due to the rapidly growing market for electric vehicles. The consulting firm McKinsey forecasts sharply rising revenues figures for electric vehicles in the coming years. In Europe, for example, revenues are expected to rise from 0.6 million vehicles in 2019 to 2.9 million vehicles in 2022. China and the U.S. are expected to see 3.5 million and 1.0 million revenues, respectively. The Samsung EV Research Center also projects that global e-vehicle turnover will increase 34 % to 3.8 million vehicles in 2021, which would make EVs account for 4.7 % of global vehicle purchases.

According to the management consultancy Roland Berger, the growing popularity of electric vehicles will also lead to enormous demand for lithium-ion batteries in the coming years. Accordingly, battery production in Europe is on the verge of a major breakthrough: by 2025, an annual production capacity of almost 500 GWh is expected to come on stream. The global market volume for the high-value production equipment needed to build numerous gigafactories will grow by 34 % annually through 2030. As the market volume increases more than tenfold – from EUR 1.7 billion in 2020 to EUR 3.2 billion in 2021 and EUR 20.9 billion in 2025 – European equipment suppliers, in particular, will benefit from this development. Although they accounted for only 8 % of the market in 2020, Europe will be the second largest market for production equipment by 2025, with a market share of 15 % and a volume of more than EUR 3.2 billion in 2025. Based on a survey of German manufacturers, the Battery Production Association of the VDMA expects year-on-year revenue growth of 14 % in 2021, up from 6 % in the previous year (as of Q3 2020). And developments in the market for wearables are also likely to further support demand for lithium-ion batteries. For example, IDC forecasts a five-year compound annual growth rate (CAGR) of 12.4 % and a total number of 637.1 million devices in 2024.

Expected Development of the Group and Segments

Revenue forecast

	2019 actual	2020 forecast	2020 actual	2021 forecast
	Revenue in EUR million	**Revenue trend**	**Revenue in EUR million**	**Revenue trend**
Group	264.6	Low to moderate increase over previous year	236.8	Slight to moderate increase over previous year
Solar	47.5	Up to 35 % less than the previous year	23.2	Up to +60 % increase compared to previous year
Electronics	115.7	Slightly below previous year	90.7	On par with the previous year
Energy Storage	40.7	Between +110 % and +130 %	64.7	Between +20 % and +40 %
Contract Manufacturing	41.5	Between 20 % and 25 % less than in the previous year	37.0	Between 20 % and 30 % less than in the previous year
Service	19.1	Slightly above previous year	21.2	On par with the previous year

Earnings forecast

	2019 actual	2020 forecast	2020 actual	2021 forecast
	EBIT in EUR million	**EBIT/EBIT margin development**	**EBIT in EUR million**	**EBIT/EBIT margin development**
Group	–7.6	EBIT margin in the low positive single-digit percentage range	7.2	EBIT margin in the low to mid positive single-digit percentage range
Solar	–2.0	EBIT margin in the high negative single-digit percentage range	–7.8	EBIT margin in the low negative single-digit percentage range
Electronics	–7.6	Balanced EBIT	–5.4	EBIT margin in the low negative single-digit percentage range
Energy Storage	–11.3	EBIT margin in the low single-digit percentage range	6.9	EBIT margin in the mid positive single-digit percentage range
Contract Manufacturing	11.5	EBIT margin in the low double-digit percentage range	12.3	EBIT margin in the mid positive double-digit percentage range
Service	1.6	EBIT margin in the high single-digit percentage range	1.3	EBIT margin in the low positive single-digit percentage range

Given the overall positive outlook for the industry in the countries and markets relevant to Manz AG, the Managing Board is confident that Manz AG will again grow profitably in 2021. The Managing Board expects a slight to moderate increase in revenues compared with 2020, an EBITDA margin in the upper positive single-digit percentage range, and an EBIT margin in the low to mid positive single-digit percentage range. A value of around 40 % is expected for the equity ratio; with regard to Gearing, the Managing Board is anticipating a value in the lower single-digit percentage range.

The forecast includes the positive one-off effect from the selling of the shares in Talus Manufacturing Ltd. and also continues to assume that the COVID-19 pandemic will not have an additional negative impact on the development of our business in the segments Solar, Electronics, Energy Storage, and Contract Manufacturing and Service in the financial year 2021.

At segment level, the Managing Board expects revenues at the prior-year level and an EBIT margin in the low single-digit negative percentage range for Electronics. For Energy Storage, the Managing Board forecasts revenue growth of between 20 % and 40 % with an EBIT margin in the mid single-digit percentage range. In the segment Solar, revenues should increase considerably compared to the previous year, provided work on the CIGS orders continues in the first half of 2021 and finalization at the end of the financial year 2021. The EBIT margin is expected to be in the low single-digit negative percentage range. For Contract Manufacturing, the Managing Board forecasts revenues between 20 % and 30 % below the previous year and an EBIT margin in the mid double-digit positive percentage range. In the Service segment, revenues are expected to be approximately at the level of the previous year, with an EBIT margin in the low single-digit positive percentage range.

The goal of the Managing Board is to further develop the comprehensive technology portfolio on the one hand, and to strengthen and expand Manz AG’s favorable market position in all segments on the other. With its technologies, Manz AG will focus, in particular on the automotive and electromobility, battery manufacturing, electronics, energy and medical technology industries in the future.

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, 2021

The Managing Board

Martin Drasch | Manfred Hochleitner | Jürgen Knie

Consolidated Financial Statement

Consolidated Income Statement

(in TEUR)

	Notes	2020	2019
Revenues	1	236,768	264,404
Inventory changes, finished and unfinished goods		–908	–9,737
Work performed by the entity and capitalized	2	5,790	4,862
Total operating performance		**241,650**	**259,528**
Other operating income[1]	3	7,181	9,690
Material expenses	4	–130,338	–160,829
Personnel expenses	5	–71,916	–71,584
Other operating expenses[2]	6	–36,600	–36,421
Share of profit (loss) of associates		9,381	8,829
EBITDA		**19,358**	**9,213**
Amortization/depreciation	7	–12,132	–16,838
EBIT		**7,225**	**–7,625**
Finance income	8	91	94
Finance costs	9	–2,345	–2,397
Earnings before taxes (EBT)		**4,971**	**–9,928**
Income taxes	11	–1,547	–1,320
Consolidated net profit		**3,425**	**–11,248**
thereof attributable to non-controlling interests	12	–10	–200
thereof attributable to shareholders of Manz AG		3,434	–11,048
Weighted average number of shares (undiluted)		7,744,088	7,744,088
Weighted average number of shares (diluted)		8,011,876	7,905,128
Earnings per share			
undiluted in EUR	13	0.44	–1.43
diluted in EUR	13	0.42	–1.43

1 This includes TEUR 246 (previous year: TEUR 1,769) reversal of valuation allowances on receivables.
2 This includes TEUR 6,524 (previous year: TEUR 548) impairment losses on financial assets and contract assets.

Consolidated Statement of Comprehensive Income

(in TEUR)

	2020	2019
Consolidated profit or loss	**3,425**	**–11,248**
Difference resulting from currency translation	–750	2,544
Cash flow hedges	15	3
Tax effect resulting from components not recognized in profit/loss	–4	–1
Total of expenditures and income recorded directly in equity capital with future reclassification with tax effect	**–739**	**2,546**
Financial assets measured at fair value through other comprehensive income (FVOCI)	–4,440	–8,306
Tax effect resulting from financial assets measured at fair value through other comprehensive income (FVOCI)	0	–1,235
Revaluation of defined benefit pension plans	76	–351
Tax effect resulting from revaluation of defined benefit pension plans	–15	696
Share of other comprehensive income from investments in associates using the equity method[1]	4	–3
Total of expenditures and income recorded directly in equity without future reclassification with tax effect	**–4,375**	**–9,199**
Group comprehensive income	**–1,690**	**–17,901**
thereof non-controlling interests	–20	–196
thereof shareholders Manz AG	–1,670	–17,705

1 For further explanations, please refer to section "(24) Assets held for sale" in the notes to the consolidated financial statements for the financial year 2020.

Consolidated Balance Sheet

Assets (in TEUR)

	Notes	Dec. 31, 2020	Dec. 31, 2019
Non-current assets			
Intangible assets	14	59,119	60,849
Property, plant and equipment	15	45,426	44,006
Investment in an associate	16	0	21,382
Financial assets	17	7,260	11,700
Other non-current assets	18	1,770	1,256
Deferred tax assets	11	6,835	5,651
		120,411	**144,844**
Current assets			
Inventories	19	29,913	35,739
Trade receivables	20	27,204	42,812
Contract assets	21	68,907	59,939
Current income tax receivables		347	288
Derivative financial instruments	22	15	10
Other current assets	23	11,375	13,892
Assets held for sale	24	30,039	0
Cash and cash equivalents	25	69,736	44,005
		237,535	**196,685**
Total assets		**357,946**	**341,528**

Shareholders' Equity and Liabilities (in TEUR)

	Notes	Dec. 31, 2020	Dec. 31, 2019
Equity	26		
Issued capital		7,744	7,744
Capital reserves		33,234	42,545
Retained earnings		83,824	70,390
Accumulated other comprehensive income		6,352	11,457
Shareholders of Manz AG		**131,154**	**132,136**
Non-controlling interests		255	275
		131,410	**132,411**
Non-current liabilities			
Non-current financial liabilities	27	5,677	728
Non-current financial liabilities from leases	28	12,609	12,268
Pension provisions	29	6,708	7,202
Other non-current provisions	30	3,719	2,659
Other non-current liabilities		11	7
Deferred tax liabilities	11	6,831	6,462
		35,555	**29,325**
Current liabilities			
Current financial liabilities	31	71,298	57,185
Current financial liabilities from leases		3,446	3,329
Trade payables	32	47,000	57,407
Contract liabilities	33	43,865	35,774
Current income tax liabilities		1,084	602
Other current provisions	34	7,575	10,693
Other current liabilities	35	16,713	14,803
		190,980	**179,793**
Total liabilities		**357,946**	**341,528**

Consolidated Cash Flow Statement

(in TEUR)

	Dec. 31, 2020	**Dec. 31, 2019**
Net profit/loss after taxes	3,425	–11,248
Amortization/depreciation	12,132	16,838
Increase (+) / decrease (–) of pension provisions and other non-current provisions	567	–304
Interest income (–) and expenses (+)	2,254	2,303
Taxes on income and earnings	1,547	1,320
Other non-cash income (–) and expenses (+)	5,129	8,644
Gains (–) / losses (+) from disposal of assets	11	19
Share of profit (loss) of associates	–9,381	–8,829
Increase (–) / decrease (+) in inventories, trade receivables, contract assets and other assets	12,013	–9,962
Increase (+) / decrease (–) in trade payables, contract liabilities and other liabilities	–3,696	–19,631
Received (+) / Paid income taxes (–)	–1,123	–948
Interest paid	–2,345	–2,397
Interest received	91	94
Cash flow from operating activities	**20,623**	**–24,101**
Cash receipts from the sale of fixed assets	569	1,063
Cash payments for the investments in intangible assets and property, plant and equipment	–9,660	–8,893
Changes in investments on financial assets	–271	14,173
Cash flow from investing activities	**–9,361**	**6,343**
Cash receipts from the assumption of non-current financial liabilities	4,949	5
Cash payments for the repayment of non-current financial liabilities	–7	–411
Cash receipts from the assumption of current financial liabilities	71,298	57,185
Cash payments for the repayment of current financial liabilities	–57,185	–42,173
Purchase of treasury shares	0	–4
Cash payment of lease liabilities	–4,400	–4,340
Cash flow from financing activities	**14,655**	**10,262**
Cash and cash equivalents at the end of the period		
Net change in cash funds (subtotal 1-3)	25,916	–7,496
Effect of exchange rate movements on cash and cash equivalents	–234	167
Credit risk allowance on bank deposit	48	328
Cash and cash equivalents on January 1, 2020	44,005	51,006
Cash and cash equivalents on December 31, 2020	**69,736**	**44,005**

The cash flow statement is discussed in the notes

Consolidated Statement of Changes to Equity 2019

(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 profit or loss (FVOCI)	Investment accounted for using the equity method[1]	Cashflow hedges	Currency translation	**Other comprehensive income**	**Equity to shareholders of Manz AG**	**Non-controlling interest**	**Total equity**
As of Jan. 1, 2019	**7,744**	**79,208**	**0**	**44,438**	**–2,209**	**–3,004**	**–130**	**–2**	**23,459**	**18,114**	**149,503**	**471**	**149,974**
Consolidated net profit	0	0	0	–11,048	0	0	0	0	0	0	–11,048	–200	–11,248
Other comprehensive income	0	0	0	0	345	–9,541	–3	2	2,540	–6,657	–6,657	4	–6,653
Consolidated income statement	0	0	0	–11,048	345	–9,541	–3	2	2,540	–6,657	–17,705	–196	–17,901
Withdrawal from Capital reserves	0	–37,000	0	37,000	0	0	0	0	0	0	0	0	0
Purchase of treasury shares	0	0	–4	0	0	0	0	0	0	0	–4	0	–4
Use of treasury shares	0	0	4	0	0	0	0	0	0	0	4	0	4
Share-based payment	0	338	0	0	0	0	0	0	0	0	338	0	338
As of Dec. 31, 2019	**7,744**	**42,545**	**0**	**70,390**	**–1,864**	**–12,545**	**–133**	**0**	**25,999**	**11,457**	**132,136**	**275**	**132,411**

1 For further explanations, please refer to section "(24) Assets held for sale" in the notes to the consolidated financial statements for the financial year 2020.

Consolidated Statement of Changes to Equity 2020

(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 profit or loss (FVOCI)	Investment accounted for using the equity method[1]	Cashflow hedges	Currency translation	**Other comprehensive income**	**Equity to shareholders of Manz AG**	**Non-controlling interest**	**Total equity**
As of Jan. 1, 2020	**7,744**	**42,545**	**0**	**70,390**	**–1,864**	**–12,545**	**–133**	**0**	**25,999**	**11,457**	**132,136**	**275**	**132,411**
Consolidated net profit	0	0	0	3,434	0	0	0	0	0	0	3,434	–10	3,425
Other comprehensive income	0	0	0	0	61	–4,440	4	11	–740	–5,105	–5,105	–10	–5,115
Consolidated income statement	0	0	0	3,434	61	–4,440	4	11	–740	–5,105	–1,670	–20	–1,690
Withdrawal from Capital reserves	0	–10,000	0	10,000	0	0	0	0	0	0	0		0
Purchase of treasury shares	0	0	–1	0	0	0	0	0	0	0	–1		–1
Use of treasury shares	0	0	1	0	0	0	0	0	0	0	1		1
Share-based payment	0	689	0	0	0	0	0	0	0	0	689		689
As of Dec. 31, 2020	**7,744**	**33,234**	**0**	**83,824**	**–1,804**	**–16,985**	**–129**	**11**	**25,259**	**6,352**	**131,154**	**255**	**131,410**

1 For further explanations, please refer to section "(24) Assets held for sale" in the notes to the consolidated financial statements for the financial year 2020.

Consolidated Notes for Financial Year 2020

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, 2020 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.

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 2020 were released for submission to the Supervisory Board by resolution of the Managing Board on March 23, 2021.

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. Controll 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, 2020:

		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 s.r.l.	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	75.0%
Manz Chungli Ltd.	Chungli/Taiwan	100.0%
Manz Taiwan Ltd.	Chungli/Taiwan	100.0%
Manz (B.V.I.) Ltd.	Road Town/British Virgin Islands	100.0%

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

Manz holds 80.5% in the associated company Talus Manufacturing Ltd., Chungli, Taiwan, which was included at equity into the consolidated financial statements until November 6, 2020.

On November 6, 2020, Lam Research Corp. informed Manz AG that it would exercise the contractually agreed call option to acquire Manz's shares. The regulatory approvals still required for the acquisition were granted at the end of January 2021. The asset was reclassified from "Investments in associates" to "Assets held for sale" following the announcement of the exercise of the purchase option.

As of October 31, 2020, Manz (Shanghai) Trading Company Ltd., Shanghai, PRC, was liquidated. Its assets, liabilities and equity were transferred to Manz Asia Ltd., Hongkong, PRC.

There is an investment over 11.1 % (previous financial year: 11.1 %) in NICE PV Research Ltd. Beijing, PR China, which is included in the consolidated financial statement according to the IFRS 9 as an equity instrument to fair value through other comprehensive income.

Covid-19: Effects

At the beginning of 2020, the Covid 19 pandemic spread first in China and later worldwide. On March 11, 2020, Covid-19 was declared a worldwide pandemic by the WHO. This resulted in economic uncertainties worldwide, which also had a negative impact on Manz AG in some cases.

This resulted in postponements of projects in the Solar and Energy Storage sectors, and there were on hold and delays at construction sites, mainly in China.

In addition, further customer projects - mainly in the Electronics segment - were postponed or delayed in the past fiscal year. This was mainly due to the Covid-19 pandemic.

Short-time work during the first lockdown resulted in lower productivity, the effects of which were partly compensated by the payment of short-time allowances. The postponement of orders led to lower revenues in 2020 and a shift to subsequent years. The Solar segment was mainly affected.

Due to unforeseeable global consequence of Covid-19 pandemic, the available information about the expected economic trends and country-specific measures regarding Covid-19 pandemic were considered in the update of estimation, exercise of discretion as well as planning assumptions.

Due to the increased uncertainty at the beginning of the pandemic, an additional impairment test was performed in June 2020. This did not result in any need for impairment.

Overall, no fundamental influence of Covid-19 could be identified on reporting and accounting as well as the underlying estimation, exercise of discretion and planning assumptions of reporting and accounting.

Consolidation principles

Capital consolidation uses the acquisition method. In this case, the acquired assets and lia-bilities 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 the 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 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. The carrying amount of the investment and all long-term shares allocated to the net investment in the associated company are consistent with Manz AG' s investment in the company.

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 in 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 is 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.

To determine the exchange rate to be applied on initial recognition of the related asset, expense or income (or part thereof) on derecognition of a non-monetary asset or non-monetary liability arising from prepaid consideration, the date of the transaction is the date of initial recognition of the non-monetary asset or non-monetary liability arising from the prepayment. 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, 2020	**Dec. 31, 2019**	**2020**	**2019**
USA	USD	1.2266	1.1217	1.1417	1.1197
China	CNY	8.0188	7.8170	7.8631	7.7359
Hong-Kong	HKD	9.5115	8.7360	8.8560	8.7735
Taiwan	TWD	34.4646	33.6188	33.6155	34.6163

Accounting and valuation principles in the financial year 2020

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, 2020.

Manz does not recognize deferred taxes on temporary differences arising from the recognition of rights-of-use assets and lease liabilities in accordance with IFRS 16.

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
Customer relationships	6 to 8
Non-current costs for obtaining a contract	2 to 3

Intangible assets with an indefinite useful life are not amortized. 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 of solar cells, for example, the assembly technology can also be used for the next generation, taking into account any adjustments. Only when a business segment is discontinued or sold, its useful life can be considered to be ended. 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, 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 2020 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

Right-of-use assets

Please refer to (15) Property, plant, and equipment) for the development of the right-of-use assets in the financial year.

Presentation of the income statement

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

(in TEUR)	2020	2019
Income from subleases	19	20
Amortization expense for right-of-use assets	–3,340	–3,414
Interest expenses for lease liabilities	–568	–622
Expenses for current leases	–640	–777
Expenses for low-value lease assets	–95	–110
Variable lease payments	–421	–266
Total amount recognized in profit or loss	**–5,045**	**–5,169**

For the presentation of leases in the consolidated cash flow statement, please refer to V. Notes to the cash flow statement. The cash outflows for leases are included in the cash flow from financing activities and amount to TEUR 4,400 (previous year TEUR 4,340) in the reporting year.

Impairment test

Intangible assets with indefinite useful lives and goodwill are not subject to scheduled amor-tization. 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 unless there are specific indications that a cash-generating unit may be impaired.

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 (Solar, Electronics, Energy Storage, Contract Manufacturing and Service).

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.

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.

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 and its disposal. An interest rate before taxes corresponding to market conditions is used as the discount rate.

If the reasons for an impairment that have been charged in previous years no longer apply, the impairment 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.

The carrying amounts of the cash-generating units were subjected to an impairment test in light of strong fluctuations in market capitalization due to the uncertainty associated with the Covid-19 pandemic in the first half of 2020. They were compared with the values in use, which are based on corporate planning. No impairment adjustments were identified out of this additional impairment test. In addition, a sensitivity analysis was carried out, according to which a 1 % higher WACC without assumed growth in perpetuity and a 10 % reduction in EBIT over the entire planning period 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 of 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 to estimate variable consideration and assess 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 direclty associated with the delivery of the goods or provisions of services which have not yet been recognized in the income statement.

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. 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 are carried out in accordance with the underlying business model and the contractually agreed cash flow conditions.

Measurement of financial assets and contract assets

In accordance with IFRS 9, an impairment test is to be performed on financial assets as of each balance sheet date. To determine the impairment requirement for trade receivables, restricted cash and contract assets, the expected losses are considered over the duration of the entire term. For all other financial assets, the expected losses are considered over a period of twelve months if there are no indications of an increase in credit risk.

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 makes use of derivative financial instruments to hedge future cash flows (cash flow hedges). In this case, at the start of the hedging relationship, the relationship between the hedged item and the hedge was documented, including the risk management objectives. When IFRS 9 was applied for the first time on January 1, 2018, there was an option to continue to use either the hedge accouting regulations of IFRS 9 or those of IAS 39. Manz has opted to continue to use hedge accounting in accordance with IAS 39.

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 payment for the services that they have rendered, 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 company's growth, measured by the change in the share price between the time the subscription rights are issued and the end of the waiting period. The stock awards expire when the employ-ment is terminated or a termination agreement is concluded. The share awards do not earn dividends during the vesting period. Fair value is determined by applying a 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 and performance conditions have to be fulfilled (vesting period). This period ends on the vesting date; i.e., the date when the employee in question becomes irrevocably entitled. The accumulated expenses from the granting of equity instruments disclosed on each reporting date up to the vesting date reflect the part of the vesting period that has already expired and the number of equity instruments that can actually be exercised when the vesting period expires, according to the Group's best estimates. The income or expense recognized in the profit or loss for the period corresponds to the development of the accumulated expenses recognized at the beginning and end of the reporting period.

No expense is recognized for compensation rights that do not become exercisable. Exceptions to this are compensation rights for which certain market conditions have to be fulfilled 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 expense not yet recognized is immediately recognized. This is applied to all compensation agreements if non-vesting conditions, over which either the company or the counterparty has an influence, are not fulfilled. If the annulled compensation agreement is replaced by a new compensation agreement, however, and the new compensation agreement is declared as a replacement for the annulled compensation agreement on the day it is granted, the annulled and the new compensation agreement are accounted for as if they were a modification to 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. Expenditure-related 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 all 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 utilised 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. 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 the estimation of the variable considerations and assessment of the restriction of

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 method of most probable value method 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.

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 VI. NOTES TO THE BALANCE SHEET (29) 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 pretax rate that reflects current market expectations with regard to the interest effect and the risks specific to the circumstances. The interest expense resulting from the unwinding of the discount is presented in finance costs. We refer to (30) 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 (34) 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 carry-forwards. 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 carry-forwards to the extent that it is probable that taxable income will be available to enable the loss carry-forwards can be actually utilised. 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.

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

The following standards, interpretations and amendments that have been published but are not yet mandatory are not expected to have any material impact on future consolidated financial statements:

- Amendments to IFRS 16 Covid-19 Related Rent Concessions: The amendments provide relief to lessees from applying IFRS 16 guidance on lease modification accounting for rent concessions arising as a direct consequence of the Covid-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a Covid-19 related rent concession from a lessor is a lease modification. A lessee that makes this election accounts for any change in lease payments resulting from the Covid-19 related rent concession the same way it would account for the change under IFRS 16, if the change were not a lease modification. There were no rental concessions at Manz, so the relief was not applied.

- Amendment to IFRS 3 Business Combinations: Modification of the definition of a business, application guidance and amendments to the explanatory notes.

- Amendments to IFRS 9, IAS 39 and IFRS 7 with regard to the effects of the IBOR reform (Phase 1): The amendments relate to relief with regard to the bi-accounting of hedge accounting rules and are mandatory for all hedging rela-tionships affected by the reform of the reference interest rate.

- Amendments to IAS 1 and IAS 8 regarding the definition of material.

- Amendments to the references in the standards to the framework.

Published standards, interpretations and amendments not yet applied

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

- Amendment to IAS 1, Classification of liabilities as current or non-current. To be applied to financial years beginning on or after January 1, 2023.

- Amendments to IAS 1, Presentation of Financial Statements – Disclosure of Accounting Policies, effective for annual periods beginning on or after January 1, 2023.

- Amendments to IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors – Definition of Accounting Estimates, effective for annual periods beginning on or after January 1, 2023.

- Amendment to IFRS 3, Reference to the Framework: Subsequent addition of the reference to the new framework of 29 March 2018, to be applied to business combinations beginning on or after January 1, 2022.

- Amendment to IFRS 4; postponement of the first-time application of IFRS 9 for certain entities in IFRS 4 in order to be able to start IFRS 9 at the same time as IFRS 17 Insurance Contracts. To be applied to financial years beginning on or after January 1, 2023.

- Amendment to IAS 16, Revenue before an asset is ready for use. Revenue from the sale of goods produced before the item of property, plant and equipment is ready for use is no longer to be deducted from the cost of the item of property, plant and equipment, but is to be recognized together with the cost of the item of property, plant and equipment in the income statement. To be applied to financial years beginning on or after January 1, 2022.

- IFRS 17, Insurance Contracts: Amendments on first-time application (January 1, 2023), acquisition costs, release of the contractual service margin, risk mitigation option, reinsurance contract and separate recognition of assets and liabilities, etc.

- IFRS 17 Insurance Contracts: Recognition, Measurement, Disclosure and Presentation Principles for Insurance Contracts within the Scope of the Standard. Effective for annual periods beginning on or after January 1, 2023.

- Amendments to IFRS 7, IFRS 9, IAS 39, IFRS 4 and IFRS 16, reform of the IBOR reform phase 2 interest rates: The amendments stipulate that the compar-ison period is not to be adjusted. Effects from the first-time application of the amendments are to be recognized in retained earnings at the time of first-time application. First-time application for financial years beginning on or after January 1, 2021.

- 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. To be applied to financial years beginning on or after January 1, 2022.

- Annual Improvements to IFRS 2018 – 2020. Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41. To be applied for financial years beginning on or after January 1, 2022.

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 Section IV.

In 2017, Manz received a major order with a total volume of EUR 263 million, which was scheduled for completion in July 2019. The CIGS projects are currently suspended due to delay on customer-related construction work on the production halls. As of December 31, 2020, contract assets of EUR 21.5 million have been recognized from these orders. Until the reporting date, the customer has fulfilled all contractual obligations, in particular payment obligations. Manz assumes a temporary interruption and a continuation of the orders in the course of 2021.

A major order with a volume of USD 90 million was placed with Manz in 2018, the project scheduled to be completed at the end of August 2019. However, there was a change in the customer's delivery schedule, the project was completed at the end of 2020.

In addition, Manz received follow up orders of around EUR 55 mio from a long-term customer in 2019. As part of these orders, equipments were delivered by Manz in 2020 as planned. The completion date for the entire orders is expected to be in the second half of 2021.

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
Solar	**2020**	7,737	6	15,412	–	–	5	–	**23,160**
	2019	11,128	–	36,096	–	–	243	–	**47,467**
Electronics	**2020**	32,012	3,071	42,372	6,606	6,529	96	–	**90,686**
	2019	16,736	61	78,015	5,868	9,094	5,881	–	**115,655**
Energy Storage	**2020**	57,096	1,713	14	–	20	4,992	854	**64,690**
	2019	14,689	12,860	353	–	626	12,147	20	**40,695**
Contract Manufaturing	**2020**	10,430	26,581	13	–	–	–	–	**37,024**
	2019	10,582	30,818	–	–	–	79	–	**41,479**
Service	**2020**	6,544	1,431	3,297	5,979	577	2,782	599	**21,209**
	2019	3,088	2,793	4,884	6,410	633	1,300	–	**19,108**
Total	**2020**	**113,819**	**32,802**	**61,108**	**12,585**	**7,126**	**7,875**	**1,453**	**236,768**
	2019	**56,223**	**46,532**	**119,348**	**12,278**	**10,353**	**19,650**	**20**	**264,404**

Work performed by the entity and capitalized (2)

In the financial year 2020, development costs were capitalized in particular in the segments Solar and Energy Storage at TEUR 2,846 and TEUR 2,230 respectively. In addition, capitalization of TEUR 303 was made in the Electronics business segment and of TEUR 412 in Contract Manufacturing and Service business segment.

Other operating income (3)

(in TEUR)	2020	2019
Subsidies	2,787	3,273
Income from the reversal of provisions	1,337	2,254
Exchange rate gains	1,224	423
Reversal of valuation allowances on receivables	246	1,769
Lease and rental income	287	106
Fair value adjustment on financial liabilities	150	106
Insurance claim	120	94
Income from the disposal of fixed assets	11	19
Other operating income	1,019	1,646
	7,181	**9,690**

Out of TEUR 2,787 subsidies, TEUR 581 are due to Covid-19 government support in Slovakia and Italy. TEUR 150 reimbursement of social security due to short-time work in Germany is reported under other operating income.

Material costs (4)

(in TEUR)	2020	2019
Cost of raw materials, consumables, and supplies, and of purchased merchandise	114,869	145,329
Cost of purchased services	15,469	15,500
	130,338	**160,829**

Personnel expenses (5)

(in TEUR)	2020	2019
Wages and salaries	59,806	59,077
Share-based compensation	689	338
Social security, pension and other benefit costs	11,421	12,169
	71,916	**71,584**

TEUR 164 wages and salaries out of short-time work were paid to the employees by the government through Manz in Germany.

Other operating expenses (6)

(in TEUR)	2020	2019
Impairment expenses on financial assets and contract assets	6,524	548
Advertising and travel expenses	5,020	7,699
Legal and consulting fees	3,701	3,523
Facility costs	3,126	3,310
Exchange rate losses	2,828	1,586
Outgoing freight	2,173	3,941
IT-costs	2,151	1,805
Other personnel-related expenses	1,910	2,997
Increase of provisions	1,360	1,190
Rent and leases	1,156	1,153
Research-related (project-based) other operating expenses	274	1,050
Other	6,377	7,619
Total	**36,600**	**36,421**

The higher impairment expenses on financial assets and contract assets in 2020 is mainly driven by an impairment loss of TEUR 4,996 made for a project in Asia.

Amortization/depreciation (7)

(in TEUR)	2020	2019
Fixed assets	8,256	9,034
Right-of-use assets from leases	3,340	3,413
Non-current costs for obtaining a contract	342	1,324
Current costs for obtaining a contract	194	3,067
	12,132	**16,838**

Finance income (8)

(in TEUR)	2020	2019
Other interest and similar income	72	74
Interest income from subleases	19	20
	91	**94**

Finance costs (9)

(in TEUR)	2020	2019
Interest on current liabilities	1,683	1,623
Interest cost from financial liabilities arising from leases	568	622
Interest component of long-term provisions	54	82
Interest on non-current liabilities	40	67
Other interest expenses	–	3
	2,345	**2,397**

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 2020 financial year, 17 (previous year: 17) employees and the 3 (previous year: 3) members of the Executive Board received 89,145 (previous year: 42,403) share awards/ stock options. Of these, 48,675 (previous year: 22,327) share awards/stock options were granted to the Executive Board.

The following table shows the development of the share awards/subscription rights 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)	113,214	14.09
Lapsed during the reporting period	–30,432	10.51
Granted during the reporting period	89,145	22.39
Inventory at the end of the year (not vested)	**171,927**	**19.02**

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

The calculation is based on the following parameters:

	2020	2019
Strike price	EUR 1.00	EUR 1.00
Risk-free annual interest rate	0 %	0 %
Volatility	18.0 %	93.3 %
Expected dividends	EUR 0.00	EUR 0.00
Fair value of each share award	19.02	11.24
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 689 (previous year: TEUR 338) were recognized 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 carry-forwards.

(in TEUR)	**2020**	**2019**
Actual tax expense		
Current period	2,285	560
Previous periods	266	–151
Deferred tax income/expenses (+)	–1,004	911
	1,547	**1,320**

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 9 % – 26 % (previous year: 9 % – 26 %) were used. The tax rate in China has been changed from 15 % to 25 % as reduced tax rate for High-tech enterprise is no longer applied.

The income tax expense in the reporting year in the amount of TEUR 1,547 (previous year: TEUR 1,320) 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)	2020	2019
Earnings before income taxes	4,971	–9,928
Manz AG income tax rate	29.13 %	29.13 %
Expected income tax expense	**1,448**	**–2,892**
International tax rate differences	–1,105	–567
Change of tax rate abroad	–793	0
Non-deductible expenses	453	–311
Prior-period taxes	266	–151
Tax-free income	–2,764	–1,746
Non-recognition of tax loss carryforwards	3,260	7,841
Use of tax loss carryforwards	–11	–138
Utilization of non-recognized loss carryforwards	0	–31
Valuation allowance on deferred taxes	–35	–629
Foreign withholding tax	689	0
Other	139	–56
Reported income tax expense	**1,547**	**1,320**
Effective tax rate	31.11 %	n.a.

The following table shows deferred tax assets and liabilities:

(in TEUR)	Deferred tax assets		Deferred tax liabilities	
	Dec. 31, 2020	**Dec. 31, 2019**	**Dec. 31, 2020**	**Dec. 31, 2019**
Intangible assets	0	577	5,816	5,578
Property, plant, and equipment	1	14	57	52
Financial assets	0	0	0	0
Contract assets, inventories and contract liabilities	5,539	5,488	14,730	13,643
Receivables	1,411	583	2,114	1,513
Cash and cash equivalents	2	19	0	0
Pension provisions	761	735	0	0
Derivative financial instruments	0	0	4	0
Trade payables	2,057	2,279	0	308
Provisions	463	334	0	0
Tax loss carry forwards	12,492	10,254	0	0
Gross value	22,725	20,283	22,721	21,094
Offsetting	–15,890	–14,632	–15,890	–14,632
Balance according to consolidated balance sheet	**6,835**	**5,651**	**6,831**	**6,462**
Net amount of deferred tax assets/deferred tax liabilities	**4**	**–811**		

The net amount of deferred tax assets developed as follows:

(in TEUR)	2020	2019
As of January 1	**–811**	**542**
Deferred tax expense (-) / income (+) in the income statement	1,004	–911
Changes in deferred taxes recognized in other comprehensive income in connection with:		
Revaluation of defined benefit pension plans	–15	696
Hedging future cash flows (cash flow hedges)	-4	0
At fair value through other comprehensive income (FVOCI) valued financial asset	0	–1,235
Difference from currency translation	–170	97
As of December 31	**4**	**–811**

Deferred taxes are only recognized for tax loss carryforwards if their utilization can be expected with sufficient certainty. For four (previous year: four) companies have incurred tax losses in the current or previous period, a deferred tax asset of TEUR 3,550 (previous year: TEUR 1,952) was recognized. Based on the short-term and medium-term planning, Manz believes that in the future, these companies will have taxable income against which the unused tax losses can be offset. Due to the positive tax results of the past years, a deferred tax assets of TEUR 3,005 was recognized in China. The subsidiary in China suffered a loss in 2020 due to Covid-19 pandemic, which represents a one-time effect in the earnings history, and is expected to return to profitability in 2021 due to the good order backlog and the expected positive business development.

As of the balance sheet date, the tax loss carry forwards totaled TEUR 264,369 (previous year TEUR 253,132). Of this amount, TEUR 371 (previous year: TEUR 1,085) over five years and TEUR 13,376 (previous year: TEUR 9,754) is limited to ten years and the rest can be carried forward indefinitely. For loss carry forwards amounting to TEUR 219,186 (previous year: TEUR 212,750), no deferred tax assets were recognized since IAS 12 stipulates in the case of losses in the recent past, high recongnization requirements are not met on the balance sheet date.

In accordance to 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 6.8 million (previous year: EUR 8.1 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 –10 (previous year: TEUR –200).

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.

	2020	**2019**
Consolidated net profit allocable to Manz AG's shareholders (in TEUR)	3,434	–11,048
Weighted average number of outstanding shares (undiluted)	7,744,088	7,744,088
Effect from share-based compensation shares	343,854	216,040
Weighted average number of outstanding shares (diluted)	**8,011,876**	**7,905,128**
Earnings per share in EUR (undiluted)	0.44	–1.43
Earnings per share in EUR (diluted)	0.42	–1.43

Notes to the 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 orders from China, the turnover is allocated to the China region.

The "Solar" business segment includes system solutions for the manufacturing costs of thin-film solar modules and CIGS thin film technology. Business in equipment for the production of lithium-ion batteries is reported in the "Energy Storage" business segment. The "Electronics" business segment focuses on the manufacture of production systems for the manufacture of consumer electronics.

In addition to the three strategic segments, there are two reporting segments, "Contract Manufacturing" (equipment and parts production as well as assembly work for customers in various industries) and "Service" which offers services relating to Manz AG's core technological expertise.

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. The exchange of services between the segments takes place at market prices.

In the Energy storage business segment, sales of TEUR 35,155 were generated with one customer in the reporting period. Sales revenue in the amount of TEUR 29,374 with another customer were included in the Electronics business segment. In addition, sales revenue of TEUR 25,643 with one customer were included in the Contract manufacturing business segment.

Segment Reporting Business Units

As of December 31, 2020

(in TEUR)	Solar	Electronics	Energy Storage	Contract Manu-facturing	Service	Consolidation	Group
Revenues with third parties							
2020	23,160	90,686	64,690	37,024	21,209	0	236,768
2019	47,467	115,655	40,694	41,480	19,108	0	264,404
Revenues with other segments							
2020	0	293	0	0	0	–293	0
2019	0	–109	0	0	0	109	0
Total revenues							
2020	**23,160**	**90,979**	**64,690**	**37,024**	**21,209**	**–293**	**236,768**
2019	**47,467**	**115,546**	**40,694**	**41,480**	**19,108**	**109**	**264,404**
Share of profit (loss) of an associate							
2020	0	0	0	9,381	0	0	9,381
2019	0	0	0	8,829	0	0	8,829
EBITDA							
2020	–5,143	–979	10,347	13,090	2,114	–73	19,358
2019	1,416	387	–7,332	12,335	2,223	184	9,213
Amortization/depreciation							
2020	2,703	4,373	3,458	798	800	0	12,132
2019	3,407	7,976	3,970	825	661	–1	16,838
EBIT							
2020	**–7,846**	**–5,352**	**6,889**	**12,292**	**1,315**	**–73**	**7,225**
2019	**–1,991**	**–7,589**	**–11,302**	**11,510**	**1,562**	**185**	**–7,625**
Financial results							
2020	–242	–651	–722	–189	–451	0	–2,254
2019	–265	–908	–494	–256	–380	0	–2,303
Earnings before taxes (EBT)							
2020	–8,088	–6,003	6,167	12,104	864	–73	4,971
2019	–2,256	–8,496	–11,796	11,254	1,182	185	–9,928
Income taxes							
2020	–5	1,152	–1,050	–660	–983	0	–1,547
2019	–347	195	–492	–283	–392	0	–1,320
Consolidated profit or loss							
2020	**–8,093**	**–4,851**	**5,118**	**11,443**	**–119**	**–73**	**3,425**
2019	**–2,604**	**–8,302**	**–12,288**	**10,971**	**789**	**185**	**–11,248**

Segment Reporting Regions

As of December 31, 2020

(in TEUR)	Revenues	Non-current assets (without deferred tax)
Germany		
2020	113,819	47,603
2019	56,223	50,334
Rest of Europe		
2020	32,802	24,297
2019	46,532	23,474
China		
2020	61,108	13,236
2019	119,348	13,952
Taiwan		
2020	12,585	26,083
2019	12,278	49,434
Rest of Asia		
2020	7,126	585
2019	10,353	712
USA		
2020	7,875	2
2019	19,650	30
Other Regions		
2020	1,453	0
2019	20	0
Group		
2020	236,768	111,805
2019	264,404	137,937

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 taken into account 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 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

			Non-cash changes				
(in TEUR)	**Carrying amount as of Jan 1, 2020**	**Cash flows**	**Foreign exchange movement**	**Addition**	**Disposal**	**Changes in fair values**	**Carrying amount as of Dec. 31, 2020**
Non-current financial liabilities							
from financial institutions	728	5,281	0	0	–332	0	5,677
from lease	12,268	0	–7	2,943	–2,595	0	12,609
Others	7	0	0	0	–7	0	0
Current financial liabilities							
from financial institutions	57,185	–1,330	–1,195	332	0	0	54,992
from other companies	0	16,306	0	0	0	0	16,306
from lease	3,329	–4,400	–13	4,530	0	0	3,446
Derivative financial instruments	0	0	0	0	0	0	0
	73,517	**15,857**	**–1,215**	**7,805**	**–2,934**	**0**	**93,030**

			Non-cash changes				
(in TEUR)	**Carrying amount as of Jan 1, 2019**	**Cash flows**	**Foreign exchange movement**	**Addition**	**Disposal**	**Changes in fair values**	**Carrying amount as of Dec. 31, 2019**
Non-current financial liabilities							
from financial institutions	1,138	–410	0	0	0	0	728
from lease	14,636	0	46	1,000	–3,414	0	12,268
Others	3	4	0	0	0	0	7
Current financial liabilities							
from financial institutions	42,173	15,735	–723	0	0	0	57,185
from lease	3,276	–4,340	7	4,386	0		3,329
Derivative financial instruments	2	0	0	0	0	–2	0
	61,228	**10,989**	**–670**	**5,386**	**–3,414**	**–2**	**73,517**

Notes to the Balance Sheet

Intangible Assets (14)

(in TEUR)	Licenses, software, and similar rights	Capitalized development costs	Goodwill	Plants under construction/ Advance payment	Non-current capitalized contract costs	Total
Acquisition/manufacturing costs						
As of January 1, 2019	**33,080**	**74,086**	**34,495**	**61**	**5,143**	**146,865**
Currency adjustment	28	125	988	0	0	1,141
Additions	860	3,518	0	209	0	4,587
Disposals	–422	0	0	0	0	–422
Reclassifications	61	0	0	–61	0	0
As of December 31, 2019	**33,607**	**77,729**	**35,483**	**209**	**5,143**	**152,171**
Amortization/Depreciation						
As of January 1, 2019	**27,472**	**54,322**	**0**	**0**	**2,743**	**84,537**
Currency adjustment	31	85	0	0	0	116
Additions	1,051	4,699	0	0	1,324	7,074
Disposals	–405	0	0	0	0	–405
Reclassifications	0	0	0	0	0	0
As of December 31, 2019	**28,149**	**59,106**	**0**	**0**	**4,067**	**91,322**
Acquisition/manufacturing costs						
As of January 1, 2020	**33,607**	**77,729**	**35,483**	**209**	**5,143**	**152,171**
Currency adjustment	–13	–87	–715	0	0	–815
Additions	405	4,615	0	472	0	5,492
Disposals	–256	–325	0	–84	0	–665
Reclassifications	0	0	0	0	0	0
As of December 31, 2020	**33,743**	**81,932**	**34,768**	**597**	**5,143**	**156,183**
Amortization/Depreciation						
As of January 1, 2020	**28,149**	**59,106**	**0**	**0**	**4,067**	**91,322**
Currency adjustment	–14	–71	0	0	0	–85
Additions	833	4,909	0	0	342	6,084
Disposals	–256	–1	0	0	0	–257
Reclassifications	0	0	0	0	0	0
As of December 31, 2020	**28,712**	**63,943**	**0**	**0**	**4,409**	**97,064**
Residual carrying amount December 31, 2019	5,458	18,623	35,483	209	1,076	60,849
Residual carrying amount December 31, 2020	**5,031**	**17,989**	**34,768**	**597**	**734**	**59,119**

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, no impairment losses were recognized in the reporting year (previous year: none).

The following amounts were recognized in profit or loss:

(in TEUR)	**2020**	**2019**
Total research and development costs	–18,081	–18,904
Scheduled depreciation on development costs	–4,653	–4,602
Capitalized development costs	5,787	4,862
Research and development costs charged to income	**–16,947**	**–18,644**

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, 2020	**Dec. 31, 2019**	**Dec. 31, 2020**	**Dec. 31, 2019**
Solar	17,022	17,556	1,835	1,881
Electronics	11,064	11,245	2,753	2,822
Energy Storage	6,682	6,682	0	0
Contract Manufacturing	0	0	0	0
Service	0	0	0	0
	34,768	**35,483**	**4,588**	**4,703**

The changes to the value of goodwill and trademark rights in the current reporting period are due to currency translations.

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 Solar, Electronics, Energy Storage, Contract Manufacturing and Service 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. 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 Group and its segments 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 past experience are taken into account in establishing the assumptions.

In the Energy Storage segment, a major order from a well-known battery manufacturer in the consumer electronics sector was placed in the second half of the financial year 2020, which will largely be processed in the coming financial years. In addition, the demand for electric cars is rising continuously, which is accompanied by an increase in the demand for battery drives. A significant improvement in earnings and an increase in sales in the Energy Storage business segment is therefore expected.

The pandemic-related restrictions led to deferred revenues for the CIGS projects. The project is expected to be completed by the end of 2021. Further major orders in the solar sector have been planned for the following years.

In the Electronics 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. Further expansion of sales and improvements in results in the electronics segment are thus expected in the future. Manz AG's competitiveness and profitability will continue to increase over the long term, and the associated turnaround strategy of previous years will be continued.

Cash flows are predicted individually for each business segment to which goodwill and trademark rights are allocated to it on the basis of revenue and cost planning. Growth rates were recorded at 0.5 % to 1.0 % (previous year: 1.0 %). The discount rate after tax used for discounting (weighted average cost of capital (WACC)) is 7.4 % to 13.2 % (previous year: 6.8 % to 9.9 %). In this context, the cost of equity is calculated on the basis of 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, 2020	**June 30, 2020**	**Dec. 31, 2019**	**Dec. 31, 2020**	**June 30, 2020**	**Dec. 31, 2019**
Solar	18.6	15.6	14.0	0.5	0.0	1.0
Electronics	10.5	13.0	11.2	0.5	0.0	1.0
Energy Storage	10.7	13.3	12.0	1.0	0.0	1.0
Contract Manufacturing	13.2	9.7	8.6	1.0	0.0	1.0
Service	10.5	13.0	14.0	1.0	0.0	1.0

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

In the course of the strong fluctuations in market capitalisation in the first half of 2020, the carrying amount of the cash-generating units were subjected to an additional impairment test. These were compared to the values in use, which are based on the current corporate planning. No need for impairment was determined for the reporting date of June 30, 2020.

The value in use of the respective cash-generating unit determined in the impairment test is recognizably higher than the respective carrying amount, so that the fair value less costs to sell was not determined. Overall, no need for impairment of the recognized goodwill and intangible assets without definite useful lives was determined for the financial years 2020 and 2019.

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 10 % reduction in EBIT over the entire planning period would not have resulted in any impairment of goodwill or trademark rights in the financial years 2020 or 2019.

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, 2020 was TEUR 734 (previous year: TEUR 1,076). In the reporting period, an amortization of TEUR 342 (previous year: TEUR 1,324) 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, 2019	**24,995**	**24,854**	**12,748**	**17,537**	**108**	**80,242**
Currency adjustment	175	66	49	0	1	291
Additions	281	967	653	997	2,402	5,300
Disposals	–244	–2,320	–444	–225	–100	–3,333
Reclassifications	9	50	0	0	–59	0
As of December 31, 2019	**25,216**	**23,617**	**13,006**	**18,309**	**2,352**	**82,500**
Amortization/Depreciation						
As of January 1, 2019	**6,924**	**19,749**	**6,871**	**0**	**0**	**33,544**
Currency adjustment	44	45	27	21	0	137
Additions	939	1,124	1,213	3,413	7	6,696
Disposals	0	–1,449	–343	–91	0	–1,883
Reclassifications	1	3	3	0	–7	0
As of December 31, 2019	**7,908**	**19,472**	**7,771**	**3,343**	**0**	**38,494**
Acquisition/manufacturing costs						
As of January 1, 2020	**25,216**	**23,617**	**13,006**	**18,309**	**2,352**	**82,500**
Currency adjustment	–446	–62	–95	–46	0	–649
Additions	202	446	497	3,679	3,023	7,847
Disposals	–12	–438	–244	–707	0	–1,401
Reclassifications	0	6	0	0	–6	0
As of December 31, 2020	**24,960**	**23,569**	**13,164**	**21,235**	**5,369**	**88,297**
Amortization/Depreciation						
As of January 1, 2020	**7,908**	**19,472**	**7,771**	**3,343**	**0**	**38,494**
Currency adjustment	–141	–28	–79	–40	0	–288
Additions	664	890	960	3,340	0	5,854
Disposals	–3	–306	–222	–658	0	–1,189
Reclassifications	0	0	0	0	0	0
As of December 31, 2020	**8,428**	**20,028**	**8,430**	**5,985**	**0**	**42,871**
Residual carrying amount December 31, 2019	17,308	4,145	5,235	14,966	2,352	44,006
Residual carrying amount December 31, 2020	**16,532**	**3,541**	**4,734**	**15,250**	**5,369**	**45,426**

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

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Right of use-assets – building	14,022	14,001
Right of use-assets – vehicles	838	952
Right of use assets – IT	390	13
	15,250	**14,966**

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

(in TEUR)	2020	2019
Depreciation of right of use-assets – building	2,686	2,819
Depreciation of right of use-assets – vehicles	610	581
Depreciation of right of use assets – IT	44	13
	3,340	**3,413**

Land and buildings of Manz Slovakia s.r.o. with a carrying amount of TEUR 3,506 (previous year: (previous year: TEUR 3,656), are used as collateral for bank loans.

Investment in an associate (16)

Manz AG holds 80.5 % of voting rights and shares in Talus Manufacturing Ltd. with headquarters in Chungli, Taiwan. This unlisted company is active in the areas of production, sales and service.

On November 6, 2020, Lam Research Corp. informed Manz AG that it will exercise the contractually agreed call option to acquire Manz’s shares. The regulatory approvals required for the acquisition were granted at the end of January 2021. The asset was reclassified from “Investments in associates” to “Assets held for sale” following the announcement of the exercise of the purchase option.

Financial assets (17)

Manz AG holds an investment of 11.1 % in NICE PV Research Ltd. Beijing, PRC. The acquisition costs amounted to TEUR 24,245. The carrying amount of TEUR 7,260 is determined with a business valuation method.

Other non-current assets (18)

The othe non-current assets contains of non-current recivables of leases of TEUR 687 (previous year: TEUR 809) and tenants loan of TEUR 796. The receivables of leases are corresponding to their fair value and not impaired. The tenants loan will be repaid at the end of the lease agreement.

Inventories (19)

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Materials and supplies	9,615	14,684
Unfinished goods and products	8,116	6,759
Finished goods and merchandise	1,258	3,183
Advance payments	10,924	11,113
	29,913	**35,739**

The total valuation allowances on inventories decreased to TEUR 6,019 (previous year: TEUR 12,433) after taking into account exchange rate differences, utiliazation of allowance and write up of inventory. In the reporting period, a net write up of TEUR 948 (previous year: write down of TEUR 1,958) were recognized. The carrying amount of inventories pledged as collateral amounts to TEUR 2,592.

Trade Receivables (20)

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

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Trade receivables from third parties	27,204	42,737
Trade receivables from associated companies	0	75
	27,204	**42,812**

Impairments on trade receivables have developed as follows:

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
As of January 1	2,245	3,978
Currency translation	–9	–55
Utilization	927	56
Reversal	246	1,769
Addition	264	147
As of December 31	**1,327**	**2,245**

Contract assets (21)

Contract assets consisted of the following amounts:

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Manufacturing costs, including profit or loss on the construction contracts	403,487	360,699
Minus advance payments received	–334,580	–300,760
	68,907	**59,939**

Impairments on contract assets developed as follows:

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
As of January 1	489	371
Currency translation	–123	0
Utilization	0	371
Reversal	0	0
Addition	6,249	489
As of December 31	**6,615**	**489**

Derivative financial instruments (22)

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

(in TEUR)	Dec. 31, 2020		Dec. 31, 2019	
	Currency hedging	Interest rate derivatives	Currency hedging	Interest rate derivatives
Change in fair value	–10	0	8	2
Nominal value	390	0	892	0
Positive fair value	15	0	10	0
Negative fair value	0	0	0	0
Remaining term	max. 07/2021	–	max. 10/2020	max. 12/2019

There is an economic relationship between the hedged item and the hedging instrument. Manz AG has defined a hedging ratio of 1:1 for the hedging relationship, as the risk of the hedging instrument is identical to the hedged risk component. Currency hedging involves a currency risk, as the amount of forward exchange contracts varies according to purchases and sales in foreign currencies. There are also fluctuations in exchange rates. The interest rate derivatives contain an interest rate risk as it can lead to a negative fair value due to changes in market interest rates. If planned transactions do not occur as planned, this can lead to ineffectiveness.

Other current assets (23)

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Restricted cash	7,065	6,794
Tax receivables (not income and income taxes)	1,420	1,912
Other deferrals (primarily insurance policies)	1,064	1,825
Receivables for employees	307	334
Current costs for obtaining a contract	112	183
Current receivables of leases	173	165
Other	1,234	2,679
	11,375	**13,892**

The other current assets are not overdue and no impairment losses were recognized. "Other" mainly includes tax credits of 754 TEUR (previous year: 1,583 TEUR) related to a grant for research and development activities in Italy.

Assets held for sale (24)

Manz AG holds 80.5 % of the voting rights and shares in Talus Manufacturing Ltd. based in Chungli, Taiwan. This unlisted company is active in the areas of production, sales and service and reported under the contract manufacturing segment.

Following the information on the exercise of the purchase option by the other shareholder of Talus on November 6, 2020, the asset was reclassified to "Assets held for sale" and the valuation on equity method was stopped.

Unlike in the previous year, the share of other comprehensive income of investments in associates amounting to TEUR 4 (previous year: TEUR –3) is included in the consolidated statement of comprehensive income in the total of expenses and income recognized directly in equity without future reclassification to profit or loss, as it relates to income (previous year: expenses) from the remeasurement of defined benefit pension plans of the associate. Accordingly, the presentation of the (accumulated) share of other comprehensive income of associates in the consolidated statement of changes in equity has also been corrected and allocated to components that will not be transferred to profit or loss.

Cash and cash equivalents (25)

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 30 (previous year: TEUR 78) was recorded.

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Cash and cash equivalents	69,736	44,005

Equity (26)

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

The Managing Board and Supervisory Board have defined a minimum equity ratio of 40 % and gearing of less than 50 % as targets.

Issued capital

The subscribed capital of the parent company, Manz AG, is reported as issued capital. The issued capital of 7,744,088.00 is divided into 7,744,088 no-par-value registered shares.

Authorized capital

Based on the resolution of the Annual General Meeting of July 12, 2016, 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 Association, to increase the share capital of the Company in the period until 11 July 2021 once or in partial amounts by a total of up to EUR 3,872,044.00 by issuing a total of up to 3,872,044 new bearer shares (no-par value shares) against cash or non-cash contributions (Authorized Capital 2016).

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 cash contributions, if the issue price of the new shares is not significantly lower than the stock exchange price of the Company's shares of the same class at the time of the determination of the issue price, which should be as close as possible to the placement of the new shares, within the meaning of section 203 (1) and (2) and section 186 (3) sentence 4 of the AktG. This authorisation to exclude subscription rights shall only apply to the extent that the shares to be issued in the course of the capital increase do not account for more than EUR 774,408.00 of the share capital and, in total, do not account for more than 10 % of the share capital at the time the authorisation is exercised. The proportionate amount of the share capital of shares issued or sold during the term of this authorisation on the basis of other authorisations in direct or corresponding application of section 186 (3) sentence 4 of the German Stock Corporation Act (Aktiengesetz, AktG) with the exclusion of subscription rights shall be counted towards this maximum amount for the exclusion of 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.

Authorisation 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 recognized, in particular financial mathematical methods. This authorisation 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 authorisation becomes effective or – if this value is lower – at the time the present authorisation 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 AktG during the term of this authorisation 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 AktG, as well as

- such shares which are acquired on the basis of an authorisation of the general meeting and which are sold in accordance with section 71 (1) no. 8 sentence 5 AktG in conjunction with section 186 (3) sentence 4 AktG during the term of this authorisation 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 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 on the basis of 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 Association, 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 authorisation 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.

Authorisation to issue share subscription rights as part of the Manz Performance Share Plan 2019 and conditional capital III

The Annual General Meeting of July 2, 2019 authorized the Executive Board, with the consent of the Supervisory Board, to grant up to 95,000 subscription rights for a total of up to 190,000 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, in each case in Germany and abroad, on one or more occasions up to and including June 30, 2024. The Supervisory Board was authorized to grant up to 85,000 subscription rights for a total of up to 170,000 shares in the Company to members of the Executive Board of the Company on one or more occasions up to and including June 30, 2024.

The granting, structuring and exercise of the subscription rights shall be carried out in accordance with the provisions set forth in the resolution of the Annual General Meeting of July 2, 2019.

The authorisation 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 authorisation.

Pursuant to Article 3 (6) of the Articles of Association, the share capital of the Company is conditionally increased by up to EUR 360,000.00 by issuing 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 authorisation of the Annual General Meeting of July 2, 2019. The shares will be issued at the issue amount specified in the authorisation resolution of the Annual General Meeting of July 2, 2019. 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 no-par value bearer shares shall have the same dividend rights as the shares of the same class already issued. 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.

Authorisation 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.

Pursuant to Article 3 (5) of the Articles of Association, the share capital of the Company is conditionally increased by up to EUR 230,000.00 by issuing up to 230,000 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 authorisation of the Annual General Meeting of July 7, 2015. The shares will be issued at the issue price stipulated in the authorisation 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.

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 Point 6 of the agenda according to the annual general meeting on July 7, 2015 or Manz Performance Share Plan 2019, which was resolved under Point 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.

Manz Performance Share Plan 2015 for members of the managing board and executive personnel of the company and its affiliated companies was explicated in a report of the managing board to the annual general meeting of July 7, 2015. In the same way, Manz Performance Share Plan 2019 for members of the managing board and executive personnel of the company and its affiliated companies, which was resolved at the annual general meeting of 2019, was explicated in a report of the managing board to the annual general meeting of July 2, 2019.

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 authorized capital. As long as the company uses this possibility, the authorized capital II set forth in Article 3, Paragraph 5 of the Articles and accordingly the authorized capital III set forth in Ariticle 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 authorized 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 reserve essentially contains payments from shareholders in accordance with section 272 (2) no. 1 of the German Commercial Code (HGB) less the costs of raising capital after tax. 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.

Treasury shares

The Annual General Meeting of June 30, 2020 authorised the Executive Board of the Company to acquire own shares until July 1, 2024 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 authorisation becomes effective or – if this amount is lower – at the time this authorisation is exercised. The shares acquired on the basis of this authorisation, 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 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 AktG).

The Executive Board was authorised to sell the treasury shares acquired on the basis of the above authorisation 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 authorisation 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 authorisation becomes effective or – if this amount is lower – at the time this authorisation 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 authorisation 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 authorisation under exclusion of the subscription right in analogous application of section 186 (3) sentence 4 of the AktG.

The Executive Board was also authorised to transfer the treasury shares acquired on the basis of the above authorisation to third parties, provided that this is done for the purpose of acquiring companies, parts of companies or participations in companies or other assets. The Executive Board was also authorised to transfer the treasury shares acquired on the basis of the above authorisation 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 combinations.

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 or will be issued 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 Executive Board was further authorised to use the treasury shares acquired on the basis of the above authorisation 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 authorised to transfer the treasury shares acquired on the basis of the above authorisation 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. German Stock Corporation Act (AktG).

In the financial year 2020, the company purchased 64 of its own shares (previous year: 203) at an average price of EUR 23.14 (previous year: EUR 19.48) per share with a market value of TEUR 1 (previous year: TEUR 4). The company purchased its own shares in the reporting period for employee anniversaries. As of the balance sheet date of December 31, 2020, no treasury shares were held in portfolio (previous year: none).

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.

Accumulated other comprehensive income

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 Manz India Private Limited, in which Manz Asia Ltd. holds a 75% interest, and 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.

Proposed appropriation of profits

In accordance with article 58, paragraph 2 of the Corporation Act, 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, 2020. Manz AG's annual financial statements as of December 31, 2020 closed with a net loss for the year of TEUR 6,143 (previous year: net loss of TEUR 6,484).

Information regarding capital management

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

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Cash and cash equivalents	69,736	44,005
Financial liabilities	76,975	57,913
Net financial liabilities	7,239	13,908
Total Manz AG shareholders equity capital	**131,154**	**132,136**
Equity ratio (in %)	36.71 %	38.77 %
Gearing (in %)	5.5 %	10.5 %

In the financial year 2020, net financial liabilities decreased. Cash and cash equivalents is lower than the level of financial liabilities. This temporary shortfall is due to a delay in the project schedule for major orders. Furthermore, the equity ratio is declining and is marginally below the specified minimum equity ratio of 40 %. As a result of the increase in equity and decrease in net financial liabilities, the ratio of net financial liabilities to equity before non-controlling interests, has fallen to 5.5 % (previous year: 10.5 %). 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.

Non-current financial liabilities (27)

Non-current financial liabilities totaling TEUR 5,677 consist of long-term loans from Manz Italy S.r.l. and have a remaining term of up to six years.

Non-current financial liabilities from leases (28)

Of the non-current financial liabilities from leases, TEUR 2,710 have a remaining term of more than one year and TEUR 9,899 of more than two years.

Pension provisions (29)

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)	2020	2019
Changes in the present value of benefits		
Present value of performance-based obligations as of January 1	**7,821**	**7,446**
Service cost	9	9
Interest cost	55	77
Benefits paid	–536	–471
Actuarial losses (+) / gains (–)		
due to changes in demographic assumptions	19	–9
due to changes in financial assumptions	201	700
due to adjustments based on past experience	–295	–17
Currency differences from international plans	–57	86
Present value of performance-based obligations as of December 31	**7,216**	**7,821**
Change in plan assets		
Value of plan assets as of January 1	**619**	**394**
Income from plan assets	5	5
Company contributions	159	262
Benefits paid	–277	–67
Actuarial losses (+) / gains (–)	16	10
Currency differences from international plans	–14	15
Value of plan assets as of December 31	**508**	**619**
Financing status (= pension reserves)	**6,708**	**7,202**
which apply to:		
Manz AG, Reutlingen	3,781	3,958
Manz Italy s.r.l., Sasso Marconi/Italy	1,419	1,488
Manz Taiwan Ltd., Chungli/ Taiwan	1,508	1,756

The pension obligations of Manz AG, Reutlingen currently consist of three 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.

3. a reinsured provident fund for the Executive Board with a defined contribution plan.

The obligations at Manz Italy S.r.l. 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 servce. 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)	2020	2019
Current service costs	–9	–9
Net interest costs	–50	–72

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 54 (previous year: TEUR 21) and the expected pension payments are TEUR 1,798 (previous year: TEUR 1,128). In the next two to five years, total expected pension payments are TEUR 1,112.

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 20 % and 80 % of the fund's total assets, respectively. 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 361 (previous year: TEUR 403). In addition, the domestic companies also paid contributions to the state pension insurance fund in the amount of TEUR 2,370 (previous year: TEUR 2,430).

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

(in %)	Germany		Italy		Taiwan	
	2020	**2019**	**2020**	**2019**	**2020**	**2019**
Discount rate	0.63	0.80	–0.02	0.37	0.44	0.83
Salary and wage increases	2.50	2.50	0.80	1.20	3.00	3.00
Pension increases	1.70	1.70	2.10	2.40	0.44	0.83

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

(in TEUR)		**2020**	**2019**
Discount rate sensitivity	+0.50 %	1,223	1,278
Discount rate sensitivity	–0.50 %	1,642	1,726
Sensitivity for pension dynamics	+0.50 %	1,597	2,586
Sensitivity for pension dynamics	–0.50 %	1,262	491

In case of a one year higher life expectancy, the pension obligation would be increased of TEUR 3,645.

The weighted average term of the defined benefit obligations at the end of the reporting year is 12.3 years (previous year: 12.9 years).

Other non-current provisions (30)

Other non-current provisions developed as follows:

(in TEUR)	Jan 1, 2020	Currency adjustment	Utilization	Reversal	Discount rate	Addition	Dec. 31, 2020
Warranties	2,359	–19	540	602	4	2,176	3,370
Personnel	300	0	56	0	0	105	349
	2,659	**–19**	**596**	**602**	**4**	**2,281**	**3,719**

(in TEUR)	Jan 1, 2019	Currency adjustment	Utilization	Reversal	Discount rate	Addition	Dec. 31, 2019
Warranties	2,868	34	599	1,197	4	1,257	2,359
Personnel	246	0	7	0	1	62	300
	3,114	**34**	**606**	**1,197**	**5**	**1,319**	**2,659**

Long-term personnel obligations include obligations arising from partial retirement and anniversary bonuses. The provision for partial retirement in the amount of TEUR 11 was netted against the plan assets.

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

Current financial liabilities (31)

Basically current liablities are due within one year. However, based on past experience and the existing backlog, it is to be expected that the respective credit lines will be prolonged.

Trade payables (32)

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, 2020	Dec. 31, 2019
Trade payables to third parties	47,000	57,403
Trade payables to associated companies	0	4
	47,000	**57,407**

Contract liabilities (33)

Contract liabilities, which represent the surplus of advance payments from customer orders, consisted of the following amounts as of December 31, 2020:

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Contract liabilities	43,865	35,774

The increase in contract liabilities is due to down payment received for new major contracts in 2020. The contract liabilities from January 1, 2020 of TEUR 35,774 were fully recognized as revenue in the period ending December 31, 2020.

Other current provisions (34)

Other current provisions developed as follows:

(in TEUR)	Jan. 1, 2020	Currency adjustment	Utilization	Reversal	Addition	Dec. 31, 2020
Personnel	1,895	–22	931	89	1,929	2,782
Sales comissions	4,999	–161	3,024	199	5	1,620
Reworking	386	0	305	0	232	313
Other	3,413	–40	2,355	447	2,289	2,860
	10,693	**–223**	**6,615**	**735**	**4,455**	**7,575**

(in TEUR)	Jan. 1, 2019	Currency adjustment	Utilization	Reversal	Addition	Dec. 31, 2019
Personnel	2,430	9	2,214	225	1,895	1,895
Sales comissions	4,823	183	4,691	315	4,999	4,999
Reworking	195	0	195	0	386	386
Other	4,586	40	4,109	517	3,413	3,413
	12,034	**232**	**11,209**	**1,057**	**10,693**	**10,693**

Costs of the annual financial statements of TEUR 409, provisions for warranties of TEUR 302 and contingent losses of TEUR 207 in particular are recognized in the area "Other".

The provisions will be settled in the next year.

Other current liabilities (35)

(in TEUR)	Dec. 31, 2020	Dec. 31, 2019
Tax liabilities	7,822	3,014
Personnel-related liabilities	6,339	6,030
Earn-out liabilities	0	3,000
Other	2,552	2,759
	16,713	**14,803**

The tax liabilities are primarily made up of value added tax liabilities. Out of TEUR 3,000 of the earn-out obligations from previous year, TEUR 2,850 was paid in the current reporting period and TEUR 150 was reversed. All liabilities are due within one year.

Leases

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 974 thousand.

In the reporting period finance income of lease receivables of TEUR 19 (previous year: TEUR 20) were recorded.

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

(in TEUR)	2020	2019
less than one year	173	165
one to two years	173	165
two to three years	173	165
three to four years	173	165
four to five years	148	165
more than five years	74	219
Total of non-discounted annual lease payments	**914**	**1,044**

Report on Financial Instruments

Trade receivables, contract assets, 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 December 31, 2020

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, 2020
Investments	7,260	0	7,260	0	0	7,260
Other non-current assets	1,770	1,083	0	0	687	1,770
Trade receivables from third parties	27,204	27,204	0	0	0	27,204
Trade receivables from associated companies	0	0	0	0	0	0
Derivative financial instruments	15	0	0	15	0	15
Other current assets	9,670	9,670	0	0	0	9,670
Cash and cash equivalents	69,736	69,736	0	0	0	69,736
	115.655	**107,693**	**7,260**	**15**	**687**	**115,655**

Liabilities as of December 31, 2020

IFRS 9 – Financial Liabilities — Carrying amounts by measurement category

(in TEUR)	Fair value	Fair value through Profit or loss	At continued acquisition cost	Designated hedge instruments (cash flow hedges)	Not in the scope of IFRS 7, IAS 9	Carrying amount Dec. 31, 2020
Financial liabilities	76,975	0	76,975	0	0	76,975
Financial liabilities from leases	0	0	0	0	0	0
Trade payables to third parties	47,000	0	47,000	0	0	47,000
Trade payables to associated companies	0	0	0	0	0	0
Dervivative financial instruments	0	0	0	0	0	0
Other liabilities	2,552	0	2,552	0	0	2,552
	126,527	**0**	**126,527**	**0**	**0**	**126.527**

Assets as of December 31, 2019

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)	Designated hedge fund instruments	Not in the scope of IFRS 7, IAS 9	Carrying amount Dec. 31, 2019
Investments	11,700	0	11,700	0	0	11,700
Other non-current assets	1,256	447	0	0	809	1,256
Trade receivables from third parties	42,737	42,737	0	0	0	42,737
Trade receivables from associated companies	75	75	0	0	0	75
Derivative financial instruments	10	0	0	10	0	10
Other current assets	13,892	11,631	0	0	2,261	13,892
Cash and cash equivalents	44,005	44,005	0	0	0	44,005
	113,675	**98,895**	**11,700**	**10**	**3,070**	**113,675**

Liabilities as of December 31, 2019

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 (cash flow hedges)	Not in the scope of IFRS 7, IAS 9	Carrying amount Dec. 31, 2019
Financial liabilities	57,913	0	57,913	0	0	57,913
Trade payables to third parties	57,403	0	57,403	0	0	57,403
Trade payables to associated companies	4	0	4	0	0	4
Dervivative financial instruments	0	0	0	0	0	0
Other liabilities	14,810	3,000	2,766	0	9,044	14,810
	130,130	**3,000**	**118,086**	**0**	**9,044**	**130,130**

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

		Fair value hierarchy		
(in TEUR)	**Dec. 31, 2020**	**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	7,260	0	0	7,260
Derivatives with a balance sheet hedging relationship	15	0	15	0
Liabilities at fair value – affecting net income				
Contingent purchase price liabilities	0	0	0	0
Liabilities at fair value – not affecting net income				
Derivatives with on-balance-sheet hedging relationship	0	0	0	0

		Fair value hierarchy		
(in TEUR)	**Dec. 31, 2019**	**Level 1**	**Level 2**	**Level 3**
Assets at fair value – affecting net income				
Derivatives with a balance sheet hedging relationship	10	0	10	0
Assets at fair value – not affecting net income				
Investments	11,700	0	0	11,700
Liabilities at fair value – affecting net income				
Contingent purchase price liabilities	3,000	0	0	3,000
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, 2020, resulted in the following total income and expenses:

(in TEUR)	2020	2019
Assets		
included in the income statement	–10	8
recorded in equity	–4,440	-8,306
at amortized cost		
included in the income statemen	150	106
recorded in equity	15	2

Financial assets of the fair market value hierarchy Level 3

Development (in TEUR)	2020	2019
As of January 1	11,700	20,006
Additions	0	0
Disposals	0	0
Change in fair value	–4,440	–8,306
As of December 31	**7,260**	**11,700**

Financial assets of the fair market value hierarchy Level 3

Development (in TEUR)	2020	2019
As of January 1	3,000	3,106
Additions	0	0
Utilization	–2,850	0
Change in fair value	–150	–106
As of December 31	**0**	**3,000**

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 in other comprehensive income.

The fair value of the investment in the amount of TEUR 7,260 (2019: TEUR 11,700) was determined on the basis of a company valuation.

If the equity of NICE PV Research Ltd. Beijing, PR China were 10 % higher, the fair value of the investment would have increased by TEUR 859. A decrease in equity by 10 % would lead to a decrease in the fair value by TEUR 859.

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 2020				
Amortized cost (AC)	–6,784	–1,706	72	–1,778
thereof:				
Financial liabilities	–2,828	–1,778	0	–1,778
Financial assets	–3,957	72	72	0
Fair value through profit or loss (FVTPL)	150	0	0	0
Designated hedging instruments	–10	0	0	0
	–6,645	**–1,706**	**72**	**–1,778**

(in TEUR)	Net profits/ losses	Total interest income/ expenses	Total interest income	Total interest expenses
Financial year 2019				
Amortized cost (AC)	4,302	–1,701	74	–1,775
thereof:				
Financial liabilities	1,586	–1,775	0	–1,775
Financial assets	2,716	74	74	0
Fair value through profit or loss (FVTPL)	106	0	0	0
Designated hedging instruments	2	0	0	0
	4,410	**–1,701**	**74**	**–1,775**

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.

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, 2020 and 2019 respectively. The sensitivity analyses were carried out based on the hedging relationships existing as of December 31, 2020, 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, 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, 2020, the maximum credit risk was TEUR 115,655 (previous year: TEUR 112,701).

(in TEUR)	Trade receivables Dec. 31, 2020	Dec. 31, 2019
Not overdue and not impaired	22,305	34,275
Overdue and value adjusted gross	5,671	9,994
Overdue and not impaired (1-30 days)	277	516
Overdue and not impaired (31-60 days)	96	106
Overdue and not impaired (61-90 days)	0	9
Overdue and not impaired (91-180 days)	96	34
Overdue and not impaired (>180 days)	86	123
Value adjustment	–1,327	–2,245
	27,204	**42,812**

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 impairement 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. 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.

The parent company Manz AG has sufficiently high bank balances and a low cash credit line. 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 December 31, 2020, the Manz Group had free cash and guarantee credit lines with banks totaling EUR 16.9 million (previous year: EUR 18.0 million).

In general, in order to reduce liquidity and financing risks, the companies in the Manz Group are required to process orders "cash positive" as far as possible. Here, the deposits should exceed the payouts over the entire term of the respective project.

As usual in project-based business, delays in incoming orders or payments have significant effects on liquidity of the respective company and possibly also on the Group. In order to recognize these risks from delayed payments in a timely manner, the Manz Group works with a rolling liquidity forecast, which is updated bi-weekly. The Group thus achieves a balance between covering its financial requirements and ensuring flexibility through the use of bank overdrafts, bank loans and leases. Manz has sufficient sources of finance at its disposal. Liabilities to existing lenders with a term of up to twelve months are generally extended.

Based on current corporate planning and an order backlog of EUR 202.3 million as of December 31, 2020 (previous year: EUR 168.5 million), the Managing Board assumes that Manz AG will be able to meet its payment obligations in fiscal years 2021 and 2022.

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	2021	2022	>2023
Dec. 31, 2020				
Financial liabilities	79,366	73,299	259	5,808
Trade payables	47,000	47,000	0	0
Financial liabilities arising from leases	18,895	4,014	3,278	11,603
Derivative financial instruments	0	0	0	0
Other liabilities	2,552	2,552	0	0
	147,813	**126,865**	**3,537**	**17,411**

(in TEUR)	Total	2020	2021	>2022
Dec. 31, 2019				
Financial liabilities	59,710	58,960	643	107
Trade payables	57,407	57,407	0	0
Financial liabilities arising from leases	18,080	3,329	2,621	12,130
Derivative financial instruments	0	0	0	0
Other liabilities	14,810	14,803	7	0
	150,007	**134,499**	**3,271**	**12,237**

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 bank balances, land charges on buildings, inventories, and receivables.

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 2020 fiscal year Manz was particularly exposed to exchange rate fluctuations of the Taiwanese dollar to the US dollar and the Euro, as well as the Chinese renmimbi to the Euro, since a significant portion of the goods and services were traded in these currency pairs in the reporting year. In the previous year, in addition to the aforementioned risks of the Taiwanese dollar, the relationship of the Hong Kong dollar to the Euro and the relationship of the Chinese renmimbi to the US dollar were identified as further significant exchange rate risks.

If the USD had appreciated by 5 % against the TWD as at December 31, 2020 (2019), the consolidated result would have been TEUR 2,177 higher (previous year TEUR 2,007 higher). Equity before tax would have been correspondingly higher by TEUR 2,177 (previous year: TEUR 2,007 higher). If the USD had been devalued by 5 % against the TWD as at December 31, 2020 (2019), the consolidated result would have been TEUR 2,177 lower (previous year: TEUR 2,007 lower). Equity before taxes would have been reduced accordingly by TEUR 2,177 (previous year: TEUR 2,007 reduced).

If the EUR had appreciated by 5 % against the TWD as at December 31, 2020 (2019), the consolidated result would have been TEUR 718 higher (previous year TEUR 679 higher). Equity before taxes would have been correspondingly higher by TEUR 718 (previous year: TEUR 679 higher). If the EUR had been devalued by 5 % against the TWD as at December 31, 2020 (2019), the consolidated result would have been TEUR 718 lower (previous year: TEUR 679 lower). Equity before taxes would have been reduced accordingly by TEUR 718 (previous year: TEUR 679 reduced).

If the EUR had appreciated by 5 % against the CNY as at December 31, 2020 (2019), the consolidated result would have been TEUR 527 higher (previous year TEUR 307 higher). Equity before taxes would have been correspondingly higher by TEUR 527 (previous year: TEUR 307 higher). If the EUR had been devalued by 5 % against the CNY as at December 31, 2020 (2019), the consolidated result would have been TEUR 527 lower (previous year: TEUR 307 lower). Equity before taxes would have been reduced accordingly by TEUR 527 (previous year: TEUR 307 lower).

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, 2020. A hypothetical increase in these interest rates by 25 basis points per year would have led to an increase in interest expenses of TEUR 189 (previous year: TEUR 148). A hypothetical reduction of 25 basis points per year would have led to a reduction in interest expenses of TEUR 189 (previous year: TEUR 148).

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.

Contingencies and Other Financial Obligations

In the event of fire damage to a customer's ventilation system, there is a possibility that Manz is also responsible for the fire. The cause of the fire is currently being investigated by an expert. The currently apparent costs for the replacement of the system plus estimated ancillary costs amount to approximately 150 TEUR.

Events after Reporting Period

The regulatory approvals for the sale of the shares in Talus Manufacturing Ltd. were granted at the end of January 2021. The profit of the transaction is in the low double-digit million Euro range.

On January 26, 2021, Manz AG was informed by the EU that it had been awarded substantial funding as part of the so-called IPCEI project (Important Project of Common European Interest) EuBatIn (Promotion of Research and Innovation in Battery Manufacturing). Manz had applied with the concept "Lithium Battery Factory of the Future". The amount of funding that Manz AG will receive to realise the project has not yet been determined. Subject to final commitments to finance Manz AG's own share, the project is to be implemented by Group companies in Germany and Italy.

Manz (B.V.I.) Ltd, Road Town, British Virgin Islands, was dissolved with effect from January 26, 2021. There has no significant effect on the group result.

On February 4, 2021, Manz AG has acquired a 40 % stake in Cadis Engineering GmbH. The total purchase price will be in the low single digit million Euro range. Cadis is a specialist for industrial inkjet systems. Manz is thus tapping into digital printing technology for direct printing on components.

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 28.09 % 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. Accordingly, the associated company Talus Manufacturing Ltd, Chungli, Taiwan, was identified as a related party. Moreover, Manz GmbH Management Consulting and Investment, Schlaitdorf is a related party. During the financial year 2020, no services were purchased from this company for consulting (previous year: TEUR 9).

Managing Board

The following persons were appointed as members of the Managing Board in the financial year 2020.

- Martin Drasch, Chief Executive Officer
- Manfred Hochleitner, Chief Financial Officer
- Jürgen Knie, Chief Operations Officer

Compensation of the Managing Board

The fundamentals of the compensation system and the amount of compensation paid to the Managing Board and Supervisory Board and former members of Managing Board are presented in the compensation report, which forms part of the group management report.

The total compensation of the Managing Board in accordance with Section 314 Subsection 1 No. 6a) of the German Commercial Code amounted to TEUR 2,250 for the financial year 2020 (previous year: TEUR 996). The non-performance-related benefits amount to TEUR 862 (previous year: TEUR 742) and the performance-related benefits amount to TEUR 254 (previous year: TEUR 0). In the financial year 2020, this figure does not include any severance payments (previous year: TEUR 0). In the year under review, a total of 48,675 (previous year: 22,327) 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 1,134 (previous year: TEUR 254).

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 18) 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 Managing Board member Jürgen Knie. For this purpose, TEUR 12 (previous year: TEUR 6) p.a. are paid into an externally funded pension fund.

The former Executive Board member Otto Angerhofer (deceased in Oct. 2020) and his widow received a pension payment of TEUR 10 (previous year: TEUR 10) in fiscal year 2020. His widow will receive a widow's pension amounting to 60 % of his pension. There is a pension obligation to the former Executive Board member or his widow in the amount of EUR 106 thousand (previous year: EUR 176 thousand).

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 2020 according to IAS 24.17:

(in TEUR)	**Total 2020**	**Total 2019**
Short-term employee benefits	**1,116**	742
Post-employment benefits	**0**	0
Benefits on termination of employment	**0**	0
Share-based compensation	**1,134**	254

Supervisory Board

Prof. Dr. Heiko Aurenz, Dipl. oec., Managing Director of Ebner Stolz Management Consultants GmbH, Stuttgart, 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! Company for continuing education, 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; Chairman of the Advisory Board of Monument Vermögensverwaltung GmbH, Stuttgart; member of the Foundation Board of the Foundation Aufbruch und Chance, Stuttgart; and Advisory Board Chairman of Bumüller GmbH & Co Backbetriebe KG, Hechingen.

The Deputy Chairman of the Supervisory Board Dieter Manz is a member of the Supervisory Board of TecInvest Holding AG, Puchheim.

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., Peking, People's Republic of China and member of the Supervisory Board of ANWHA(Shanghai) Automation Engineering Co., Ltd, Shanghai, People's Republic of China.

Compensation of the Supervisory Board

The compensation system for the Supervisory Board is also presented in the compensation report, which is part of the group management report.

For the financial year 2020, 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 189 (previous year: TEUR 237).

Employees

Manz Group employed an average of 1,437 employees in the reporting year (previous year: 1,535 employees).

Auditor fees

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

(in TEUR)	2020	2019
Audit services	182	180
Other attestation services	0	0
Tax services	0	0
Other services	0	0

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart audited the consolidated financial statements of the financial years 2020 and 2019.

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, 2021

The Managing Board of Manz AG

Martin Drasch   Manfred Hochleitner   Jürgen Knie

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, 2021

The Managing Board of Manz AG

Martin Drasch	Manfred Hochleitner	Jürgen Knie

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 January 1 to December 31, 2020, the consolidated balance sheet as of December31, 2020, consolidated cash flow statement flows and consolidated statement of changes in equity for the fiscal year from 1 January to 31 December 2020, 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 January 1 to December 31, 2020. In accordance with the German legal requirements, we have not audited the content of the combined statement on corporate governance, which is published on a website stated in the group management report and is part of the group management report (Secs. 289f and 315d HGB ["Handelsgesetzbuch": German Commercial Code]).

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at December 31, 2020 and of its financial performance for the fiscal year from January 1 to December 31, 2020, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of the group statement on corporate governance referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and the EU Audit Regulation (No 537/2014, referred to subsequently as “EU Audit Regulation”) and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the “Auditor’s responsibilities for the audit of the consolidated financial statements and of the group management report” section of our auditor’s report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Art. 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from January1 to December 31, 2020. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

Below, we describe what we consider to be the key audit matters:

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 extent of 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 Group’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 the development of margins throughout the projects’ execution, we also applied data analysis procedures.

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 “Summary of significant accounting policies” as well as “Notes to the balance sheet”, note 21 “Contract assets”.

Impairment testing of goodwill

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

Goodwill of EUR 34.8 million (prior year: EUR 35.5 million) is recognized in the consolidated financial statements of Manz AG and is 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 carry out the impairment test with the Company's executive directors and assessed its compliance with the requirements of IAS 36. We checked on a test basis that the planning assumptions used in the detailed forecasts of each of the cash-generating units are in line with the business plan of the Company prepared by the Managing Board and ratified by the Supervisory 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 analyzed the sensitivity analyses prepared by the Company with a view to consideration of the significant assumptions, 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 impairment 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 "Summary of significant accounting policies" as well as "Notes to the balance sheet," note 14 "Intangible assets."

Other information

The Supervisory Board is responsible for the report of the Supervisory Board. The executive directors and the Supervisory Board are responsible for the declaration pursuant to Sec. 161 AktG ["Aktiengesetz": German Stock Corporation Act] on the German Corporate Governance Code, which is part of the statement on corporate governance. In all other respects, the executive directors are responsible for the other information. The other information comprises the following reporting sections in the Annual Report, of which we received a copy of by the time this auditor's report was issued: the disclosures made in the "To our shareholders" section of the Annual Report, the group non-financial report, the combined statement on corporate governance 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 Sec. 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group’s ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group’s position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have determined necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group’s financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the

Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Report on the assurance in accordance with Sec. 317 (3b) HGB on the electronic reproduction of the consolidated financial statements and the group management report prepared for publication purposes

Opinion

We have performed assurance work in accordance with Sec. 317 (3b) HGB to obtain reasonable assurance about whether the reproduction of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the attached electronic file "Manz _ AG _ KA+KLB _ ESEF-2020-12-31" and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance only extends 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 in this reproduction nor to any other information contained in the abovementioned electronic file.

In our opinion, the reproduction of the consolidated financial statements and the group management report contained in the abovementioned attached electronic file and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format. We do not express any opinion on the information contained in this reproduction nor on any other information contained in the abovementioned file beyond this reasonable assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the fiscal year from January 1 to December 31 2020 contained in the "Report on the audit of the consolidated financial statements and of the group management report" above.

Basis for the opinion

We conducted our assurance work on the reproduction of the consolidated financial statements and the group management report contained in the abovementioned attached electronic file in accordance with Sec. 317 (3b) HGB and Exposure Draft of IDW Assurance Standard: Assurance in Accordance with Sec. 317 (3b) HGB on the Electronic Reproduction of Financial Statements and Management Reports Prepared for Publication Purposes (ED IDW AsS 410). Our responsibilities under that standard are further described in the "Group auditor's responsibilities for the assurance work on the ESEF documents" section. Our audit firm applied the standards for the quality assurance system set forth in IDW Quality Control Standard: "Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis" [Requirements for Quality Control in the Practice of Public Auditors] (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 reproduction of the consolidated financial statements and the group management report in accordance with Sec. 328 (1) Sentence 4 No. 1 HGB and for the tagging of the consolidated financial statements in accordance with Sec. 328 (1) Sentence 4 No. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have considered necessary to enable the preparation of ESEF documents that are free from material non-compliance with the requirements of Sec. 328 (1) HGB for the electronic reporting format, whether due to fraud or error.

The executive directors of the Company are also responsible for the submission of the ESEF documents together with the auditor's report and the attached audited consolidated financial statements and the audited group management report as well as other documents to be published to the operator of the Bundesanzeiger [German Federal Gazette].

The Supervisory Board is responsible for overseeing the preparation of 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 non-compliance with the requirements of Sec. 328 (1) HGB, whether due to fraud or error. We exercise professional judgment and maintain professional skepticism throughout the engagement. We also:

- Identify and assess the risks of material non-compliance with the requirements of Sec. 328 (1) HGB, whether due to fraud or error, 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 electronic file containing the ESEF documents meets the requirements of Delegated Regulation (EU)

2019/815, in the version valid as of the reporting date, on the technical specification for this electronic file.

- Evaluate whether the ESEF documents enable an XHTML reproduction 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 (iX-BRL) enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on June 30, 2020. We were engaged by the Supervisory Board on August 25, 2020. 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 audit committee pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Steffen Maurer.

Stuttgart, March 23, 2021

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Matischiok	Maurer
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

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For the sake of better readability, we consistently 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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