manz

# 6-MONTH REPORT 2018

# Manz AG at a glance

## 2018 Financial Calendar

| | |
|---|---|
| **November 13, 2018** | Publication of 2018 9-Month Report |
| **November 26–28, 2018** | 2018 German Equity Forum |

## Overview of consolidated net profits

| (in million euros) | Jan. 1 to June 30, 2018 | Jan. 1 to June 30, 2017 | Change in % |
|---|---|---|---|
| Revenue | 173.5 | 119.6 | +45.1 |
| Overall performance | 178.4 | 126.7 | +40.8 |
| EBITDA | –0.7 | 12.4 | n/a |
| EBITDA margin (in %) | n/a | 9.8 | n/a |
| EBIT | –5.1 | 7.0 | n/a |
| EBIT margin (in %) | n/a | 5.5 | n/a |
| EBT | –5.9 | 5.6 | n/a |
| Consolidated net profit (loss) | –6.5 | 4.7 | n/a |
| Earnings per share (in euros) | –0.80 | 0.61 | n/a |
| Cash flow from operating activities | –33.7 | 39.6 | n/a |
| Cash flow from investing activities | –6.4 | 19.4 | n/a |
| Cash flow from financing activities | 10.0 | –21.5 | n/a |

| | June 30, 2018 | Dec. 31, 2017 | Change in % |
|---|---|---|---|
| Total assets | 382.5 | 368.2 | +3.9 % |
| Equity | 157.0 | 163.4 | –3.9 % |
| Equity ratio (in %) | 41.0 | 44.4 | –3.4 pp |
| Financial liabilities | 53.1 | 40.3 | +31.8 % |
| Liquid funds | 44.9 | 72.2 | –37.8 % |
| Net debt | 8.2 | –31.9 | n/a |

# MANZ AG MISSION STATEMENT

With our claim „passion for efficiency – efficiency through passion," we, as a high-tech equipment manufacturer, make the promise of performance, to offer innovative and economic solutions to our customers in established and future-oriented markets and market segments. Extensive technological know-how, a competitive product portfolio, and customer proximity are the foundation of our company and enable us to recognize new industry requirements at an early stage and incorporate them into the development of our products. The Manz Group is an innovation driver for key technologies such as sustainable energy production and stationary power storage, displays and devices for global communication needs or E-mobility. Due to our extensive expertise in automation, laser processing, image processing, measurement technology, liquid chemistry, and roll-to-roll processes, there are application opportunities and demand for our solutions in numerous industries. We concentrate not only on customer-specific production solutions in our core segments of Solar, Electronics, and Energy Storage, but also on the development, production, and marketing of standardized individual machines and modules and their intelligent incorporation into complete, individual system solutions.

## WE ACT IN A SUSTAINABLE MANNER. IN ALL AREAS. TO ALL CHALLENGES.

To open up opportunities. To enable further education. To accept social responsibility. To drive innovation. To conserve resources.

Sustainability is more than just a slogan at Manz. We have therefore decided to put the spotlight on sustainability in this year's financial reports. As a large listed company, from the fiscal year 2017 on we also appropriately summarize our diverse activities around environmental issues, employee concerns, social concerns, respect for human rights, and fight against corruption and bribery in a report.

The entire sustainability report can be found on our website. We provided interesting facts and backgrounds concerning the key topics for us in this report.

# INDEX OVERVIEW

# HIST ORY OF MANZ AG

**1987** Company founded by Dieter Manz

Developed the first automation system for processing crystalline solar cells in a pilot manufacturing project **1988**

**1994** Shipped the first automation solution for the flat panel displays industry to Asia

Shipped the first automation system for a completely automated production line for crystalline solar cells **2000**

**2005** Entered the thin-film market with equipment for mechanically scribing solar panels

IPO on the Entry Standard market of the Frankfurt Stock Exchange **2006**

**2008** Became leading supplier of systems for wet-chemical processes by acquiring Intech, Taiwan

Entered the market for lithium-ion batteries **2009**

**2012** Acquired the CIGS innovation line from Würth Solar
Opened facility for solar and display production systems in Suzhou, China

Manz becomes global leading equipment supplier for the touch panel production
First order from AMOLED display industry **2013**

**2014** Acquisition of mechanical engineering division of Kemet Electronics Italy (formerly Arcotronics) for enlargement of technology portfolio in Battery division

Acquisition of KLEO Halbleitertechnik GmbH, expansion of the technology portfolio by the addition of "laser direct imaging" **2015**

**2016** Shanghai Electric becomes strategic anchor investor of Manz AG

Start of strategic collaboration with Shanghai Electric and Shenhua in CIGS thin-film solar technology **2017**

# TO OUR SHAREHOLDERS

## 10 MANZ AG STOCK

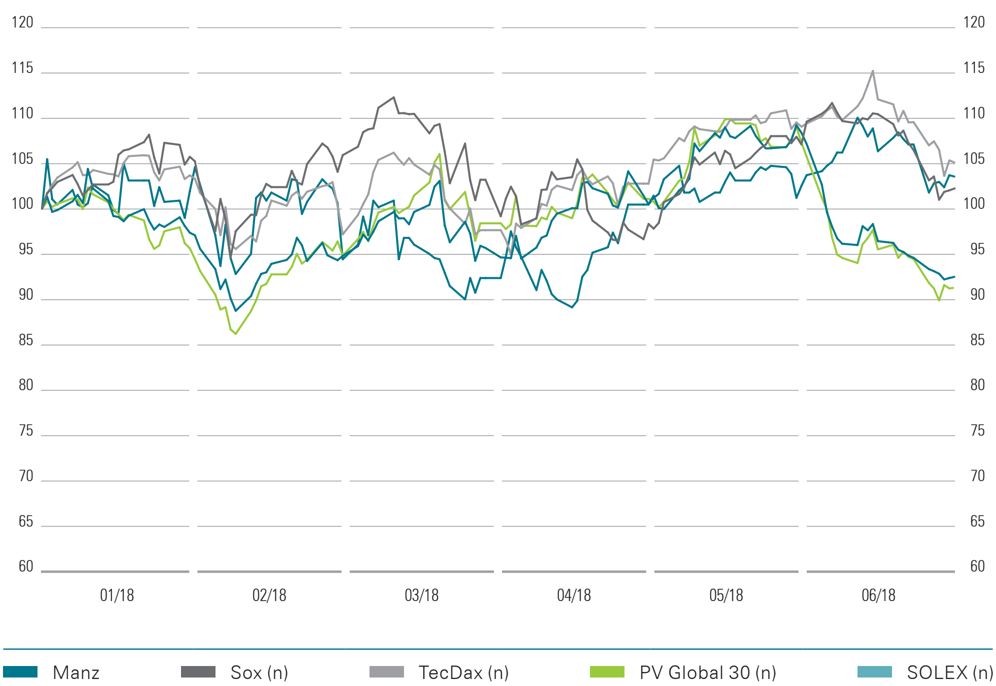
# MANZ AG STOCK

## CHANGE IN SHARE PRICE (JANUARY 1 TO JUNE 30, 2018)

The Manz AG share began the 2018 fiscal year on Tuesday, January 2, 2018, with a closing price of 33.90 euros. During the following period the share was characterized by volatile price performance, and on April 16, 2018 reached a low of 30.20 euros per share in the period under review. Until the beginning of June, Manz Paper trended steadily upwards; reaching its high of 37.30 euros on June 11, 2018. By the end of June 2018, the performance was marked by a slight downward trend and closed at euros 35.15 on June 29, 2018. This corresponds to a market capitalization of around 272.2 million euros and a price increase of 3.7 %.

The benchmark indices developed as follows over the period under review:
TecDAX +12.9 %; SOX +6.2 %; SOLEX –9.7 %; PV30 Global –10.4 %

**Chart Showing Manz AG Stock** (XETRA, in euros)



# STOCK KEY DATA AND PERFORMANCE INDICATORS

### Stock Key Data and Performance Indicators

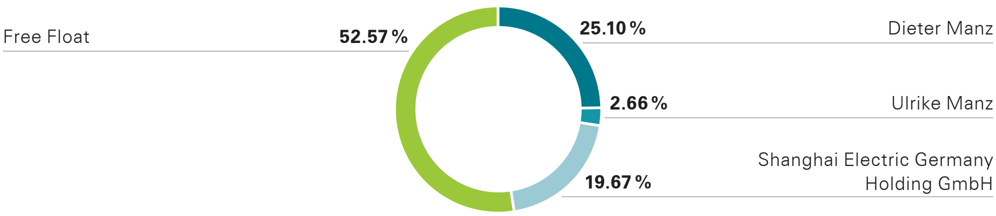
| | |
|---|---|
| **German Securities Identification Number** | A0JQ5U |
| **ISIN** | DE000A0JQ5U3 |
| **Ticker symbol** | M5Z |
| **Trading segment** | Regulated market (Prime Standard) |
| **Share type** | Bearer shares with no par value (no-par-value shares) with a pro rata amount of the share capital of 1.00 euros each |
| **Capital stock** | **7,744,088 EUR** |
| **IPO** | September 22, 2006 |
| **Opening price** | 19.00 euros |
| **Share price at the beginning of the reporting period*** | 33.90 euros |
| **Share price at the end of the reporting period*** | 35.15 euros |
| **Change (in percent)** | **+3.7 %** |
| **Period high** | 37.30 euros |
| **Period low** | 30.20 euros |

* In each case closing prices on German Stock Exchange AG's XETRA trading system

# SHAREHOLDER STRUCTURE

Manz AG currently shows a high free-float of 52.57 % and has a broad shareholder base. Shanghai Electric Germany Holding GmbH owns 19.67 % of the shares as of Saturday, June 30, 2018. In addition, Board of Directors member Manz and his wife Ulrike Manz own 25.10 % and 2.66 % of the company's shares, respectively.

### Shareholder Structure



## 2018 ANNUAL MEETING OF SHAREHOLDERS

The 2018 Manz AG Annual General Meeting took place at the Filharmonie in Filderstadt, Germany, on Tuesday, July 03, 2018. A total of 269 shareholders attended and heard the report of the Managing Board on the development of business in the year 2017 and the outlook for the 2018 fiscal year. A total of 59.3 % of capital stock with voting rights was represented (previous year: 57.9 %); all of the items on the agenda were adopted. Detailed voting results can be found at any time on the company's website www.manz.com under Investor Relations/Annual General Meeting.

**2018 Financial Calendar**

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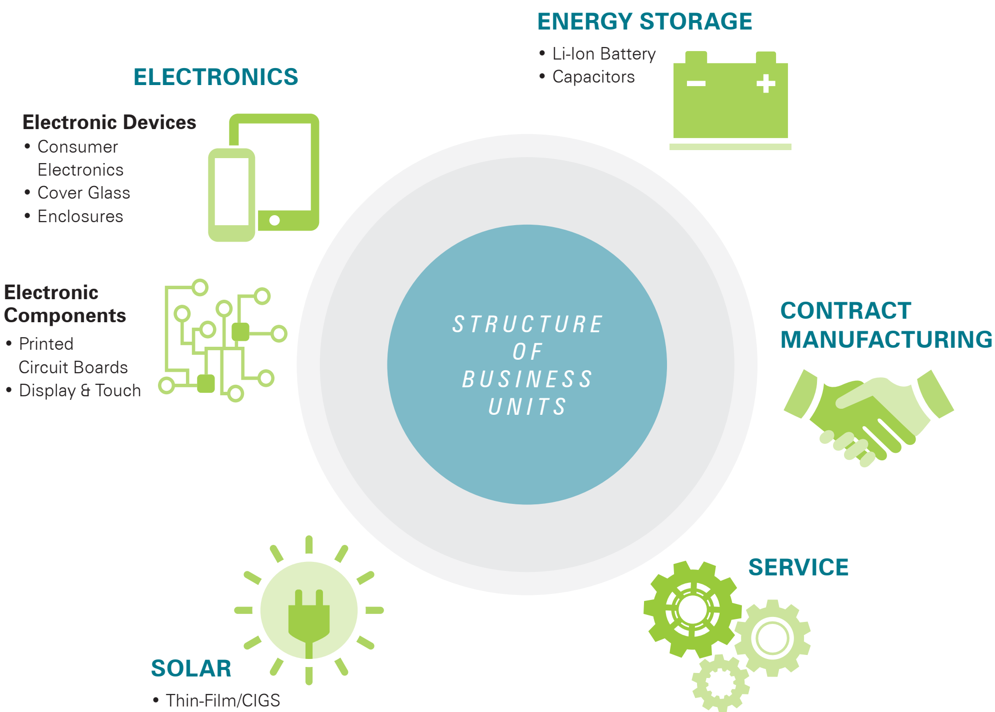
# GRO
# UPINT
# ERIMMA
# NAGEM
# ENTRE
# PORT

# BASIC INFORMATION ON THE GROUP

## BUSINESS MODEL AND STRATEGY

Founded in 1987, Manz AG is a global high-tech equipment manufacturing company. Its business activities consist of five segments: Solar, Electronics, Energy Storage, Contract Manufacturing, and Service. With many years of expertise in automation, laser processing, vision and metrology, wet chemistry, and roll-to-roll processes, the company offers manufacturers and their suppliers in various industries a broad portfolio of innovative products. In addition to customer-specific production solutions, this includes standardized individual machines and modules that can be intelligently linked together to form complete, customized system solutions.

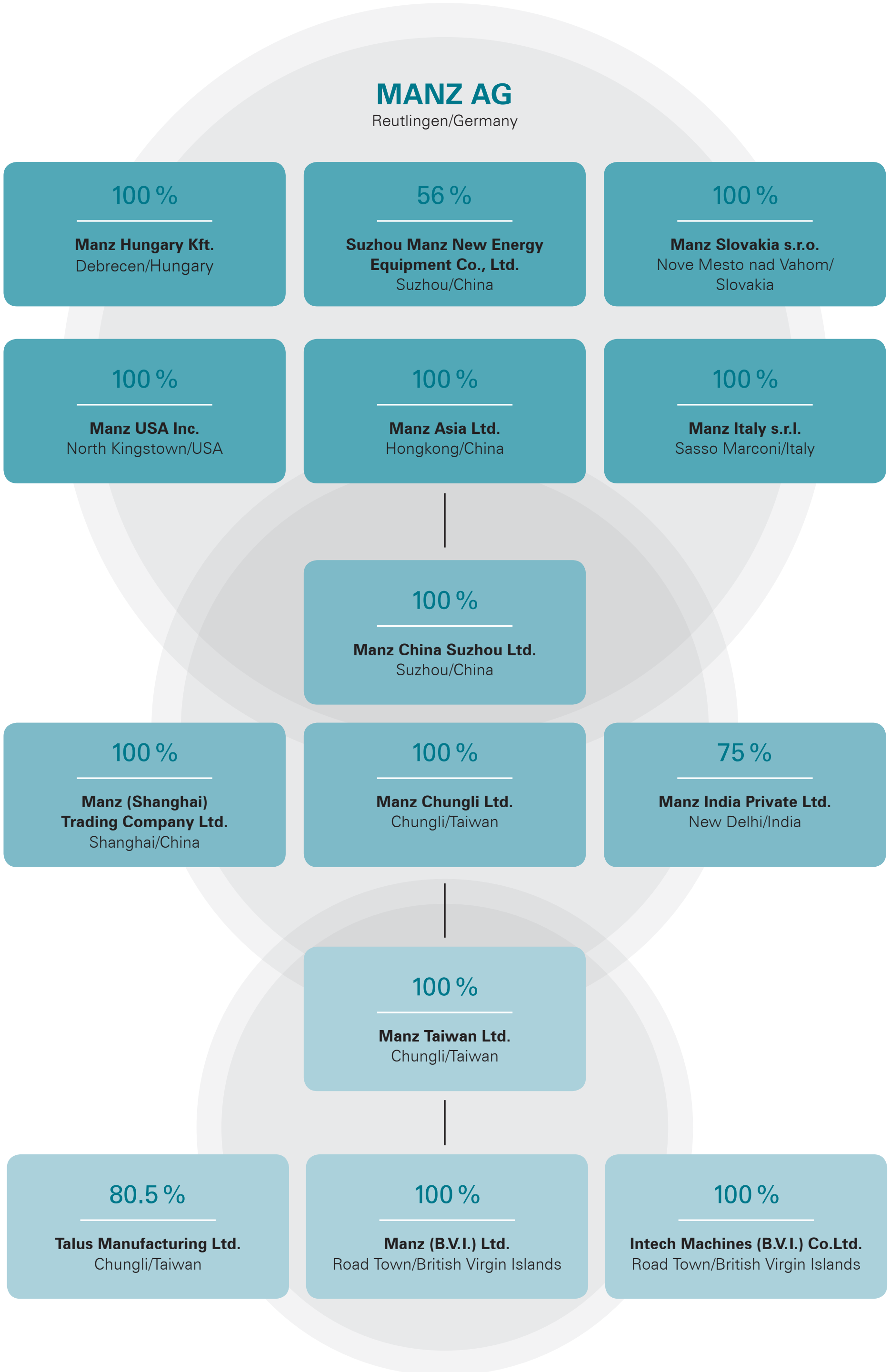
In addition to the CIGS*fab* turnkey production line in the Solar segment, the company is paying special attention to the automotive industry in the Electronics and Energy Storage segments. For example, economical and competitive lithium-ion battery manufacturing equipment – from the cell to the finished pack – and automated assembly lines for cell contact systems are helping the industry transform from the classic to the electric power train. 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.



The core of the company's strategy is to make use of the technology portfolio via a Group-wide established R&D Council across all industries and regions. This overarching exchange of technology and know-how offers not only a high level of flexibility, but also the possibility of creating internal synergies with regard to platform structures and kits, product portfolios and processes and procedures, and to use them economically.

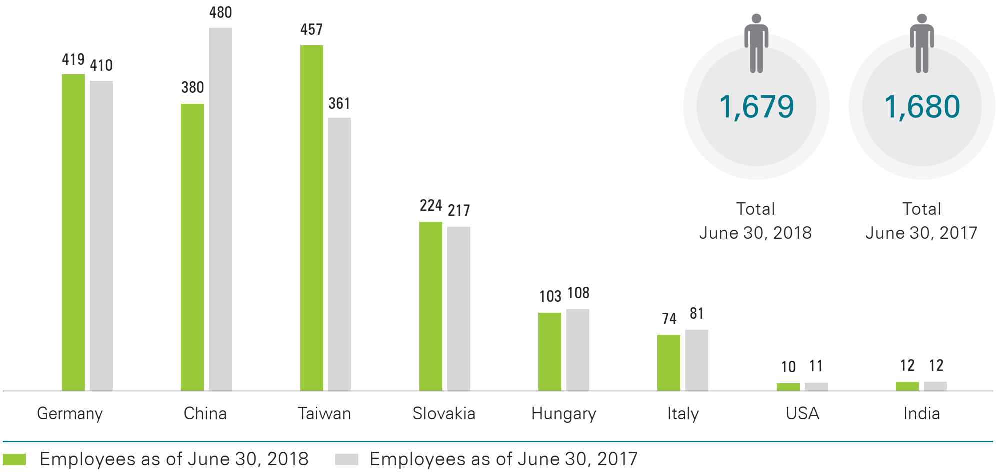
Manz AG's business model offers a sustainable increase in competitiveness combined with profit-oriented growth. The strategic cooperation in the Solar segment with Shanghai Electric Group and Shenhua Group ensures stability. The company is increasing its competitiveness and profitability with a strong focus on the expansion of the business with standard equipment and rapidly broadening its global customer base. A group-wide structured process for product identification, development and implementation significantly reduces development effort and time. Additional growth opportunities arise from individual development projects for customer-specific pilot lines. Here, Manz AG is a sought-after development partner throughout the industry and a pioneer for new future technologies.

## GROUP STRUCTURE AND HOLDINGS



## LOCATIONS AND EMPLOYEES

**Employees by country**




## CONTROL SYSTEM AND PERFORMANCE INDICATORS

Manz AG is organized for the purpose of corporate management by product and service segments at Group level and consists of the five business segments "Solar," "Electronics," "Energy Storage," "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. The Managing Board is informed about business performance in the individual segments on a regular basis by means of detailed reports and regular management meetings. As a result, it is possible for the respective Managing Board to control the company in a timely manner.

The control indicators for Manz AG's corporate development are sales, earnings before interest and taxes (EBIT), and earnings before interest, taxes, depreciation, and amortization (EBITDA). Further performance indicators are the equity rate and liquidity. The Manz AG control system has not changed relative to the previous year.

Manz AG's financial management system is centrally organized. In order to minimize risks and make use of the potential to optimize activities across the entire group, the company concentrates decisions about subsidiaries' financing, investments, and currency hedging activities 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.

# Locations and 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**
Taoyuan
Production, Sales & Service

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

8 **India**
New Delhi
Sales & Service

## RESEARCH AND DEVELOPMENT

With more than 500 engineers, technicians, and scientists at its development sites, Manz AG concentrates on the development of innovative production, assembly and handling technologies, standardized individual machines, modules, and completely interlinked, customized system solutions and systems, as well as the interdepartmental linking of its competencies through the R&D Council to maximize synergy effects and economies of scale. In addition, Manz AG maintains numerous cooperative agreements with well-known research institutes, universities and colleges.

Manz AG had a total R&D ratio of 4.5 % in the reporting period (previous year: 8.7 %). On the one hand, the significant decline is attributable to increased overall performance and to the elimination of high R&D expenditures in the Solar division as a result of the sale of NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH) as of April 1, 2017. If only the capitalized development costs are considered, the research expense ratio amounts to 1.7 % (previous year: 3.6 %). R&D investments of 7.9 million euros are below the prior year's level of 10.4 million euros.

Scheduled depreciation on activated development services of 1.6 million euros (previous year: 1.8 million euros) was charged in the reporting period 2018. There was no unscheduled depreciation. The company will also continue to place a clear emphasis in the R&D area. Manz AG strives for an annual rate of R&D to sales of 6.5 % on average in order to provide sustained and long-term consolidation of its positive technological positioning and its innovations in the relevant target markets.

# KNOWLEDGE EDUCATION TRAINING

The best possible qualification for us is the key to sustainable success. Against this background, we maintain a variety of programs and initiatives for the further qualification of our employees. We also want to establish the professional development opportunities of our global employees in a more diverse manner with the promotion of the international, internal job market.

Dual

**Education is an investment in the future**

Dual training and dual studies are very important to Manz AG. The internationalization of the dual training concept is also of great importance to us as a globally operating company. For example, at the location in Slovakia, in close cooperation with the German training department, a successful commercial/technical training structure based on the German model has been established.

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**Qualification means you never stop learning**

Lifelong learning is an essential part of our sustainability strategy. We offer a broad range of training and further education measures, as well as subject-specific qualification measures, as part of the Manz Academy. In 2017, a total of 37,996.50 hours of training were held. On average, each employee received 21.8 hours of training in 2017.

**“The top tier” is also further developed**

“Future Leadership@Manz” is a new program for the management level in the company, in the framework of which a common, cross-location understanding of leadership is developed.

# BUSINESS REPORT

## MACROECONOMIC ENVIRONMENT AND INDUSTRY-RELATED CONDITIONS

### Economic Market Environment

According to the Kiel Institute for the World Economy (IfW), the expansion of the global economy lost momentum at the beginning of 2018. Accordingly, the US trade conflicts noticeably slow down global economic activity. In China, measures to curb credit expansion and prevent overheating in the real estate market are weighing on the economy. Additionally, there was a heightened political uncertainty in the eurozone, largely due to the change of government in Italy. The IfW forecasts an increase in global gross domestic product (GDP) for the entire year of 2018 of 3.8 % (previous year: +3.9 %) for the USA, 2.8 % (previous year: +2.2 %) for China the IfW experts calculate GDP growth of 6.5 % (previous year: +6.9 %), for Europe an increase of 2.1 % (previous year: +2.6 %) and for Germany 2.0 % (Previous year: +2.6 %).

### Mechanical Engineering Industry

The Federation of German Mechanical and Plant Engineers (VDMA) continues to regard mechanical engineering as being on a growth path worldwide. Adjusted for prices, the association expects a global increase in sales of 4 % for 2018 (previous year: +3 %), and 4 % growth for China after the market declined in the previous year (previous year: –2 %), and even for Germany 5 % forecast (previous year: +5 %). The Robotics & Automation division will be able to post significant growth in Germany with a clearly above-average price growth of 10 % (previous year: +12 %). The positive expectations for the German mechanical engineering industry are supported by the strong foreign orders, which were around 6 % above the previous year's level in the first four months of 2018.

### Core Segment Industries

#### Solar

According to VDMA, the German engineering companies for solar industry were able to increase sales in the first half of 2018 by 7.7 % compared to the previous year. The overwhelming share was generated by the companies with 58.6 % in the Chinese market. The strong market position of German mechanical engineering companies in thin-film technology is reflected in a market share of 61.6 % in the first quarter of 2018. This was significantly above the corresponding value of the previous year. Based on previous year values, however, a decrease in the share of the thin-film market can be expected later in the year. The overall positive outlook is based on the growing global demand for PV installations: newly installed capacity is expected to increase in 2018 by 5.8 %, from 98 gigawatts (GW) to 104 gigawatts (GW) compared to the previous year.

### Electronics

According to the VDMA, German manufacturers for electronics production are expecting an average sales increase of 7.9 % over the previous year for 2018. The Asia region is the largest buyer of electronic engineering products, with a market share of 33.1 %, followed by Germany with 26.3 % and Europe with 24.1 %. According to IHS Research, the global display market will increase overall production capacity by 6.4 % to 210.8 million sqm, with the trend from LED to AMOLED technology continuing. Accordingly, the AMOLED technology will contribute a revenue share of 26.6 % in 2018 (previous year: 18.3 %). An increase of over 20 % for the creation of value of the machine-builders all around the electronic power train is forecast by the VDMA for 2018.

### Energy Storage

According to the VDMA, the sales growth of German machinery and equipment manufacturers for battery production will amount to around 15.2 % in 2018 (previous year: +14 %). The main reasons for this development are the growing demand from the automotive industry for batteries for electro-mobility and stationary energy storage devices for the energy turnaround. The average export rate in German battery engineering is generally over 80 %, with Asia and North America accounting for the largest share (53 %).

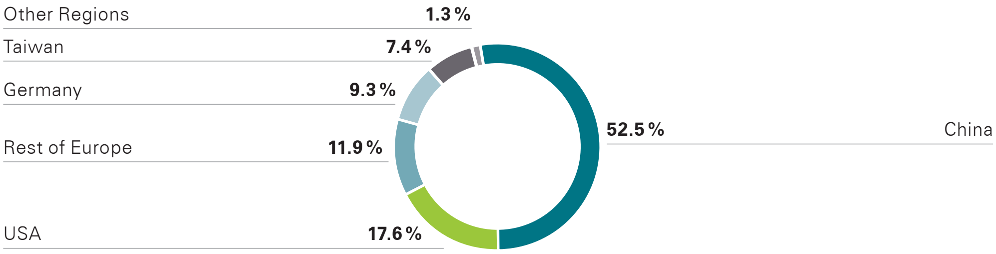
## ANALYSIS OF THE NET ASSETS, FINANCIAL POSITION AND GROUP PROFITABILITY

### Group profitability

Revenues in the first six months of 2018 half of 2018 amounted to 173.5 million euros compared to 119.6 million euros in the previous year. This corresponds to 45 % increase and essentially reflects the strong development of the Solar segment. The contribution to sales in the second quarter, at 87.4 million euros, was at the level of the first quarter of 2018 (March 31, 2018: 86.1 million euros) and 21.4 % above the sales revenues of the second quarter of the previous year (72.0 million euros).

Changes in finished goods and work in progress inventories amounted to 2.0 million euros (previous year: 2.9 million euros). Capitalized proprietary contributions of 2.9 million euros were below the previous year's level (previous year: 4.3 million euros) and is largely attributed to activities for product development in the solar business sector. This resulted in a total contribution of 178.4 million euros (previous year: 126.7 million euros).

**Revenues by Regions January 1 to June 30, 2018**




Other operating income amounted to 2.4 million euros (previous year: 38.9 million euros) and mainly comprises income from share price gains and subsidized projects. The reason for the significant decrease compared to the previous year is the special effect of 34.4 million euros in connection with the sale of NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH) in fiscal year 2017.

The cost of materials amounted to 121.1 million euros (previous year: 77.7 million euros) and the materials cost ratio was 67.9 % (previous year: 61.3 %). The increase compared to the previous year is a result of the dynamic development of the Contract Manufacturing segment, the implementation of material-intensive energy storage pilot projects and a high proportion of CIGS contracts. As a result, the gross profit amounted to 59.7 million euros compared to 87.9 million euros in the previous year, including the special effect from the sale of NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH). Adjusted for this one-time effect, the gross profit for the first six months of 2017 amounted to 53.5 million euros. Personnel expenses in the first six months of 2018 were slightly below the previous year at 37.8 million euros (38.4 million euros).

Compared to the previous year, the personnel expenses ratio improved substantially due to the significantly increased total output to 21.2 % (previous year: 30.3 %). The other operating expenses were significantly lower at 22.7 million euros than in the previous year (37.1 million euros). This decrease is mainly due to expenses in the previous year in connection with the CIGS major orders. A cable fire at the Taiwan site had a negative impact on Manz AG of 2.2 million euros. This value is included in other operating expenses. Earnings before interest, taxes, depreciation, and amortization (EBITDA) amounted to –0.7 million euros after a non-recurring prior-year EBITDA of –22.0 million euros, adjusted for the non-recurring one-time special effect from the sale of NICE Solar Energy GmbH (unadjusted previous year: 12.4 million euros). In regard to the second quarter, Manz AG generated an EBITDA of 2.4 million euros, which was adjusted for the negative one-time effect of the cable fire at the Taiwan site. This corresponds to an increase of 3.3 million euros compared to the first quarter of 2018 (March 31, 2018: –0.9 million euros). At 4.3 million euros, depreciation was slightly below the previous year's level of 5.4 million euros and included only scheduled depreciation of proprietary capitalized contributions and tools or equipment.

EBIT in the second quarter of 2018 amounted to –2.1 million euros. As in the case of EBITDA, the negative effect of the fire in Taiwan, with a value of 2.2 million euros, also has an effect here. Adjusted for this one-time effect, the EBIT for the second quarter of 2018 was +0.1 million euros. EBIT therefore increased significantly by 3.1 million euros, compared to the first quarter of 2018 EBIT. The increase in EBIT of +13.2 million euros is even more significant compared to the second quarter of 2017, with –13.1 million euros. Manz AG believes that its strategy towards a sustainable profitable business model has been confirmed in light of this positive trend in its operating business. The overall EBIT for the first six months of 2018 will be –5,1 million euros (previous year: 7.0 million euros, including the special effect from the sale of NICE Solar Energy GmbH – formerly Manz CIGS Technology GmbH – in the amount of 34.4 million euros).

Finance costs amounted to –0.9 million euros in the first six months of 2018, compared to –1.4 million euros in the previous year. This improvement is mainly due to the repayment of debt capital in Manz AG. After deducting taxes on income and earnings, Manz AG's consolidated net income for the first six months of 2018 amounts to –6.5 million euros (previous year: 4.7 million euros, including the special effect from the sale of NICE Solar Energy GmbH – formerly Manz CIGS Technology GmbH – in the amount of 34.4 million euros). This results, based on a weighted average of 7,744,088 shares, in undiluted earnings per share of –0.80 euros (previous year undiluted: 0.61 euros, including the special effect from the sale of NICE Solar Energy GmbH – formerly Manz CIGS Technology GmbH – in the amount of 34.4 million euros).

**Group Net Assets**

Total assets as of June 30, 2018 increased from 368.2 million euros to 382.5 million euros, compared to December 31, 2017.

On the asset side, as of June 30 2018, long-term assets amounted to 132.6 million euros above the level of the 2017 balance sheet date (125.8 million euros). The increase is mainly due to greater intangible assets of 63.4 million euros (December 31, 2017: 58.7 million euros). The increase is largely a result of the application of IFRS 15 and the associated capitalization of order acquisition. Current assets as of June 30, 2018, at 249.9 million euros, were well above the amount of 242.4 million euros as of the 2017 balance sheet date. In view of the positive order situation, inventories increased to 90.0 million euros as of the reference date (December 31, 2017: 62.2 million euros). Due to the first-time application of IFRS 15, receivables from construction contracts amounting to over 61.0 million euros are reported for the first time as contractual assets in the interim financial statements as of June 30, 2018. This position was previously an integral part of trade receivables. At the same time, trade receivables also decreased significantly as of June 30, 2018 to 39.6 million euros (December 31, 2017: 95.7 million euros). The decrease in liquid assets to 44.9 million euros by the end of the 2018 period of review (December 31, 2017: 72.2 million euros) mainly resulted from the use of prepayments in connection with the processing of CIGS contracts in line with the progressive project cycle. On the liabilities side, equity amounted to 157.0 million euros (December 31, 2017:

163.4 million euros), which resulted in an equity ratio of 41.0% (December 31, 2017: 44.4%) in an increased balance sheet amount. Long-term liabilities increased from 17.2 million euros as of December 31, 2017, to 18.3 million euros as of June 30, 2018. The reason for the slight increase is greater long-term financial liabilities of 4.3 million euros (December 31, 2017: 3.3 million euros).

Short-term debt increased substantially to 207.2 million euros compared to the end of fiscal year 2017, mainly due to the inclusion of bank overdrafts in the foreign subsidiaries (December 31, 2017: 187.7 million euros). Current financial liabilities as of June 30, 2018, amounted to 48.8 million euros (December 31, 2017: 37.0 million euros). Trade payables at the end of the 2018 reporting period amounted to 101.2 million euros (December 31, 2017: 117.5 million euros) and are mainly related to the commissioning of third parties to implement the large CIGS orders. As a result of the implementation of IFRS 15 for the fiscal year 2018, the company will for the first time report contractual liabilities of 27.9 million euros as of June 30, 2018. Previous advance payments received are included in this position (December 31, 2017: 13.4 million euros). As of Saturday, June 30, 2018, other short term accruals amounted to 10.9 million euros, compared with 5.2 million euros at the end of 2017. Other current liabilities amounted to 18.2 million euros (Sunday, December 31, 2017: 13.2 million euros).

**Group liquidity position**

The basis for the cash flow from operating activities, totaling –33.7 million euros, is the positive EBIT of –5.1 million euros. The increase in intangible assets and contractual assets in connection with the application of IFRS 15, as well as the improved order backlog and the resulting increase in inventories, resulted in a corresponding cash outflow with a simultaneous decrease in trade receivables.

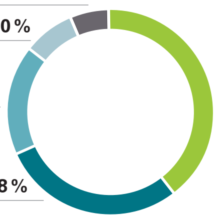
Cash flow from investment activities amounted to –6.4 million euros in the 2018 reporting period. The cash outflow resulted mainly from investments in intangible assets and tools or equipment, primarily in development activities.

The cash flow from financing activities in the first six months of 2018 amounted to 10.0 million euros and resulted primarily from the change in short-term financial debt. If exchange rate changes are taken into account, Manz AG therefore had liquid funds totaling 44.9 million euros as of June 30, 2018 (December 31, 2017: 72.2 million euros). Unused lines of credit with banks as of the 2018 balance sheet date come to 14.0 million euros (December 31, 2017: 20.7 million euros).

Net debt amounted to 8.2 million euros with a bank balance of 44.9 million euros. Since the beginning of 2018, new Aval loan commitments have been issued in the amount of 36.1 million euros.

## SEGMENT REPORTING

**Revenues by Business Units January 1 to June 30, 2018**




### Solar

The first six months of the year 2018 were also marked by the implementation of the major CIGS contracts with a total volume of 263 million euros, which Manz AG received in January 2017 as part of the strategic cooperation with Shanghai Electric and the Shenhua Group. The groundbreaking ceremony for the CIGS Turnkey Plant (CIGS*fab*) for the series production of thin-film CIGS solar modules in China took place as planned at the beginning of 2018. In January 2018, Manz also received a payment of approximately 43 million euros related to the large CIGS contracts. The payment was made according to the agreement, after contractually defined milestones had been successfully achieved in the completion of CIGS*fab*.

In the first six months of 2018, Manz AG generated around 69.3 million euros, or 39.9 % of the Manz Group's total revenues, in the solar segment (previous year: 16.5 million euros, or 13.8 %). The EBIT segment amounted to 6.5 million euros in the first six months of 2018 compared to 26.1 million euros in the same period of the previous year, whereby this figure was significantly affected by the revenue-enhancing, positive special effect of 34.4 million euros from the sale of the NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH) as reported on March 31, 2017. In comparison with the EBIT segment adjusted for this special effect of –8.3 million euros as of June 30, 2017, the EBIT for the solar segment increased by around 15 million euros.

### Electronics

At the beginning of the year, Manz had received new and subsequent orders from the electronics business segment with a total volume of approximately 20 million USD for wet-chemical tools or equipment for the manufacture of Displays. Manz AG's wet-chemical equipment convinced, not least, their existing customers, such as Xianyang CaiHong Optoelectronics Technology Co. Ltd. ("CHOT"), a well-known Chinese flat screen manufacturer that is part of the China Electronics Corporation Group (CEC). Two other long-time customers, one electronics manufacturer located in Taiwan and a Japanese technology group, also decided to purchase innovative Manz equipment for manufacturing high-end TFT displays and flexible OLED displays.

Manz received a major order in the double-digit million euros range from a global electronics company in May 2018. Part of the order to manufacture the cell contact system for battery cells in electric vehicles is the LightAssembly modular assembly line. Contacting systems are integrated into the electrical energy storage system in order to allow series or parallel switching of lithium-ion battery cells or to complete voltage measurements in each cell and temperature measurements in the module. The overall order was divided into two equal parts: Manz AG has already received the first installment during the second quarter, and the second installment is expected for the third quarter of 2018.

In the first six months of 2018, Manz AG generated around 30.0 million euros, or 17.3% of the Manz Group's total revenues, in the electronics segment (previous year: 42.1 million euros, or 35.2 %). The EBIT segment improved in the reporting period from –11.0 million euros in the previous year to –8.1 million euros, despite a significantly lower level of sales, and reflects the improved cost structures.

**Energy Storage**

Manz received three orders for the flexible Battery Laser System BLS 500 laser system in the Energy Storage business segment from customers from the power tools and automotive/e-mobility sectors, as well as an order for a pilot line for assembling battery cells in January 2018. The total volume of the orders was roughly 7 million euros. The company has already sold 10 BLS 500 type laser systems since the system was launched. With the BLS 500, Manz has introduced a flexible laser platform to the market that is designed for different laser processes in the manufacture of lithium-ion batteries. Customers can design powerful laser equipment matched to specific requirements and processes, structured around a standardized machine base. In doing so, Manz combines the advantages of a standard system with those of a customized solution.

In addition, Manz received an order from a European customer in April 2018 for a standard production line for the production of laminated lithium-ion pouch battery cells and their battery modules. These will be used for electric forklift trucks, automated guided vehicle systems and stationary energy storage. The order volume is in the low tens of millions of euros. The order will have an impact on revenues and earnings in the 2018 and 2019 business years.

The sales business segment generated around 13.8 million euros, or 8.0 % of Manz AG's total revenues in the first six months of 2018 (previous year: 12.0 million euros, or 10.0 %). The EBIT business segment improved to –6.2 million euros in the reporting period compared to –11.5 million euros in the previous year, but is still influenced by expenses for the development of new standard products, automation and process modules, as well as the expansion of sales in Asia, Europe and the United States.

**Contract Manufacturing**

During the 2018 reporting period, Manz AG generated 49.9 million euros, or 28.8% of the Manz Group's total revenues, in the contract manufacturing business segment (previous year: 40.4 million euros, or 33.8%). The EBIT segment amounted to 0.3 million euros in 2017, compared to 0.7 million euros in the previous year. The one-time special effect in connection with the fire at the Taiwan location had a negative impact on earnings.

**Service**

The company generated 10.4 million euros, or 6.0% of the Manz Group's total revenue in the service business segment (previous year: 8.7 million euros, or 7.3%). The EBIT segment amounted to 2.7 million euros in 2018, compared to 2.6 million euros in the previous year.

# SUPPLEMENTAL REPORT

Effective July 01, 2018, the company's Managing Board appointed Mr. Manfred Hochleitner (45) as Chief Financial Officer, who will immediately take over responsibility for the Finance and Controlling, HR, IT, Organization, Administration, Investor Relations, and Legal departments. After successfully completing his degree at the University of Passau in mathematics, with a minor in economics, Manfred Hochleitner gained extensive experience in the electronics and electrical engineering sector in his seven years at the VOGT electronic Group, ultimately being appointed as an authorized signatory and head of the Production and Supply Chain Management business segment. From 2007 to 2011, Mr. Hochleitner was the managing director of Optiplan GmbH. Following his role as commercial manager at mechanical engineering company Grämmer AG, he spent six years at Phoenix Solar AG as Director of Controlling/Finance and as Chief Financial Officer until 2018.

On July 26, 2018, Manz AG announced that Eckhard Hörner-Marass would be leaving the Managing Board at the end of 2018 at his own request. Mr. Hörner-Marass has been a member of the Managing Board since October 2016 and Chairman of the Managing Board since July 2017 and has agreed with the Supervisory Board for a one-year reduction of his term of office, which originally ran until December 31, 2019. The Supervisory Board intends to appoint Managing Board member Martin Drasch as the future Chairman of the Managing Board.

# REPORT ON OPPORTUNITIES AND RISKS

No significant changes have arisen compared with the opportunities and risks presented in the 2017 Annual Report.

# FORECAST REPORT

## EXPECTED DEVELOPMENT OF THE GROUP AND SEGMENTS

The Managing Board considers the industry outlook in the three strategic business segments Electronics, Solar and Energy Storage to be thoroughly positive. Based on an order intake of 196 million euros in the first six months of 2018, an order backlog of 240 million euros on June 30, 2018, and an expected continuous increase in productivity in all segments, the management board foresees a corresponding improvement of revenues and earnings in the second half of 2018. Assuming that the underlying conditions remain unchanged, the Managing Board therefore continues to expect sales growth of between 10 % and 14 % for the current financial year compared to 2017, with a slightly positive EBIT excluding special effects. This would amount to an improvement in operating earnings of around 30 million euros. Revenue is expected to increase across all business segments. Due to the continued high research and development expenses for further expanding the product portfolio, as well as investments in market cultivation, the Electronics and Energy Storage segments are not expected to make a positive contribution to the Group's EBIT until 2019. Detailed prognoses for all the segments have been published in the 2017 Annual Report.

## 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, development center or high 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.

# RESEARCH INNOVATION TECHNOLOGY

Over 500 engineers, technicians, and scientifically trained employees, as well as numerous partnerships with renowned universities, colleges, and institutes, demonstrate the importance of research and development at Manz. We not only ensure the sustainable development of our company with continuous innovation, but we also make a significant contribution to the success of our customers with our high-quality, demand-oriented products and services.

# CONSOLIDATED INTERIM FINANCIAL STATEMENT

# CONSOLIDATED INCOME STATEMENT

| | 1. Half Year (in EUR tsd.) | | 2nd Quarter (in EUR tsd.) | |
|---|---|---|---|---|
| | **January 1 to June 30, 2018** | **January 1 to June 30, 2017** | **April 1 to June 30, 2018** | **April 1 to June 30, 2017** |
| Revenues | 173,532 | 119,600 | 87,431 | 71,982 |
| Inventory changes, finished and unfinished goods | 1,972 | 2,856 | –3,207 | 1,948 |
| Work performed by the entity and capitalized | 2,904 | 4,281 | 1,589 | 1,397 |
| **Total operating revenues** | **178,408** | **126,737** | **85,814** | **75,327** |
| Other operating income | 2,436 | 38,864 | 908 | 3,236 |
| Cost of materials | –121,113 | –77,736 | –56,321 | –44,040 |
| **Gross profit** | **59,731** | **87,865** | **30,400** | **34,523** |
| Personnel expenses | –37,812 | –38,374 | –18,656 | –18,624 |
| Other operating expenses | –22,657 | –37,126 | –11,561 | –26,701 |
| **EBITDA** | **–738** | **12,365** | **183** | **–10,802** |
| Amortization/Depreciation | –4,325 | –5,411 | –2,255 | –2,270 |
| **Operating earnings (EBIT)** | **–5,063** | **6,954** | **–2,072** | **–13,072** |
| Finance income | 112 | 39 | 70 | 14 |
| Finance costs | –901 | –1,405 | –476 | –818 |
| **Earnings before taxes (EBT)** | **–5,852** | **5,588** | **–2,478** | **–13,875** |
| Income taxes | –667 | –889 | 259 | –227 |
| **Consolidated profit or loss** | **–6,518** | **4,699** | **–2,219** | **–14,102** |
| of which attributable to minority interests | –350 | –25 | –545 | –15 |
| of which attributable to shareholders of Manz AG | –6,168 | 4,724 | –1,674 | –14,087 |
| Weighted average number of shares | 7,744,088 | 7,744,088 | 7,744,088 | 7,744,088 |
| Earnings per share (undiluted) in EUR per share | –0.80 | 0.61 | –0.22 | –1.82 |
| Earnings per share (diluted) in EUR per share | –0.80 | 0.60 | –0.22 | –1.82 |

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

| | 1. Half Year (in EUR tsd.) | | 2nd Quarter (in EUR tsd.) | |
|---|---|---|---|---|
| | **January 1 to June 30, 2018** | **January 1 to June 30, 2017** | **April 1 to June 30, 2018** | **April 1 to June 30, 2017** |
| **Consolidated profit or loss** | **–6,518** | **4,699** | **–2,219** | **–14,102** |
| Difference resulting from currency translation | 119 | –6 | –114 | 36 |
| Cash flow hedges | 7 | 5 | 5 | 2 |
| Tax effect resulting from components not recognized in profit/loss | –2 | –1 | –2 | –16 |
| **Total of expenditures and income recorded directly in equity with future reclassification with tax effect** | **124** | **–2** | **–111** | **22** |
| Revaluation of defined benefit pension plans | 178 | 51 | 88 | 84 |
| Tax effect resulting from components not recognized in profit/loss | –41 | –11 | –20 | –19 |
| **Total of expenditures and income recorded directly in equity without future reclassification with tax effect** | **137** | **40** | **68** | **65** |
| **Consolidated comprehensive income** | **–6,257** | **4,737** | **–2,262** | **–14,015** |
| of which minority interests | –336 | –123 | –501 | –103 |
| of which shareholders of Manz AG | –5,921 | 4,861 | –1,761 | –13,912 |

# CONSOLIDATED BALANCE SHEET

**ASSETS (in EUR tsd.)**

| | June 30, 2018 | Dec. 31, 2017 |
|---|---|---|
| **Non-current assets** | | |
| Intangible assets | 63,350 | 58,729 |
| Property, plant, and equipment | 39,689 | 38,070 |
| Financial investments | 23,575 | 23,575 |
| Other non-current assets | 620 | 540 |
| Deferred taxes | 5,350 | 4,934 |
| | **132,584** | **125,848** |
| **Current assets** | | |
| Inventories | 89,950 | 62,159 |
| Trade receivables | 39,566 | 95,709 |
| Contract assets | 61,037 | 0 |
| Income tax receivables | 75 | 4 |
| Derivative financial instruments | 0 | 29 |
| Other current assets | 14,319 | 12,270 |
| Cash and cash equivalents | 44,933 | 72,209 |
| | **249,880** | **242,380** |
| **Total assets** | **382,464** | **368,228** |

# CONSOLIDATED BALANCE SHEET

## LIABILITIES AND SHAREHOLDERS' EQUITY (in EUR tsd.)

| | June 30, 2018 | Dec. 31, 2017 |
|---|---|---|
| **Equity** | | |
| Issued capital | 7,744 | 7,744 |
| Capital reserve | 98,798 | 98,917 |
| Revenue reserves | 24,850 | 31,018 |
| Other comprehensive income | 20,373 | 20,125 |
| Shareholders of Manz AG | **151,765** | **157,804** |
| Non-controlling interests | 5,213 | 5,549 |
| | **156,978** | **163,353** |
| **Non-current liabilities** | | |
| Non-current financial liabilites | 4,326 | 3,332 |
| Pension provisions | 7,287 | 7,435 |
| Other non-current provisions | 2,979 | 2,716 |
| Other non-current liabilities | 18 | 248 |
| Deferred taxes liabilities | 3,638 | 3,480 |
| | **18,247** | **17,211** |
| **Current liabilities** | | |
| Current financial liabilities | 48,803 | 36,973 |
| Trade payables | 101,181 | 117,509 |
| Payments received | 0 | 13,395 |
| Contract liabilities | 27,876 | 0 |
| Current income tax liabilities | 31 | 1,406 |
| Other current provisions | 10,894 | 5,180 |
| Derivative financial instruments | 268 | 7 |
| Other current liabilities | 18,185 | 13,194 |
| | **207,239** | **187,664** |
| **Total liabilities and shareholders' equity** | **382,464** | **368,228** |

# CONSOLIDATED STATEMENT OF CASH FLOWS

**(in EUR tsd.)**

| | Jan. 1 to June 30, 2018 | Jan. 1 to June 30, 2017 |
|---|---|---|
| Operating earnings (EBIT) | –5,063 | 6,954 |
| Depreciation/amortization of fixed assets | 4,325 | 5,411 |
| Increase (+)/decrease (–) in pension provisions and other non-current provisions | 115 | 195 |
| Other non-cash income (–) and expenses (+) | 119 | 85 |
| Gains (–)/losses (+) from disposals of assets | 395 | –34,372 |
| Increase (–)/decrease (+) in inventories, trade receivables and other assets | –39,847 | 10,558 |
| Increase (+)/decrease (–) in trade payables, contract liabilities and other liabilities | 9,130 | 52,362 |
| Income tax received (+)/paid (–) | –2,111 | –327 |
| Interest paid | –901 | –1,287 |
| Interest received | 112 | 39 |
| **Cash flow from operating activities** | **–33,726** | **39,618** |
| Cash receipts from the sale of fixed assets | 117 | 97 |
| Cash payments for investments in intangible assets and property, plant and equipment | –6,547 | –5,158 |
| Cash receipts from the sale of consolidated entities less cash outflow | 0 | 48,676 |
| Payments for the acquisition of consolidated entities and other business units | 0 | –24,221 |
| **Cash flow from investing activities** | **–6,430** | **19,394** |
| Cash receipts from the assumption of non-current financial liabilities | 1,417 | 0 |
| Cash payments for the repayment of non-current financial liabilities | –412 | –460 |
| Change in current financial liabilities | 11,831 | –21,007 |
| Purchase of treasury shares | –78 | –3 |
| Cash payments for the repayment of financial leases | 0 | –6 |
| Changes in restricted cash | –2,804 | 0 |
| **Cash flow from financing activities** | **9,953** | **–21,476** |
| **Cash and cash equivalents at the end of the period** | | |
| Net change in cash funds (subtotal 1 – 3) | –30,203 | 37,536 |
| Effect of exchange rate movements on cash and cash equivalents | 124 | –336 |
| Cash and cash equivalents on January 1 | 55,575 | 55,722 |
| **Cash and cash equivalents on June 30** | **25,495** | **92,922** |
| **Composition of cash and cash equivalents** | | |
| Cash and cash equivalents | 44,933 | 92,922 |
| Less restricted cash | –19,438 | 0 |
| **Cash and cash equivalents on June 30** | **25,495** | **92,922** |

# CONSOLIDATED STATEMENT OF CHANGES TO EQUITY

**(in EUR tsd.)**

| | | | | | Cumulative other equity | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Components which are not transferred to profit or loss | Components which may be transferred to profit or loss | | | | | | |
| | **Subscribed capital** | **Capital reserves** | **Treasury shares** | **Revenue reserves** | Remeasurement of pensions | Available-for-sale financial assets | Cash flow hedges | Currency translation | **Cumulative other equity capital** | **Equity capital attributable to share-holders of Manz AG shareholders** | **Minority shares** | **Total equity capital** |
| **As of January 1, 2017** | **7,744** | **143,681** | **0** | **–10,839** | **–2,047** | | **–15** | **21,995** | **19,933** | **160,519** | **4,587** | **165,106** |
| Consolidated net profit | | | | 4,724 | | | | | | 4,724 | –25 | 4,699 |
| Other comprehensive income | | | | | 40 | | 4 | 92 | 136 | 136 | –98 | 38 |
| Consolidated income statement | 0 | 0 | 0 | 4,724 | 40 | 0 | 4 | 92 | 136 | 4,860 | –123 | 4,737 |
| Purchase of treasury shares | | | –3 | | | | | | | –3 | | –3 |
| Use of treasury shares | | | 3 | | | | | | | 3 | | 3 |
| Share-based payment | | 85 | | | | | | | | 85 | | 85 |
| **As of June 30, 2017** | **7,744** | **143,766** | **0** | **–6,115** | **–2,007** | **0** | **–11** | **22,087** | **20,069** | **165,464** | **4,464** | **169,928** |
| **As of January 1, 2018** | **7,744** | **98,917** | **0** | **31,018** | **–2,344** | **–475** | **–14** | **22,958** | **20,125** | **157,804** | **5,549** | **163,353** |
| Consolidated net profit | | | | –6,168 | | | | | | –6,168 | –350 | –6,518 |
| Other comprehensive income | | | | | 137 | | 5 | 105 | 248 | 248 | 14 | 262 |
| Consolidated income statement | 0 | 0 | 0 | –6,168 | 137 | 0 | 5 | 105 | 248 | –5,921 | –336 | –6,257 |
| Withdrawal from capital reserves | | | | | | | | | | 0 | | 0 |
| Purchase of treasury shares | | | | | | | | | | 0 | | 0 |
| Use of tresury shares | | | –78 | | | | | | | –78 | | –78 |
| Share-based payment | | –119 | 78 | | | | | | | –41 | | –41 |
| Changes to the basis of consolidation | | | | | | | | | | 0 | | 0 |
| **As of June 30, 2018** | **7,744** | **98,798** | **0** | **24,850** | **–2,207** | **–475** | **–9** | **23,063** | **20,373** | **151,765** | **5,213** | **156,978** |

# NOTES (ABRIDGED)

## GENERAL DISCLOSURES

Manz AG has its headquarters in Steigaeckerstrasse 5 in 72768 Reutlingen, Germany. Its business activities consist of five segments: Solar, Electronics, Energy Storage, Contract Manufacturing, and Service. With many years of expertise in automation, laser processing, vision and metrology, wet chemistry, and roll-to-roll processes, the company offers manufacturers and their suppliers in various industries a broad portfolio of innovative products. In addition to customer-specific production solutions, this includes standardized individual machines and modules that can be intelligently linked together to form complete, customized system solutions. Manz AG shares are traded on the regulated market (Prime Standard segment) of the Frankfurt Stock Exchange.

Pursuant to Section 115 of the Securities Trading Act (WpHG), the interim consolidated financial statements as of June 30, 2018 have been prepared in condensed form in accordance with the International Financial Reporting Standards (IFRS) – including IAS 34 – of the International Accounting Standards Board (IASB), London, which are endorsed by the European Union, and the Interpretations of the IFRS Interpretations Committee in effect on the balance sheet date. Standards and interpretations that have not yet taken effect have not been applied. The present interim consolidated financial statements and the interim group management report have not been subject to an audit or an audit review in accordance with Section 317 of the Commercial Code.

The interim consolidated financial statements are prepared in euros. Unless otherwise stated, the information is given in thousands of euros.

## ACCOUNTING AND VALUATION PRINCIPLES

The accounting policies applied to the condensed consolidated interim financial statements as of Saturday, June 30, 2018, as well as the calculation methods and input parameters used to measure fair value are the same as those of the consolidated financial statements as of Sunday, December 31, 2017. A detailed description of these policies was published in the notes to the consolidated financial statements in the 2017 Annual Report.

What is different is that, as of January 1, 2018, Manz is for the first time applying IFRS 9 “Financial Instruments” and IFRS 15 “Revenue from Contracts with Customers”. Values from prior periods have not been adjusted.

### First-time application of IFRS 9 financial instruments

The application of IFRS 9 results in a different measurement of financial assets. The regulations for financial liabilities have been adopted from IAS 39.

IFRS 9 contains new classification and valuation rules for financial assets that are based on the business model and the type of cash flows. The classification into the different evaluation categories is done as follows:

- Amortized cost (AC)
- Fair Value Through Other Comprehensive Income (FVTOCI)
- Fair Value Through Profit or Loss (FVTPL)
- Equity instruments classified as FVTOCI. Fluctuations in the fair market value are recognized in other results.

The Manz Group financial instruments were assigned to the business models and the valuation categories were determined in accordance with IFRS 9.

IFRS 9 contains a depreciation model in which the expected losses must be taken into account. The depreciation is to be determined either on the basis of the expected 12-month loss or on the basis of the total expected loss over the remaining term of the instrument. Depreciation losses in the amount of the expected remaining life of the instrument must be recognized for instruments whose default risk has significantly increased since inception. The same applies irrespective of an increase in the default risk for trade receivables and contractual assets that do not contain a financing component.

To implement the new depreciation requirements, valuation models have been developed that are used to determine default rates for trade receivables and contract assets. An analysis of the historical default rates takes into account different regions. These historical default rates are adjusted by the influence of forward-looking information in the macroeconomic environment. In addition, the default rates are reviewed by the responsible management.

Manz uses the simplified depreciation approach as defined under IFRS 9 for all trade receivables and contract assets. Current adjustments are recognized in profit and loss in the amount of the expected credit losses for financial instruments over their lifetime. The IFRS 9 application did not result in valuation differences for financial instruments, as the previous approach to creating valuation allowances was essentially in line with IFRS 9 requirements.

### First-time application of IFRS 15 revenue from customer contracts

The previous IAS 11 Construction Contract standards, IAS 18 revenues, and the related interpretations will be replaced effective January 1, 2018, when IFRS 15 enters into force.

IFRS 15 establishes when, and in what amount, revenues are to be recognized. Manz applies IFRS 15 in accordance with the modified retrospective method. The resulting conversion effects are recognized in retained earnings. Production orders in the inventory that were previously accounted for by using the percentage of completion method correspond to the requirements for period-related revenue recognition. The presentation of the comparative period is not adjusted. With regard to the disclosure, as of January 1, 2018, receivables from construction contracts are recognized as contract assets. These were previously recognized under trade receivables. Advance payments received so far are reported under contract liabilities.

As of January 1, 2018, the former "Payments received" item is recognized under "Contract liabilities".

The resulting figures are shown below:

| (in EUR tsd.) | June 30, 2018 | Jan. 1, 2018 |
|---|---|---|
| Trade accounts receivable | 39,566 | 47,191 |
| Contract asset | 61,037 | 48,518 |
| Contract liabilities | 27,876 | 13,395 |

Of the contractual liabilities as of January 1, 2018 in the amount of 13,395 thousand euros, revenues of 2,504 thousand euros were recognized in the period up to June 30, 2018.

Additional costs for the acquisition of a contract are activated if they are covered by income from the contract and can be clearly assigned to a project. The capitalized costs for the acquisition of contracts are reduced linearly by the consumption of value over the planned project duration.

In addition, through the capitalization of sales commissions, long term intangible assets and contract assets as of June 30, 2018 increased by 3,427 thousand euros (January 1, 2018: 5,143 thousand euros higher). A loss of value of 1,716 thousand euros in the reporting period was recorded.

## CONSOLIDATION RANGE

Manz AG's consolidated interim financial statements include all the companies whose financial and operating policy can be either directly or indirectly determined by Manz AG ("controlling relationship"). In addition to Manz AG, the group of consolidated companies includes 14 fully consolidated subsidiaries (December 31, 2017: 16 fully consolidated subsidiaries).

At the end of June 30, 2018, Manz China WuZhong Co. Ltd., Suzhou/PR China and Manz China Shanghai Ltd. (Shanghai), Shanghai/PR China were liquidated. Its assets, liabilities and equity are held by Manz Asia Ltd. Hongkong/PR China.

# EXPLANATIONS OF INDIVIDUAL ITEMS IN THE INCOME STATEMENT

## OTHER OPERATING INCOME

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Exchange rate gains | 949 | 93 |
| Subsidies | 286 | 130 |
| Changes to valuation allowances on receivables | 254 | 203 |
| Income from the reversal of provisions | 120 | 138 |
| Other | 827 | 3,944 |
| Income from the deconsolidation of NICE Solar Energy GmbH, Schwäbisch Hall (formerly Manz CIGS Technology GmbH) | 0 | 34,356 |
| | **2,436** | **38,864** |

## COST OF MATERIALS

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Cost of raw materials, consumables and supplies and of purchased merchandise | 113,087 | 67,060 |
| Cost of purchased services | 8,026 | 10,676 |
| | **121,113** | **77,736** |

# OTHER OPERATING EXPENSES

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Advertising and travel expenses | 3,151 | 3,495 |
| Other research-related operating expenses | 2,995 | 7,565 |
| Rent and leasing | 2,607 | 2,704 |
| Outgoing freight | 1,786 | 1,726 |
| Appropriation to provisions | 1,110 | 513 |
| Other personnel-related expenses | 840 | 1,038 |
| Legal and consulting costs | 832 | 1,145 |
| Distribution expenses | 463 | 8,140 |
| Valuation allowances for receivables and losses on receivables | 316 | 427 |
| Exchange rate losses | 287 | 1,012 |
| Other | 8,270 | 9,361 |
| | **22,657** | **37,126** |

# EXPLANATIONS OF INDIVIDUAL ITEMS IN THE BALANCE SHEET

## INTANGIBLE ASSETS

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Licenses, software and similar rights and values | 6,096 | 6,718 |
| Capitalized development costs | 19,710 | 18,680 |
| Activated contract preparation expenses | 3,427 | 0 |
| Goodwill | 34,117 | 33,331 |
| | **63,350** | **58,729** |

## PROPERTY, PLANT AND EQUIPMENT

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Land and buildings, including buildings on third-party land | 28,681 | 26,739 |
| Technical equipment and machinery | 5,491 | 4,567 |
| Other equipment, operating and office equipment | 2,941 | 2,952 |
| Prepayments | 2,576 | 3,813 |
| | **39,689** | **38,070** |

## INVENTORIES

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Raw materials, consumables, and supplies | 42,882 | 24,062 |
| Work in progress | 22,104 | 19,859 |
| Finished goods and merchandise | 12,481 | 12,754 |
| Prepayments | 12,483 | 5,484 |
| | **89,950** | **62,159** |

## TRADE ACCOUNTS RECEIVABLE

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Future receivables from construction contracts | 0 | 48,518 |
| Trade accounts receivable | 39,566 | 47,191 |
| | **39,566** | **95,709** |

## CONTRACT ASSETS

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Manufacturing costs, including profit or loss on the construction contracts | 231,157 | 0 |
| Minus advance payments received | –170,120 | 0 |
| | **61,037** | **0** |

## OTHER CURRENT RECEIVABLES

| (in EUR tsd.) | June 30, 2018 | June 30, 2017 |
|---|---|---|
| Tax receivables (not income and income taxes) | 7,869 | 5,658 |
| Personnel receivables | 492 | 510 |
| Other accruals (primarily insurance policies) | 1,397 | 593 |
| Other | 4,561 | 5,509 |
| | **14,319** | **12,270** |

## EQUITY

In the first six months of 2018, the Manz Group purchased 2,267 treasury shares at an average price of 32.68 euros per share (market value of 74,081.05 euros), which were transferred to employees in the context of jubilee benefits and project sharing.

Capital reserves are comprised primarily of contributions from shareholders pursuant to Section 272(2), No. 1 of the Commercial Code, minus financing costs after taxes. Furthermore, this also includes the value of share-based compensation granted to management (including the Managing Board) as a salary component in the form of equity instruments (Performance Share Plan). The increase in capital reserves of 119 thousand euros in the first six months of 2018 relates to the allocation from share-based compensation (Manz Performance Share Plan).

## CONTRACT LIABILITIES

| (in EUR tsd.) | June 30, 2018 | Dec. 31, 2017 |
|---|---|---|
| Manufacturing costs, including profit or loss on the construction contracts | 7,258 | 0 |
| Minus advance payments received | –35,134 | 0 |
| | **–27,876** | **0** |

## ADDITIONAL INFORMATION ABOUT FINANCIAL INSTRUMENTS

The hedging relationships recognized by Manz in accordance with IAS 39 also meet the requirements of IFRS 9.

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

Trade receivables, other current receivables, liquid funds, trade payables, and the majority of other liabilities as set out in IFRS 7 mostly have short remaining terms. The carrying amounts of these financial instruments are therefore assumed to equate approximately to their fair market values.

## Carrying Amounts by Measurement Category

| FAssets (in EUR tsd.) | IAS 39 Classification | IFRS 9 Classification | Book Value Dec. 31, 2017 | Book Value Jan. 1, 2018 | Book Value June 30, 2018 |
|---|---|---|---|---|---|
| Other longterm assets | Loans and receivables | At continued acquisition cost | 540 | 540 | 620 |
| Financial investments | Financial assets available for sale | Profit and loss recognized at fair value in other results (Equity instruments) | 23,575 | 23,575 | 23,575 |
| Trade receivables | Loans and receivables | At continued acquisition cost | 95,709 | 47,191 | 39,566 |
| Contract assets | – | – | 0 | 48,518 | 61,037 |
| Derivative financial instruments | Designated hedge fund instruments | Designated hedge fund instruments | 29 | 29 | 0 |
| Other current receivables | Loans and receivables | At continued acquisition cost | 12,270 | 12,270 | 14,319 |
| Cash and cash equivalents | Loans and receivables | At continued acquisition cost | 72,209 | 72,209 | 44,933 |
| | | | **204,332** | **204,332** | **184,050** |

| Liabilities (in EUR tsd.) | IAS 39 Classification | IFRS 9 Classification | Book Value Dec. 31, 2017 | Book Value Jan. 1, 2018 | Book Value June 30, 2018 |
|---|---|---|---|---|---|
| Financial liabilities | At continued acquisition cost | At continued acquisition cost | 40,305 | 40,305 | 53,129 |
| Liabilities from goods and services | At continued acquisition cost | At continued acquisition cost | 117,509 | 117,509 | 101,181 |
| Derivative financial instruments | Designated hedge fund instruments | Designated hedge fund instruments | 7 | 7 | 268 |
| Other liabilities | | | | | |
| | Fair value through profit or loss (FVTPL) | Fair value through profit or loss (FVTPL) | 3,422 | 3,422 | 3,425 |
| | At continued acquisition cost | At continued acquisition cost | 10,020 | 10,020 | 14,778 |
| | | | **171,263** | **171,263** | **172,781** |

### Assets as of June 30, 2018

| IFRS 9 – Financial assets | Carrying Amounts by Measurement Category | | | | | |
|---|---|---|---|---|---|---|
| (in EUR tsd.) | Fair value | At continued acquisition cost | Profit and loss recognized at fair value in other results (Equity instruments) | Designated hedge fund instruments | Not in the application area IFRS 7, IFRS 9 | Carrying amount June 30, 2018 |
| Other longterm assets | 620 | 620 | – | – | – | 620 |
| Financial investments | 23,575 | – | 23,575 | – | – | 23,575 |
| Trade receivables | 39,566 | 39,566 | – | – | – | 39,566 |
| Contract assets | 61,037 | 61,037 | – | – | – | 61,037 |
| Derivative financial instruments | 0 | 0 | – | – | – | 0 |
| Other current receivables | 14,319 | 6,450 | – | – | 7,869 | 14,319 |
| Cash and cash equivalents | 44,933 | 44,933 | – | – | – | 44,933 |
| | **184,050** | **152,606** | **23,575** | **0** | **7,869** | **184,050** |

### Liabilities as of June 30, 2018

| IFRS 9 – Financial liabilities | Carrying Amounts by Measurement Category | | | | | | |
|---|---|---|---|---|---|---|---|
| (in EUR tsd.) | Fair value | At fair value through profit or loss | Valued at amortized cost | Recognized value according to IAS 17 | Designated hedge fund instruments | Not in the application area IFRS 7, IFRS 9 | Carrying amount June 30, 2018 |
| Financial liabilities | 53,129 | – | 53,129 | – | – | – | 53,129 |
| Liabilities from goods and services | 101,181 | – | 101,181 | – | – | – | 101,181 |
| Derivative financial instruments | 268 | – | – | – | 268 | – | 268 |
| Other liabilities | 18,203 | 3,425 | 3,157 | – | – | 11,621 | 18,203 |
| | **172,781** | **3,425** | **157,467** | **0** | **268** | **11,621** | **172,781** |

### Assets as of December 31, 2017

| IAS 39 – Financial assets | Carrying Amounts by Measurement Category | | | | | |
|---|---|---|---|---|---|---|
| (in EUR tsd.) | Fair value | Loans and receivables | Financial assets available for sale | Designated hedge fund instruments | Not in the application area IFRS 7, IAS 39 | Carrying amount Dec. 31, 2017 |
| Other longterm assets | 540 | 540 | – | – | – | 540 |
| Financial investments | 23,575 | – | 23,575 | – | – | 23,575 |
| Trade receivables | 95,709 | 47,191 | – | – | 48,518 | 95,709 |
| Derivative financial instruments | 29 | – | – | 29 | – | 29 |
| Other current receivables | 12,270 | 6,613 | – | – | 5,657 | 12,270 |
| Cash and cash equivalents | 72,209 | 72,209 | – | – | – | 72,209 |
| | **204,332** | **126,553** | **23,575** | **29** | **54,175** | **204,332** |

### Liabilities as of Dec. 31, 2017

| IAS 39 – Financial liabilities | Carrying Amounts by Measurement Category | | | | | | |
|---|---|---|---|---|---|---|---|
| (in EUR tsd.) | Fair value | At fair value through profit or loss | Valued at amortized cost | Recognized value according to IAS 17 | Designated hedge fund instruments | Not in the application area IFRS 7, IAS 39 | Carrying amount Dec. 31, 2017 |
| Financial liabilities | 40,305 | – | 40,305 | – | – | – | 40,305 |
| Trade receivables | 117,509 | – | 117,509 | – | – | – | 117,509 |
| Derivative financial instruments | 7 | – | – | – | 7 | – | 7 |
| Other liabilities | 13,442 | 3,422 | 1,826 | – | – | 8,194 | 13,442 |
| | **171,263** | **3,422** | **159,640** | **–** | **7** | **8,194** | **171,263** |

## VALUATION CLASSES

The Group uses the following hierarchy to determine and present the fair market values of financial instruments for each measurement 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 break down as follows in the fair market value hierarchy levels:

## ASSIGNED TO FAIR MARKET VALUE HIERARCHY STEPS

| | | Fair Value Hierarchy | | |
|---|---|---|---|---|
| **(in EUR tsd.)** | **June 30, 2018** | **Step 1** | **Step 2** | **Step 3** |
| **Assets at fair value – affecting net income** | | | | |
| Derivatives with on-balance-sheet hedging relationship | 0 | – | – | – |
| **Assets at fair value – not affecting net income** | | | | |
| Financial investments | 23,575 | – | – | 23,575 |
| **Liabilities at fair value – affecting net income** | | | | |
| Conditional purchase price liabilities | 3,425 | – | – | 3,425 |
| **Liabilities at fair value – not affecting net income** | | | | |
| Derivatives with on-balance-sheet hedging relationship | 268 | – | 268 | – |

| | | Fair Value Hierarchy | | |
|---|---|---|---|---|
| **(in EUR tsd.)** | **Dec. 31, 2017** | **Step 1** | **Step 2** | **Step 3** |
| **Assets at fair value – affecting net income** | | | | |
| Derivatives with on-balance-sheet hedging relationship | 29 | – | 29 | – |
| **Assets at fair value – not affecting net income** | | | | |
| Financial investments | 23,575 | – | – | 23,575 |
| **Liabilities at fair value – affecting net income** | | | | |
| Conditional purchase price liabilities | 3,422 | – | – | 3,422 |
| **Liabilities at fair value – not affecting net income** | | | | |
| Derivatives with on-balance-sheet hedging relationship | 7 | – | 7 | – |

The fair value of the contingent purchase price installment from the acquisition of Kleo Halbleitertechnik GmbH classified in level 3 of the measurement hierarchy increased by 3 thousand euros as of June 30, 2018. The calculation is based on contractual agreements and internal company planning data.

# RELATIONSHIPS WITH RELATED COMPANIES AND RELATED PERSONS

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

Accordingly, the Supervisory Board and the executive Board of Manz AG, including their family members, have been identified as related parties. 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. This circle includes the 2H.IM Executive Interim Management GmbH, Langweid. Services were received from 2H.IM Executive Interim Management GmbH, Langweid up to June 30, 2018 in the amount of 65 thousand euros.

# CONTINGENT LIABILITIES AND OTHER FINANCIAL COMMITMENTS

There were no major changes to other financial commitments and contingencies, or connections to related businesses and parties in the first six months of 2018, compared to December 31, 2017.

# SEGMENT REPORTING FOR DIVISIONS

**As of June 30, 2018**

**(in EUR tsd.)**

| | Solar | Electronics | Energy Storage | Contract Manu-facturing | Service | Consolidation | Group |
|---|---|---|---|---|---|---|---|
| Revenues with third parties | | | | | | | |
| **Q1 + Q2 2018** | 69,341 | 30,010 | 13,812 | 49,941 | 10,428 | 0 | 173,532 |
| **Q1 + Q2 2017** | 16,447 | 42,073 | 11,975 | 40,367 | 8,738 | 0 | 119,600 |
| Revenues with other segments | | | | | | | |
| **Q1 + Q2 2018** | 0 | 2,758 | 0 | 0 | 0 | –2,758 | 0 |
| **Q1 + Q2 2017** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total revenues | | | | | | | |
| **Q1 + Q2 2018** | **69,341** | **32,768** | **13,812** | **49,941** | **10,428** | **–2,758** | **173,532** |
| **Q1 + Q2 2017** | **16,447** | **42,073** | **11,975** | **40,367** | **8,738** | **0** | **119,600** |
| EBITDA | | | | | | | |
| **Q1 + Q2 2018** | 7,056 | –6,455 | –4,782 | 855 | 2,858 | –269 | –738 |
| **Q1 + Q2 2017** | 27,853 | –9,050 | –10,323 | 1,258 | 2,627 | 0 | 12,365 |
| Depreciation | | | | | | | |
| **Q1 + Q2 2018** | 525 | 1,655 | 1,453 | 583 | 110 | 0 | 4,325 |
| **Q1 + Q2 2017** | 1,705 | 1,959 | 1,131 | 553 | 63 | 0 | 5,411 |
| EBIT | | | | | | | |
| **Q1 + Q2 2018** | 6,532 | –8,110 | –6,236 | 272 | 2,748 | –268 | –5,063 |
| **Q1 + Q2 2017** | 26,148 | –11,009 | –11,454 | 705 | 2,564 | 0 | 6,954 |

# SEGMENT REPORTING FOR REGIONS

**As of June 30, 2018**

| (in EUR tsd.) | Third-party revenues by customer location |
|---|---|
| Germany | |
| **Q1 + Q2 2018** | 16,085 |
| **Q1 + Q2 2017** | 13,401 |
| Rest of Europe | |
| **Q1 + Q2 2018** | 20,728 |
| **Q1 + Q2 2017** | 20,028 |
| China | |
| **Q1 + Q2 2018** | 91,067 |
| **Q1 + Q2 2017** | 50,417 |
| Taiwan | |
| **Q1 + Q2 2018** | 12,869 |
| **Q1 + Q2 2017** | 12,659 |
| Rest of Asia | |
| **Q1 + Q2 2018** | 2,072 |
| **Q1 + Q2 2017** | 2,172 |
| USA | |
| **Q1 + Q2 2018** | 30,455 |
| **Q1 + Q2 2017** | 20,568 |
| Other regions | |
| **Q1 + Q2 2018** | 256 |
| **Q1 + Q2 2017** | 355 |
| Group | |
| **Q1 + Q2 2018** | 173,532 |
| **Q1 + Q2 2017** | 119,600 |

The Manz Group has five business segments - Solar, Electronics, Energy Storage, Contract Manufacturing and Service as well as an international presence. This structure corresponds to the business activities of Manz and is therefore the basis of management control by management.

All revenues come from customer contracts.

# KEY EVENTS OF PARTICULAR IMPORTANCE OCCURRING AFTER THE END OF THE REPORTING PERIOD

On July 26, 2018, Manz AG announced that Eckhard Hörner-Marass would be leaving the Company's Managing Board at the end of 2018 at his own request. Mr. Hörner-Marass has been a member of the Managing Board since October 2016 and Chairman of the Managing Board since July 2017. He has agreed with the Supervisory Board on a one-year reduction in his term of office, which originally ran until December 31, 2019. The Supervisory Board intends to appoint Managing Board member Martin Drasch as the future Chairman of the Managing Board.

# FURTHER DISCLOSURES

## EMPLOYEES

As of June 30, 2018, the Manz Group had an average of 1,719 employees (June 30, 2017: 1,733 employees).

## MANAGING BOARD

Eckhard Hörner-Marass, Dipl.-Ing. (FH), Chief Executive Officer
Martin Drasch, Dipl.-Ing. (FH), Chief Operations Officer
Manfred Hochleitner, Dipl.-Math., Chief Financial Officer
(from July 1, 2018)
Gunnar Voss von Dahlen, Dipl.-Kfm., Chief Financial Officer
(until March 26, 2018)

# RESPONSIBILITY STATEMENT

To the best of our knowledge, and in accordance with the applicable accounting principles for interim financial reporting, the condensed consolidated interim financial statements give a true and fair view of the Manz Group's financial position, financial performance and cash flows, and the Manz Group's interim management report includes a true and fair view of the trends and performance of the business and the position of the Group, as well as a description of the principal opportunities and risks associated with the Group's expected development in the remaining fiscal year.

Reutlingen, August 14, 2018

The Executive Board of Manz AG

Eckhard Hörner-Marass          Martin Drasch          Manfred Hochleitner

# IMPRINT

**Publisher**

Manz AG
Steigaeckerstrasse 5
72768 Reutlingen
Tel.: +49 (0) 7121 9000-0
Fax: +49 (0) 7121 9000-99
info@manz.com
www.manz.com

**Editor**

cometis AG
Unter den Eichen 7/Gebaeude D
65195 Wiesbaden
Tel.: +49 (0) 611 20 585 5-0
Fax: +49 (0) 611 20 585 5-66
www.cometis.de

**Design**
Art Crash Werbeagentur GmbH
Weberstrasse 9
76133 Karlsruhe
Tel.: +49 (0) 721 94009-0
Fax: +49 (0) 721 94009-99
info@artcrash.com
www.artcrash.com

passion for efficiency


**MANZ AG**

Steigaeckerstrasse 5
72768 Reutlingen
Tel.: +49 (0) 7121 9000-0
Fax: +49 (0) 7121 9000-99
info@manz.com
www.manz.com