



# Impulses

6-MONTH REPORT 2016

# Manz AG at a glance

## 2016 Financial Calendar

**November 15, 2016**  
**November 21–23, 2016**

Publication of 2016 9-Month Report  
2016 German Equity Forum

## Overview of Group Results

(in EUR million)	Jan. 1 to June 30, 2016	Jan. 1 to June 30, 2015	Change in %
Revenues	124.0	121.9	+1.7%
Total operating revenues	126.6	130.2	-2.8%
EBITDA	-4.5	-6.7	+32.8%
EBITDA margin (in %)	n/a	n/a	
EBIT	-11.7	-12.9	+9.3%
EBIT margin (in %)	n/a	n/a	
EBT	-14.1	-14.1	+0%
Consolidated net profit (loss)	-17.0	-15.0	-13.3%
Earnings per share (in euros)	-2.84	-2.94	+3.4%
Cash flow from operating activities	-23.3	-41.0	+43.2%
Cash flow from investing activities	-4.6	-15.9	+71.1%
Cash flow from financing activities	59.6	80.9	-26.3%

	June 30, 2016	Dec. 31, 2015	Change in %
Total assets	330.5	292.5	+13.0%
Shareholders' equity	187.7	125.3	+49.8%
Equity ratio (in %)	56.8	42.8	+32.7%
Financial liabilities	67.4	82.9	-18.7%
Liquid assets	65.9	34.4	+91.8%
Net debt	1.5	48.6	-97.0%

## MANZ AG MISSION STATEMENT

As a high-tech equipment manufacturer, our goal is to develop equipment and systems for fast-growing industries around the world. With our claim "passion for efficiency," we are making a service promise to offer our customers – companies in fast-growing future markets – increasingly efficient production equipment. Global proximity to customers and extensive technological expertise are the foundation of our company, and they enable us to continually optimize our range of products in line with industry requirements. This makes the Manz Group an important innovation leader – for breakthroughs in key technologies, such as the production of sustainable energy and stationary power storage, displays and devices for global communication needs, and e-mobility. On the basis of our extensive expertise in the technology sectors automation, laser processing, vacuum coating, printing and coating, metrology, wet chemistry, and roll-to-roll, there are application opportunities for our solutions in numerous industries. Currently we are concentrating our research and development activities on production systems for our strategic business segments Electronics, Solar and Energy Storage.

### WE SET THE PACE FOR BRINGING NEW TECHNOLOGIES FORWARD

More powerful displays, printed circuit boards, and other core components for smartphones, notebooks and tablet computers; more efficient lithium-ion batteries for stationary energy storage, e-mobility, and consumer electronics; and solar modules with continually increasing efficiency: With our production systems we are creating vital impulses so that new technologies and products can become quickly established and inexpensively produced.

We focus on fast-growing markets where product life cycles are short and continuous innovation is a must. With highly flexible development processes and our cross-industry technology transfer, we can proactively work in markets with constantly changing conditions and can thus create clear competitive advantages for our customers.



1



*INDEX*

**a 09 TO OUR SHAREHOLDERS**

- 10 Letter from the Managing Board
- 13 Manz AG Stock

**b 17 GROUP INTERIM MANAGEMENT REPORT**

- 18 Basic Information on the Group
- 23 Business Report
- 34 Events After the Balance Sheet Date
- 34 Report on Opportunities and Risks
- 34 Forecast Report

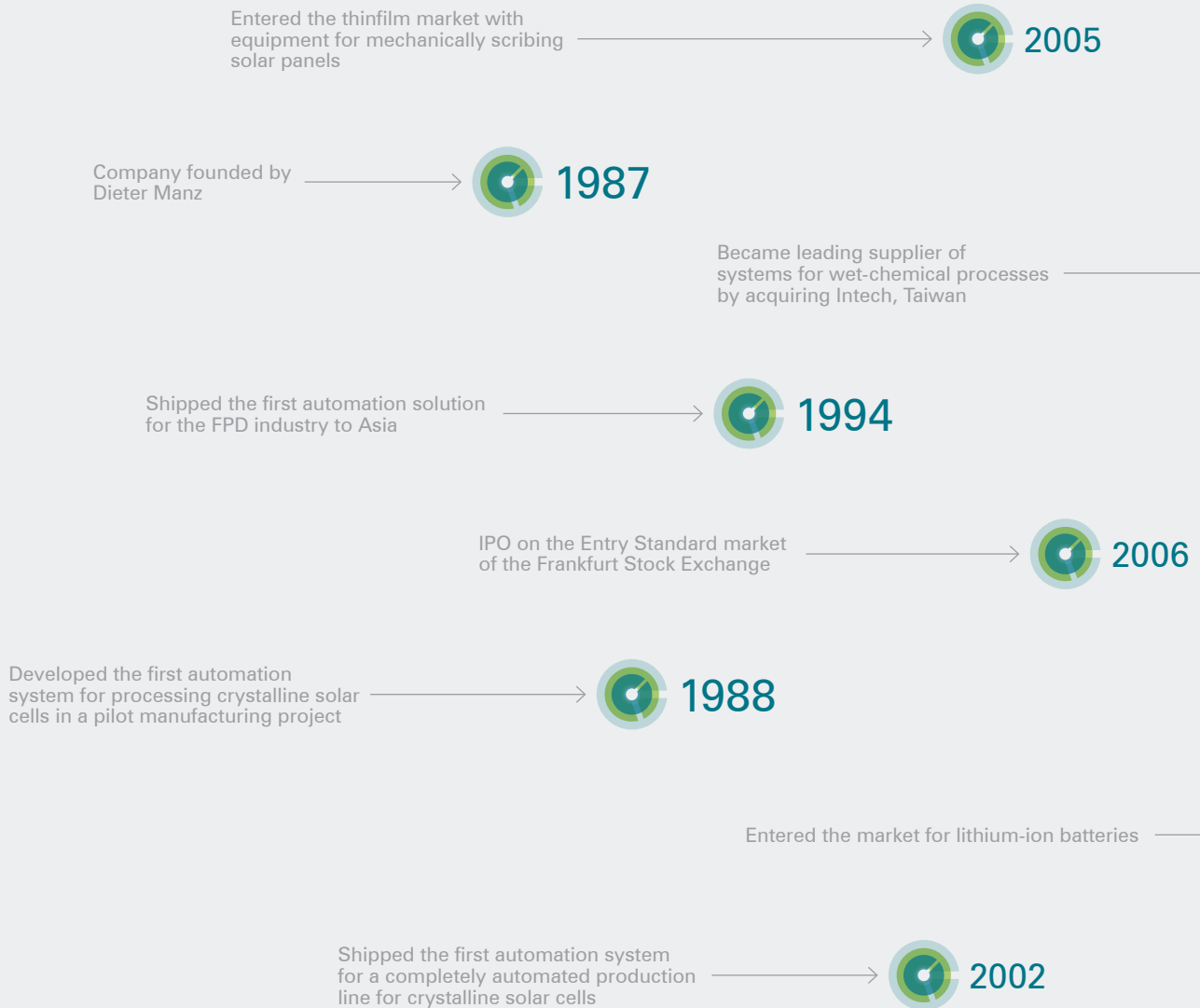
**C 39 CONSOLIDATED INTERIM FINANCIAL STATEMENT**

- 40 Consolidated Income Statement
- 42 Consolidated Statement of Comprehensive Income
- 44 Consolidated Balance Sheet
- 46 Consolidated Cash Flow Statement
- 47 Consolidated Statement of Changes to Equity
- 48 Segment Reporting for Divisions
- 49 Segment Reporting for Regions

**d 51 NOTES**

- 52 Basic Principles
- 53 Basis of Consolidation
- 54 Notes on Individual Items in the Income Statement
- 56 Notes on Individual Items in the Balance Sheet
- 63 Contingencies and Other Financial Commitments
- 63 Related Parties
- 63 Key Events of Particular Importance Occuring After the End of the Reporting Period
- 64 Further Disclosures
- 65 Responsibility Statement
- 65 Review Report
- 67 Imprint

## THE HISTORY OF MANZ AG




---

1987

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

2014

2008

Acquisition of KLEO, a company of the Zeiss Group, expansion of the technology portfolio by the addition of "laser direct imaging"

2015

Manz Coating GmbH founded – development center for vacuum-coating technology

2010

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

2012

2009

Start of strategic collaboration with new anchor investor Shanghai Electric

2016

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

2013

2016

A large, white, stylized lowercase letter 'a' is centered on a dark teal circular background. The 'a' has a thick, rounded stroke and a small tail at the bottom right. The background consists of several overlapping circles of varying shades of teal, creating a layered effect.

a

---

*TO OUR SHAREHOLDERS*





## LETTER FROM THE MANAGING BOARD

Dear Shareholders,

After having made a good start in the current year during the first quarter with a significant increase in revenues and a balanced EBITDA, the halt in orders by a major customer that occurred early in the second quarter put a damper on our operations. At the same time, however, we achieved, with the capital increase and the participating interest of Shanghai Electric in Manz AG successfully completed at the end of May, an important strategic milestone and will be able to create a sound foundation for Manz AG to again develop positively in the future.

In the first six months of 2016, we realized revenue in the amount of 124.0 million euros. Although we are thus slightly above the level of the previous year, our expectations were not fully realized. The reason for this is basically the temporary halt in orders by a major customer in the Energy Storage sector which led, counter to our planning, to revenue losses in the mid single-digit million range in June 2016. Thanks to the restructuring measures initiated, our cost basis improved significantly, as was also the case in the first quarter. As a result we therefore are reflecting an EBITDA following the first six months of 2016 of –4.5 million euros which though improved in comparison with the previous year is nevertheless negative. After six months, the EBIT comes to –11,7 million euros.

For the full year, we continue to expect a significant increase in revenue with significantly improved earnings before interest and taxes (EBIT). We are pursuing the goal of achieving at minimum a balanced operating result before depreciation, interest and taxes (EBITDA), even though as a result of the existing planning uncertainty and the losses in revenue and earnings in the second quarter in connection with the order halt in the Energy Storage segment this appears increasingly challenging.

Our assumption is grounded in the expectation of stronger second six months for 2016. The strategic cooperation with Shanghai Electric will make a significant contribution to this development. In the preceding months we have further intensified the dialogue between our companies. The detailed planning for our future cooperation is proceeding according to plan, and we are expecting that we will be able to report concretely on the next steps in the course of the third quarter. The intensification of our cooperation is also reflected in the appointment of Guoxing Yang (48), deputy director of the Business Development department of Shanghai Electric, as a member of the Supervisory Board of Manz AG.



In Shanghai Electric we have an anchor investor with a long-term orientation and a strategic partner at our side. This will yield new opportunities, in particular for the commercialization of our world-leading CIGS technology on the Chinese market. But also in the field of energy storage systems and in other areas of automation technology, we see potential which we intend to raise jointly in the coming months and years.

Der Vorstand



Dieter Manz



Martin Hipp



Martin Drasch

## MANZ AG STOCK

### PRICE PERFORMANCE (JANUARY 1, 2016 – JULY 31, 2016)

The Manz AG share began the 2016 fiscal year on January 4, 2016, with a closing price of 31.04 euros. Following a brief period of falling prices at the beginning of the year, the share reached the low for the period under review at 22.56 euros on February 9, 2016. The value subsequently recovered and remained at a price level between 35 and 42 euros per share until the beginning of June. On June 2, 2016, the share reached its high in the reporting period at 42.11 euros. The stock then recorded significant losses and hovered at a price level of around 31 euros. The share closed at 31.10 euros on July 29, 2016.

**Chart Showing Manz AG Stock January 1 to July 31, 2016 (XETRA, in EUR)**



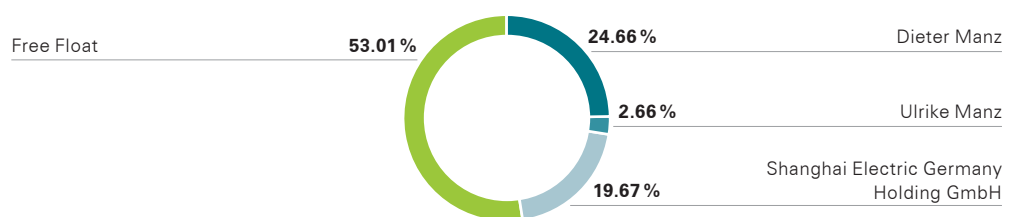
At the end of the 2016 reporting period, the Manz share, with a drop of 0.65%, was almost unchanged compared to the beginning of the year. In comparison with the reference indices, only the Semiconductor Sector Index (SOX) of the Philadelphia Stock Exchange closed above the Manz share. The technology index TecDAX closed at the end of the reporting period with a value change similar to that of the Manz AG share. The solar industry indices World Solar Energy TR Index (SOLEX) of Société Générale and the Photovoltaik Global 30 Index (PV Global 30) of Deutsche Börse AG, on the other hand, recorded significant price losses of just at 50% in each case.

**Stock Key Data and Performance Indicators**

<b>German Securities Identification Number</b>	A0JQ5U
<b>International Securities Identification Number</b>	DE000A0JQ5U3
<b>Ticker Symbol</b>	M5Z
<b>Stock Market Segment</b>	Regulated market (Prime Standard)
<b>Type of Stock</b>	Registered, common, no-par value bearer shares, each with a proportionate value of 1.00 EUR of capital stock
<b>Capital Stock</b>	<b>7,744,088 EUR</b>
<b>IPO</b>	September 22, 2006
<b>Opening Price</b>	19.00 EUR
<b>Stock Price at the Beginning of the Reporting Period*</b>	31.04 EUR
<b>Stock Price at the End of the Reporting Period*</b>	31.10 EUR
<b>Change (in percent)</b>	<b>+0.2%</b>
<b>Annual High</b>	42.11 EUR
<b>Annual Low</b>	22.56 EUR

\* Closing prices on Deutsche Börse AG's XETRA trading system

Currently at 53.01 %, Manz AG has a large number of shares in free float and has a wide shareholder base. As of June 30, 2016, company founder and chairman of the Managing Board, Dieter Manz, holds a total of 24.66 % of Manz's stock. In addition, Ulrike Manz holds 2.66 % of the company's shares. Shanghai Electric Germany Holding GmbH, a subsidiary of the Chinese Shanghai Electric Group, holds a share of 19.67 %.

**Shareholder Structure****2016 Financial Calendar**

<b>November 15, 2016</b>	Publication of 2016 9-Month Report
<b>November 21–23, 2016</b>	2016 German Equity Forum



## 2016 ANNUAL MEETING OF SHAREHOLDERS

The FILharmonie in Filderstadt, Germany, hosted Manz AG's 2016 Annual General Meeting on July 12, 2016. A total of 305 shareholders attended and heard the report of the Managing Board on the development of business in the year 2015 and the outlook for the 2016 fiscal year.

Almost all the shareholders represented in the Annual General Meeting approved the meeting's agenda. A total of 60.52% of capital stock with voting rights was represented (previous year: 56.21%).

In the framework of the Annual General Meeting, the Managing Board reported in detail concerning the restructuring measures introduced following the difficult fiscal year 2015 in order to make Manz AG profitable again for the future. The central element of these measures is the entry of the Shanghai Electric Group as the anchor shareholder, which took place in May 2016. In conjunction with the planned strategic cooperation, Guoxing Yang (48), deputy director of the Business Development department of Shanghai Electric Group, was appointed as a member of the Supervisory Board of Manz AG. Guoxing Yang is assuming the duties of Dr.-Ing. E.h. Peter Leibinger.

The following table provides an overview of the detailed voting results:

### Voting Results – Overview

Agenda Item	Voting issue	Abstentions	Validly cast votes	In % of share capital	No votes	No – %	Yes votes	Yes – %	Result
2	Ratification of the acts of the members of the Managing Board 2015	173,005	2,583,322	33.36	31,168	1.21	<b>2,552,154</b>	<b>98.79</b>	Adopted
3	Ratification of the acts of the members of the Supervisory Board 2015	173,005	4,493,544	58.03	190,356	4.24	<b>4,303,188</b>	<b>95.76</b>	Adopted
4	Election of auditor for financial reports, consolidated financial reports and six month financial report 2016	984	4,665,565	60.25	335,826	7.20	<b>4,329,739</b>	<b>92.80</b>	Adopted
5a	Election to Supervisory Board: Prof. Dr. Heiko Aurenz	174,005	4,492,544	58.01	234,861	5.23	<b>4,257,683</b>	<b>94.77</b>	Adopted
5b	Election to Supervisory Board: Guoxing Yang	220,136	4,446,413	57.42	227,318	5.11	<b>4,219,095</b>	<b>94.89</b>	Adopted
5c	Election to Supervisory Board: Prof. Dr. Michael Powalla	220,830	4,445,719	57.41	236,484	5.32	<b>4,209,235</b>	<b>94.68</b>	Adopted
6	Creation of new authorized capital, corresponding amendment to Articles	48,213	4,618,336	59.64	536,761	11.62	<b>4,081,575</b>	<b>88.38</b>	Adopted
7	Cancellation of Contingent Capital III, amendment to the Articles of Incorporation	1,029	4,665,520	60.25	5,865	0.13	<b>4,659,655</b>	<b>99.87</b>	Adopted



b

---

*GROUP INTERIM  
MANAGEMENT REPORT*

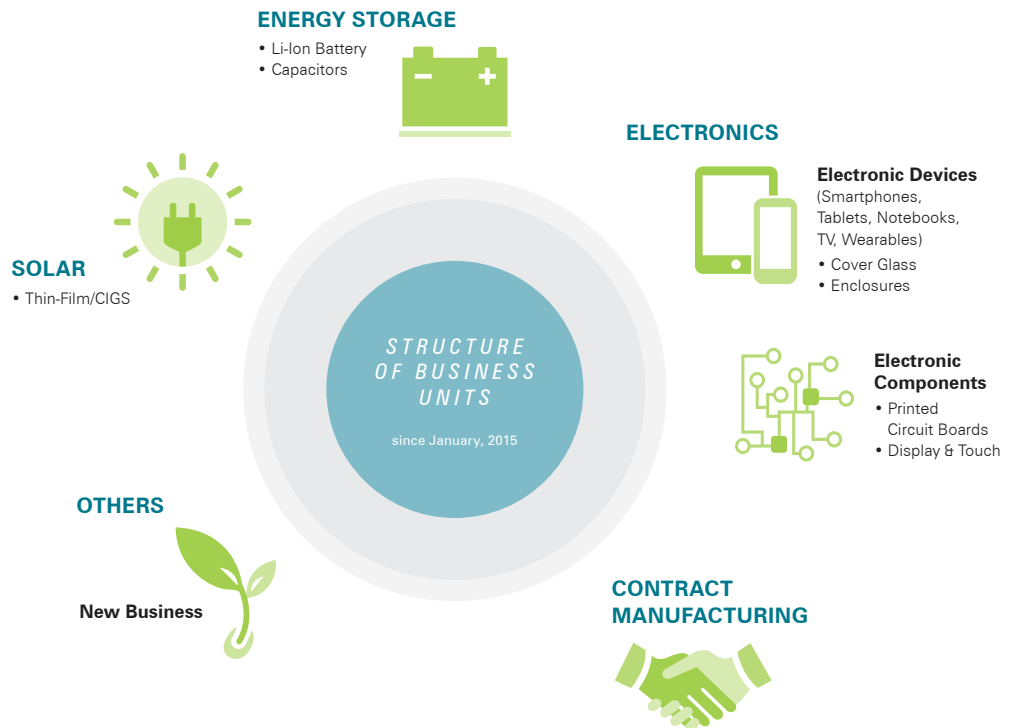




## BASIC INFORMATION ON THE GROUP

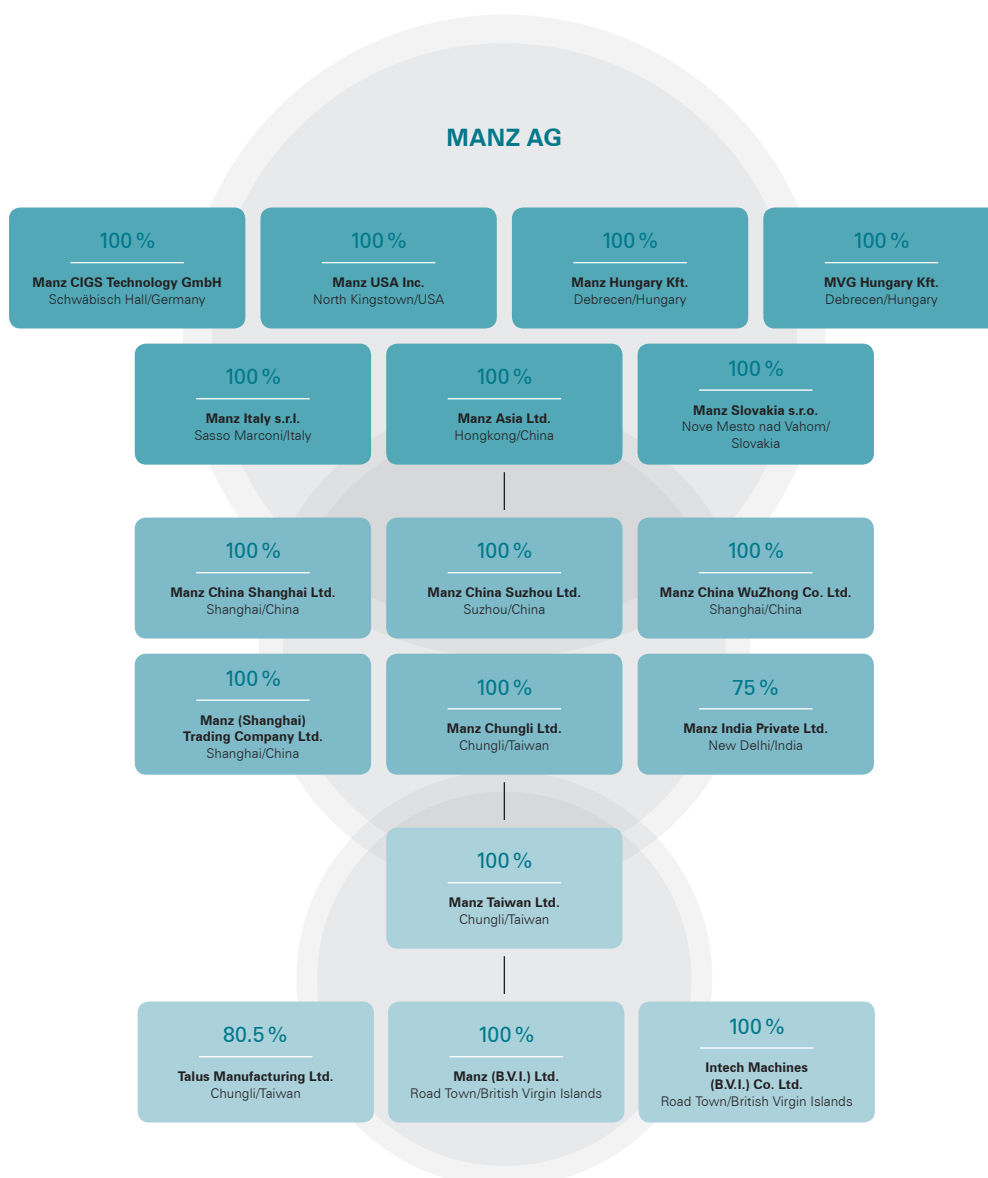
### BUSINESS MODEL INCLUDING GOALS AND STRATEGY

Manz AG, founded in 1987, is an internationally active high-tech equipment manufacturer with a global presence. The company offers its customers in growth and sunrise industries highly efficient production systems and in recent years has successfully established itself as a sought-after development partner of industry. With its innovative solutions for extremely reliable production processes, Manz AG is a pioneer in developing and introducing key technologies for today. With extensive expertise in the seven technology fields of automation, laser processing, vacuum coating, metrology, wet chemistry, printing and coating and roll-to-roll processes, Manz AG focuses on the three strategic business segments Electronics, Solar and Energy Storage. To secure medium-term and long-term success, Manz AG will also continue to be rigorous in the future in its pursuit of cross-industry technology transfer, the diversification of its business model and the internationalization of the company.



## GROUP STRUCTURE AND HOLDINGS

Altogether, 18 companies are included in Manz AG's consolidated financial statements as of June 30, 2016, and are therefore fully consolidated. On the reporting date, Manz AG, as the Group's parent company, held a 100% interest in six international subsidiaries and one domestic subsidiary located in Schwäbisch Hall. Two of the foreign subsidiaries are based in Hungary and one subsidiary each in Italy, the USA, Slovakia, and Hong Kong. In addition, the company has a 100% stake in four second-tier subsidiaries in China and one in Taiwan. A 75% second-tier subsidiary exists in India. Manz AG also has a 100% stake in a third-tier subsidiary in Taiwan and two fourth-tier subsidiaries in the British Virgin Islands as well as an 80.5% interest in Taiwan.

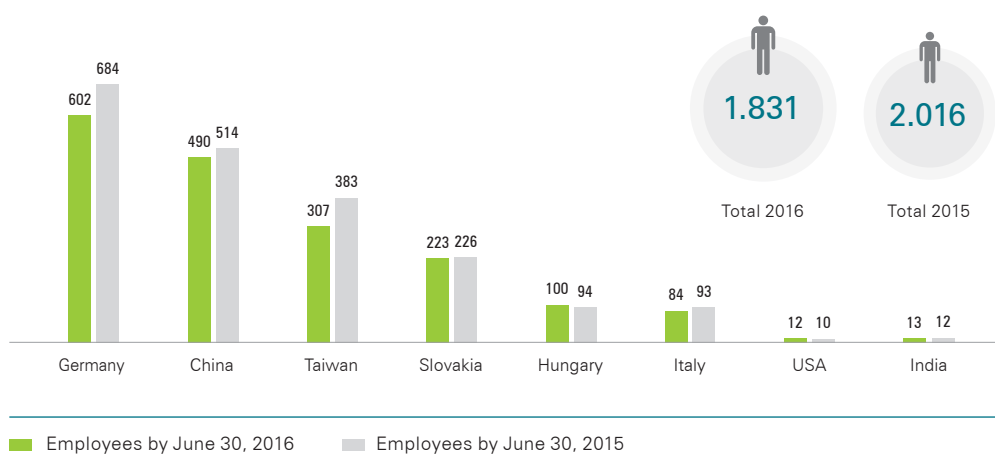


## LOCATIONS AND EMPLOYEES

Qualified and motivated employees provide the basis of Manz AG's long-term success. As of June 30, 2016, Manz employed a total workforce of 1,831 (previous year: 2,016) both in Germany and abroad, of which 602 employees worked at the German locations. Based on the number of employees, the largest subsidiary in the Group is Manz China Suzhou Ltd. in China, with 467 employees, followed by Manz Taiwan Ltd. in Taiwan, with 260 employees, and Manz Slovakia s.r.o., with 223 employees.

The continuous expansion of its technology and product portfolio, with more than 450 qualified engineers, technicians and scientists, and having a strong local presence in the main sales region of Asia both remain central components of the company's strategic positioning and are reflected in its employee structure.

### Employees by country



## CONTROL SYSTEM AND PERFORMANCE INDICATORS

Manz AG is organized, for corporate management purposes, by products and services at Group level and has three business segments, namely "Electronics", "Solar" and "Energy Storage," as well as the "Contract Manufacturing" and "Others" reporting segments. In order to decide how to distribute resources and manage the earnings power of the divisions and segments, 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. This enables the Managing Board to counter any unsatisfactory developments promptly.

# Locations and Employees



## LOCATIONS

- |   |   |  |
|---|---|--|
| <p>1 <b>Germany</b><br/>Reutlingen, Tübingen,<br/>Karlstein, Schwäbisch Hall,<br/>Production, Sales &amp; Service</p> <p>2 <b>Hungary</b><br/>Debrecen<br/>Production &amp; Service</p> <p>3 <b>Slovakia</b><br/>Nove Mesto nad Vahom<br/>Production, Sales &amp; Service</p> | <p>4 <b>Italy</b><br/>Sasso Marconi<br/>Production, Sales &amp; Service</p> <p>5 <b>USA</b><br/>North Kingstown, Cupertino<br/>Sales &amp; Service</p> <p>6 <b>Taiwan</b><br/>Taoyuan, Taichung, Tainan<br/>Production, Sales &amp; Service</p> <p>7 <b>South Korea</b><br/>Seoul, Incheon, Daegu<br/>Sales &amp; Service</p> | <p>8 <b>China</b><br/>Shanghai, Suzhou, Wuxi,<br/>Yingkuo, Huaian, Jiangyin,<br/>Ningbo, Longhua, Xiamen<br/>Production, Sales &amp; Service</p> <p>9 <b>India</b><br/>New Delhi, Calcutta,<br/>Bangalore, Hyderabad<br/>Sales &amp; Service</p> |
|---|---|--|

Manz AG's financial management system is organized centrally. 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.

In addition, Manz strives for a well-balanced debt maturity profile. Figures such as revenue, earnings before interest and taxes (EBIT), earnings before interest, taxes, depreciation and amortization (EBITDA), equity ratio, and liquidity serve Manz AG's Managing Board as key indicators for financial management. Manz reports on the development of the control indicators in respect of defined target values on an annual basis. For more detailed information about this, please refer to the section "Control System and Performance Indicators" in Manz AG's 2015 Annual Report, which can be viewed on Manz AG's website ([www.manz.com](http://www.manz.com)) under "Investor Relations".

## RESEARCH AND DEVELOPMENT

Research and development is a key component for the successful expansion of Manz AG's cross-industry technology and product portfolio. In order to further strengthen Manz's position as a company driving innovation in growth industries, research and development (R&D) activities again play an important role for the company in the 2016 fiscal year. With over 450 engineers, technicians and scientists at its development facilities in Germany, Italy, Slovakia, Taiwan and China, Manz AG focuses on the main technologies in its Electronics, Solar and Energy Storage business segments, emphasizing the cross-industry integration of these core competencies in order to accelerate synergy effects and economies of scale.

Manz AG had a total ratio of research costs to sales of 8.9% in the reporting period (previous year: 11.9%). If we consider only capitalized development costs, the ratio of research costs to sales totals 3.2% (previous year: 6.4%). In order to provide sustained and long-term consolidation of its excellent technological positioning in the relevant target markets and its innovativeness, Manz AG is striving for an annual ratio of research costs to sales of 6.5% on average.

## BUSINESS REPORT

### MACROECONOMIC ENVIRONMENT AND INDUSTRY-RELATED CONDITIONS

#### Economic Market Environment

In its "Grundlinien der Wirtschaftsentwicklung im Sommer 2016" (Basic Economic Trends, Summer 2016), the Deutsche Institut für Wirtschaftsforschung in Berlin (DIW) expects only subdued growth of the global economy. As in the past quarters, it is above all the emerging countries, where growth lags behind that of prior years, that contribute to the slow-down. While for the remaining course of the year, the DIW expects a slight global economic recovery, the surprisingly weak development in the first quarter is not expected to be completely offset. Against this background, global growth in the current year should be only around 3.2%. In the coming year, according to the DIW projection, the economy will improve slightly, with growth possibly being 3.6%.

In the euro zone, gross domestic product (GDP) picked up momentum in the first quarter and increased by 0.6%. In the second quarter, however, there may have been a slight movement in the other direction, since after a very strong expansion of industrial production in January, it lost ground again in the following two months. Overall, the DIW expects a GDP growth of 1.6% this year and 1.7% in the coming year. Prior to the referendum of the British in favor of leaving the EU (Brexit), the DIW expected growth for Germany of 1.7%, driven by a dynamic domestic economy. For 2017, with slowing consumption and weaker construction investment, the Institute still expected an increase in GDP of 1.4%. But the "DIW Konjunkturbarometer Juni 2016" (DIW Economic Barometer, June 2016), states that the economy could already significantly lose momentum, especially because there could be a marked decline in exports to Great Britain. Without considering indirect effects, this would impact the German economy by a half a percentage point.

For the People's Republic of China, one of the most important sales markets of Manz AG, the DIW expects, following growth of 6.9% in the past year, an increase of only 6.1% in the current and 6.0% in the coming year – among other things because the global economy will provide only little impulse for exports. In the next three years, China will put around 630 billion euros in the expansion of its infrastructure in order to support its growth. In the largest economy of the world, the United States, the outlook, according to DIW, will initially be rather restrained: For 2016, the Berlin economists expect a GDP growth of 1.8%, though already in 2017 it should accelerate again to 2.3%.

#### Electronics Segment

In its Electronics segment, Manz AG offers highly efficient production systems for the manufacture of displays for LCD and OLED flat screens as well as touch sensors. In addition,

the portfolio also comprises production systems for printed circuit boards and chip carriers as well as smartphones, tablet computers, notebooks and other consumer electronics.

Industry experts are optimistic about the market development for smartphones and tablet computers in the coming years. While the year 2015 ended with an increase in the smartphone market of 9.8% and thus, according to the International Data Corporation (IDC), for the first time a single-digit growth, the market should continue expand significantly through 2019 with an average of 7.4% per year. While sales in 2015 were around 1.43 billion units, in 2019 they should already be at 1.86 billion units. And while the market for traditional desktop and laptop PCs may continue to shrink, the Gartner Group expects the sale of premium laptops to more than double from 45 million units worldwide in 2015 to 92 million in 2019. According to Gartner, tablet sales in this period will be relatively stable at 195 to 198 million units annually.

The market and technological development of flat panel displays continue to be dynamic. According to a trend study of the market research company Markets and Markets, the entire market should grow at an average rate of 6% annually to a volume of 155.54 billion USD in the year 2020. Two promising drivers of this development, according to the market research institute IHS, are the still relatively young AMOLED displays as well as the further development of flexible displays. Compared with LCD technology, AMOLED displays are more simply constructed, thinner and lighter and offer better color saturation and better contrasts, react more quickly and therefore are easier to integrate in touchscreen functions. In addition, they allow the further development of flexible, bendable and even foldable displays, which opens up completely new design options. To the extent the demand for portable devices rises, the demand for innovative flexible displays will grow: This includes not only smartphones and tablets but also in increasing degree smartwatches, data glasses, VR (virtual reality) devices and displays for automobile cockpits. Improvements in the production and cost reductions, which will be made possible in no small part by the development work at innovation drivers such as Manz AG, will allow suppliers of entertainment electronics increasingly to utilize AMOLED displays. According to IHS, sales using this technology should grow in 2016 alone by 25% in comparison with the previous year to 15 billion USD. This growth will be supported among other things by tablets and notebooks – in 2016, 8.6 million devices equipped with AMOLED could be delivered, 63% more than in the year before. The technology for flexible displays, on the other hand, is still very much at the beginning. Their sales, according to the projection by IHS, will grow from 3.7 billion USD in the year 2016 to 15.5 billion USD in the year 2022.

With the established production locations in Taiwan and China, Manz AG is active in the hotspots of the target industries and has earned a leading position within Asia as a supplier of wet chemical processing equipment. With the acquisition of Kleo Halbleitertechnik GmbH at the beginning of June 2015, Manz AG expanded its technology portfolio with the addition of laser direct imaging (LDI) of printed circuit boards. The LDI platform Manz SpeedLight 2D was successfully integrated into the existing solutions for the manufacture of printed circuit boards. In comparison with the conventional photo lithography process,



it enables an increase in efficiency as well as higher flexibility in the production process. Thus Manz is opening up a significant potential for cost reductions of up to 75%. With its cross-industry technology transfer and target-oriented research and development activities, Manz AG views itself as being well positioned to be able to further expand its strong market position and to benefit from future opportunities.

### **Solar Segment**

As a high-tech equipment manufacturer, Manz AG offers the industry innovative production solutions for crystalline solar cells and thin-film solar modules.

In its "Global Market Outlook 2016 through 2020", the industry association Solar Power Europe views the worldwide expansion of solar energy significantly more positively than in earlier forecasts. Market observers consider a growth of the global photovoltaic (PV) capacity to 600 gigawatts (GW) by 2020 to be realistic – in 2015, 229 GW were installed worldwide, and in 2010 less than 41 GW. The market for solar energy is gaining momentum; in 2015 alone, 50.6 GW were added. Solar energy is growing most vigorously in Asia and in the United States; China and Japan alone contributed more than half of the worldwide solar expansion. China displaced Germany as the leading country with the largest installed solar capacity and achieved 43 GW, while Europe exceeded the 100-GW mark.

According to the market research institute IHS, the capacity of currently projected new plants is around 110 GW. Around half of this pipeline comprises projects in the United States, China and Brazil. At the end of 2016, installed plants will exceed 310 GW, with Germany losing its leading role and falling to number four behind China, the United States and Japan in installed solar capacity. Together with Italy, these countries make up 70 percent of installed solar capacity worldwide.

The continuing expansion of solar energy is stabilizing the prices for solar modules achievable on the market. IHS expects that prices will drop initially in 2016 by only around 5%, but then price pressure will increase again beginning with the second half of the year, and in 2017 prices will drop by 8% to an average of 0.51 USD per watt. Nevertheless, the average gross margin of the industry was around 22%. The market is again becoming more diversified internationally not only on the consumer side, but also on the producer side: While in China production capacity could increase in 2016 by 12.9%, in Southeast Asia the increase could be 65% and in India even 80%.

With its production systems, Manz AG offers the industry both efficiency gains and significant cost savings. With the unique know-how provided by the largest team of experts in the world, Manz AG focuses on CIGS thin-film technology. With the innovation line, which is unique throughout the industry, at the Schwäbisch-Hall location and an exclusive collaboration with the Center for Solar Energy and Hydrogen Research in Baden-Württemberg (ZSW), Manz AG is intensively driving research and development in the area of CIGS. The goal is to use the exclusive access to the research results of Manz AG's development

partner ZSW to transfer the technology from the lab to mass production: at an efficiency rate of 22.6%, ZSW achieved the world record for efficiency over all other thin-film solar technologies in June 2016.

With the Manz CIGS*fab*, the company offers its customers a turnkey, fully integrated production line for the manufacture of CIGS thin-film solar modules. Already today the production costs of CIGS thin-film technology in a Manz CIGS*fab* are, depending on the location and size of the factory, significantly below the costs of the prevalent crystalline silicon solar technology. With CIGS*fab*, Manz thus currently offers the most profitable and efficient solar technology. A record efficiency of 16% at module size and a reliable technology roadmap for future increases of efficiency guarantee maximum investment security. Accordingly, Manz AG sees itself excellently positioned to be able to benefit from the next investment cycle in the solar industry.

### **Energy Storage Segment**

In its Energy Storage business segment, Manz AG focuses on production systems for lithium-ion battery cells and battery systems as well as for capacitors, which are used in the fields of consumer electronics, e-mobility and stationary power storage.

Experts from the market research institute Frost & Sullivan expect a quadrupling of the total global market for lithium-ion batteries from 17.6 billion USD in the year 2013 to around 70 billion USD by 2020. The main drivers over the next three to four years will be the "Mobile Communication" and "Computing Devices" segments. Frost & Sullivan are expecting further medium-to-long-term growth momentum for the market for lithium-ion batteries from e-mobility and stationary power storage. According to them, both in the automotive industry and in the sector for energy networks and the storage of renewable energies, statutory incentives will impact sales figures for Li-ion batteries. In the year 2015, according to Avicenne Energy, around 2.7 million automobiles with electric motors, (electric cars, hybrid vehicles and plug-in hybrid vehicles) were produced worldwide. For the year 2020, the market research institute expects a rise in the annual production to 4.6 million units, which should further increase up to the year 2025 to more than 7 million vehicles per year. Depending on governmental subsidies of electro-mobility in China, there should be additional potential beyond this which can lead to annual production of 6 million units in 2020 and more than 9 million in 2025.

Innovative high-tech equipment manufacturers such as Manz AG are playing a significant roll in this with the development of high-efficiency production systems. The Fraunhofer-Institut für System- und Innovationsforschung (ISI) in Karlsruhe in its "Gesamt-Roadmap Energiespeicher für die Elektromobilität 2030" (Overall Roadmap for Energy Storage Systems for Electric Mobility 2030) mentions a battery price under 130 USD/kWh as the key for electric automobiles becoming competitive with traditionally driven vehicles. Automobile manufacturers are striving toward this level with the construction of their own production systems for batteries. The cost for small-format lithium-ion cells is already below 200

euros/kWh. In the coming five to ten years, a further cost reduction to below 100 euros/kWh should be achieved. Large-format lithium-ion cells, the production costs of which are between 200 euros/kWh and 250 euros/kWh, are already today purchased in some cases by OEMs from cell manufacturers at prices below 200 euros/kWh. According to ISI, by 2030 the doubling of energy density to as much as 300 Wh/kg is possible as well as a cost reduction to below 100 euros/kWh. Thus the development of prices for large-format cells follows the development of prices for small-format cells with a lag of ten to 15 years. The drivers of this development are material innovations and scale effects through industrialized manufacture with rising numbers of units. The large Asian suppliers of entertainment electronics want to also use these effects. Despite current overcapacities, they are investing in the further expansion of their battery manufacture, observes the ISI.

In the Energy Storage business segment, Manz AG has proven expertise in winding, stacking and laminating technologies, the most important technologies in the manufacture of lithium-ion batteries and capacitors for consumer electronics, e-mobility and stationary energy storage. Manz, in particular due to its international locations, is optimally positioned in the relevant production markets. This provides an excellent basis for systematic use of the revenue and earnings potential in these industries, both now and in the future.

### **Overall Assertion**

As a high-tech equipment manufacturer, Manz AG has developed outstanding expertise in the seven key technologies of automation, laser processing, vacuum coating, printing and coating, metrology, wet chemistry and roll-to-roll. To reduce dependence on the development of individual target industries and growth markets, the company is pursuing a systematic diversification of its business model with regard to customers, regions and industries and at the same time is further optimizing technology transfer between the business segments.

For its Electronics business segment, Manz AG assesses the medium term outlook positively. This assessment is based on the steady development and increasing market penetration of new technologies such as AMOLED and foldable displays as well as the constantly rising demand for LCD and OLED flat screens, smartphones and high-quality portable computers, touch sensors, high-resolution printed circuit boards and chip carriers. In addition, new product groups such as smart watches, virtual reality and automotive applications contribute to the further potential in this field.

In the solar industry, a continued strong expansion of installed equipment worldwide is evident, with both the demand for solar modules as well as production capacity being distributed among more and more countries. With its innovative production solutions, particularly in relation to the highly efficient and economical CIGS thin-film technology, Manz AG considers itself to be fundamentally well positioned to benefit from future investments. Especially against the background of the planned cooperation with Shanghai Electric, the

Managing Board sees very good opportunities in the successful marketing and further development of CIGS technology.

Due to the dynamic development of the market for lithium-ion batteries and the globally unique technology portfolio for the manufacture of all current battery cell concepts for consumer electronics, e-mobility and stationary power storage, Manz AG also sees significant opportunities for growth in the Energy Storage segment.

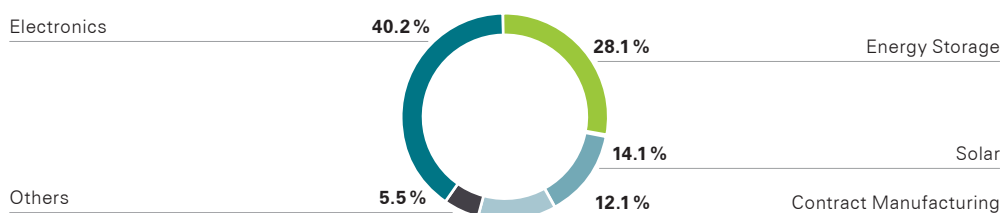
## ANALYSIS OF FINANCIAL POSITION, FINANCIAL PERFORMANCE AND CASH FLOWS

### Cash Flows

In the first six months of the 2016 fiscal year, sales revenues of Manz AG at 124.0 million euros were slightly above the first half of 2015 (121.9 million euros). But due to a special effect they lagged slightly behind expectations after a temporary order halt by a major customer in the Energy Storage business segment in June led to revenue losses in the middle single-digit millions range.

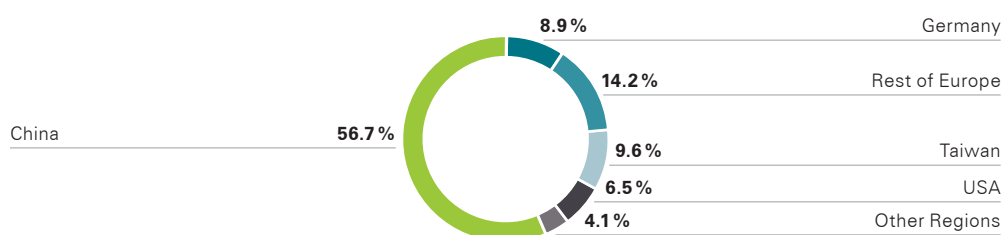
At 49.8 million euros, the Electronics segment accounted for a 40.2% share of the revenue in the reporting period (June 30, 2015: 42.3 million euros or 34.7%). The Solar segment generated around 17.5 million euros or 14.1% of Manz AG's total revenues (June 30, 2015: 10.6 million euros or 8.6%). With equipment for the production of lithium-ion batteries and capacitors, the Energy Storage business segment was responsible for another significant share of revenue with 34.9 million euros or 28.1% (June 30, 2015: 49.7 million euros or 41.0%). The Contract Manufacturing reporting segment was responsible for revenue contributions of 15.0 million euros or 12.1% (June 30, 2015: 14.2 million euros or 11.6%). Revenues in the Others reporting segment totaled 6.9 million euros, following 5.2 million euros in the first six months of 2015; this corresponds to a revenue share of 5.5%, following 4.1% in the comparable period of the previous year.

### Revenues by Business Units January 1 to June 30, 2016



Manz AG revenues by region had the following distribution in the first six months of the 2016 fiscal year: Taiwan and China accounted for the largest share of Manz AG's revenues, at 82.2 million euros or 66.3% (June 30, 2015: 76.1 million euros or 62.4%). Business in the rest of Asia contributed 5.1 million euros to total revenues or 4.1% (June 30, 2015: 4.6 million euros or 3.8%). In Germany, the company generated 10.9 million euros or 8.9% of total revenue (June 30, 2015: 21.2 million euros or 17.3%). Manz AG generated around 17.6 million euros or 14.2% of its revenues in the rest of Europe in the reporting period, following 16.7 million euros or 13.7% in the first six months of 2015. In the USA, the company achieved revenues of 8.1 million euros; this corresponds to a 6.5% share of total revenues (June 30, 2015: 2.5 million euros or 2.0%). Revenues in other regions worldwide amounted to 39 thousand euros (June 30, 2015: 0.9 million euros or 0.8%).

#### Revenues by Regions January 1 to June 30, 2016



The change in inventory of finished goods and work in progress was around -1.4 million euros (previous year: 0.5 million euros). This drop is attributable predominantly to the reduction of inventories in the reporting period. Own work capitalized, at 4.0 million euros, was significantly below the prior-year level (7.8 million euros). This drop is attributable to fewer pilot projects that could be capitalized. Overall this resulted in total operating revenues of 126.6 million euros, a level below that of the comparable period of the previous year (previous year: 130.2 million euros).

With 3.2 million euros, other operating revenues remained virtually unchanged in comparison to the prior year (3.1 million euros). Material costs at 70.3 million euros were significantly below those of the previous year (77.2 million euros), with the material cost ratio, at 55.5%, also being below the level of the previous year of 59.3%. As with own work capitalized, it is apparent that less material-intensive pilot projects were implemented.

Gross profit was 59,5 million euros and thus was above the level of the previous year (56.2 million euros). Personnel expenses at 40.5 million euros were down in the first six months of 2016 below the comparable period of 2015 (41.3 million euros) as a result of adapting resources at the beginning of the year. At the same time, the personnel expenses ratio rose slightly over the in comparison with the previous year (31.7%) to 32.0% as a result of the lower total operating revenues. Other operating expenses increased to 23.5 million euros

(previous year: 21.6 million euros) primarily as a result of an increase in outgoing freight expenditures.

While result before interest, taxes and depreciation/amortization (EBITDA) was improved, as a result of the level of revenue being weaker than expected and the resulting lower total operating revenue, at –4.5 million euros it was in the negative range (previous year: –6.7 million euros). Depreciation and amortization in the first half of 2016 at 7.3 million euros was at the level of the previous year (6.2 million euros). Contained in this are unscheduled write-offs in the amount of 766 thousand euros for the closing of the Karlstein and Tettwang locations. Overall, this results in operating earnings (EBIT) of –11.7 million euros (previous year: –12.9 million euros).

An analysis of the individual business segments shows that the EBIT in the Electronics segment amounted to –4.0 million euros (previous year: –8.1 million euros). The Solar segment posted EBIT of –4.9 million euros, following –7.0 million euros in the previous year. Operating earnings in the Energy Storage segment amounted to –2.9 million euros, following 1.7 million euros in the reference period of the previous year. The Contract Manufacturing reporting segment posted operating earnings of 63 thousand euros (previous year: 1.1 million euros). In the Others segment, EBIT amounted to 64 thousand euros, compared with –0.6 million euros in the previous year.

Financial cost increased in the 2016 reporting period to 2.4 million euros after 1.2 million euros in the previous year, among other things because a loan from the European Investment Bank in the amount of 20 million euros was completely drawn down and fees in connection with the repayment of bank loans were incurred. Overall, this leads to a financial result of –2.3 million euros (previous year: –1.2 million euros). After deduction of taxes on income, Manz AG's consolidated net loss in the first half of 2016 was 17.0 million euros (previous year: –15.0 million euros). With a weighted average of 5,950,043 shares, this results in earnings per share of –2.84 euros (previous year: –2.94 euros with 5,097,803 shares).

### **Financial Position**

Total assets as of June 30, 2016 increased in comparison with the balance sheet date of the 2015 year to 330.5 million euros (December 31, 2015: 292.5 million euros). On the liabilities side, the company's equity came to 187.7 million euros. The increase in comparison with December 31, 2015 (125.3 million euros) resulted from the capital increase completed at the end of May 2016. Issued capital rose in this connection by 2.3 million euros from 5.4 million euros to 7.7 million euros. Capital reserves rose from 99.3 million euros as of December 31, 2015 to 173.7 million euros. As a result of the loss in the first half of 2016, retained earnings fell from –2.3 million euros at the end of 2015 to –17.3 million euros. The amount resulting from currency translation at the foreign subsidiaries increased to 18.9 million euros (December 31, 2015: 18.5 million euros.) This relates, in particular, to the strength of the Chinese renminbi and the Taiwanese dollar against the euro. As of the

reference date of the reporting period, the equity ratio is 56.8%, following 42.8% as of December 31, 2015.

Non-current liabilities increased slightly in comparison with the end of the 2015 fiscal year to 15.8 million euros (previous year: 14.4 million euros). Pension provisions at 7.8 million euros were also at the same level as at the 2015 balance sheet date. Among other things, possible warranty services for customers flow into other non-current provisions for customers. They were 2.9 million euros and thus were above the level as of December 31, 2015 (2.5 million euros). Other non-current liabilities in the amount of 0.9 million euros continue unchanged to include the non-current share of the earn-out components from the purchase of KLEO Halbleitertechnik GmbH on June 1, 2015.

In addition, current liabilities fell significantly in comparison with the end of the 2015 fiscal year (152.9 million euros) to 127.1 million euros as a result of the repayment of loans from financial institutions. Thus in conjunction with the capital increase, current financial liabilities were paid down and as of June 30, 2016 amounted to 65.2 million euros (December 31, 2015: 81.0 million euros). Trade payables at 38.7 million euros were slightly below the level at the end of 2015 (40.8 million euros) while advances received at 3.5 million euros lagged significantly below the level at the 2015 balance sheet date (10.5 million euros). This significant change is the result of the types of orders and projects statuses recorded at the reference dates. Income tax liabilities increased to 0.9 million euros after 0.2 million euros at the balance sheet date in the 2015. Other current provisions totaled 6.4 million euros and thus were slightly above the amount reflected as of the 2015 balance sheet date of 6.3 million euros. The value of derivative financial instruments fell significantly as of June 30, 2016 to 0.4 million euros following 3.1 million euros at the end of 2015 due to the reduction in orders in US dollars. Other liabilities of 12.1 million euros (year end 2015: 11.0 million euros) contain personnel-related liabilities, earn-out liabilities to Würth-Solar at 3.0 million euros and the non-current share of earn-out components from the purchase of KLEO Halbleitertechnik GmbH as of June 1, 2015 at 0.1 million euros.

On the asset side, the decrease in non-current assets from 130.1 million euros as of the end of the 2015 fiscal year to 126.1 million euros as of June 30, 2016 is due essentially to a decrease in intangible assets and fixed assets. Thus less own work was capitalized, while assets at the same time were depreciated scheduled and unscheduled. Due to lower capital investments and scheduled depreciation, fixed assets fell from 42.8 million euros as of the 2015 balance sheet date to 40.0 million euros as of June 30, 2016. Other non-current assets recorded a rise in the reporting period to 1.9 million euros compared with 1.6 million euros as of the balance sheet date of December 31, 2015.

As of June 30, 2016, current assets, at 204.5 million euros, were above the amount for the 2015 balance sheet date (162.4 million euros). Inventories amounted to 34.2 million euros following 36.6 million euros as of December 31, 2015. The drop is essentially due to the reduction in inventories and changes in finished goods and work in progress. At the same time, trade receivables, at 95.0 million euros, were significantly above the level of the end

of the year 2015 (83.8 million euros). Included in these are future receivables from manufacturing orders (POC receivables) that occurred in connection with the order halt that took place at the beginning of June and at the time of publication of the report were still the subject matter of negotiations with the major customer. Income tax receivables as of June 30, 2016 remained largely unchanged at 0.2 million euros. Holdings of derivative financial instruments rose as of the 2016 reference date with an on-the-whole low level of 28 thousand euros to 89 thousand euros. Other current receivables in the amount of 9.1 million euros are to large extent composed of value-added tax receivables (December 31, 2015: 7.4 million euros). Liquid funds as of the end of the reporting period came to 65.9 million euros, having increased strongly as a result of the issue proceeds resulting from the capital increase completed at the end of May (December 31, 2015: 34.4 million euros).

### **Liquidity Position**

Considering cash flow in the strict sense (operating profit plus depreciation/amortization of fixed assets and increase/decrease in other non-current provisions and pension provisions), there was a negative cash flow totaling –4.0 million euros in the first six months of 2016 (previous year: –6.2 million euros). With negative operating earnings (EBIT) of –11.7 million euros, this negative cash flow results primarily from adding back depreciation, amortization and write-offs on fixed assets in the amount of 7.3 million euros (previous year: 6.2 million euros). Cash flow from operating activities for the 2016 reporting period amounted to –23.3 million euros (previous year: –41.0 million euros). This development is largely due to a significantly lower increase in inventories, trade receivables and other assets and a corresponding outflow of funds in the amount of –8.9 million euros (previous year: –35.6 million euros), while trade payables and other liabilities at –8.0 million euros fell in comparison with the development in the previous year (previous year: 4.1 million euros).

Following a cash flow from investing activities of –16.0 million euros in the same period in the previous year (2015), there was a cash outflow of 4.6 million euros for the 2016 reporting period. This is attributable to investments in intangible assets and property, plant and equipment, primarily in development activities. In terms of segments, the Solar division accounted for investment of 2.2 million euros (previous year: 4.3 million euros), the Electronics division 0.2 million euros (previous year: 3.2 million euros) and the Energy Storage division 0.8 million euros (previous year: 2.9 million euros). In the other segments, 1.4 million euros were invested in the 2016 reporting period (previous year: 0.6 million euros).

Cash flow from financing activities in the 2016 reporting period amounted to 59.6 million euros, following a cash outflow of 80.9 million euros in the previous year of 2015. The reason for this is the receipts for capital contributions in connection with the capital increase in the amount of 80.7 million euros, with, at the same time, a reduction in current financial liabilities in the amount of 15.9 million euros and of costs of raising capital (before taxes) of 5.8 million euros.



If exchange rate changes are taken into account, Manz AG therefore had liquid funds totaling 65.9 million euros as of June 30, 2016 (6/30/2015: 49.2 million euros).

Unused credit lines with banks as of the balance sheet date of June 30, 2016, come to 13.7 million euros (previous year: 92.4 million euros).

The existing credit lines with the German house banks and a German credit insurance company were paid back following the capital increase and the existing KfW loan was retired early from the issue proceeds. The project loan of the European Investment Bank (EIB) in the amount of 20 million euros for the financing of the expenditures of the Manz Group for research and development activities, in particular in the area of solar technology, continues unchanged. The EIB, however, has a right to termination. Due to the ongoing, positive negotiations regarding an extension, the company assumes that the EIB will waive its extraordinary termination right; otherwise the early repayment would be made through the existing liquid funds in the amount of 65.9 million euros.

### **Overall Assertion**

Group revenues in the first six months of 2016 fiscal year came to 124.0 million euros and thus were slightly above those of the first half of 2015 (121.9 million euros). Due to the revenue losses in the mid single-digit millions range caused by the order halt of a major customer in the Energy Storage business segment, however, total revenues are lagging behind our expectations. Total operating revenues, which are weaker in comparison with the previous year, are also of crucial importance for the negative development of cash flows compared with the first quarter of 2016. As a result, the result before interest, taxes and depreciation/amortization (EBITDA) at –4.5 million euros is in the negative range even though it is improved in comparison with the same period of the previous year. Earnings before interest and taxes (EBIT) amounted to approximately –11.7 million euros (previous year: –12.9 million euros).

Liquid funds came to 65.9 million euros with a net indebtedness of 1.5 million euros (December 31, 2015: 48.6 million euros), while the equity ratio as of June 30, 2016 was 56.8% (December 31, 2015: 42.8%). The value of orders on hand as of July 31, 2016 was 69.8 million euros (previous year: 104.1 million euros). Due to the strategic cooperation with Shanghai Electric which will begin in the course of the second half of the year, the Managing Board expects a comparatively strong second half of the year with respect to operations and considers itself well equipped, with the results achieved in the first six months, to be able to also achieve the goals set for the year.

## EVENTS AFTER THE BALANCE SHEET DATE

No events that would have had a significant impact on our cash flows, financial position and financial performance took place after the end of the reporting period.

## REPORT ON OPPORTUNITIES AND RISKS

All opportunities and risks presented in the 2015 Annual report, with the exception of the risks connected with the capital increase successfully carried out in May 2016, continue to exist. Beyond this, the following change has occurred.

As a result of the order stop of a major customer in the Energy Storage business segment that occurred in June 2016, there is a risk of a material negative impairment of the financial position, financial performance and cash flows of the Group. The Managing Board is currently still in negotiations with the customer. The Company assumes that in the event of an order cancellation, it will be possible to realize the existing contractual claims in at least the amount of the POC receivables reported.

Beyond this, no significant changes have arisen compared with the opportunities and risks presented in the 2015 Annual Report.

## FORECAST REPORT

### OUTLOOK

In our forecast report, we address, insofar as possible, Manz AG's expected future growth and the company's business environment in the current fiscal year of 2016.

In addition to the overall positive macroeconomic framework conditions, developments in the electronics, solar and lithium-ion battery sub-markets are also crucial to Manz AG's further operating growth.

For the current 2016 fiscal year, we expect operating activities in our Electronics business segment to show a significant improvement. This assumption is based on the sustained high demand for end devices with touch panel displays, such as smartphones and tablet computers. It is our view that the increased demand as well as the additional areas of application will lead to new and replacement investments in production systems, from which Manz AG can benefit. In addition, we expect that the classic display market in Asia will recover again in the current year and that we will also be able to expect impetus from this business segment again. The continuing automation trend in production in Asian countries should also have a positive effect on the demand for our systems for assembly automation.

Overall, we expect that in 2016 the Electronics business segment will generate markedly higher sales revenues than in the previous year, with a significantly improved EBIT margin. The value of orders on hand in the Electronics segment was 49 million euros as of July 31, 2016 (previous year: 24 million euros).

For our Solar segment, we feel optimistic in view of a steadily growing end-customer demand for solar modules and the planned cooperation with Shanghai Electric in CIGS technology. The constantly increasing demand makes new investments in modern equipment unavoidable in order to implement profitable manufacture in light of the dramatically falling prices for solar modules in recent years. In the field of thin-film solar technology, we continue to be convinced of the technological superiority of the Manz CIGS*fab*, our turnkey production line for the manufacture of CIGS thin-film solar modules. The efficiency records in module and cell format achieved by Manz as well as our exclusive research partner ZSW, the Center for Solar Energy and Hydrogen Research at Baden-Württemberg, impressively document that CIGS thin-film solar modules are not only more powerful than multicrystalline solar cells but also are significantly less expensive to produce. The sale of fully integrated, turnkey production lines for CIGS thin-film solar modules therefore continues to be our primary goal. With the exception of our automation solutions, we discontinued the business activities in the area of crystalline photovoltaics at the end of 2015. These will be continued at our Chinese location in Suzhou. Overall, we expect that a new order for a CIGS*fab* will have the effect of significantly increasing revenues in the Solar segment compared with the previous year. We also expect that the EBIT margin will improve significantly. The value of orders on hand as of July 31, 2016 was 4 million euros (previous year: 7 million euros).

In our Energy Storage business segment, we have opened up further target markets with our production systems for manufacturing lithium-ion batteries for e-mobility, stationary power storage and the consumer electronics sector that offer us significant revenue and earnings potential. We are seeing a strongly rising demand in particular from customers in the consumer electronics industry; but investments in production capacities for e-mobility are also demonstrating a dynamic development. For the full year of 2016, we are now only expecting revenue and earnings at the level of the previous year. It will only be possible to make a definitive statement as to if and to what degree revenue and earnings will be impacted in the current fiscal year by the temporary order halt only after the final conclusion of the talks with the customer. The value of orders on hand as of July 31, 2016 was 12 million euros (previous year: 63 million euros).

The Contract Manufacturing reporting segment is expected to show positive development in the current year of 2016. For the year 2016, we expect that revenues and earnings will increase significantly due to the additional revenues with Talus Manufacturing. The value of orders on hand as of July 31, 2016 is 3 million euros (previous year: 4 million euros). We also expect 2016 revenues and earnings in the Others segment to be at the prior-year level. The value of orders on hand as of July 31, 2016 was 2 million euros (previous year: 3 million euros).

In addition to the systematic continuation of our diversification strategy, cross-industry technology transfer and our own production and service locations in our customers' local markets, investments in R&D activities, in particular, are the foundation for sustainable growth. In this context, we want to strengthen and expand our good market position in our business segments by further developing our extensive technology portfolio. Overall, in the current fiscal year we therefore are planning to invest approximately 20 million euros into the R&D segment, which is slightly below the amount in 2015 (27 million euros). The outstanding importance of research at our company is underscored by the ratio of research and development costs to sales of 12.2% in the 2015 fiscal year.

## OVERALL ASSERTION ON THE COMPANY'S FUTURE DEVELOPMENT

Owing to the positive prospects in our strategic segments and orders on hand of around 70 million euros as of July 31, 2016, we expect a positive performance for the current fiscal year.

For the full year, we continue to expect a significant increase in revenue with significantly improved earnings before interest and taxes (EBIT). We are pursuing the goal of achieving at minimum a balanced operating result before depreciation, interest and taxes (EBITDA), even though as a result of the existing planning uncertainty and the losses in revenue and earnings in the second quarter in connection with the order halt in the Energy Storage segment this appears increasingly challenging.

## FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements. These statements 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 can cause our company's actual results, financial performance, growth, and performance to significantly deviate from the opinions stated in this report. Our company assumes no obligation to update these forward-looking statements or adapt them to future events or developments.



A large, white, stylized letter 'C' is centered on a teal background. The background features several concentric circles of varying shades of teal, creating a layered effect. The letter 'C' is the most prominent element, positioned in the center of the composition.

# C

---

*CONSOLIDATED INTERIM  
FINANCIAL STATEMENT*



## CONSOLIDATED INCOME STATEMENT

2nd Quarter (in EUR tsd.)

	April 1 to June 30, 2016	April 1 to June 30, 2015
Revenues	59,467	67,957
Inventory changes, finished and unfinished goods	-1,019	121
Work performed by the entity and capitalized	1,745	2,516
<b>Total operating revenues</b>	<b>60,193</b>	<b>70,594</b>
Other operating income	1,219	1,957
Cost of materials	-36,175	-42,804
<b>Gross profit</b>	<b>25,237</b>	<b>29,747</b>
Personnel expenses	-19,400	-20,559
Other operating expenses	-11,221	-9,533
<b>EBITDA</b>	<b>-5,384</b>	<b>-345</b>
Amortization/depreciation	-3,894	-3,125
<b>Operating earnings (EBIT)</b>	<b>-9,278</b>	<b>-3,470</b>
Finance income	11	26
Finance costs	-1,627	-799
<b>Earnings before taxes (EBT)</b>	<b>-10,894</b>	<b>-4,243</b>
Income taxes	-2,903	-507
<b>Consolidated profit or loss</b>	<b>-13,797</b>	<b>-4,750</b>
of which attributable to minority interests	-23	5
of which attributable to shareholders of Manz AG	-13,774	-4,755
Weighted average number of shares	6,479,222	5,267,547
Earnings per share (diluted = undiluted) in EUR per share	-2.13	-0.90



## CONSOLIDATED INCOME STATEMENT

1st Half Year (in EUR tsd.)

	Jan. 1 to June 30, 2016	Jan. 1 to June 30, 2015
Revenues	123,959	121,928
Inventory changes, finished and unfinished goods	-1,405	529
Work performed by the entity and capitalized	4,019	7,779
<b>Total operating revenues</b>	<b>126,573</b>	<b>130,236</b>
Other operating income	3,171	3,097
Cost of materials	-70,268	-77,166
<b>Gross profit</b>	<b>59,476</b>	<b>56,167</b>
Personnel expenses	-40,501	-41,278
Other operating expenses	-23,452	-21,585
<b>EBITDA</b>	<b>-4,477</b>	<b>-6,696</b>
Amortization/depreciation	-7,271	-6,209
<b>Operating earnings (EBIT)</b>	<b>-11,748</b>	<b>-12,905</b>
Finance income	18	37
Finance costs	-2,354	-1,225
<b>Earnings before taxes (EBT)</b>	<b>-14,084</b>	<b>-14,093</b>
Income taxes	-2,870	-900
<b>Consolidated profit or loss</b>	<b>-16,954</b>	<b>-14,993</b>
of which attributable to minority interests	-55	-6
of which attributable to shareholders of Manz AG	-16,899	-14,987
Weighted average number of shares	5,950,043	5,097,803
Earnings per share (diluted = undiluted) in EUR per share	-2.84	-2.94

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

2nd Quarter (in EUR tsd.)

	April 1 to June 30, 2016	April 1 to June 30, 2015
<b>Consolidated profit or loss</b>	<b>-13,797</b>	<b>-4,750</b>
Difference resulting from currency translation	1,200	-2,660
Cash flow hedges	-628	-2,004
Tax effect resulting from components not recognized in profit/loss	145	463
<b>Total of expenditures and income recorded directly in equity with future reclassification with tax effect</b>	<b>717</b>	<b>-4,201</b>
Revaluation of defined benefit pension plans	-57	-239
Tax effect resulting from components not recognized in profit/loss	12	66
<b>Total of expenditures and income recorded directly in equity without future reclassification with tax effect</b>	<b>-45</b>	<b>-173</b>
<b>Consolidated comprehensive income</b>	<b>-13,125</b>	<b>-9,124</b>
of which minority interests	422	3
of which shareholders of Manz AG	-13,547	-9,127

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

1st Half Year (in EUR tsd.)

	Jan. 1 to June 30, 2016	Jan. 1 to June 30, 2015
<b>Consolidated profit or loss</b>	<b>-16,954</b>	<b>-14,993</b>
Difference resulting from currency translation	773	9,557
Cash flow hedges	2,547	-2,014
Tax effect resulting from components not recognized in profit/loss	-588	465
<b>Total of expenditures and income recorded directly in equity with future reclassification with tax effect</b>	<b>2,732</b>	<b>8,008</b>
Revaluation of defined benefit pension plans	-87	-535
Tax effect resulting from components not recognized in profit/loss	15	144
<b>Total of expenditures and income recorded directly in equity without future reclassification with tax effect</b>	<b>-72</b>	<b>-391</b>
<b>Consolidated comprehensive income</b>	<b>-14,294</b>	<b>-7,376</b>
of which minority interests	313	-3
of which shareholders of Manz AG	-14,607	-7,373

## CONSOLIDATED BALANCE SHEET

### ASSETS (in EUR tsd.)

	June 30, 2016	Dec. 31, 2015
<b>Non-current assets</b>		
Intangible assets	80,917	81,574
Property, plant, and equipment	40,012	42,830
Deferred taxes	3,249	4,095
Other non-current assets	1,905	1,634
	<b>126,083</b>	<b>130,133</b>
<b>Current assets</b>		
Inventories	34,213	36,636
Trade receivables	94,982	83,799
Income tax receivables	187	151
Derivative financial instruments	89	28
Other current receivables	9,056	7,421
Liquid funds	65,930	34,372
	<b>204,457</b>	<b>162,407</b>
<b>Total assets</b>	<b>330,540</b>	<b>292,540</b>

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

	June 30, 2016	Dec. 31, 2015
<b>Equity</b>		
Issued capital	7,744	5,421
Retained earnings	173,718	99,345
Revenue reserves	-17,327	-2,315
Currency translation	18,917	18,512
Shareholders of Manz AG	<b>183,052</b>	<b>120,963</b>
Minority Interests	4,610	4,297
	<b>187,662</b>	<b>125,260</b>
<b>Non-current liabilities</b>		
Non-current financial liabilities	2,237	1,913
Non-current deferred investment grants	61	64
Financial liabilities from leases	9	11
Pension provisions	7,800	7,839
Other non-current provisions	2,850	2,502
Other non-current liabilities	875	875
Deferred taxes	1,957	1,178
	<b>15,789</b>	<b>14,382</b>
<b>Current liabilities</b>		
Current financial liabilities	65,150	80,999
Trade payables	38,695	40,809
Payments received	3,519	10,507
Income tax liabilities	850	196
Other current provisions	6,381	6,258
Derivative financial instruments	374	3,140
Other liabilities	12,118	10,976
Financial liabilities from leasing	2	13
	<b>127,089</b>	<b>152,898</b>
<b>Total liabilities and shareholders' equity</b>	<b>330,540</b>	<b>292,540</b>

## CONSOLIDATED CASH FLOW STATEMENT

(in EUR tsd.)

	Jan. 1 to June 30, 2016	Jan. 1 to June 30, 2015
<b>Cash flow from operating activities</b>		
Operating earnings (EBIT)	-11,748	-12,905
Depreciation/amortization of fixed assets	7,271	6,209
Increase (+)/decrease (-) in pension provisions and other non-current provisions	310	521
Other non-cash income (-) and expenses (+)	120	-24
<b>Cash flow</b>	<b>-4,047</b>	<b>-6,199</b>
Gains (-)/losses (+) from disposals of assets	13	0
Increase (-)/decrease (+) in inventories, trade receivables and other assets	-8,933	-35,603
Increase (+)/decrease (-) in trade payables and other liabilities	-8,009	4,148
Income tax received (+)/paid (-)	-182	-2,204
Interest paid	-2,195	-1,168
Interest received	17	36
Cash flow from operating activities	<b>-23,336</b>	<b>-40,990</b>
<b>Cash flow from investing activities</b>		
Cash receipts from the sale of fixed assets	18	6
Cash payments for investments in intangible assets and property, plant and equipment	-4,581	-11,035
Cash payments for the acquisition of consolidated entities, less liquid funds received	0	-4,919
Cash flow from investing activities	<b>-4,563</b>	<b>-15,948</b>
<b>Cash flow from financing activities</b>		
Cash proceeds from long-term borrowings	982	13,150
Cash payments for repayment of long-term borrowings	-364	-1,550
Change in current financial liabilities	-15,850	28,774
Purchase of treasury shares	-5	-9
Cash payments for the repayment of financial leases	-13	-8
Cash receipts from issue of capital	80,709	41,888
Costs of raising capital (before taxes)	-5,831	-1,307
Cash flow from financing activities	<b>59,628</b>	<b>80,938</b>
<b>Cash and cash equivalents at the end of the period</b>		
Net change in cash funds (subtotal 1 – 3)	31,729	24,000
Effect of exchange rate movements on cash and cash equivalents	-171	2,036
Cash and cash equivalents on January 1	34,372	23,153
Cash and cash equivalents on June 30	<b>65,930</b>	<b>49,189</b>
<b>Composition of cash and cash equivalents</b>		
Liquid funds	65,930	49,189
<b>Cash and cash equivalents on June 30</b>	<b>65,930</b>	<b>49,189</b>

## CONSOLIDATED STATEMENT OF CHANGES TO EQUITY

(in EUR tsd.)

	Issued capital	Capital reserves	Treasury shares	Revenue reserves			Currency translation	Manz AG shareholders	Minority equity	Total share-holders' equity
				Cumulative profit/loss	Remeasurement of pensions	Cash flow hedges				
<b>As of Jan. 1, 2015</b>	<b>4,928</b>	<b>103,817</b>	<b>0</b>	<b>20,976</b>	<b>-1,840</b>	<b>-35</b>	<b>12,128</b>	<b>139,974</b>	<b>39</b>	<b>140,013</b>
Total comprehensive income				-14,987	-391	-1,549	9,554	-7,373	-3	-7,376
Capital increase	493	41,396						41,889		41,889
Costs of raising capital after taxes		-926						-926		-926
Purchase of treasury shares			-9					-9		-9
Use of treasury shares			9					9		9
Share-based compensation		24						24		24
<b>As of June 30, 2015</b>	<b>5,421</b>	<b>144,311</b>	<b>0</b>	<b>5,989</b>	<b>-2,231</b>	<b>-1,584</b>	<b>21,682</b>	<b>173,588</b>	<b>36</b>	<b>173,624</b>
<b>As of Jan. 1, 2016</b>	<b>5,421</b>	<b>99,345</b>	<b>0</b>	<b>1,774</b>	<b>-1,949</b>	<b>-2,140</b>	<b>18,512</b>	<b>120,963</b>	<b>4,297</b>	<b>125,260</b>
Total comprehensive income				-16,899	-72	1,959	405	-14,607	313	-14,294
Capital increase	2,323	78,386						80,709		80,709
Costs of raising capital after taxes		-4,133						-4,133		-4,133
Purchase of treasury shares			-5					0		-5
Use of treasury shares			5					0		5
Share-based compensation		120						120		120
<b>As of June 30, 2016</b>	<b>7,744</b>	<b>173,718</b>	<b>0</b>	<b>-15,125</b>	<b>-2,021</b>	<b>-181</b>	<b>18,917</b>	<b>183,052</b>	<b>4,610</b>	<b>187,662</b>

## SEGMENT REPORTING FOR DIVISIONS

As of June 30, 2016

(in EUR tsd.)	Revenues with third parties	Revenues with other segments	EBITDA	EBIT	Segment assets	Segment liabilities	Net assets	Additions to assets	Depreciation scheduled	Depreciation non-scheduled	Employees (annual average)
<b>Solar</b>											
Q1 + Q2 2015	10,546		-4,374	-7,017	70,631	24,653	45,978	4,294	2,482		280
Q1 + Q2 2016	17,462		-1,665	-4,931	58,996	9,979	49,017	2,203	2,544	632	264
<b>Electronics</b>											
Q1 + Q2 2015	42,320		-5,794	-8,158	85,662	49,903	35,759	3,236	1,778		1,013
Q1 + Q2 2016	49,776		-1,814	-3,999	96,048	76,731	19,317	191	1,662	134	858
<b>Energy Storage</b>											
Q1 + Q2 2015	49,704		2,486	1,729	68,892	10,474	58,418	2,936	683		128
Q1 + Q2 2016	34,866		-1,583	-2,945	53,885	9,476	44,409	772	1,282		176
<b>Contract Manufacturing</b>											
Q1 + Q2 2015	14,185		1,415	1,124	25,441	19,535	5,906	95	233		101
Q1 + Q2 2016	14,980		327	63	43,247	12,600	30,647	1,126	204		133
<b>Others</b>											
Q1 + Q2 2015	5,173	6,256	-429	-583	7,453	4,601	2,852	17	92		108
Q1 + Q2 2016	6,875	5,162	258	64	6,457	5,354	1,103	52	123		90
<b>Zentral-funktionen/ Übriges</b>											
Q1 + Q2 2015					70,376	45,665	24,711	457	941		332
Q1 + Q2 2016					71,907	28,738	43,169	237	690		299
<b>Konsolidierung</b>											
Q1 + Q2 2015		-6,256									
Q1 + Q2 2016		-5,162									
<b>Konzern</b>											
Q1 + Q2 2015	121,928	0	-6,696	-12,905	328,455	154,831	173,624	11,035	6,209		1,962
Q1 + Q2 2016	123,959	0	-4,477	-11,748	330,540	142,878	187,662	4,581	6,505	766	1,820



## SEGMENT REPORTING FOR REGIONS

As of June 30, 2016

(in EUR tsd.)	Third-party revenues by customer location	Non-current assets (without deferred taxes)
<b>Deutschland</b>		
<b>Q1 + Q2 2015</b>	21,194	54,922
<b>Q1 + Q2 2016</b>	10,914	47,866
<b>Übriges Europa</b>		
<b>Q1 + Q2 2015</b>	16,684	19,076
<b>Q1 + Q2 2016</b>	17,636	21,047
<b>China</b>		
<b>Q1 + Q2 2015</b>	62,405	19,439
<b>Q1 + Q2 2016</b>	70,317	16,853
<b>Taiwan</b>		
<b>Q1 + Q2 2015</b>	13,656	38,565
<b>Q1 + Q2 2016</b>	11,869	36,238
<b>Übriges Asien</b>		
<b>Q1 + Q2 2015</b>	4,604	10
<b>Q1 + Q2 2016</b>	5,096	6
<b>Amerika</b>		
<b>Q1 + Q2 2015</b>	2,455	72
<b>Q1 + Q2 2016</b>	8,088	71
<b>Sonstige Regionen</b>		
<b>Q1 + Q2 2015</b>	930	727
<b>Q1 + Q2 2016</b>	39	753
<b>Konzern</b>		
<b>Q1 + Q2 2015</b>	121,928	132,811
<b>Q1 + Q2 2016</b>	123,959	122,834

d

---

NOTES

52	BASIC PRINCIPLES
53	BASIS OF CONSOLIDATION
54	NOTES ON INDIVIDUAL ITEMS IN THE INCOME STATEMENT
56	NOTES ON INDIVIDUAL ITEMS IN THE BALANCE SHEET
63	CONTINGENCIES AND OTHER FINANCIAL COMMITMENTS
63	RELATED PARTIES
63	KEY EVENTS OF PARTICULAR IMPORTANCE OCCURRING AFTER THE END OF THE REPORTING PERIOD
64	FURTHER DISCLOSURES
65	RESPONSIBILITY STATEMENT
65	REVIEW REPORT
67	IMPRINT

## BASIC PRINCIPLES

Pursuant to Section 37w (3) of the German Securities Trading Act (WpHG), the consolidated interim financial statements as of June 30, 2016 have been prepared in condensed form according to 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. A review was performed.

With the exception of the new provisions described below, the accounting policies applied to the consolidated interim financial statements as of June 30, 2016, 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 December 31, 2015. A detailed description of these policies was published in the notes in the 2015 Annual Report.

In addition to the income statement, a statement of comprehensive income, a balance sheet, a cash flow statement and a statement of changes in equity are presented.

All significant intercompany balances and transactions have been eliminated. In the view of the management, the interim financial statements include all adjustments necessary for an appropriate presentation of the Group's financial position, financial performance and cash flows. The results presented in interim periods do not necessarily permit predictions about future business performance.

The consolidated interim financial statements were prepared in euros. Unless otherwise stated, all amounts are shown in thousands of euros.

## EXCHANGE RATES OF THE MOST IMPORTANT CURRENCIES

(in EUR)		Closing rate		Average rate	
		June 30, 2016	Dec. 31, 2015	Jan. 1 to June 30, 2016	Jan. 1 to June 30, 2015
USA	USD	1.1105	1.0908	1.1164	1.1174
Taiwan	TWD	35.8214	35.9551	36.6109	34.8978
Hong-Kong	HKD	8.6169	8.4524	8.6721	8.6653
China	CNY	7.3798	7.0822	7.2979	6.8588
Ungarn	HUF	316.6800	314.8090	313.0200	307.7060

## BASIS OF CONSOLIDATION

Manz AG's consolidated financial statements include all the companies whose financial and operating policy Manz AG can either directly or indirectly determine ("controlling relationship"). In addition to Manz AG, the group of consolidated companies includes the following subsidiaries:

### Fully Consolidated Companies

		Interest in %
<b>Manz CIGS Technology GmbH</b>	Schwäbisch Hall/Germany	<b>100.0 %</b>
<b>Manz USA Inc.</b>	North Kingstown/USA	<b>100.0 %</b>
<b>Manz Hungary Kft.</b>	Debrecen/Hungary	<b>100.0 %</b>
<b>MVG Hungary Kft.</b>	Debrecen/Hungary	<b>100.0 %</b>
<b>Manz Italy s.r.l.</b>	Sasso Marconi/Italy	<b>100.0 %</b>
<b>Manz Slovakia s.r.o.</b>	Nove Mesto nad Vahom/Slovakia	<b>100.0 %</b>
<b>Manz Asia Ltd.</b>	Hong-Kong/China	<b>100.0 %</b>
Manz China Shanghai Ltd. (Shanghai) <sup>1)</sup>	Shanghai/China	100.0 %
Manz (Shanghai) Trading Company Ltd. <sup>1)</sup>	Shanghai/China	100.0 %
Manz China WuZhong Co. Ltd. <sup>1)</sup>	Suzhou/China	100.0 %
Manz China Suzhou Ltd. <sup>1)</sup>	Suzhou/China	100.0 %
Manz India Private Ltd. <sup>1)</sup>	New Delhi/India	75.0 %
Manz Chungli Ltd. <sup>1)</sup>	Chungli/Taiwan	100.0 %
Manz Taiwan Ltd. <sup>2)</sup>	Chungli/Taiwan	100.0 %
Talus Manufacturing Ltd. <sup>3)</sup>	Chungli/Taiwan	80.5 %
Manz (B.V.I.) Ltd. <sup>3)</sup>	Road Town/British Virgin Islands	100.0 %
Intech Machines (B.V.I.) Co. Ltd. <sup>3)</sup>	Road Town/British Virgin Islands	100.0 %

<sup>1)</sup> via Manz Asia Ltd. <sup>2)</sup> via Manz Chungli Ltd. <sup>3)</sup> via Manz Taiwan Ltd.

## NOTES ON INDIVIDUAL ITEMS IN THE INCOME STATEMENT

### OTHER OPERATING INCOME

(in EUR tsd.)	June 30, 2016	June 30, 2015
Exchange rate gains	430	267
Income from the reversal of provisions	46	41
Income from the reduction of provisions	800	363
Income from the sale of investments	5	0
Subsidies	0	1,560
Changes to valuation allowances on receivables	818	0
Other	1,072	866
	<b>3,171</b>	<b>3,097</b>

### COST OF MATERIALS

(in EUR tsd.)	June 30, 2016	June 30, 2015
Cost of raw materials, consumables and supplies and of purchased merchandise	60,591	72,094
Cost of purchased services	9,677	5,072
	<b>70,268</b>	<b>77,166</b>

## OTHER OPERATING EXPENSES

(in EUR tsd.)	June 30, 2016	June 30, 2015
Rents and leasing	3,510	2,953
Other operating costs	1,417	1,527
Other personnel expenses	747	879
Advertising and travel expenses	4,926	5,186
Outgoing freight, packaging	2,442	1,075
Legal and consulting costs	1,567	1,261
Insurance policies	456	345
Licensing fees	458	489
Exchange rate losses	772	883
Losses on receivables	35	122
Changes to valuation allowances on receivables	29	7
Other	7,094	6,858
	<b>23,452</b>	<b>21,585</b>

## INCOME TAXES

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

Income taxes break down as follows:

(in EUR tsd.)	June 30, 2016	June 30, 2015
Current tax expense/income (–)	331	736
Deferred tax expense/income (–)	2,538	164
	<b>2,870</b>	<b>900</b>

## NOTES ON INDIVIDUAL ITEMS IN THE BALANCE SHEET

### INTANGIBLE ASSETS

(in EUR tsd.)	June 30, 2016	Dec. 31, 2015
Licenses, software and similar rights, and assets	17,944	20,207
Capitalized development costs	24,905	23,355
Goodwill	38,008	37,952
Prepayments	60	60
	<b>80,917</b>	<b>81,574</b>

### PROPERTY, PLANT AND EQUIPMENT

(in EUR tsd.)	June 30, 2016	Dec. 31, 2015
Land and buildings, including buildings on third-party land	27,807	29,229
Technical equipment and machinery	7,456	7,383
Other equipment, operating and office equipment	3,388	4,696
Prepayments	1,361	1,522
	<b>40,012</b>	<b>42,830</b>

The closure of the locations Karlstein and Tett nang resulted in unscheduled depreciation on property, plant and equipment in the amount of 766 thousand euros.



## INVENTORIES

(in EUR tsd.)	June 30, 2016	Dec. 31, 2015
Raw materials, consumables and supplies	16,658	17,924
Work in progress	15,165	16,509
Finished goods and merchandise	1,521	1,582
Prepayments	869	622
	<b>34,213</b>	<b>36,636</b>

## TRADE RECEIVABLES

(in EUR tsd.)	June 30, 2016	Dec. 31, 2015
Future receivables from construction contracts	73,090	52,906
Trade receivables	21,892	30,893
	<b>94,982</b>	<b>83,799</b>

Future receivables from construction contracts, accounted for in accordance with their percentage of completion, are determined as follows:

(in EUR tsd.)	June 30, 2016	Dec. 31, 2015
Manufacturing costs, including outcome of the contract, of construction contracts	168,690	112,801
Minus advances received	-95,600	-59,895
	<b>73,090</b>	<b>52,906</b>

## OTHER CURRENT RECEIVABLES

(in EUR tsd.)	June 30, 2016	Dec. 31, 2015
Tax receivables (not income taxes)	2,867	3,633
Personnel receivables	906	713
Other accruals (primarily insurance policies)	554	377
Other	4,729	2,698
	<b>9,056</b>	<b>7,421</b>

## SHAREHOLDERS' EQUITY

Changes in individual items of the Group's equity are presented separately in the "Consolidated Statement of Changes in Equity".

## ISSUED CAPITAL

As a result of the cash capital increase of April 29, 2016, which was decided, with Supervisory Board approval, by the Managing Board in partial exercise of the authorization given at the Annual General Meeting of July 09, 2014, pursuant to Article 3(3) of the Articles of Incorporation (Authorized Capital 2014), the issued capital of Manz AG was increased by 2,323,224.00 euros to 7,744,088.00 euros (previous year: 5,421 thousand euros) and is divided into 7,744,088 no-par value bearer shares, which are fully paid up. The nominal value of each share is thus 1.00 euro.

## CAPITAL RESERVES

Capital reserves are comprised primarily of contributions from shareholders pursuant to Section 272(2), no. 1 of the German 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).

Of the increase in the first six months of 2016 in the amount of 74,373 thousand euros, 74,253 thousand euros relates to the premium from the capital increase carried out on May 20, 2016 and 120 thousand euros relates to the allocation from share-based compensation (Manz Performance Share Plan).

## TREASURY SHARES

In the first six months of 2016, the Manz Group purchased 126 treasury shares at an average price of 37.06 euros per share (market value of 4.67 thousand euros), which were transferred to employees in the context of jubilee benefits.

As of June 30, 2016, the company has no further treasury shares in its portfolio.

## ADDITIONAL INFORMATION ABOUT FINANCIAL INSTRUMENTS

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 lion's share 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 values.

### Carrying Amounts by Measurement Category

(in EUR tsd.)	Fair value	Loans and receivables	Designated hedging instruments (cash flow hedges)	Not within the scope of IFRS 7, IAS 39	Carrying amount June 30, 2016
<b>Assets as of June 30, 2016</b>					
Other non-current assets	1,905	1,905	–	–	1,905
Trade receivables	94,982	21,892	–	73,090	94,982
Derivative financial instruments	89	–	89	–	89
Other current receivables	9,056	6,189	–	2,867	9,056
Liquid funds	65,930	65,930	–	–	65,930
	<b>171,962</b>	<b>147,114</b>	<b>89</b>	<b>24,759</b>	<b>171,962</b>

### Carrying Amounts by Measurement Category

(in EUR tsd.)	Fair value	Measured at amortized cost	Carrying amount according to IAS 17	Designated hedging instruments (cash flow hedges)	Not within the scope of IFRS 7, IAS 39	Carrying amount June 30, 2016
<b>Liabilities as of June 30, 2016</b>						
Financial liabilities	67,387	67,387	–	–	–	67,387
Financial liabilities from leases	13	–	11	–	–	11
Trade payables	38,695	38,695	–	–	–	38,695
Derivative financial instruments	374	–	–	374	–	374
Other liabilities	12,118	6,375	–	–	5,743	12,118
	<b>118,587</b>	<b>112,457</b>	<b>11</b>	<b>374</b>	<b>5,743</b>	<b>118,585</b>

### Carrying Amounts by Measurement Category

(in EUR tsd.)	Fair value	Loans and receivables	Designated hedging instruments (cash flow hedges)	Not within the scope of IFRS 7, IAS 39	Carrying amount Dec. 31, 2015
<b>Assets as of Dec. 31, 2015</b>					
Other non-current assets	1,634	1,634	–	–	1,634
Trade receivables	83,799	30,893	–	52,906	83,799
Derivative financial instruments	28	–	28	–	28
Other current receivables	7,421	3,788	–	3,633	7,421
Liquid funds	34,372	34,372	–	–	34,372
	<b>127,254</b>	<b>70,687</b>	<b>28</b>	<b>56,539</b>	<b>127,254</b>

### Carrying Amounts by Measurement Category

(in EUR tsd.)	Fair value	Measured at amortized cost	Carrying amount according to IAS 17	Designated hedging instruments (cash flow hedges)	Not within the scope of IFRS 7, IAS 39	Carrying amount Dec. 31, 2015
<b>Liabilities as of Dec. 31, 2015</b>						
Financial liabilities	82,802	82,912	–	–	–	82,912
Financial liabilities from leases	26	–	24	–	–	24
Trade payables	40,809	40,809	–	–	–	40,809
Derivative financial instruments	3,140	–	–	3,140	–	3,140
Other liabilities	10,976	6,878	–	–	4,098	10,976
	<b>137,753</b>	<b>130,599</b>	<b>24</b>	<b>3,140</b>	<b>4,098</b>	<b>137,861</b>

The existing credit lines with the German house banks and a German credit insurance company were paid back following the capital increase and the existing KfW loan was retired early from the issue proceeds. The project loan of the European Investment Bank (EIB) in the amount of 20 million euros for the financing of the expenditures of the Manz Group for research and development activities, in particular in the area of solar technology, continues unchanged. Due to existing termination options on the part of the EIB, the loan will remain under current financial liabilities, as in the previous year. Due to the ongoing, positive negotiations regarding an extension, the company assumes that the EIB will waive its extraordinary termination right; otherwise the early repayment would be made through the existing liquid funds in the amount of 65.9 million euros.

At Manz Slovakia, financial liabilities in the amount of 10,880 thousand euros were in like manner subject to covenant agreements with various financial reference values. The covenants are reviewed by the banks only once a year using the annual financial statements. With financial liabilities in the amount of 3,880 thousand euros, two of three covenants would not be met as of June 30, 2016. Based on planning for the period July-December 2016, the company expects that all covenants will be met by the end of the year.

## **MEASUREMENT CLASSES ACCORDING TO IFRS 7.27**

The Group uses the following hierarchy to determine and present the fair 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).

As of June 30, 2016, derivative financial instruments disclosed in current assets with a value of 89 thousand euros (previous year: 28 thousand euros), as well as derivative financial instruments disclosed in current liabilities with a value of 374 thousand euros (previous year: 3,140 thousand euros) fall within Level 2 of the fair value hierarchy within the scope of IFRS 7.27.

## CONTINGENCIES AND OTHER FINANCIAL COMMITMENTS

There were no major changes to other financial commitments and contingencies compared with 12/31/2015.

## RELATED PARTIES

Compared with December 31, 2015, the group of related parties has remained unchanged. Guoxing Yang, deputy director of the Business Development department of Shanghai Electric Group Co., Ltd., was elected to the Supervisory Board at the Annual General Meeting on July 12, 2016.

In the period from January 1 to June 30, 2016, Manz AG purchased laser systems with a value of 5,990 thousand euros from the TRUMPF Group, of which Supervisory Board member Dr. Peter Leibinger is managing partner. As of June 30, 2016, liabilities to the TRUMPF Group amount to 5,236 thousand euros.

Manz AG purchased goods with a total value of 2 thousand euros from TRUMPF Hüttinger Elektronik GmbH & Co. KG, of whose Advisory Board Peter Leibinger is a member. As of June 30, 2016, Manz AG holds no liabilities to TRUMPF Hüttinger Elektronik GmbH & Co. KG.

In the period January 1 to June 30, 2016, 783 thousand euros was paid by the Center for Solar Energy and Hydrogen Research at Baden-Württemberg (ZSW), of which Prof. Powalla is a member of the Board of Directors, for services and license fees of Manz AG. As of June 30, 2016, liabilities to the ZSW amount to 504 thousand euros.

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

No significant circumstances that could have an impact on the company's financial position, financial performance and cash flows occurred after the balance sheet date.

## FURTHER DISCLOSURES

### EMPLOYEES

As of June 30, 2016, the Manz Group had an average of 1,820 employees (June 30, 2015: 1,962 employees).

### MANAGING BOARD

Dieter Manz, Dipl. Ing. (FH), CEO  
Martin Hipp, Dipl.-Kaufmann, CFO  
Martin Drasch, Dipl.-Ing. (FH), COO

### SUPERVISORY BOARD

Prof. Dr. Heiko Aurenz, Dipl. oec., Partner at Ebner Stolz Management Consultants GmbH, Stuttgart (Chairman)

Dr.-Ing. E.h. Dipl.-Ing. Peter Leibinger, managing shareholder of TRUMPF GmbH + Co. KG, Ditzingen, Vice Chairman (until July 12, 2016)

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

Guoxing Yang, Deputy Director of the Business Development department at Shanghai Electric Group Co., Ltd. (since July 12, 2016)



## 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 11, 2016

The Managing Board of Manz AG



Dieter Manz



Martin Hipp



Martin Drasch

## REVIEW REPORT

To the Supervisory Board of Manz AG, Reutlingen:

We have reviewed the condensed consolidated interim financial statements – comprising the income statement, statement of comprehensive income, balance sheet, cash flow statement, statement of changes in equity and selected explanatory notes – and the interim group management report of Manz AG, Reutlingen, for the period from January 1, 2016 to June 30, 2016 which are part of the six month financial report pursuant to Section 37w of the German Securities Trading Act. The preparation of the condensed consolidated interim financial statements in accordance with the IFRS applicable to interim financial reporting as adopted by the EU and of the interim group management report in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports is the responsibility of the legal representatives of the Company. Our responsibility is to issue a review report on the condensed consolidated interim financial statements and on the interim group management report based on our review.

We conducted our review of the condensed consolidated interim financial statements and the interim group management report in accordance with German generally accepted standards for the review of financial statements promulgated by the Institut der

Wirtschaftsprüfer (IDW). Those standards require that we plan and perform the review so that we can exclude through critical evaluation, with moderate assurance, that the condensed consolidated interim financial statements have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU and that the interim group management report has not been prepared, in all material respects, in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports. A review is limited primarily to inquiries of company personnel and analytical procedures and therefore does not provide the assurance attainable in a financial statement audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we cannot express an audit opinion.

Based on our review, no matters have come to our attention that cause us to presume that the condensed consolidated interim financial statements have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU nor that the interim group management report has not been prepared, in all material respects, in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports.

Reutlingen, August 11, 2016

BEST AUDIT GmbH  
Wirtschaftsprüfungsgesellschaft  
Reutlingen Office

Marion Moser  
Auditor

Harald Aigner  
Auditor

## 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/Gebäude 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



**MANZ AG**

Steigaeckerstraße 5  
72768 Reutlingen, Germany  
Phone: +49 (0) 7121 9000-0  
Fax: +49 (0) 7121 9000-99  
[info@manz.com](mailto:info@manz.com)  
[www.manz.com](http://www.manz.com)