

SUSS MICROTEC INVESTOR PRESENTATION

November 2018



DISCLAIMER

This presentation contains forward-looking statements relating to the business, financial performance and earnings of SUSS MicroTec SE 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 SE. 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 SE does not intend or accept any obligation to publish updates of these forward-looking statements.

AGENDA

- 1 Overview**
- 2 Strategy, products and markets**
- 3 Financials**
- 4 Outlook**

1 Overview

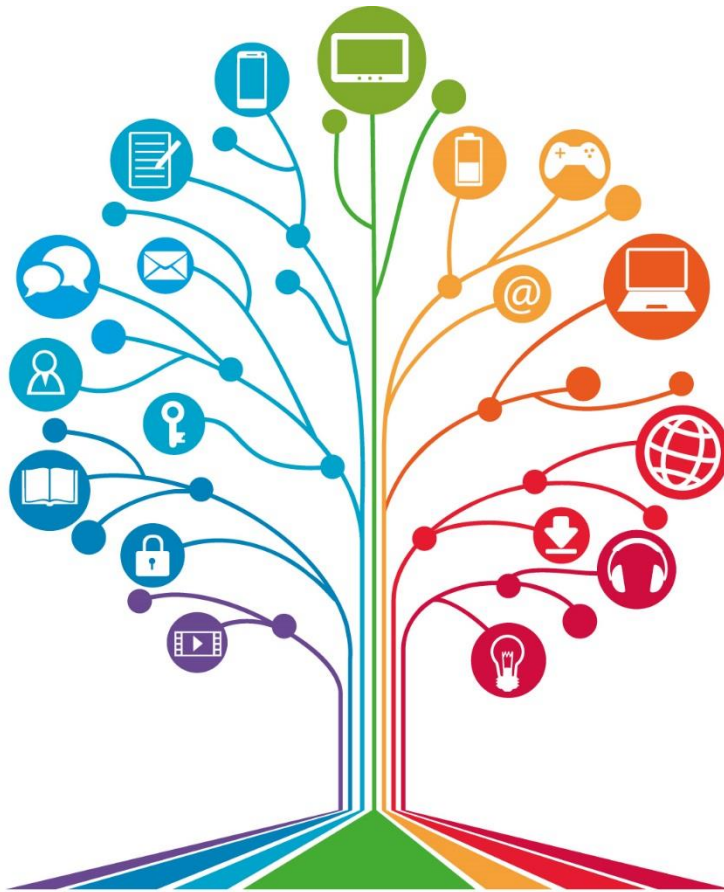
2 Strategy, products and markets

3 Financials

4 Outlook



- + Equipment provider for semiconductor and related industries
- + Semi front-, mid- and back-end, MEMS, RF, Opto, etc.
- + Tier one market players becoming major customers
- + Very demanding market environment



- + Digitization
- + Wireless Communication
- + Data Networks
- + Cloud Computing
- + Internet of Things
- + Smart Factory
- + Autonomous Driving
- + Mobility
- + Automation



SUSS MICROTEC – A GLOBAL PLAYER



MAIN PRODUCTION SITES

Germany



Sternenfels*

- + **Development/production:**
 - Bonder
 - Coater and Developer
 - Photomask Equipment
- + **Core competencies:**
 - Wet Processing
 - Wafer Bonding
 - Photomask Equipment
- + **Production facility ~15,000 m²**

Garching*

- + **SUSS MicroTec HQ**
- + **Development/production:**
 - Mask Aligner
 - Bond Aligner
- + **Core competencies:**
 - Exposure (proximity exposure)
 - Alignment
 - Bond Aligner
- + **Production facility ~9,000 m²**

Switzerland



Neuchatel (Switzerland)

- + **Core competencies:**
 - Production of micro-optical components
 - Imprint Excellence Center
- + **Production facility ~1,200 m²**
- + **2 sites for redundancy**

USA



Corona (California)

- + **Development/production:**
 - Stepper/Scanner
 - Laser Processing
- + **Core competencies:**
 - Exposure (UV projection)
 - Laser Ablation
- + **Production facility ~7,000 m²**

Taiwan



HsinChu (Taiwan)**

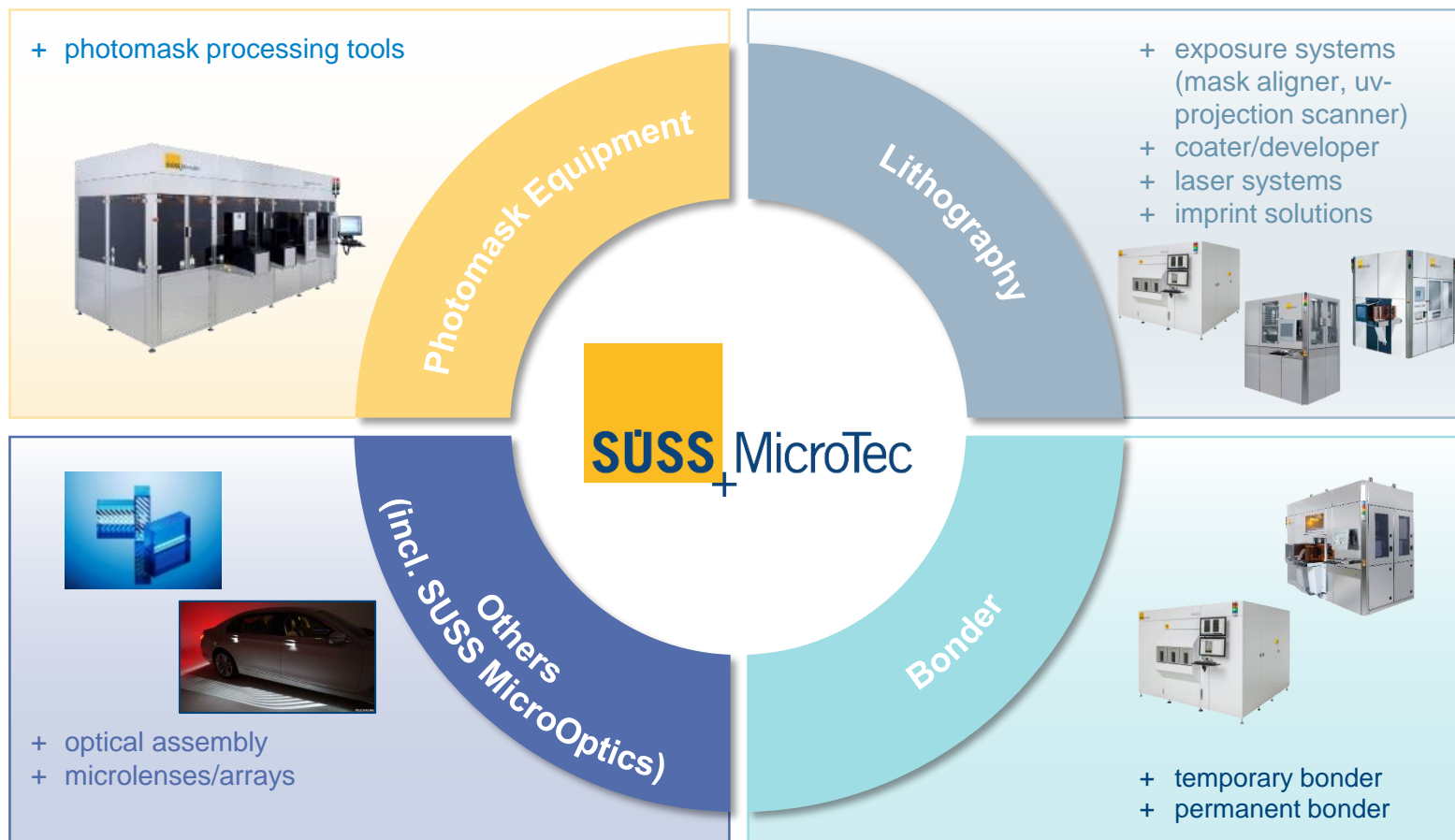
- + **Core competencies:**
 - Final Assembly Coater
 - Application
 - Show Room



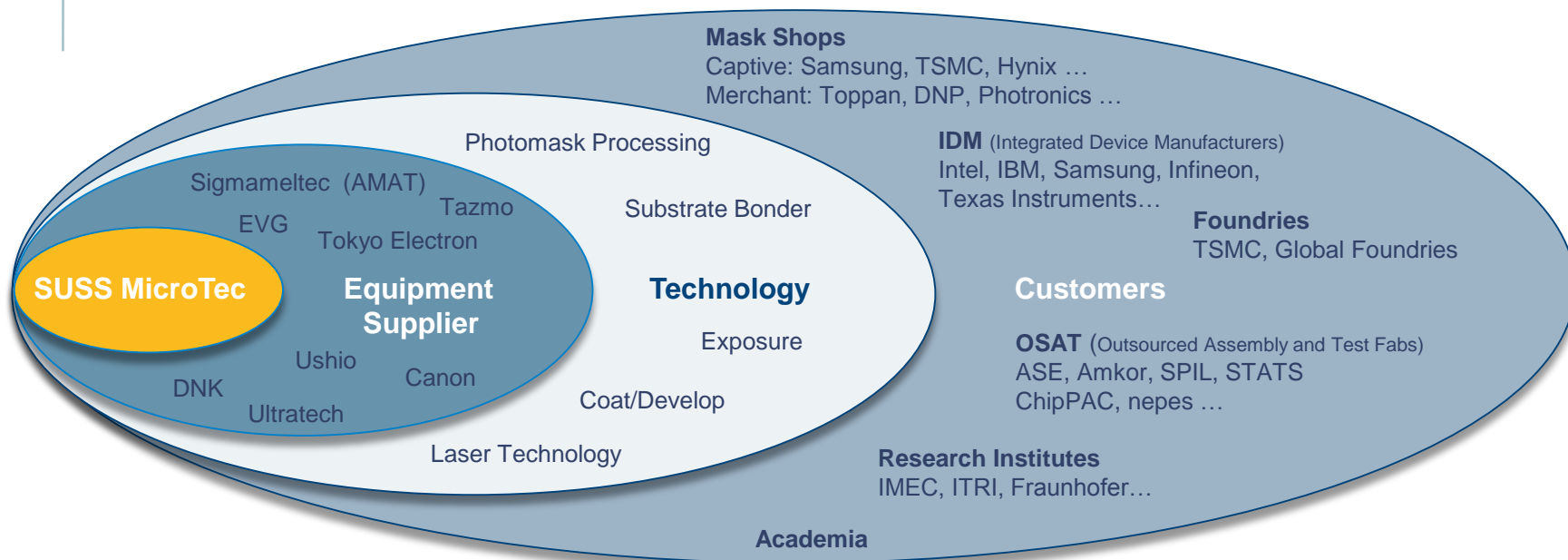
*Production site is owned by SUSS MicroTec

**planned

OUR PRODUCT PORTFOLIO



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/UTEC:

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

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MARKETS ARE CHANGING – WE RECOGNIZE AND WE REALIZE OPPORTUNITIES



- + Megatrends are driving our business: digitization, wireless communication (5G), data networks, cloud computing, IoT, smart factory, autonomous driving, mobility, AI
- + Semiconductor industry is highly innovative and very demanding
- + Processes are getting more complex – customers asking for more support
- + New business fields arise:
 - + UV – projection scanners for advanced packaging, esp. FOWLP
 - + Imprint solutions for production of optical elements
 - + SUSS MicroOptics products for the automotive industry

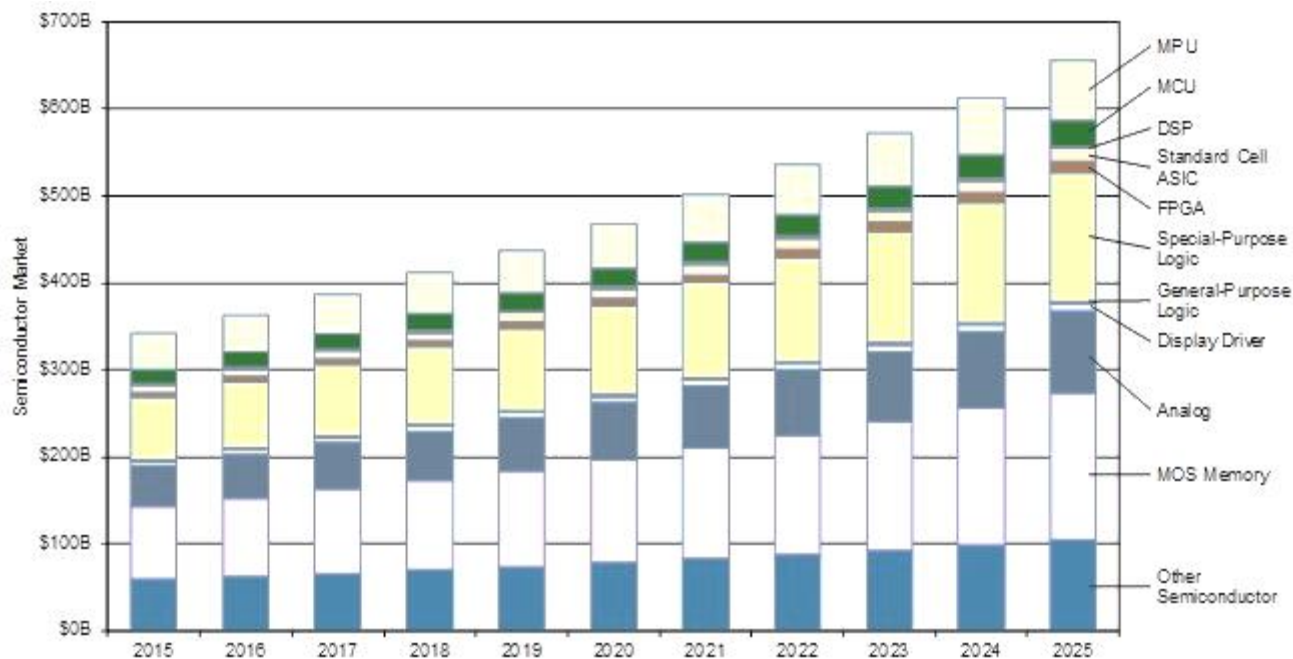
OUR KEY GROWTH DRIVERS

Market	Advanced packaging	(RF) MEMS	Chipset integration	MicroOptics
	<ul style="list-style-type: none"> - Micro-bumping - CU-pillar - Redistribution layer (RDL) - FOWLP 	<ul style="list-style-type: none"> - SAW/BAW filters for 5G standard - Autonomous driving - Mobile devices - Smart factory 	<ul style="list-style-type: none"> - 3D TSV - 2.5D integration 	<ul style="list-style-type: none"> - Automotive light carpet - Optical assembly - Wafer level optics

SUSS Products	- Coater/developer - UV - scanner	- Coater/developer - UV - scanner	- Temporary bonder - Coater/developer	- Mask Aligner platform for imprint solutions/ lens stacking
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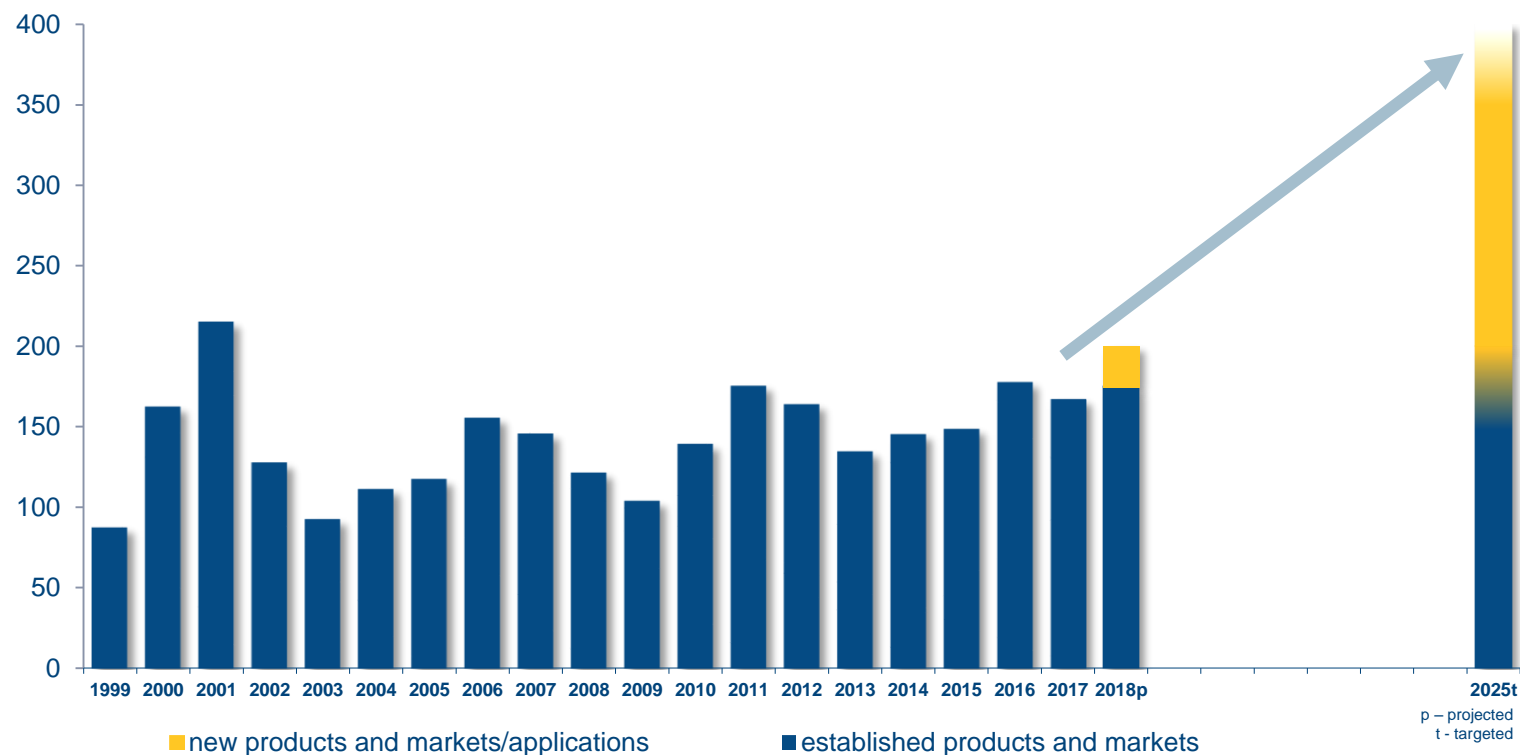
SEMICONDUCTOR MARKET LONG TERM OUTLOOK



The global semiconductor market will be \$656B in 2025 compared to \$343B in 2015 with a CAGR of 6.7%*

SEMICONDUCTOR MARKET OUTLOOK = SUSS POTENTIAL

Sales
in € million



Based on the favorable market trends and our targeted market share gains, we should be able to show sustainable growth of sales over the years to come, always keeping in mind, that the business will remain cyclical

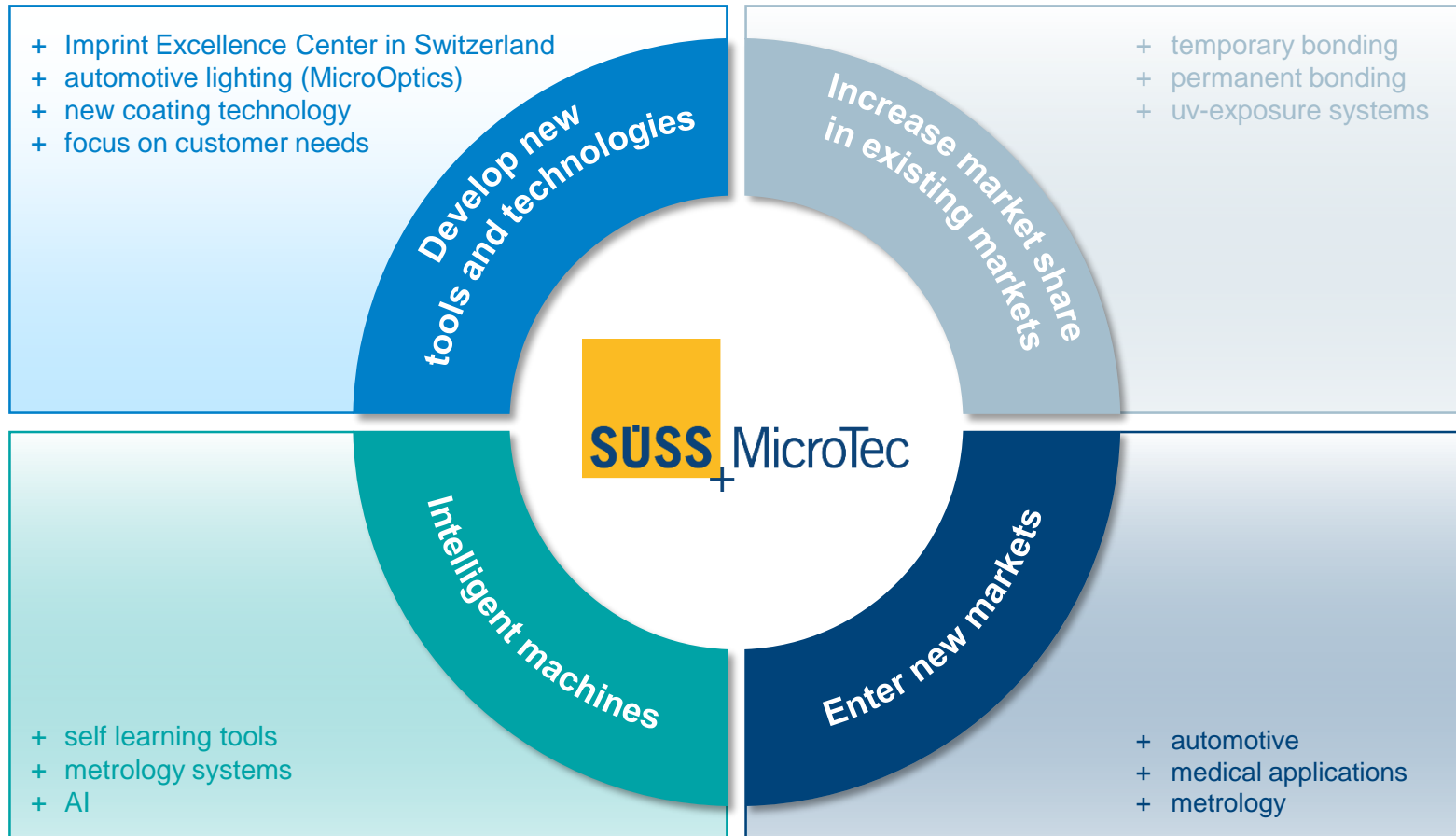
*This chart contains forward-looking targets relating to the business and financial performance of SUSS MicroTec SE. These statements are based on current estimates, projections and expectations and are therefore subject to risks and uncertainties, most of which are difficult to estimate. Consequently, actual developments as well as performance may differ materially from those which is explicitly or implicitly assumed in this graphic.

SUSS 2025 – DOUBLE OUR SALES VOLUME

- + **Customer satisfaction is our highest priority**
- + **Convince as solutions provider**
- + **Enter new business fields**
- + **Establish co-operations with leading semiconductor suppliers**
- + **Develop / acquire new technologies to improve our core products**
- + **Increase production capacity by outsourcing**
- + **Establish a production site for final assembly in Asia**



BUILDING BLOCKS OF OUR STRATEGY



BUILDING BLOCKS OF OUR STRATEGY - BONDER



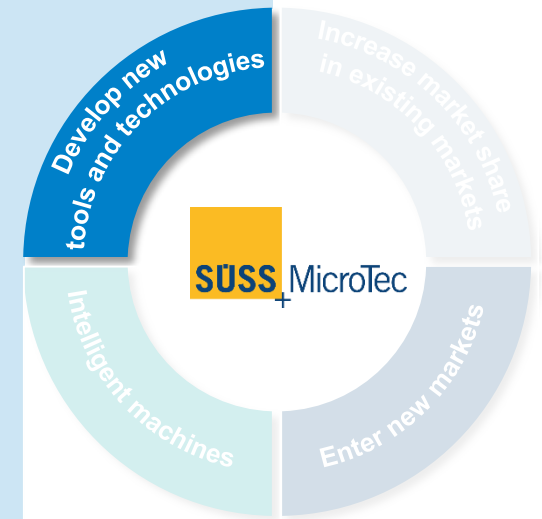
- + **Maintain and expand market position in temporary bonding**
- + **Penetrate into MEMS applications with permanent bond systems**
- + **Self learning machines and adaptive process improvements**
- + **Completion of 200mm permanent bond platform with scaling to 300mm possible**



XBS200
permanent bonding system

BUILDING BLOCKS OF OUR STRATEGY - COATER

- + Maintain market share at existing customers
- + Mid-term: increase market share in AdP and MEMS via new coating technology with improved cost of ownership
- + Self learning and -improving machines
- + Cost reduction (e.g. via outsourcing)
- + Longer-term: enter new application fields with new coating technology



ACS200 Gen3
coater / developer

BUILDING BLOCKS OF OUR STRATEGY - SCANNER

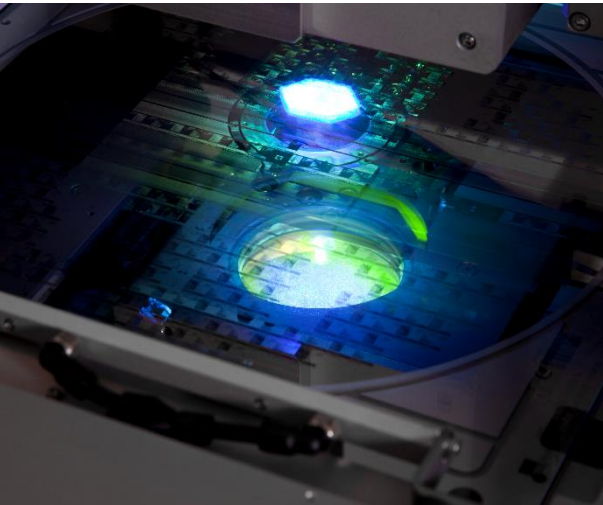


- + **Successful delivery of upgrade kit to lead customer**
- + **Evaluation tool placed at this customer**
- + **Move into volume production with lead customer**
- + **Establish a strong market position in uv-projection exposure**



DSC300 Gen3
UV-projection scanner

UV – PROJECTION SCANNER



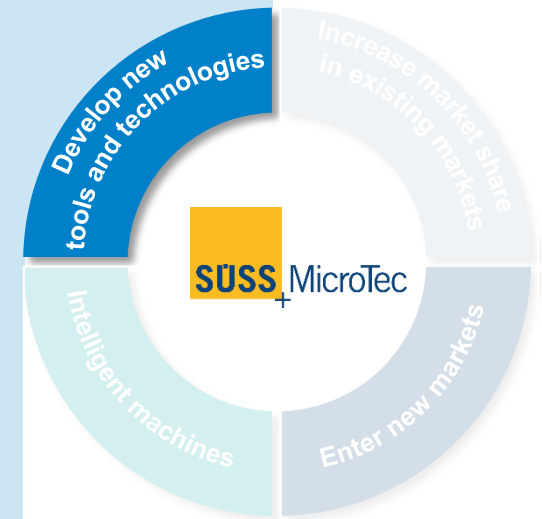
- + Target markets: advanced packaging (FOWLP, Cu-pillar...)
- + Package sizes are increasing (package size gets larger than step field of conventional 1x stepper)
- + Scanner is ideal exposure tool to address large package sizes
- + High resolution and overlay
- + Throughput of our DSC300 Gen3 increased considerably
- + Excellent cost of ownership



Our UV – projection scanner is THE tool to address next generation exposure requirements

BUILDING BLOCKS OF OUR STRATEGY – HIGH VOLUME IMPRINT ON BASIS OF OUR MASK ALIGNER

- + Establish an Imprint Excellence Center in Switzerland
- + Utilize our mask aligner platform to offer imprint processes and solutions
- + High quality and low volume production



BUILDING BLOCKS OF OUR STRATEGY - MICROOPTICS



- + Enter automotive market for lighting solutions
- + Automotive qualification obtained in 2018
- + First orders for light carpet have been placed
- + Other automotive lighting solutions are possible



AGENDA

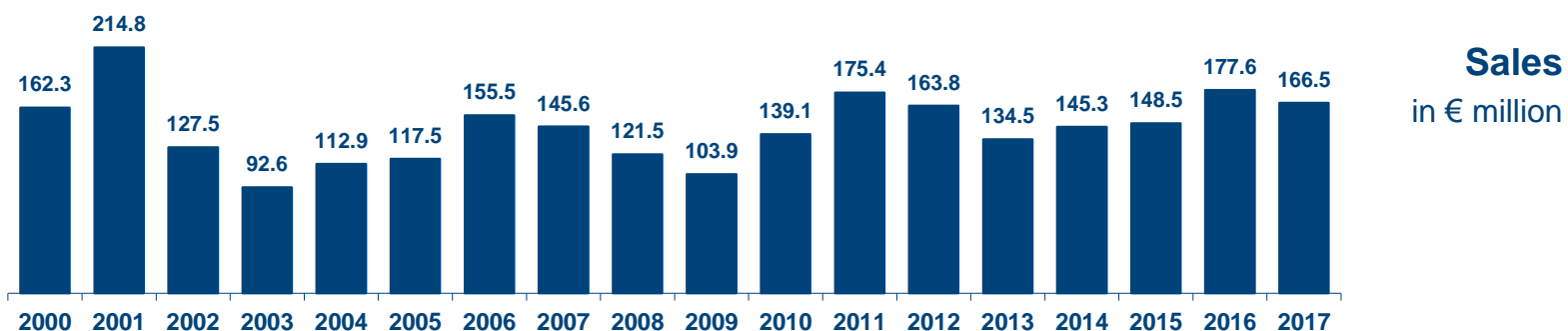
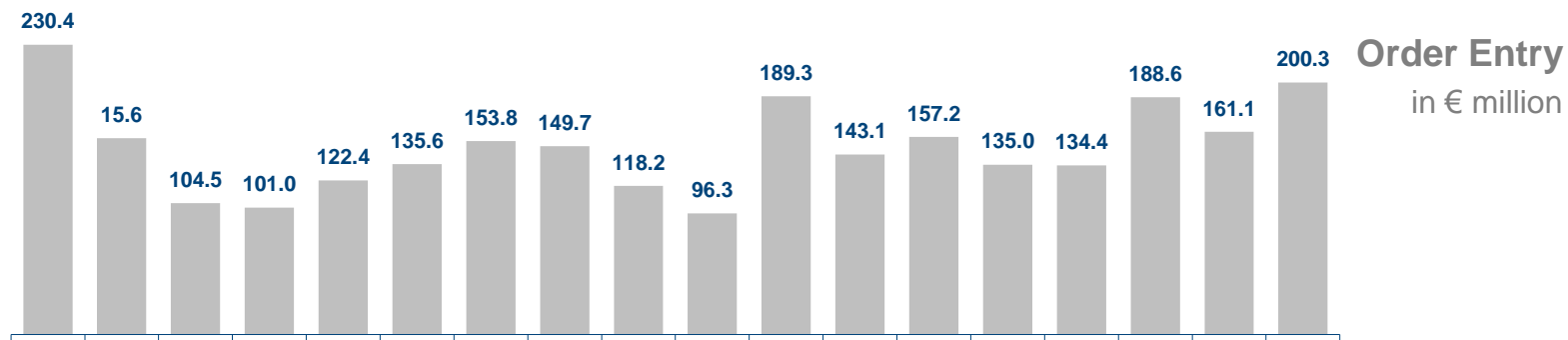
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KEY GROUP FIGURES 9M 2018

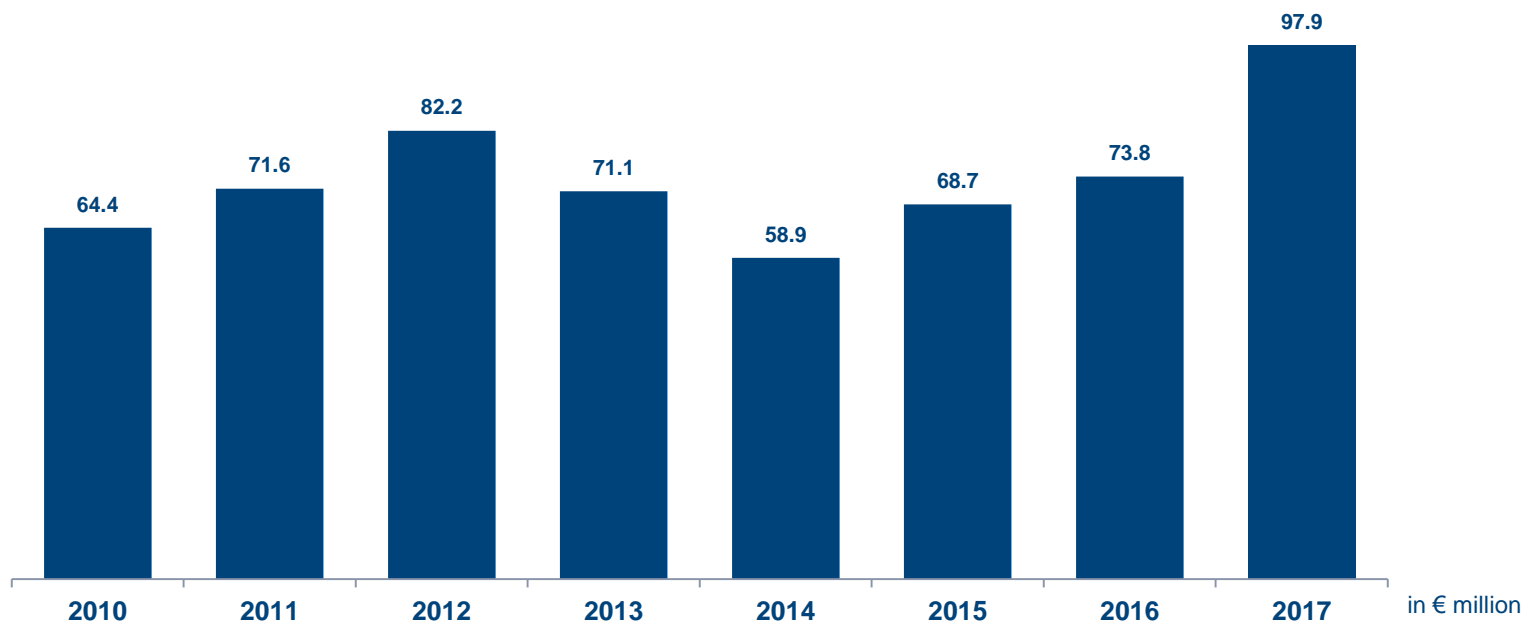
in € million	Q3 2018	Q3 2017	delta 9M 2018/ 9M 2017	9M 2018	9M 2017	in %
Order Intake	47.0	36.9	+27.4%	125.2	131.4	-4.7%
Order Backlog 9/30	--	--	--	119.5	117.7	1.5%
Revenue	41.9	47.1	-11.0%	139.3	113.4	22.8%
EBIT	-0.7	7.0	--	6.9	8.6	-19.8%
<i>EBIT in % of Sales</i>	<i>-1.7%</i>	<i>14.9%</i>	<i>-16.5%pts</i>	<i>5.0%</i>	<i>7.6%</i>	<i>-2.6%pts</i>
adjusted EBIT*	-0.1	5.0	--	7.5	6.6	-13.6%
<i>adj. EBIT in % of Sales</i>	<i>-0.02%</i>	<i>10.6%</i>	<i>--</i>	<i>5.4%</i>	<i>5.8%</i>	<i>-0.4%pts</i>
Earnings after tax	-0.8	4.5	--	3.4	3.8	-10.5%
EPS in €	-0.04	0.24	--	0.18	0.20	-10.0%
Free Cash Flow	-6.8	6.3	--	-22.7	0.7	--
Net Cash	--	--	--	10.4	30.9	-66.3%
Employees 9/30	--	--	--	863	762	19.6%

*one-off effect 2017: license income of € 2.0 million
one-off effect 2018: severance payment of appr. € 600 tsd.

LONG TERM BUSINESS DEVELOPMENT I

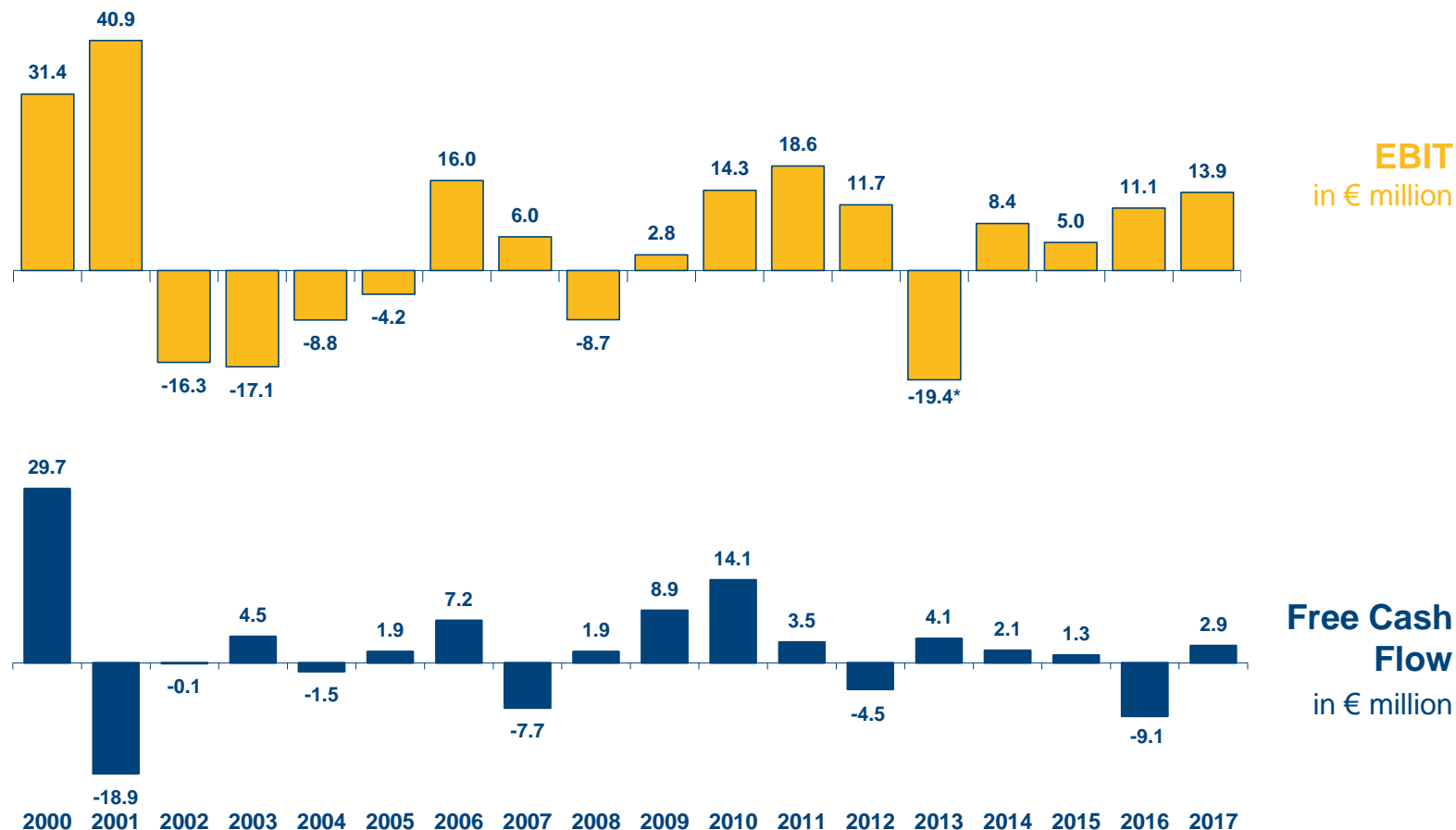


INVENTORY DEVELOPMENT



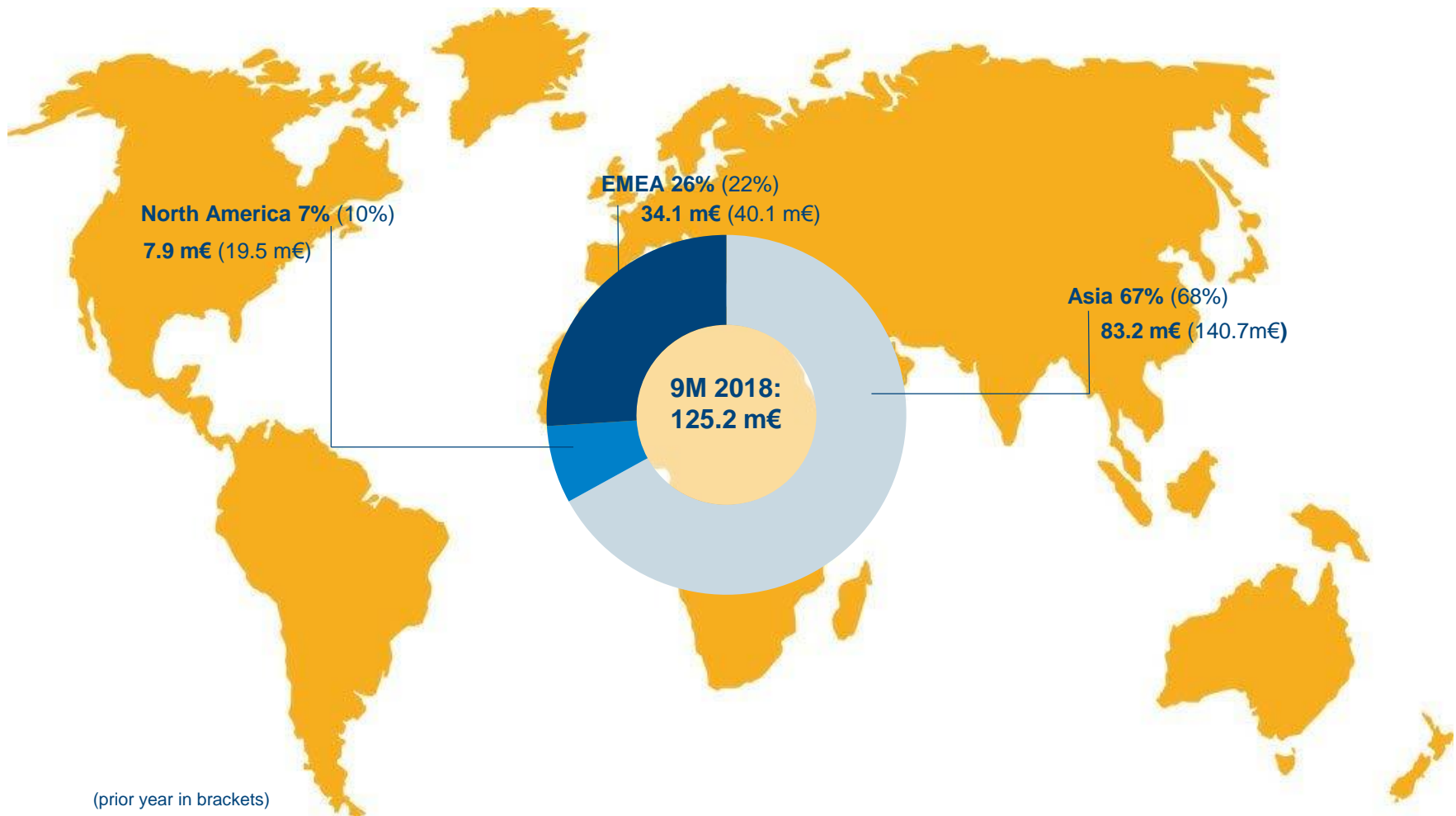
- + Inventory went up because of high order backlog
- + Increased number of valuation and demonstration tools in the field
- + Preproduction of multiple tools in order to meet challenging lead times

LONG TERM BUSINESS DEVELOPMENT II

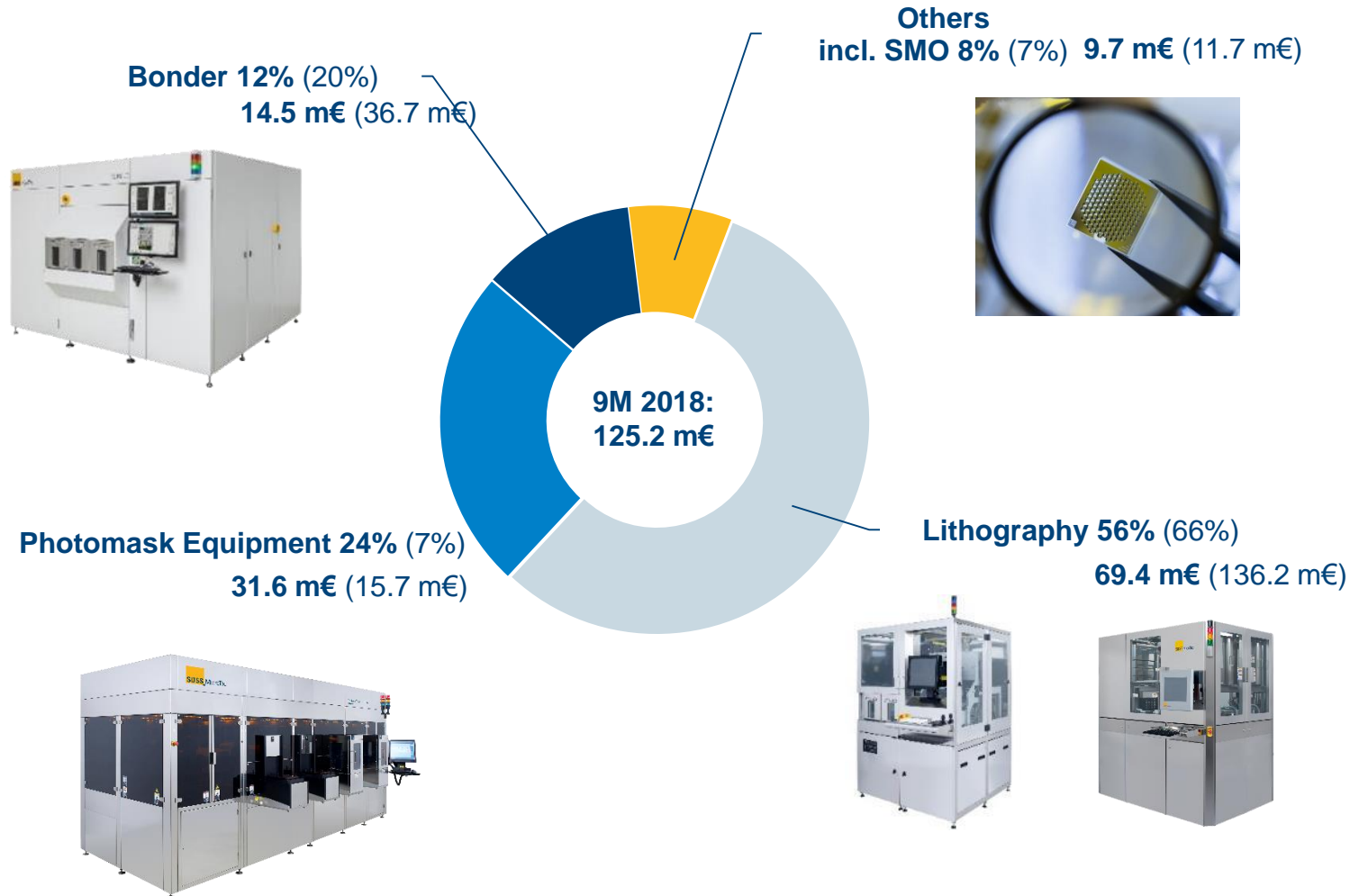


* EBIT 2013: one-off effect from restructuring the product line permanent bonding (€ -13.2 million)

ORDER ENTRY BY REGION 9M 2018 (FY2017)

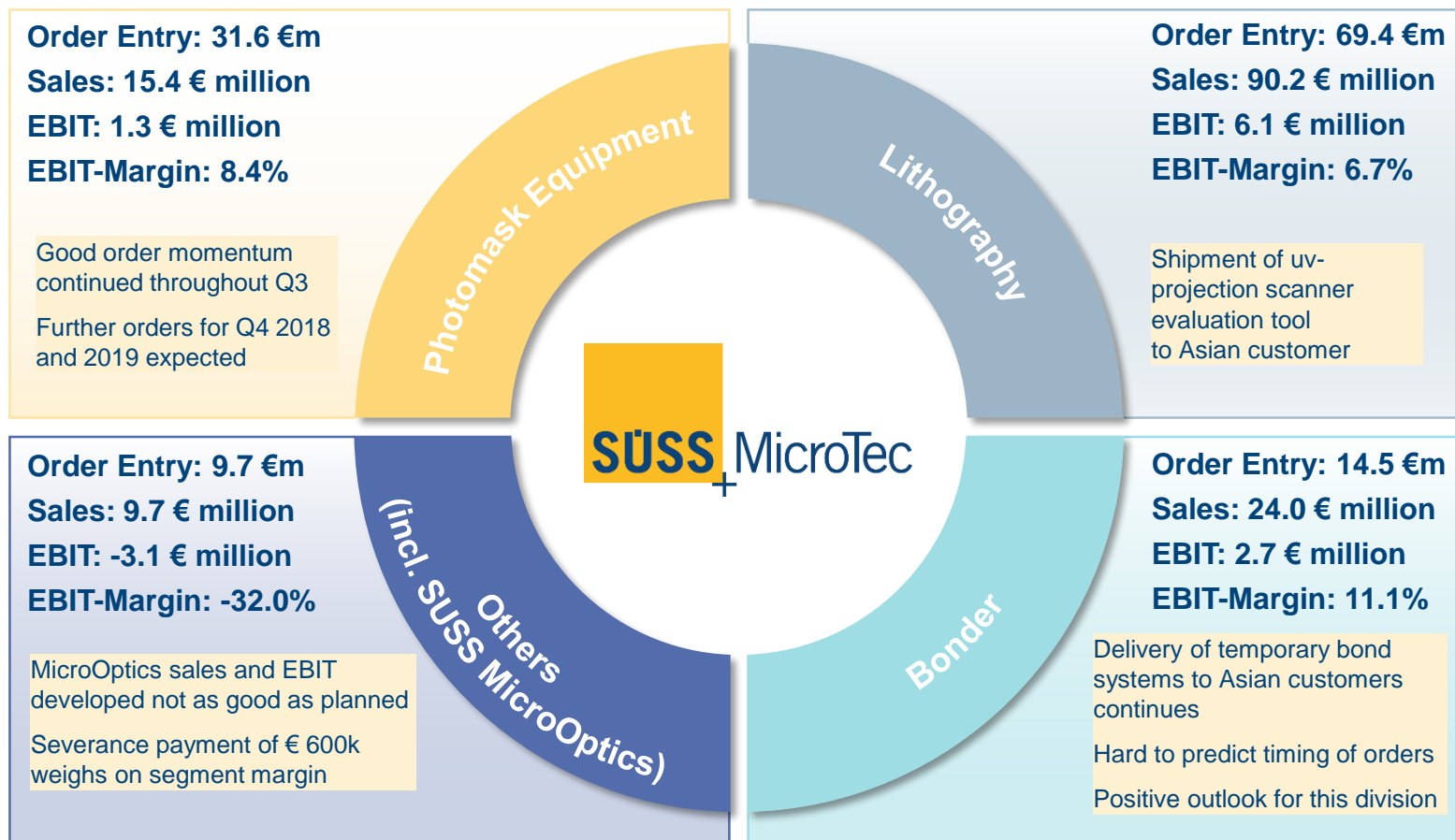


ORDER ENTRY BY SEGMENT 9M 2018 (FY 2017)



(prior year in brackets)

SEGMENTS DEVELOPMENT IN 9M 2018



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- + The semiconductor industry is amidst of a big transition and it is entering a disruptive phase where mobile and other merging mega-drivers, such as big data, 5G, high performance computing (HPC), the internet of things (IoT) as well as smart automotive and smart factory will significantly impact business dynamics and create a tremendous opportunity across the semiconductor supply chain (Yole Sep. 2018)
- + Semiconductor market + 15.8% in 2018 to a volume of USD 498 bn and + 4.4% in 2019 (Market Insight, Oct. 2018)
- + Global Fab equipment spending +14% in 2018 and + 7.5% in 2019 to a volume of USD 67.5 bn (Semi, Sep. 2018)
- + More than Moore (MtM) equipment (lithography tools and bonders) to grow by 10% annually (CAGR 2017 – 2023) to an equipment market volume of appr. USD 750 million (Yole, Oct. 2018)
- + 3D TSV and Fan-out markets are expected to grow by a CAGR of 29% and 15% respectively from 2017 – 2023 (Yole, Sep. 2018)



- + Fiscal year 2018: Sales € 195 million – € 205 million
EBIT on level of prior year (7.1% without special effect)
- + Q4 2018 + Q1 2019: Order entry of more than € 90 million



Situation:

- + Highly innovative markets
- + Megatrends support business case
- + International customers
- + Increased R&D
- + Long term growth targets

Outlook:

- + Semiconductor market growth will continue
- + IOT, digitization, AI, mobility,... are just taking off
- + Entering new business fields with established and new products
- + Imprint excellence center starts operating in Switzerland
- + More volume orders for temporary bonding systems to come
- + Position permanent bonding systems in market
- + 2019 will be the decisive year for uv-projection scanners

SUSS MICROTEC INVESTOR PRESENTATION

Back up



INVESTOR RELATIONS INFORMATION

Contact

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SÜSS MicroTec SE

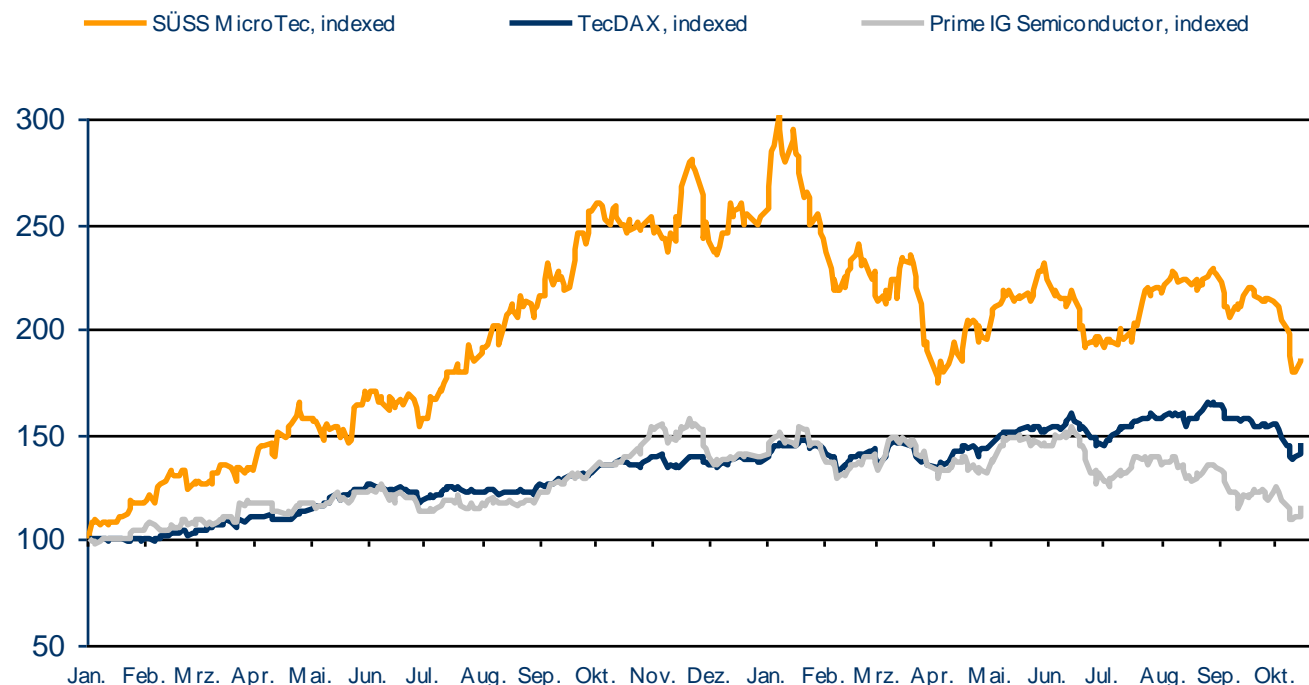
Schleissheimer Strasse 90
85748 Garching
Germany
www.suss.com

Financial Calendar 2019

Annual Report 2018	27 Mar
Quarterly Announcement 2019 (Q1)	8 May
Annual General Meeting 2019, Munich	6 Jun
Interim Report 2019	7 Aug
Quarterly Announcement 2019 (Q3)	7 Nov

SHARE PRICE DEVELOPMENT AND MAJOR HOLDERS

(Price of the SÜSS MicroTec Share at January 2, 2017: 6.54 €)



Major Shareholders > 3%:

Universal-Investment
Kempen Oranje
Luxunion
Janus Henderson Group
Internat. Kap. Anl. (INKA)
Sycomore Asset Man.
Lupus Alpha
Hansa Invest
Dimensional Funds

Average daily trading volume January 2017 – November 2018: ~ 97.000

SEGMENTS, ORDER ENTRY AND SALES FULL YEAR 2017

Segments

Photomask Equipment

Order Entry: 15.7 € million
 Sales: 19.7 € million
 EBIT: 5.1 € million
 EBIT-Margin: 25.9%
Adj. EBIT-Margin: 15.7%*
 *€ -2m licence agreement

Lithography

Order Entry: 136.2 € million
 Sales: 112.8 € million
 EBIT: 6.3 € million
 EBIT-Margin: 5.6%
Adj. EBIT-Margin: 14.5%*
 *€ +10m losses Photonic Systems

Bonder

Order Entry: 36.7 € million
 Sales: 22.1 € million
 EBIT: 3.3 € million
 EBIT-Margin: 14.9%
Adj. EBIT-Margin: 10.4%*
 *€ -1m extraordinary margin perm. bonder

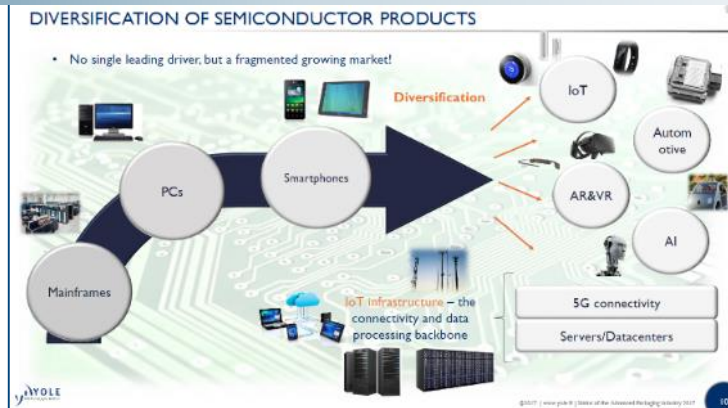
SUSS MicroTec Group FY 2017**

Order Entry: 200.3 € million
 Sales: 166.5 € million
 EBIT: 13.9 € million
 EBIT margin: 8.3%
Adj. EBIT-Margin: 12.6%

** Including Others (2017: order entry € 11.7 million, sales € 11.9 million, EBIT € -0.8 million)

OUR GROWTH DRIVERS

Advanced Packaging



RF MEMS

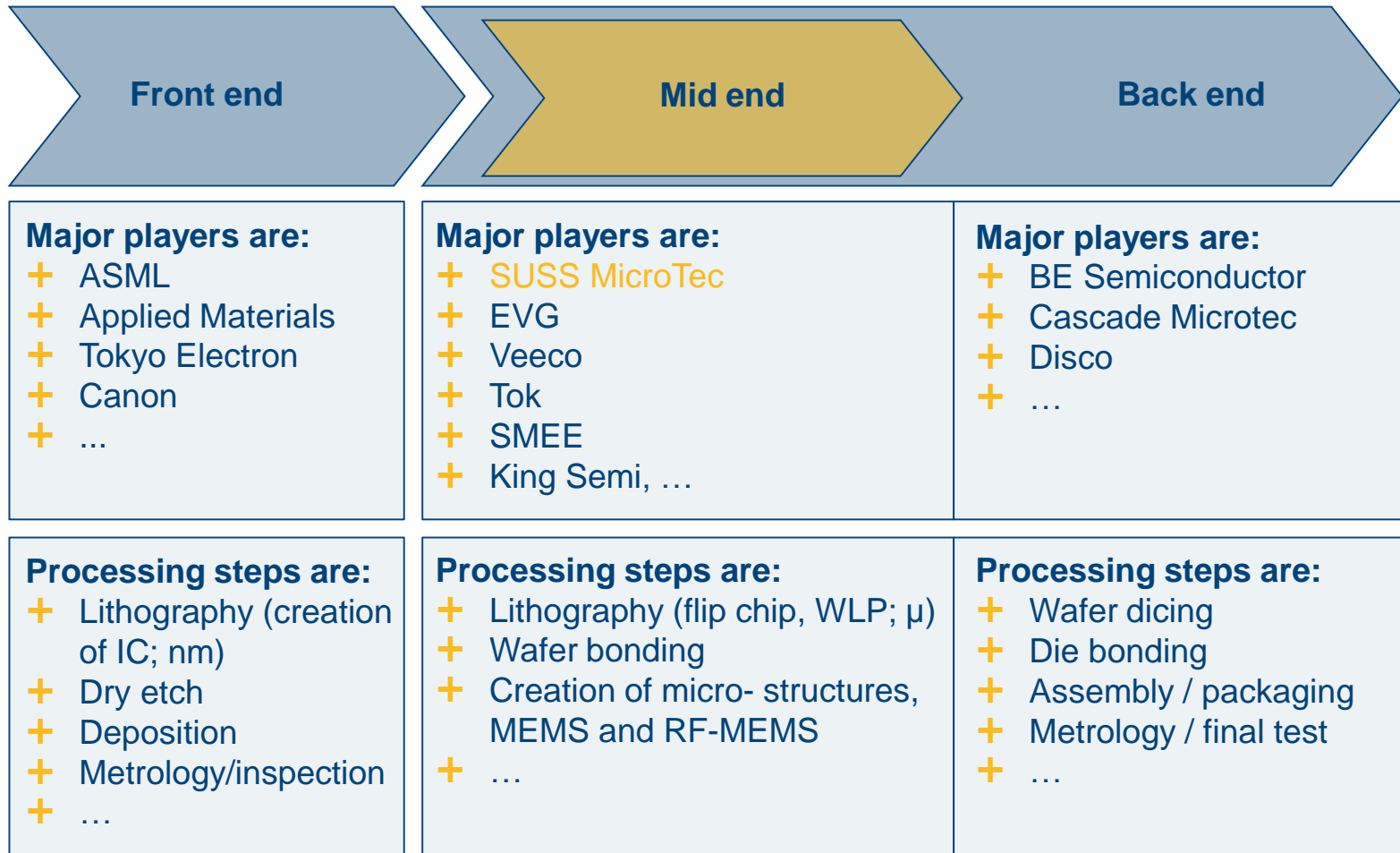


3D Packaging



FOWLP





SUSS MICROOPTICS – GROWTH DRIVER AUTOMOTIVE LIGHTING

Automotive Lighting

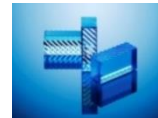
- + Light Carpet (External and internal)
- + Front Lights (LED Matrix and Laser Light)



Low volume high quality

- + LVHQ is the traditional Micro-Optics business, which addresses profitable niche markets with low growth but high margins

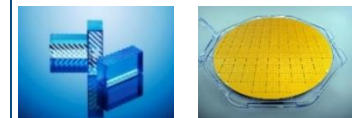
SMO products and end applications:



Microlens Array
13x13mm²



Asclepion TattooStar

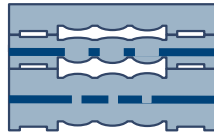
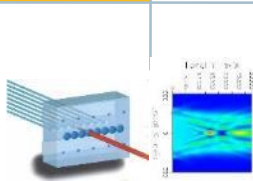


ROE + DOE
40x50mm²



ASML 193nm wafer stepper

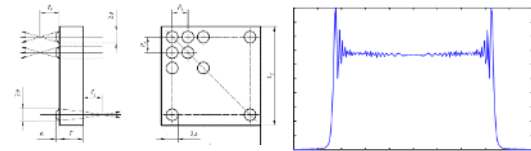
SUSS IMPRINTING EXCELLENCE CENTER CUSTOMER SERVICES @ SUSS MICROOPTICS PRODUCTION



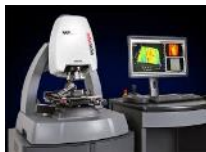
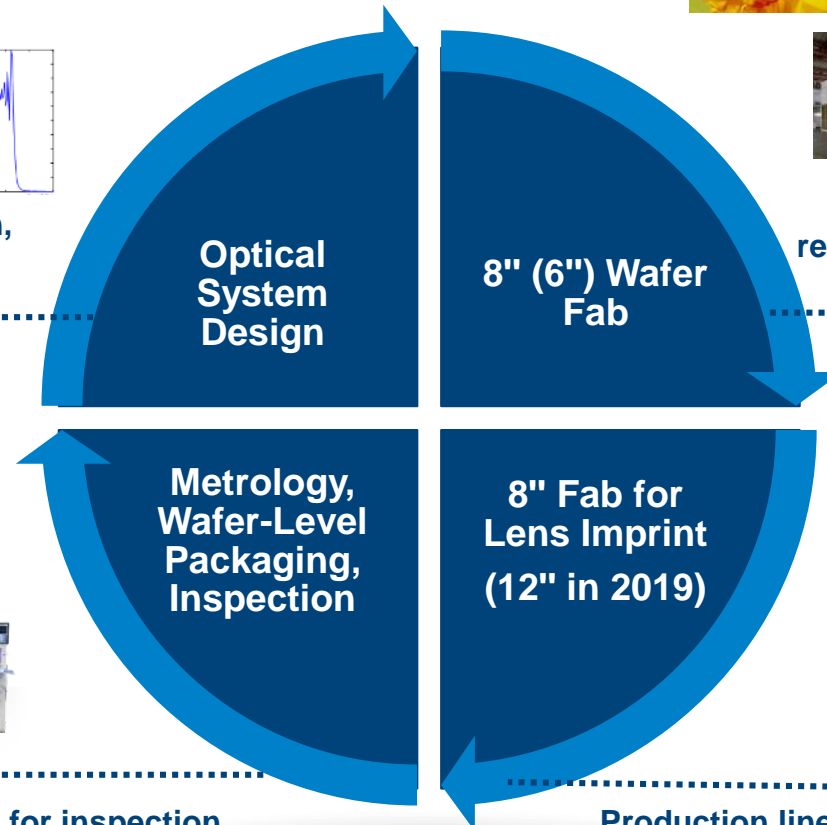
Wafer-Level Optics (WLO)
→ Aperture layers in bulk material
→ Excellent overlay control



Production line high-quality refractive & diffractive micro-optics (Fused Silica, Silicon)



Optical Design, System Design, Micro-Optics Simulation



Fully equipped metrology lab for inspection and sorting of micro-optical components. (ISO 9001, IATF 16949, Six Sigma)



Production line for micro lens imprint (Polymer), wafer-level packaging (WLP), dicing Start-Up service for SUSS customers

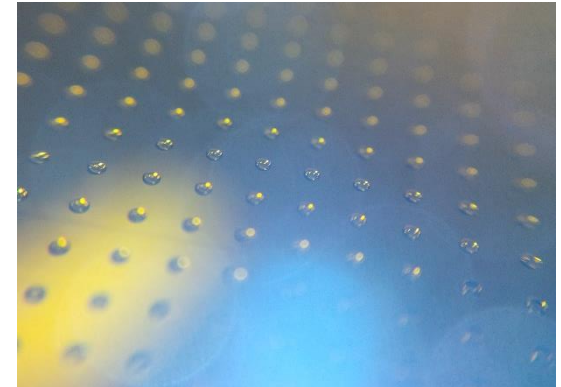
MASK ALIGNER – GROWTH DRIVER IMPRINT SOLUTIONS

The flexible imprint portfolio for

Nano – Imprint

Micro – Imprint

Optical Assembly



is covering a wide range of growing applications & markets



LED

(nano)PSS for High Brightness LEDs.



MEMS/NEMS

Nano- and micro-patterning need to be extensively adopted in device manufacturing.



Optoelectronic sensors

Optical nano-gratings are key components for the communication market worldwide.



Microoptics

Imprint is essential to fabricate micro-optical devices for wafer-level cameras and image sensors.



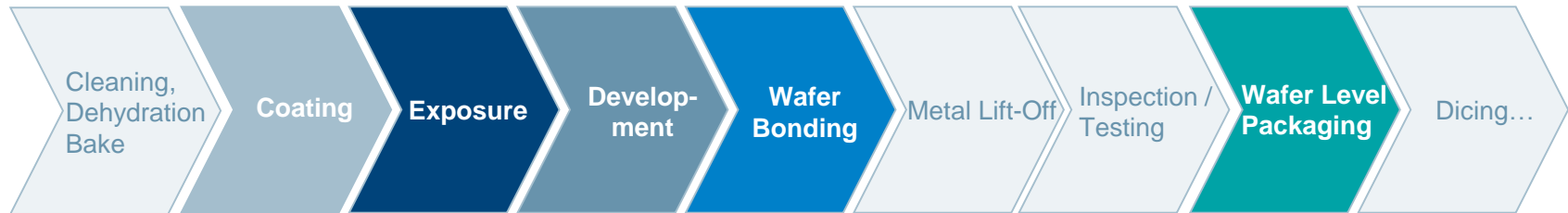
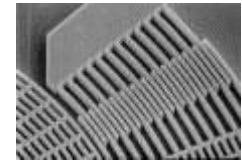
Augmented Reality

Imprinted nano-metric DOE de-fractive optical elements are required for the glasses with augmented reality

LITHOGRAPHY PROCESS STEPS: MEMS PRODUCTION



From wafer to airbag sensor



**Coater /
Developer**



**Mask
Aligner**



**Coater /
Developer**



**Wafer
Bonder**



**Coater /
Mask Aligner**