



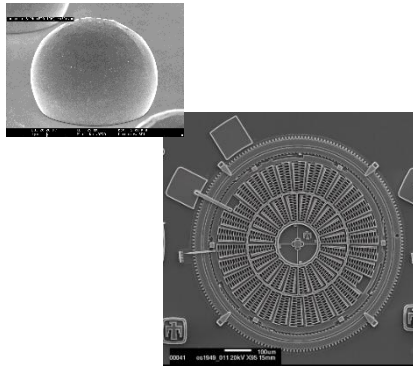
CAPITAL MARKETS DAY - STERNENFELS **- EXPOSURE SYSTEMS -**

ANDREAS NAGY, GM EXPOSURE SYSTEMS

September 13, 2018

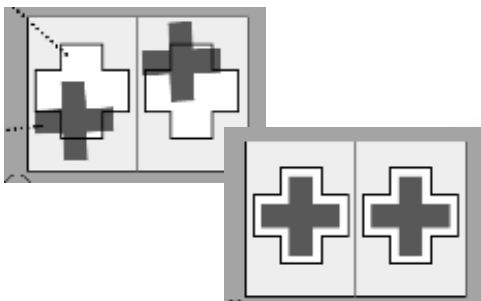
Proximity Exposure

Lithographic Wafer & Substrate Structuring
Micro-bumping, Flip Chip, MEMS ...



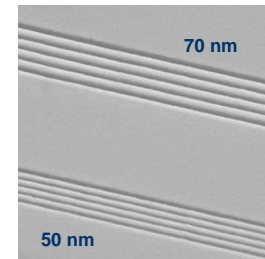
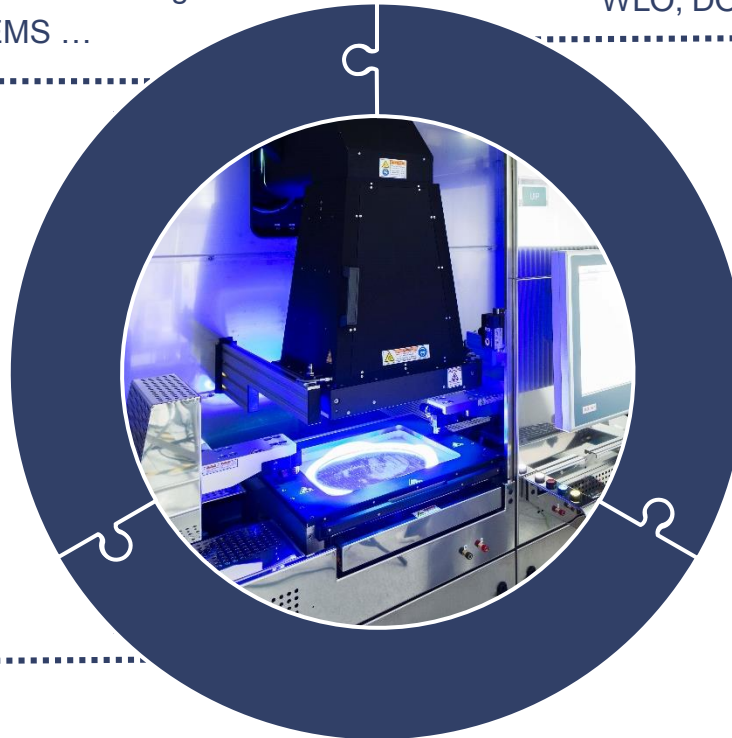
Wafer Alignment

Bond alignment
Optical assembly

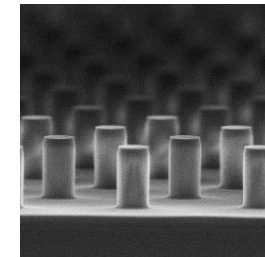


Nano-Imprint

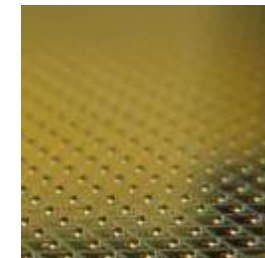
Nano- & Micro-Structuring
WLO, DOE, μ PSS, optical gratings



Highest resolution patterning for Research



Pillars structuring for (nano)PSS in HB LED



Wafer level lenses on glass substrate

MASK ALIGNER APPLICATIONS AND TARGET MARKETS

MEMS	RF	Advanced Packaging	Imprint Lithography
<ul style="list-style-type: none">• MA200• Manual & automated tools• Sensors and actuators• Automotive and mobile applications	<ul style="list-style-type: none">• MA150/200• Manual & automated tools• Frequency filter• Mobile com. / 5G IoT / smart appliances	<ul style="list-style-type: none">• MA200/300• Automated tools• Micro Bumping, RDL, Flip chip, CIS• Mobile computing	<ul style="list-style-type: none">• MA8• Manual & Semi-automated tools• Nano-structuring WLO, DOE Optical assembly• Mobile & automotive

TAILORED IMPRINT SOLUTIONS FOR EMERGING MARKETS

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.



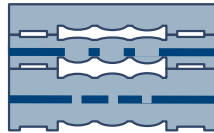
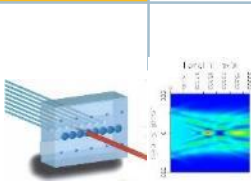
Augmented Reality

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

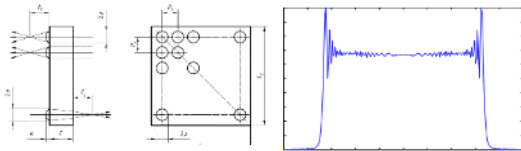
**SUSS IMPRINTING EXCELLENCE CENTER –
CUSTOMER SERVICES FROM A REAL SOLUTION SUPPLIER**



SUSS IMPRINTING EXCELLENCE CENTER CUSTOMER SERVICES @ SUSS MICROOPTICS PRODUCTION



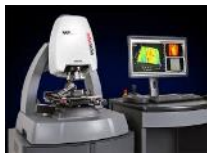
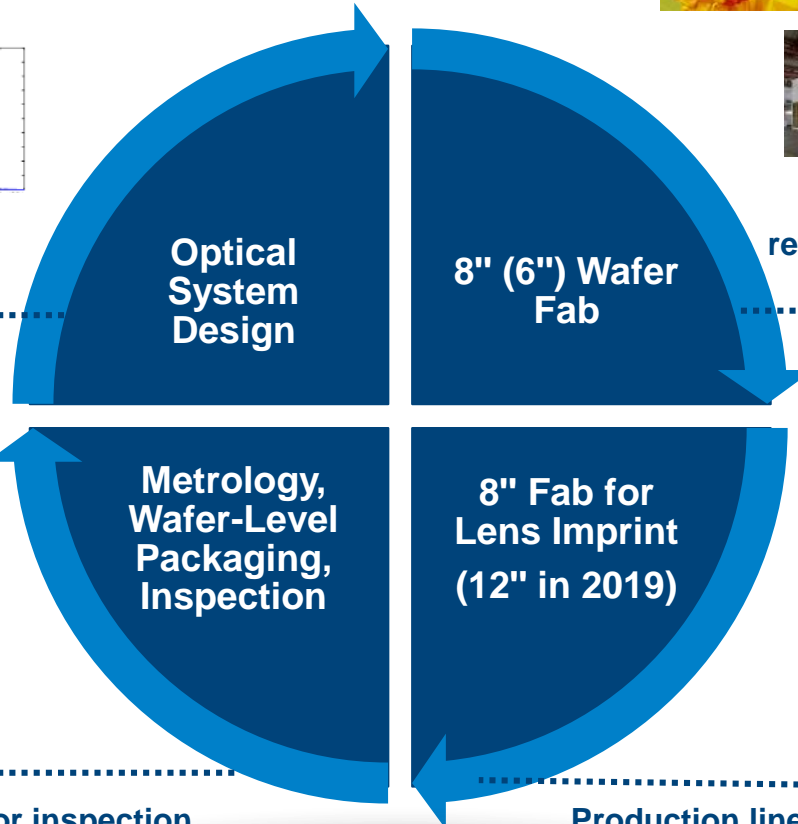
Wafer-Level Optics (WLO)
 → Aperture layers in bulk material
 → Excellent overlay control



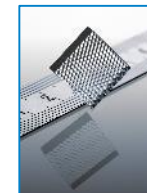
**Optical Design, System Design,
Micro-Optics Simulation**



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



**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**

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.



Thank you!

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