+ World leading supplier of high-quality Micro-Optics
+ More than 180 active customers worldwide
+ CAGR 30% for last 5 years
+ We are part of SUSS MicroTec group
PRODUCTS DEFINITIONS

+ **Microlenses or Refractive Optical Elements (ROE):** small lenses with lens diameters typically below 2 millimeters

+ **Diffractive Optical Elements (DOE):** complex pattern of micro- and nano-scale structures to transform light in a predetermined way

+ **Hybrid Micro-Optics:** combination of refractive (ROE), diffractive optical elements (DOE) and/or other microstructures, like e.g. pinhole arrays, posts, marks, …, integrated on one- or both sides of a planar substrate or wafer.

Refractive Microlens Arrays

Diffractive Optical Elements

Hybrid Micro-Optics
APPLICATIONS & MARKETS FOR PLANAR MICRO-OPTICS

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- No of Customers, Market, % of Revenue
  - 33x Fiber Coupling 30.2%
  - 10x Automotive Lighting 46.7%
  - 26x Optics Industry 2.6%
  - 17x SEMI 10.2%
  - 20x MedTech 7.9%
  - 8x Imaging 0.5%
  - 12x Metrology 0.2%
  - 12x Laser 0.6%
  - 32x R&D 0.4%

- Applications & Markets:
  - Wafer-Level Optics (WLO)
  - Laser Beam Shaping
  - Microscopes
  - Skin Treatment
  - BMW Welcome Light Carpet
  - NanEye - disposable Endoscope
  - Fiber Coupler for Telecom/Datacom
MICRO-OPTICS FOR AUTOMOTIVE LIGHTING

- Light Carpets
- Front Lights
  - LED Matrix
  - Laser Light
- Interior
- Back Lights
IMPRINT EXCELLENCE CENTER AT SMO

“You can’t supply top-notch production equipment without have a production line in place”

Optical Design, System Design, Micro-Optics Simulation

Optical System Design

8” (6”) Wafer Fab

Metrology, Wafer-Level Packaging, Inspection

8” & 12” Process Development Demos

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

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

Production Line for Microlens Imprint (Polymer), Wafer-Level Packaging, Dicing Excellence Center for SUSS Customers

Reinhard Voelkel, SUSS MicroOptics SA
Thank you!