



## **SUSS MICROTEC INVESTOR PRESENTATION**

**April 2017**

This presentation contains forward-looking statements relating to the business, financial performance and earnings of SUSS MicroTec AG and its subsidiaries and associates. Forward-looking statements are based on current plans, estimates, projections and expectations and are therefore subject to risks and uncertainties, most of which are difficult to estimate and which in general are beyond the control of SUSS MicroTec AG. Consequently, actual developments as well as actual earnings and performance may differ materially from those which explicitly or implicitly assumed in the forward-looking statements. SUSS MicroTec AG does not intend or accept any obligation to publish updates of these forward-looking statements.

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**I. SUSS MicroTec at a Glance**

**II. Products & Markets**

**III. Financials**

**IV. Outlook**

- + Global leader in manufacturing equipment for semiconductor devices
- + SUSS' Equipment creates micro structures that connect micro electronic devices
- + Focus on growth segments: advanced packaging, MEMS, and 2.5D / 3D Integration
- + Attractive end markets: smartphones, tablets, automotive, LED, sensors, IoT, ...

- + Order entry 2016: € 161.1 million
- + Sales 2016: € 177.6 million
- + EBIT 2016: € 11.1 million
- + Net Cash 2016: € 31.1 million
- + Market Cap 01/31/2016: € 145.7 million

# SUSS MICROTEC – A GLOBAL PLAYER

## NORTH AMERICA

Order Entry 33.7 € million  
Sales 25.4 € million  
Employees 102

## EMEA

Order Entry 38.1 € million  
Sales 43.1 € million  
Employees 469

## ASIA

Order Entry 89.3 € million  
Sales 109.0 € million  
Employees 140



\*Figures refer to the fiscal year 2016

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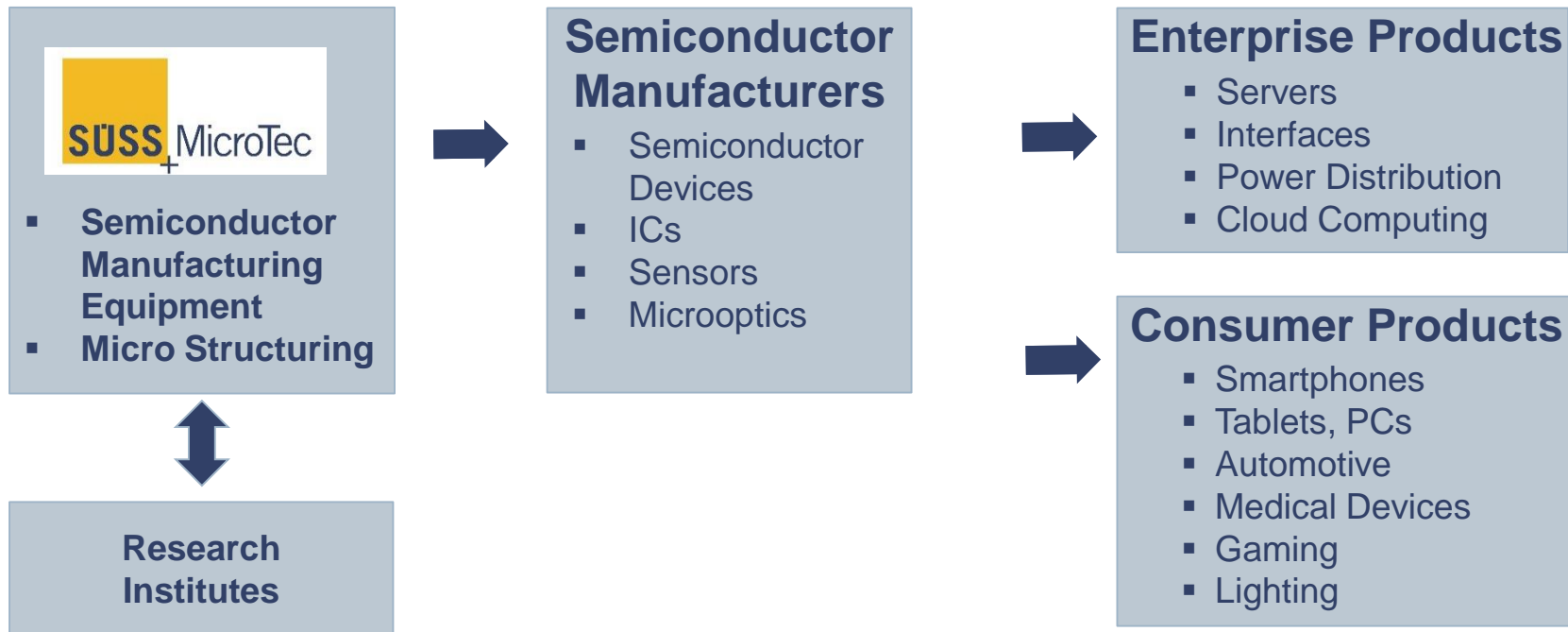
**I.** SUSS MicroTec at a Glance

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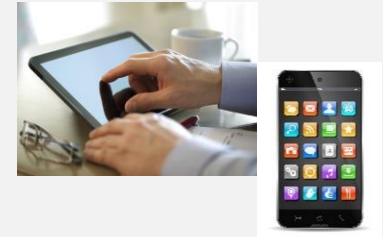




- + SUSS MicroTec:**
  - Key player in leading edge semiconductor manufacturing equipment
  - Developer of highly innovative process solutions
- + Key components for electronic devices such as cell phones, PCs and tablet computers are produced with SUSS MicroTec's equipment**

## Connectivity & Data Processing

- + Connection through apps, social media, data streaming
- + Connectivity of devices, Internet of Things (IoT)
- + Permanent internet connectivity provided by smartphones and tablet PCs at affordable cost
- + Industry 4.0 connectivity of manufacturing units



## Mobility & Automotive

- + Autonomous, electric and plug in hybrid cars, E-Bikes, trains drive the need for power devices and high performance ICs at the same time
- + Growing electronic content and sensors (MEMS) for autonomous cars


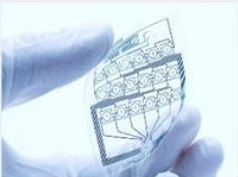








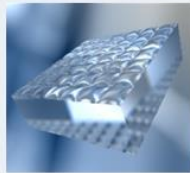



## Energy Efficiency

- + Environmental awareness and rising energy costs drive the demand for energy efficient devices
- + Energy efficiency in industrial production
- + Smart energy management in household applications
- + Green energy management systems





Semiconductors			Sensors	Lighting	Micro Optics
<b>Front End Lithography</b> <ul style="list-style-type: none"> <li>▪ Photomask Cleaning</li> </ul>  	<b>Advanced Packaging</b> <ul style="list-style-type: none"> <li>▪ Micro-Bumping</li> <li>▪ Fan-Out WLP</li> <li>▪ Cu Pillar</li> </ul>  	<b>Chipset Integration</b> <ul style="list-style-type: none"> <li>▪ 3D (TSV) Stacking</li> <li>▪ 2.5D Integration</li> </ul>  	<b>MEMS</b> <ul style="list-style-type: none"> <li>▪ Internet of Things</li> <li>▪ Automotive</li> <li>▪ Mobile Devices</li> <li>▪ Industry 4.0</li> <li>▪ Biomedical</li> </ul>  	<b>LED</b> <ul style="list-style-type: none"> <li>▪ General Lighting</li> <li>▪ HB and UHB</li> </ul>  	<b>Advanced Optics</b> <ul style="list-style-type: none"> <li>▪ Wafer Level Optics</li> <li>▪ Fiber Optics</li> <li>▪ Laser and Lithography Beam Shaping Optics</li> </ul>   <p><b>Micro Optical Components</b></p> <p>Micro lens arrays Diffractive optical elements</p>



## Frontend

## Mid- and Backend

### Photomask Equipment

Photomask Cleaning Equipment



MaskTrackPro

### Lithography

Laser Processing Equipment



ELP300

Exposure Systems



Mask Aligner  
MA200/300 Gen2



Projection Scanner  
DSC300 Gen2

Coaters and Developers



ACS300 Gen2

### Bonder

Wafer Bonding Equipment



XBC300 Gen2



XB8



# SEGMENTS, ORDER ENTRY AND SALES 9M 2016

## Divisions

### Photomask Equipment

Photomask Cleaning  
Equipment

FY 2015

FY 2016

21.5 € million  
23.5 € million  
2.3 € million  
9.9%

26.3 € million  
19.7 € million  
1.8 € million  
9.2%

### Lithography

Laser  
Processing  
Equipment

Exposure  
Systems

Coaters and  
Developers

FY 2015

FY 2016

149.6 € million  
106.3 € million  
9.7 € million  
9.1%

105.0 € million  
133.8 € million  
13.2 € million  
9.8%

### Bonder

Wafer Bonding  
Equipment

FY 2015

FY 2016

10.5 € million  
11.4 € million  
-4.0 € million  
-34.7%

18.6 € million  
14.0 € million  
-1.7 € million  
-12.1%

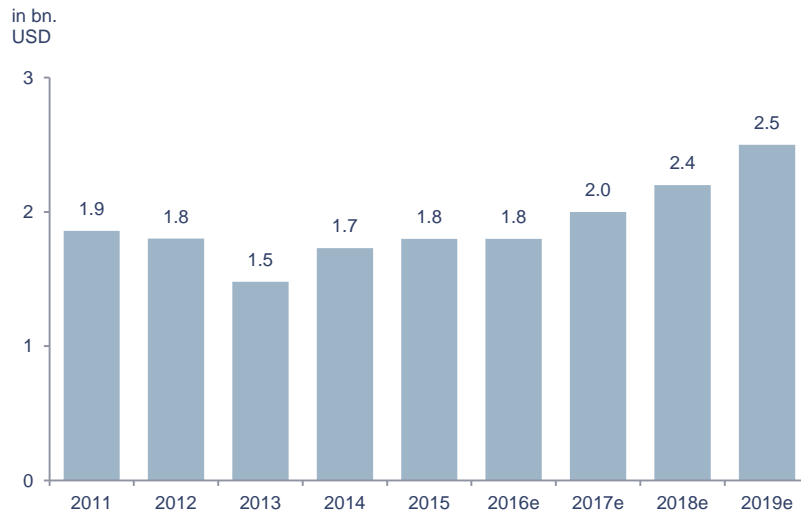
Ord. Entry  
Sales  
EBIT  
EBIT-  
margin

## SUSS MicroTec Group\* FY 2016

Order Entry: 161.1 € million  
Sales: 177.6 € million  
EBIT: 11.1 € million  
EBIT margin: 6.3%

\* Including Others

## Wafer-level packaging (WLP) and assembly equipment



Source: Gartner, January 2017

- + Attractive growth opportunities within wafer-level packaging:
  - Fan-out WLP
  - Copper pillar
  - Bumping
- + Grow market share for core products in advanced packaging: coater/developer, UV-projection scanner and mask aligner
- + Timing of new FOWLP production line investments appears to be pushing out
- + Overall semiconductor equipment market is expected to be flat or slightly down yoy in 2016
- + Market forecasts show a return to the growth path in WLP and assembly in 2017



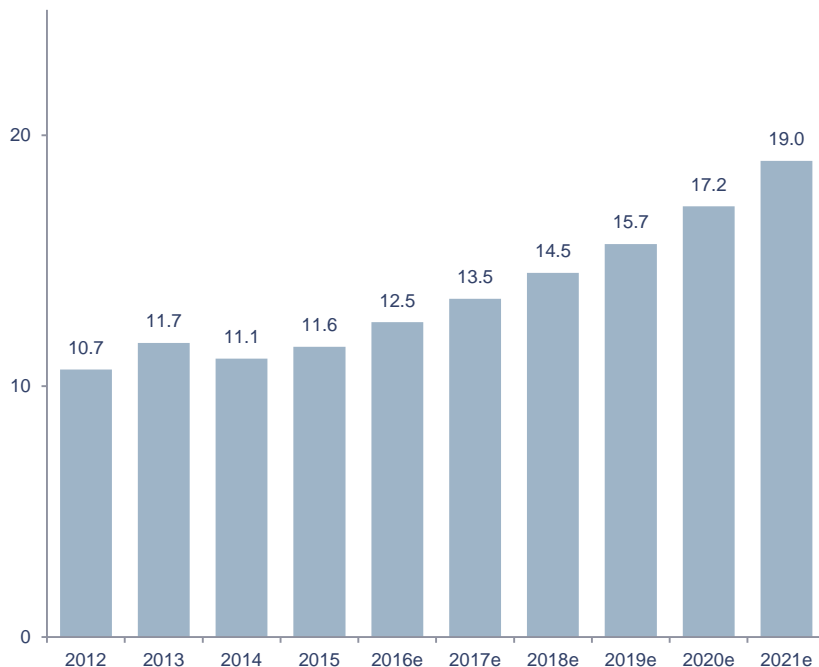
**Portable electronic products are driving component packaging towards new packaging technologies for integrating multiple functions (for instance memory and application processors)**

## **FOWLP enables:**

- + Smaller form factors**
- + Split die package or multi-die package/SiP**
- + Increased I/O density (Fine line and space (L/S))**
- + Die fabrication from different technology nodes can be assembled in a single package**
- + Excellent electrical and thermal as well as high temperature warpage performance**

## MEMS market

in bn.  
USD

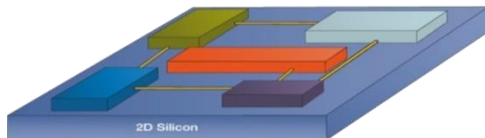


Source: Yole 2016

- + Internet of Things (IoT)
- + Smartphones and tablets
- + Automotive applications
- + Health/biomedical applications
- + Grow market share for core products for MEMS: coater/developer, mask aligner, substrate bonder
- + Market re-entry permanent bonder with new differentiated product

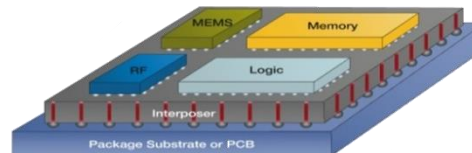
## 2D Packaging

- Increased performance and complexity of ICs by shrinking transistor geometry according to Moore's Law
- New technologies like EUV and multiple patterning drive further scaling
- Technical challenges and limitations make it increasingly more difficult and expensive to reduce the feature size



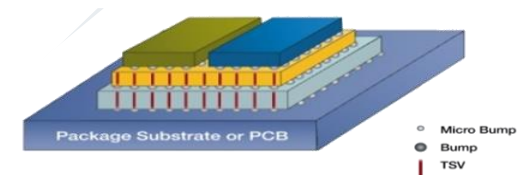
## 2.5D Packaging

- Combining of several devices on an interposer addresses the limitations of traditional shrinking while enhancing performance
- Increased packaging density
- Reduced footprint
- Packaging becomes enabler and addresses performance slow down of Moore's Law



## 3D Integration (TSV)

- Stacking of several devices horizontally enables high performance at a low footprint
- TSV and bonded thin Si technology becomes key enabler for scaling
- Performance and complexity increase combined with smaller footprint
- Reduced energy consumption



**SUSS MicroTec's equipment and process solutions enable 2D shrinking ("*Moore's Law*") and 2.5D / 3D integration ("*More than Moore*")**

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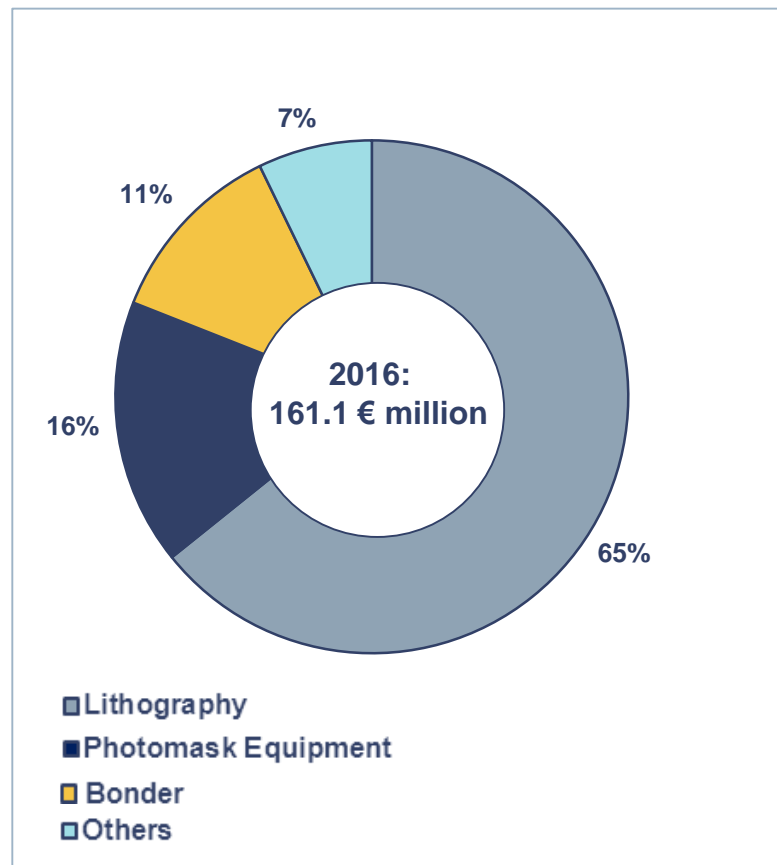
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**II.** Products & Markets

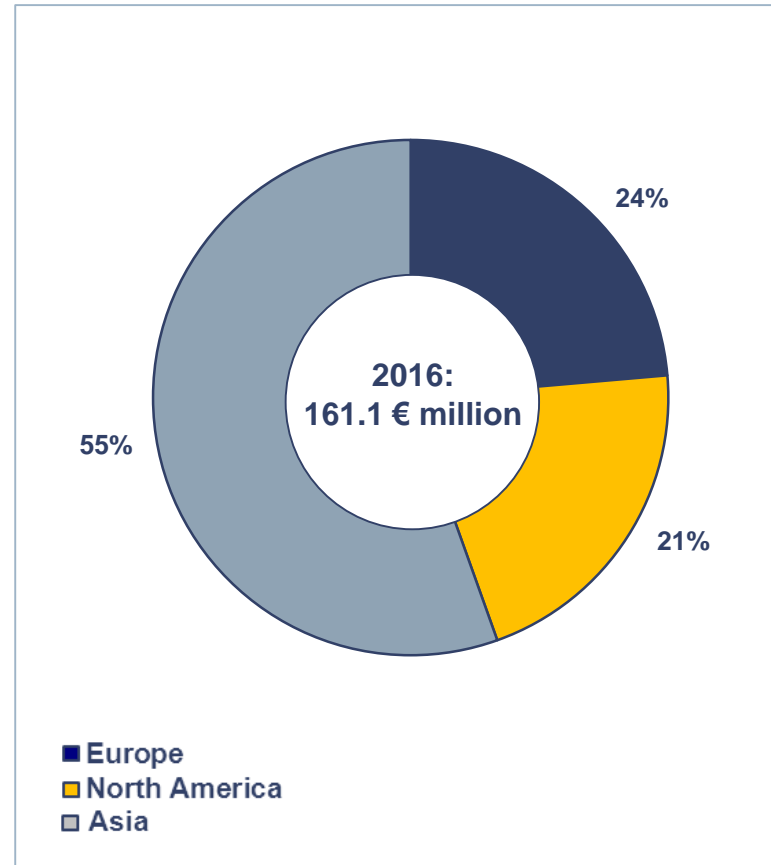
**III.** Financials

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## Order Entry by Segment



## Order Entry by Region



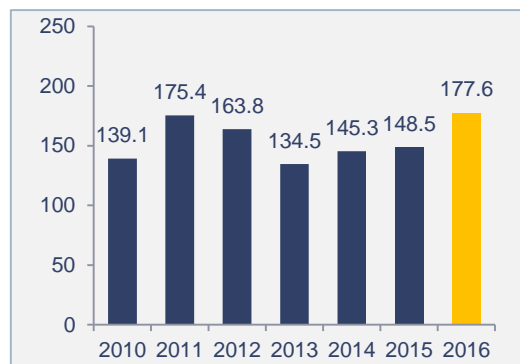


# LONG TERM BUSINESS DEVELOPMENT – P&L KEY FIGURES

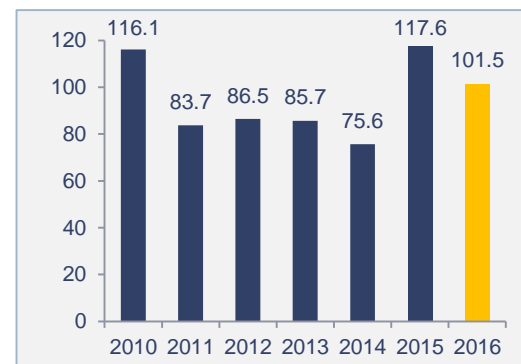
## Order Entry in € million



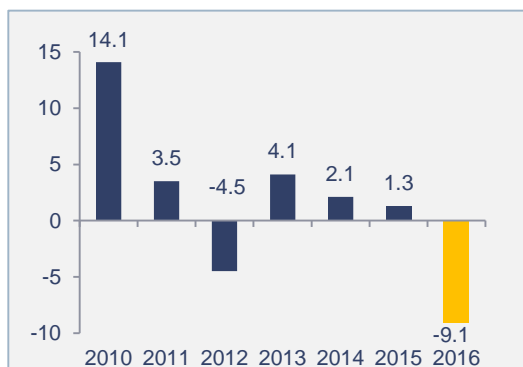
## Sales in € million



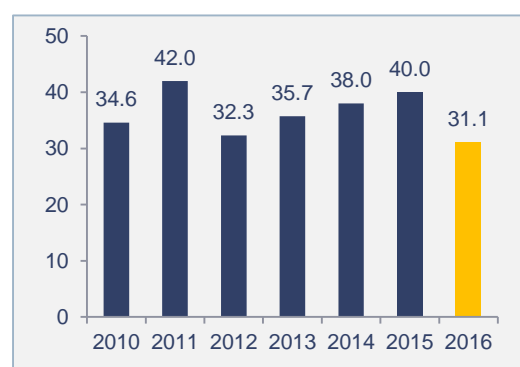
## Order Backlog in € million



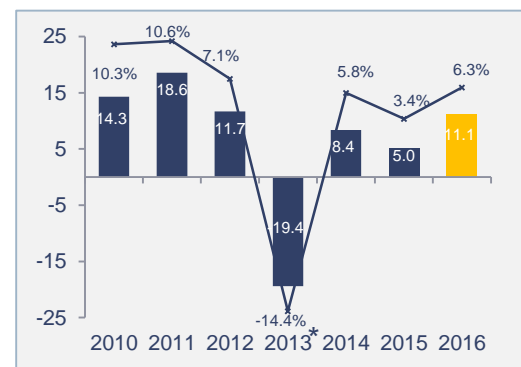
## Free Cash Flow in € million



## Net Cash in € million



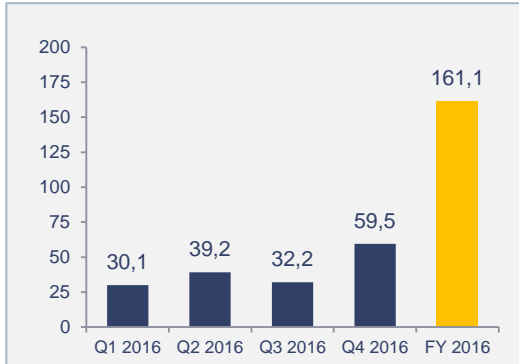
## EBIT in € million



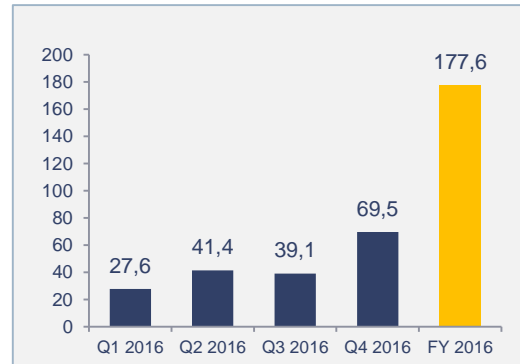
\* Including a -13.2 € million one-off effect from restructuring of the product line permanent bonding (-0,69 € per share)

# 2016 - P&L KEY FIGURES BY QUARTER

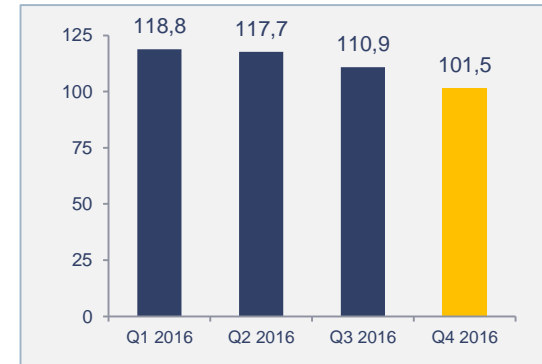
## Order Entry in € million



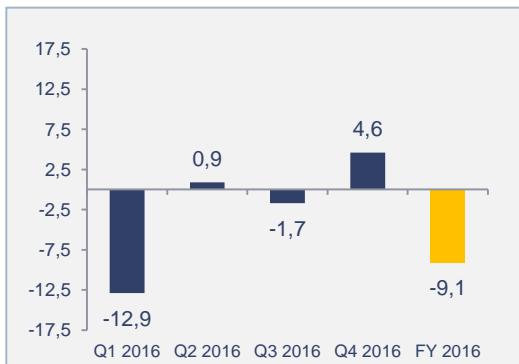
## Sales in € million



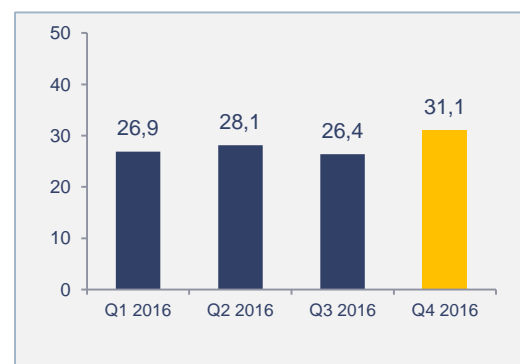
## Order Backlog in € million



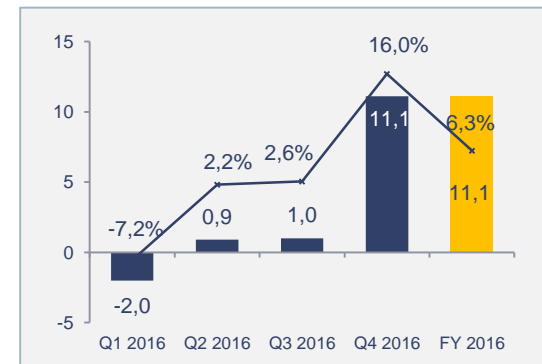
## Free Cash Flow in € million



## Net Cash in € million



## EBIT in € million



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## Short-term

- + Grow market share for core products in all market segments
- + Traction for new advanced lithography products from SUSS MicroTec Photonic Systems
- + Stabilize Company at positive EBIT and cash generation, continue revenue growth:
  - Gross margin 30-35% ✓

## Mid-term

- + Focused product portfolio
- + Positive EBIT from Bonder Division and Photonic Systems
- + Successful new adjacent market entries (leverage existing technologies to grow SAM)
- + Continue revenue growth at positive EBIT and cash generation:
  - Sales of >200M
  - Gross margin >35% ✓ (excluding Photonic Systems)
  - EBIT margin >5% ✓

## Long-term

- + Continue revenue growth at positive EBIT and cash generation:
  - Sales of >200M
  - Gross margin >35%
  - EBIT margin 10%

## Market Outlook

- + Gartner expects the semiconductor market to grow by 7.2% in 2017
- + This would mark a new record level of 364.1 bn \$ (2016: 339.7 bn \$)
- + Market growth will be driven by automotive and industrial applications, the memory segment and the Internet of Things
- + Semi expects the semiconductor equipment market to grow strongly by 9.2% in 2017
- + Wafel-level-packaging and assembly equipment market is expected to grow by 10.7% in 2017 after 3.9% in 2016 (Gartner)
- + Yole expectes MEMS-market CAGR 2015 – 2021 of 13% (unit growth)

## SUSS MicroTec Outlook

- + FY 2017:      Sales € 160 – 170 million  
                     EBIT € 9 – 13 million
- + Q1 2017:      Order entry € 35 - 45 million



A close-up photograph of a hand holding a black marker, writing the words 'Thank you!' in a cursive script on a white surface. The background of the slide features a blue, textured pattern resembling a microchip or circuit board.

Thank you!

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## Contact

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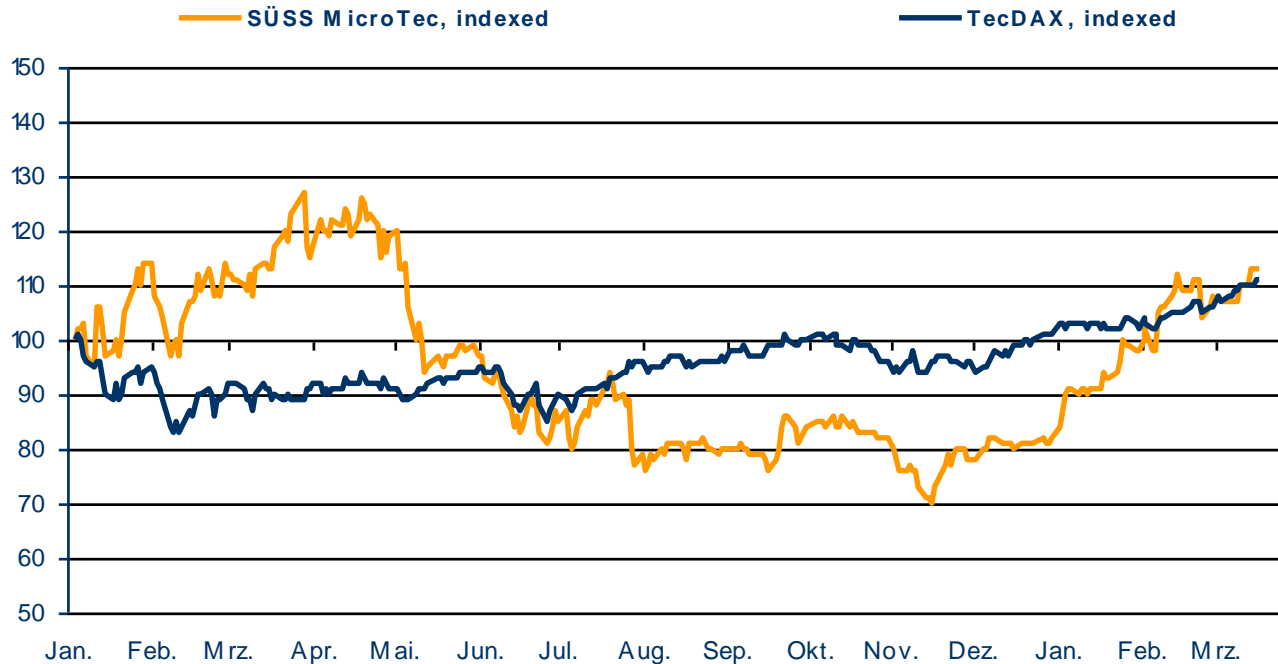
## Financial Calendar 2017

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Annual Report 2016	30 Mar
Quarterly Report 2017	4 May
Annual General Meeting 2017, Munich	31 May
Interim Report 2017	10 Aug
Nine-month Report 2017	9 Nov

# SHARE PRICE DEVELOPMENT AND MAJOR HOLDERS

(Price of the SÜSS MicroTec Share at January 2, 2016: 4.88 € )

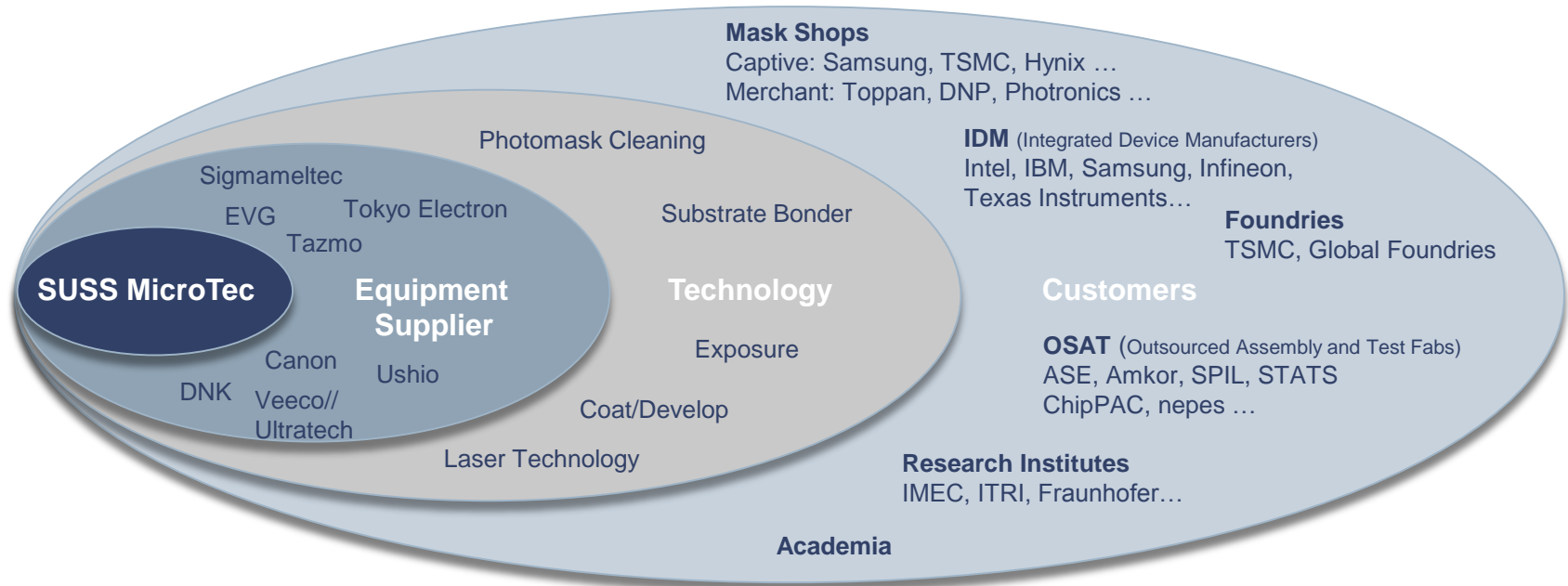


## Major Shareholders:

Sycomore	5.2%
Henderson	5.1%
Universal	5.1%
Lupus Alpha	3.2%
Dimensional	3.0%

**Average daily trading volume January 2016 – March 2017: ~ 160.000**

# MAIN COMPETITORS AND PEER GROUP



## Peer Group

### BE Semiconductor:

equipment for leadframe, substrate and WLP applications (die attach, wire-bonding, plating), target markets include electronics, computer, automotive, industrial, LED and solar energy

### Veeco/Ultratech:

steppers for the semiconductor market, advanced packaging, nanotechnology, laser processing (LSA)

### Kulicke & Soffa:

design and manufacture of equipment for semiconductor, LED and electronic assembly (wire-bonding, advanced packaging)

### Rudolph Tech:

equipment and software solutions for macro defect inspection, probe card test and analysis, thin film metrology, advanced packaging lithography systems (steppers)

### EV Group:

equipment for wafer-bonding, lithography/nanoimprint lithography (NIL), metrology, photoresist coating, cleaning and inspection for the target markets: advanced packaging, compound semiconductor and silicon-based power devices, MEMS, nanotechnology and SOI

# MAIN PRODUCTION SITES

## Germany

### Sternenfels\*

- + Development/production:
  - **Bonder**
  - **Coater and Developer**
  - **Photomask Equipment**
- + Production facility ~15,000 m<sup>2</sup>



### Garching\*

- + SUSS MicroTec HQ
- + Development/production:
  - **Mask Aligner**
  - **Bond Aligner**
- + Production facility ~9,000 m<sup>2</sup>



## USA

### Corona (California)

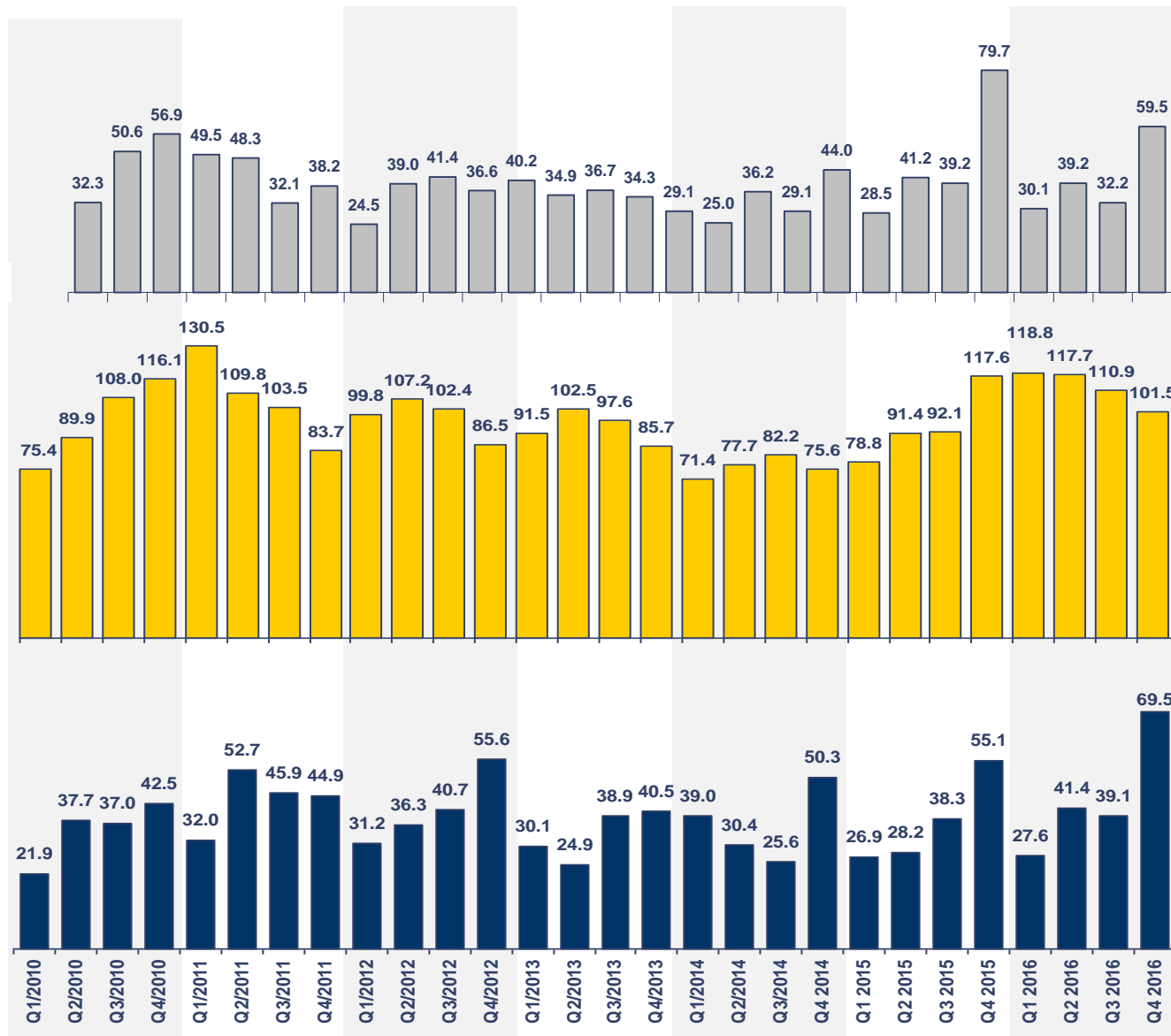
- + Development/production:
  - **Stepper/Scanner**
  - **Laser Processing**
- + Production facility ~7,000 m<sup>2</sup>



\*Production site is owned by SUSS MicroTec



# LONG TERM BUSINESS DEVELOPMENT BY QUARTER

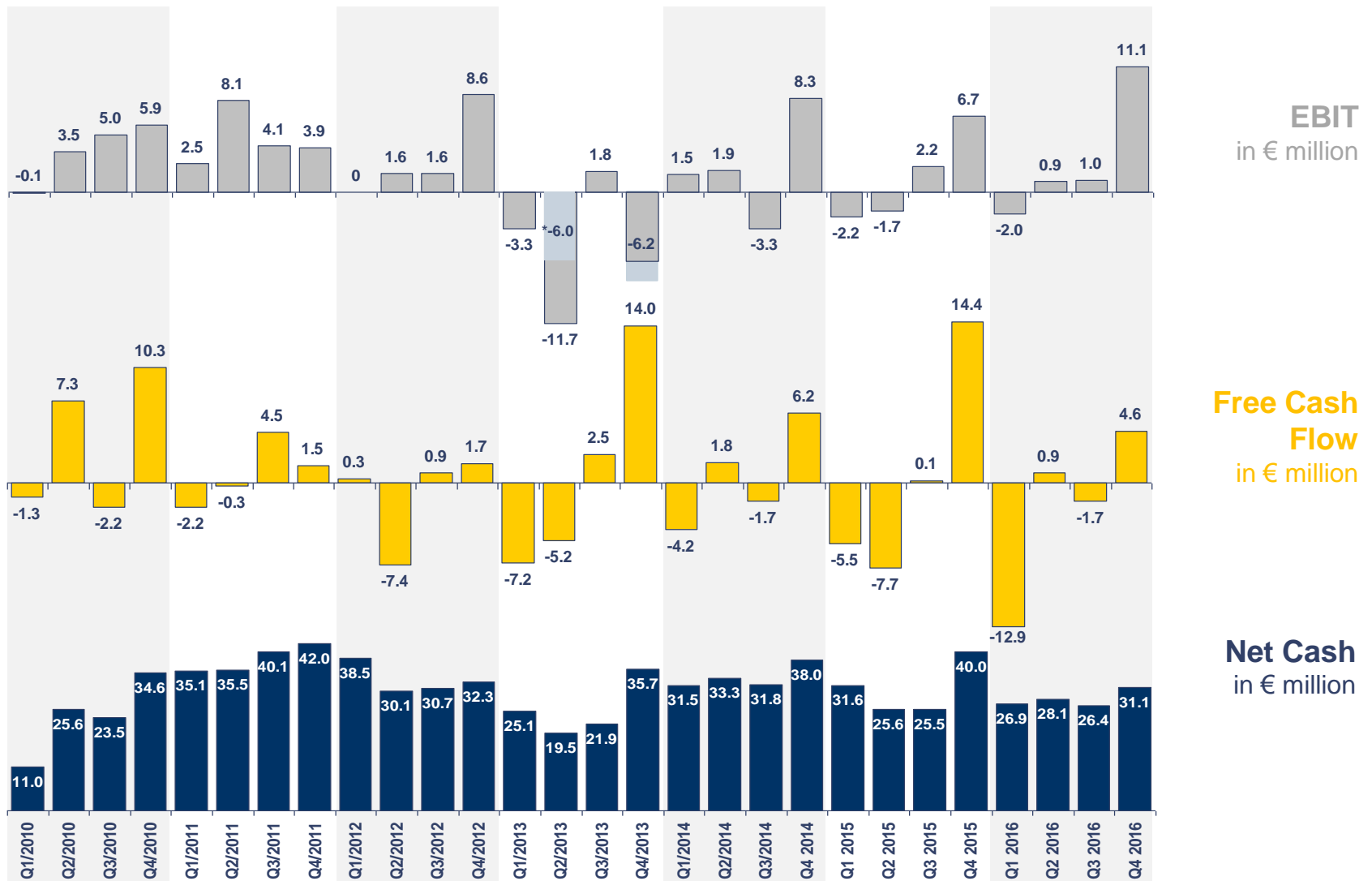


**Order Entry**  
in € million

**Order Backlog**  
in € million

**Sales**  
in € million

# EBIT, FREE CASH FLOW AND NET CASH DEVELOPMENT



\* one-off effect from restructuring the product line permanent bonding

# KEY FINANCIALS Q4 2016 AND FULL YEAR 2016

in € million	Q4 2016	Q4 2015	in %
<b>Order Intake</b>	<b>59.5</b>	<b>79.7</b>	<b>-25.3%</b>
<b>Order Backlog 12/31</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Revenue</b>	<b>69.5</b>	<b>55.1</b>	<b>26.1%</b>
<b>EBIT</b>	<b>11.1</b>	<b>6.7</b>	<b>65.7%</b>
<i>EBIT in % of Sales</i>	<i>16.0%</i>	<i>12.2%</i>	<i>3.8%pt</i>
<b>Earnings after tax</b>	<b>8.3</b>	<b>3.6</b>	<b>&gt;100%</b>
<b>EPS in €</b>	<b>0.43</b>	<b>0.19</b>	<b>&gt;100%</b>
<b>Free Cash Flow*</b>	<b>4.6</b>	<b>14.4</b>	<b>-68.0%</b>
<b>Net Cash</b>	<b>--</b>	<b>--</b>	<b>--</b>

	2016	2015	in %
	<b>161.1</b>	<b>188.6</b>	<b>-14.6%</b>
	<b>101.5</b>	<b>117.6</b>	<b>-13.7%</b>
	<b>177.6</b>	<b>148.5</b>	<b>19.6%</b>
	<b>11.1</b>	<b>5.0</b>	<b>&gt;100%</b>
	<i>6.3%</i>	<i>3.4%</i>	<i>2.9%pt</i>
	<b>5.0</b>	<b>0.2</b>	<b>&gt;100%</b>
	<b>0.26</b>	<b>0.01</b>	<b>&gt;100%</b>
	<b>-9.1</b>	<b>1.3</b>	<b>--</b>
	<b>31.1</b>	<b>40.0</b>	<b>-22.3%</b>

\* before consideration of purchased interest-bearing securities