

Focuslight Corporate Overview

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2026-01

Focuslight Overview

- Founded in 2007 by Dr. Victor X. Liu, headquartered in Xi'an, China.
- A fast-growing company that develops and manufactures:
 - **Laser sources and materials** (Photon Generation)
 - **Micro-optics** (Photon Control)
 - **Photonics module and system solutions** (Application Solutions) focusing on optical communication, consumer electronics, pan-semiconductor, automotive, and medical and health applications.
- A **global photonics foundry** offering process development and manufacturing services to the global photonics community.
- Publicly listed in the Shanghai Stock Exchange (Ticker Symbol: 688167).



Milestones


2007
Founding of Focuslight



2018
Dongguan delivery and high-volume manufacturing center officially in operation

IPO

2021
Successful IPO at Shanghai Stock Market



2024
Acquisition of ams OSRAM's optical component assets;
Relaunch of Heptagon brand



2024
Shaoguan Base officially in operation



LIMO
Lissotschenko Mikrooptik

2017
Acquisition of LIMO;
Started providing photon control and photonics application solutions

FOCUSLIGHT
Never stop exploring

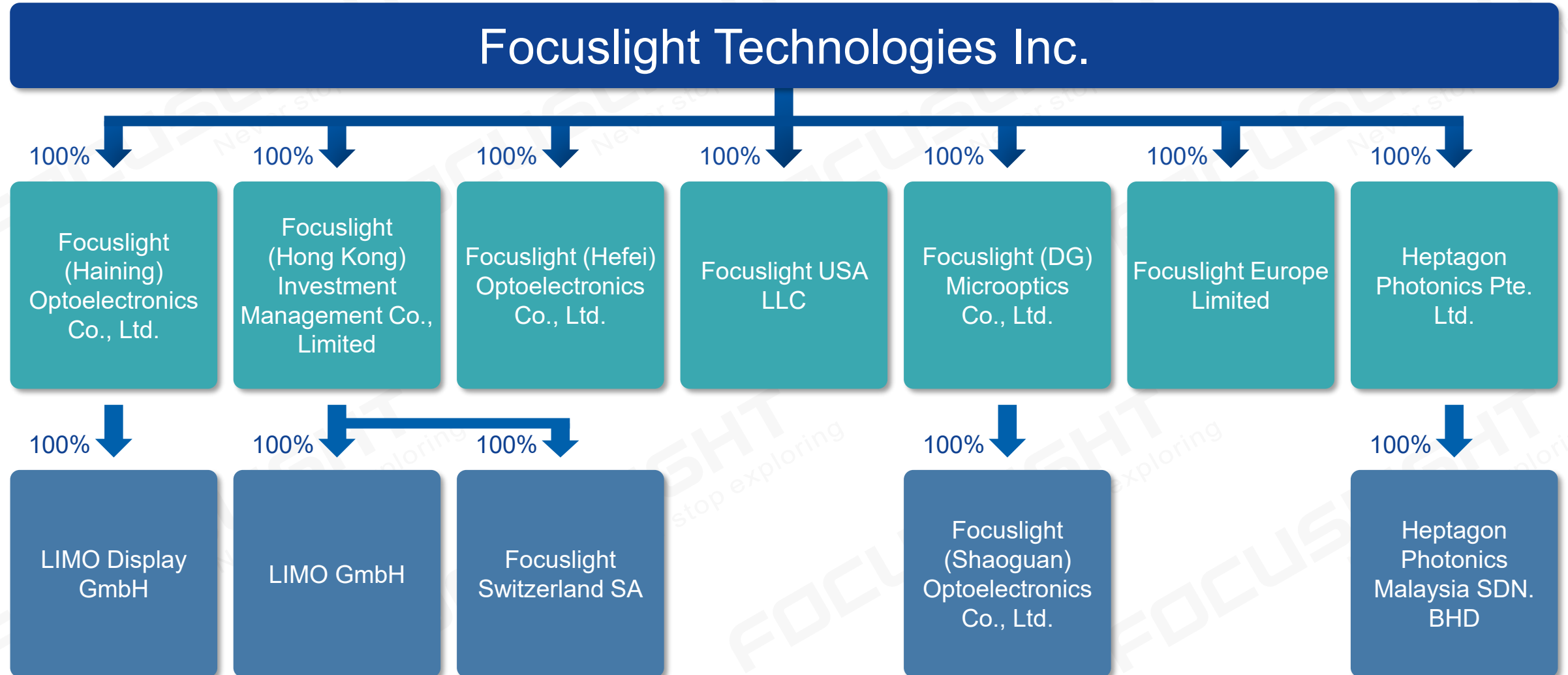
2019
Global branding identity upgrade

SUSS + MicroOptics

2024
Acquisition of SUSS MicroOptics



Focuslight Corporate and Subsidiaries



Focuslight Global Operations System



Zurich, Switzerland
R&D Office



Neuchâtel, Switzerland
Operations Center



Dortmund, Germany
Operations Center



Xi'an, China
Focuslight HQ, Operations Center



Hefei, China
Operations Center



Shaoguan, China
Operations Center



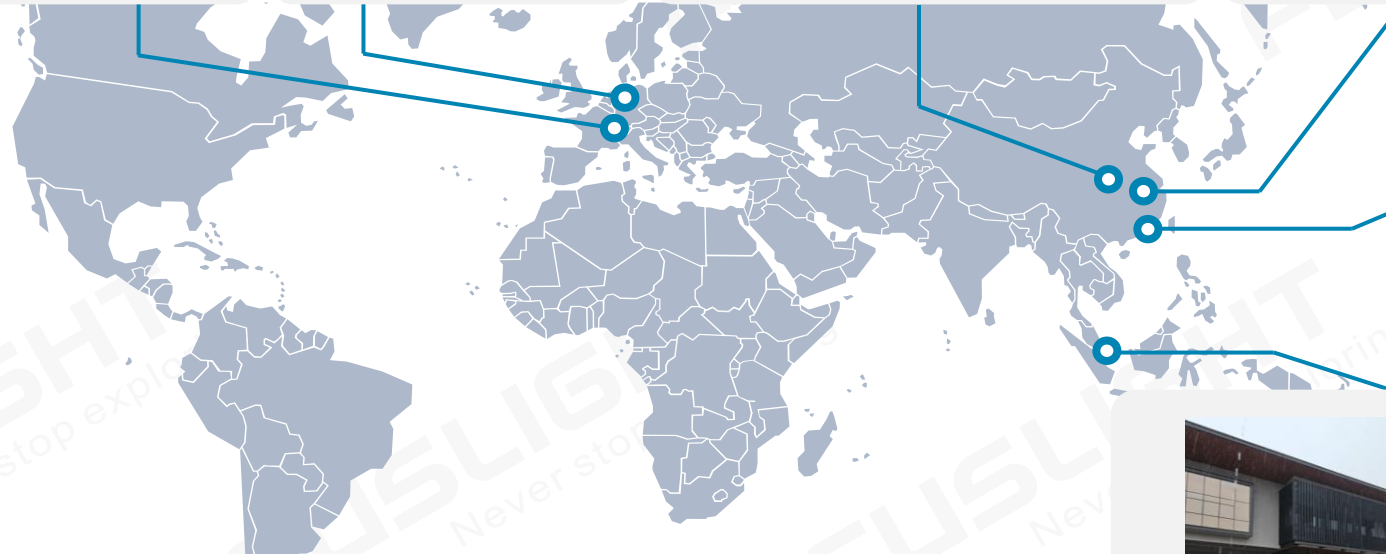
Dongguan, China
Operations Center



Iskandar Puteri, Malaysia
Operations Center
(being constructed)



Ang Mo Kio, Singapore
Operations Center
Business Center



In a world of evolving market dynamics, we provide the solutions that support you to stay ahead –

Optimized, efficient, cost-efficient, flexible, and forward-thinking.

Key Facts & Figures



Employees

>900



Revenue Proportion
Invested into R&D (2025H1)

~24%



Yearly Revenue
(2024)

620M RMB



Patents Valid
Worldwide

>560



Facility Worldwide

>49,000m²























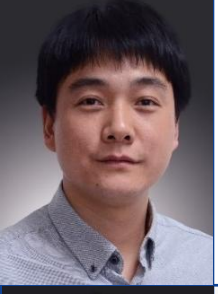


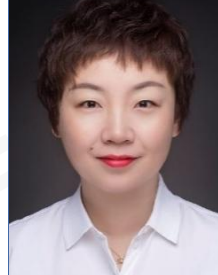







Clean Room Worldwide

>17,000m²



ISO 9001
ISO 14001
ISO 45001
IATF 16949
Certified

Corporate Management Team

	<p>Dr. Xingsheng Liu (Victor) Chairman, CEO</p> <p>Research and management experience in the US, with 100+ publications, 300+ patents, 30+ invited papers internationally</p> <p>Committee Member of SPIE and IEEE</p> <p>  </p>		<p>Dr. Chung-En Zah CTO</p> <p>30+ years of research experience in the US, with 300+ publications, 50+ patents in optoelectronics and telecommunication</p> <p>IEEE Fellow, OSA Fellow, 2x R&D 100 award winner</p> <p>  </p>
	<p>Mr. Sinclair Vass Corporate SVP of International Sales & Business Development</p> <p>35+ years experience in international photonics markets, having held technical, commercial and general management leadership roles at major multinational companies</p> <p>   </p>		<p>Mr. Guowei Zhu (Gavin) Corporate VP of Quality</p> <p>20+ years in international automotive companies, rich experience in IATF QMS and plant operations management by World Class Manufacturing (WCM) & Lean manufacturing</p> <p>  </p>
	<p>Mr. Tan Chee Huo (Michael) Corporate SVP of Business Process and IT</p> <p>25+ years in IT leadership, specializes in digital business transformation, global project management, multicultural team leadership in fast-paced international industries, and strategic decision-making</p> <p>   </p>		<p>Mr. Ye Dai (Robert) Corporate VP of Global Sales</p> <p>Excellent track record in worldwide sales, product line and business unit management leadership roles</p> <p>20+ patents granted</p> <p> </p>
	<p>Ms. Yiping Ye (Alison) Board Director, CFO</p> <p>Over 20 years management experience and multi-field business practices</p> <p>In-depth understanding in LTC, IPD, intercultural cooperation and rich operational experience in market development, project operation and business management</p> <p> </p>		<p>Mr. Qichuan Yu Chief Product/Process Officer</p> <p>Over 25 years of experience in wafer-level optics, optical sensor and camera packaging, SAW/BAW filter R&D, and NPD execution, with a strong focus on mastering, tooling, and wafer-level processes</p> <p>   </p>

Corporate Management Team



**Ms. Xuefeng Zhang
(Jennifer)**

Board Director, Board Secretary,
Marketing Director

Over 15 years photonics industry international business experience, in-depth understanding and rich experience in sales, marketing and business development



Mr. Hong Wang

Corporate R&D Director

PhD in physics and Master in computer science. 20+ years in quantitative analytics, capital market risk modeling and architecting. Expert in building analytic infrastructure and system. Rich experience in multinational team management.



Mr. Lucas Zhang

Global Operations Vice President

20 years of global supply chain management experience at multiple Fortune 500 companies, with strong expertise in supply chain planning and management within the consumer electronics industry



HUAWEI



Mr. Weiyi Gu

President of Laser Source and
Applications BU

13 years experience in photonics R&D and product management, with rich track records of leaderships in developing and delivering system solutions for pan-semiconductor and industrial applications



Mr. Vicknes Ratha Krishnan

VP of Laser Source and Applications BU

Proven business leader, 16+ years in program and product management within optoelectronics and semiconductors, working with multinational companies and top-tier customers.



Mr. Dirk Walter Bogs

President of Laser Optics BU

Over 25 years' experience in ultra-precision tooling, optic manufacturing, engineering & project management, and operational management

Very deep knowledge of technology development and optimization



Mr. Yong Tian (York)

VP of Laser Optics BU

20+ years of operation & R&D management, very deep knowledge with organic optical materials and optical coating technology, published SCI articles and owns patented technologies. Experienced in Lean Manufacturing & Industry 4.0



Dr. Tobias Senn

Head of Strategic Growth R&D

15+ years of experience in micro-optical component development for the consumer market. Expert in design for manufacturing and process development, with a strong focus on high-volume production and yield improvement



Mr. Hongyuan Liu (Tom)

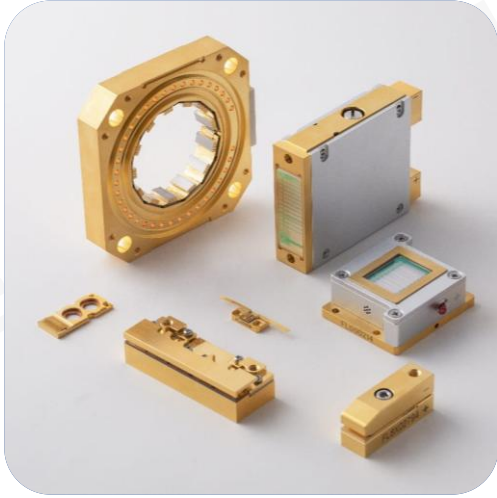
President of Global Photonics Foundry BU

20+ years in R&D and operations management, specializing in optical imaging and non-imaging system design, WLO process & integration, and optical component manufacturing. Proven track record in new product development and scaling high-volume production



Business and Branding

FOCUSLIGHT
Never stop exploring



Photon
Generation



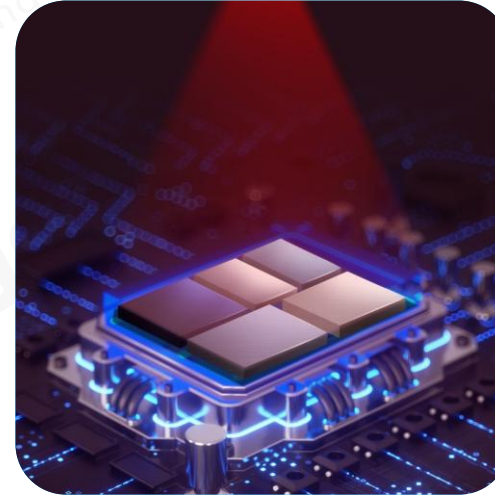
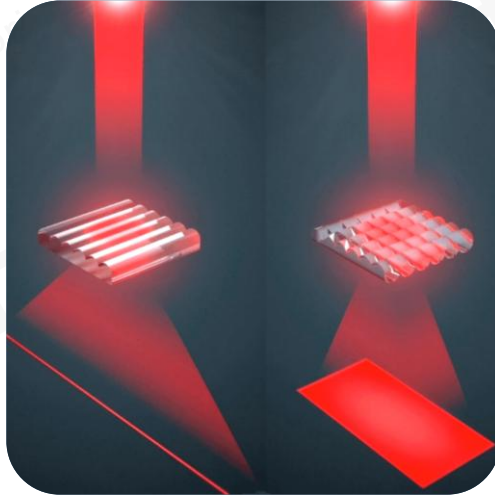
Photon
Control



Photonics
Application
Solutions



Global
Photonics
Foundry

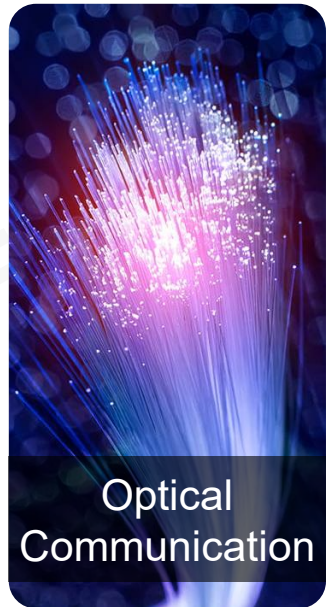


FOCUSLIGHT
Never stop exploring

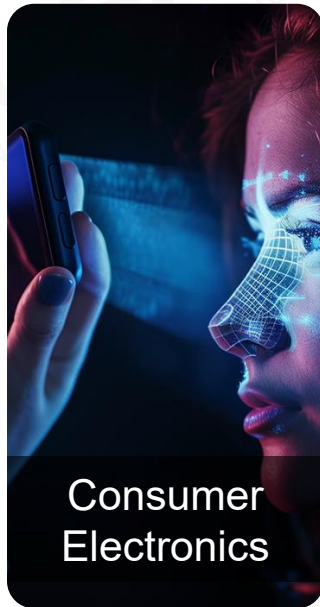


 **HEPTAGON**

Markets



7%
revenue



9%
revenue



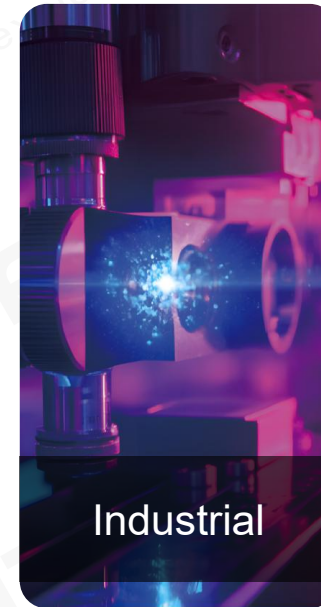
21%
revenue



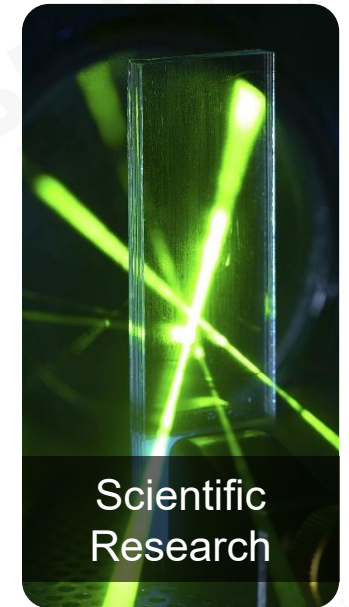
19%
revenue



12%
revenue



30%
revenue



2%
revenue

** Based on accumulated revenue data from 2025 Q1-Q3 (figures unaudited)*

Value Proposition

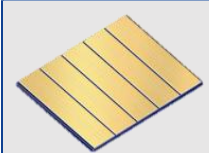
Total Solution and Service in Full Value Chain

Raw
Materials

Components,
Devices

Modules,
Subsystems,
Application
Systems

Solution,
Support,
Service



Chips (Strategic
collaboration
with Suppliers)



**Packaging
Materials**



**Optics
Substrate**



Light Sources



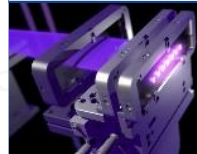
**Optical
Components**



**Fiber Coupled
Modules**



**Laser
Subsystems**



**Optical
Subsystems**



**Integrated
Modules**



**Application
Centers**



**Technical
Support**



**Field Service
Centers**

Industry Leader + Strong Financial Backing + Healthy Stable Company + Invest in the Future



Do what we do best

Offer the best value

Optimize to the extreme

Achieve the best
performance / quality-to-
price ratio

Commitment to Customers

- Lowest cost manufacturing for high volume products
- Willing to take technical risk, but request customer commit market share in return
- Willing to take investment risk in R&D and capital including M&A for customer but request customer commit market share in return
- Collaboration transparency, fast response, IP protection and long-term partnership



What we don't do

Take high market risk

Be greedy

Be too aggressive

Compete against our
customers

Vision

To unlock the potential of photonics
to enhance and enrich people's life



Mission

*Be the global trusted photonics solution provider
through innovation, operational excellence
and fast response*

Products and Services

Micro-Optics

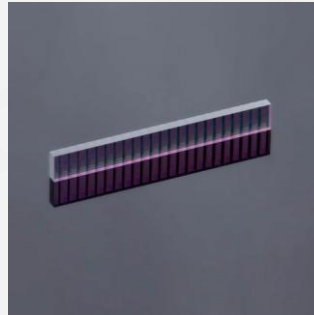
Single Lenses and Linear Lens Arrays



FAC



SAC



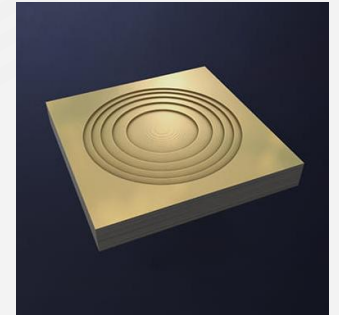
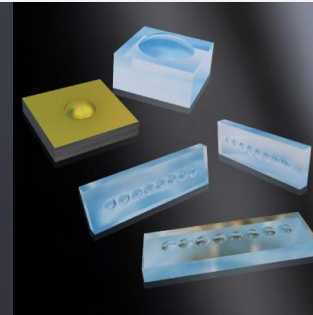
SAC array



BTS



Fiber coupler and collimator

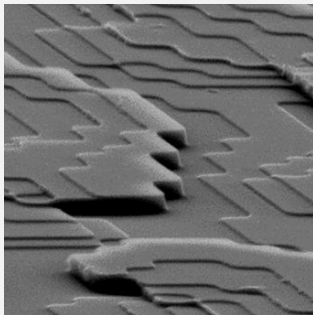


Collimating DOE

Area Lens Arrays



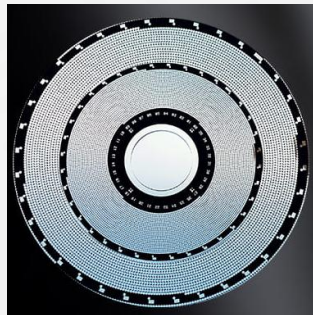
Homogenizer and
diffuser



DOE beam splitter,
dot or line generator

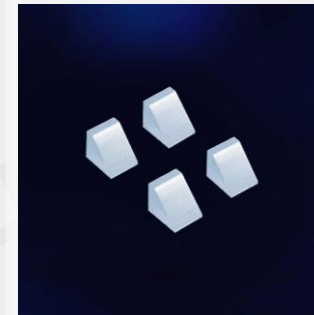


Shack-Hartmann
array

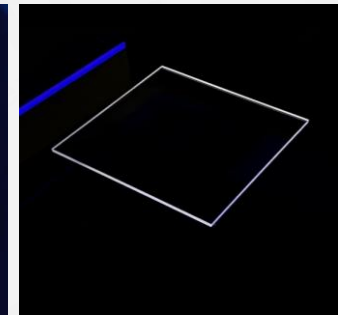


Pinhole array

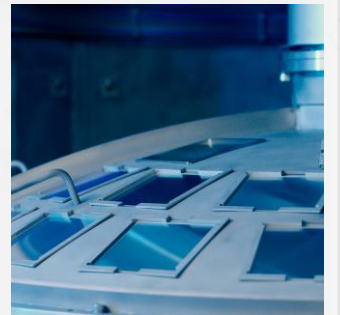
Plano Optics and Coatings



Micro prism



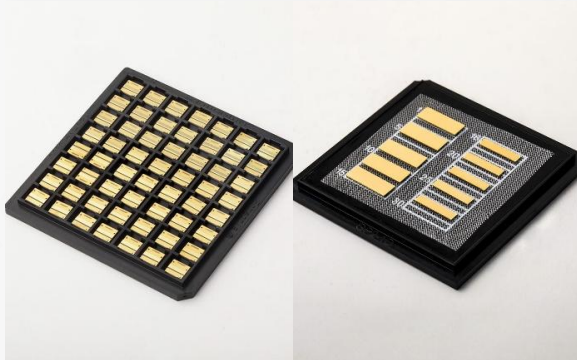
Window



Optical Coating

Products and Services

Laser Sources and Materials



Advanced Materials

- AuSn Pre-Deposited AlN Ceramic Submounts
- AuSn Pre-Deposited CuW Submounts



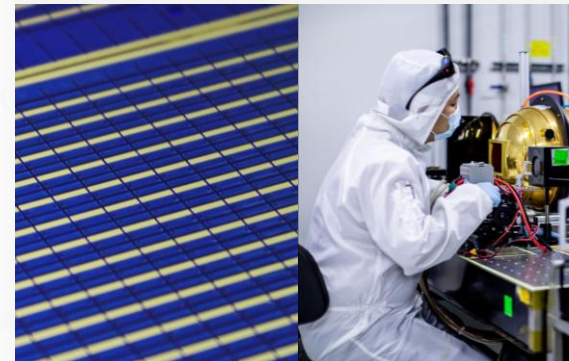
Open-Package Diode Lasers

- Single Emitter Components
- Single Bar Components
- Micro-Channel Cooled Stacks
- Conduction Cooled Stacks
- Pumped Modules



Fiber-Coupled Diode Lasers

- Emitter-Based Modules
- Bar-Based Modules



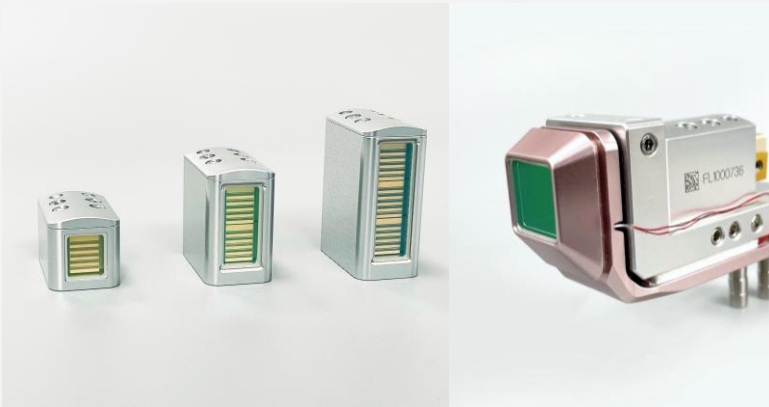
Technical Services

- Thin Film Metallization Service
- Diode Laser Manufacturing Service

Products and Services

Medical and Health Application Solutions

Laser Hair Removal Modules



Laser Skin Rejuvenation Modules



Laser Body Sculpting Modules



Diode Laser Drivers



Products and Services

Pan-Semiconductor Application Solutions

Advanced Display Manufacturing



Solid-State Laser Lift-Off (LLO) System

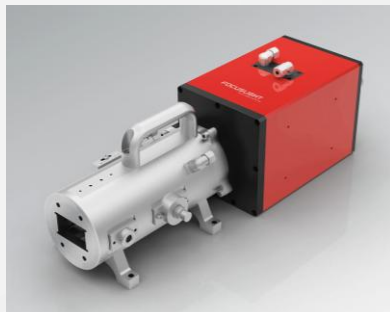


Solid-State Laser Annealing (SLA) System



Variable Beam Laser System
(Mini and Micro LED Processing)

IC Manufacturing



IC Wafer Annealing
System



Variable Beam Laser System
(Advanced Chip Packaging)

Industrial Solutions



IR Line System



Industrial Laser Module

Technical Service



End-to-end Technical
Services

Products and Services

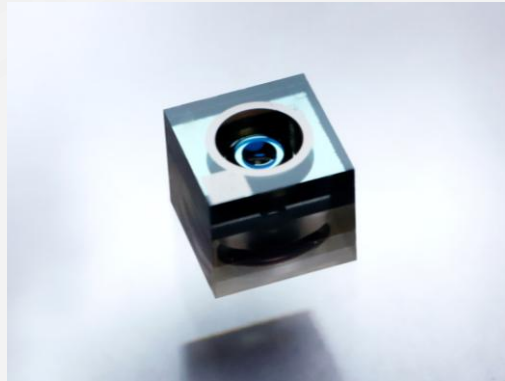
Wafer Level Optics, Wafer Level Stacking, Wafer Level Integration

Wafer-Level Optics



Micro lens arrays, diffusers, DOEs,
Fresnel lenses

Wafer-Level Lens Modules



Stacked imaging lens modules
compatible with CMOS

Sensor Module Packaging Service



Packaging service for sensor
modules

Semiconductor Foundry Service

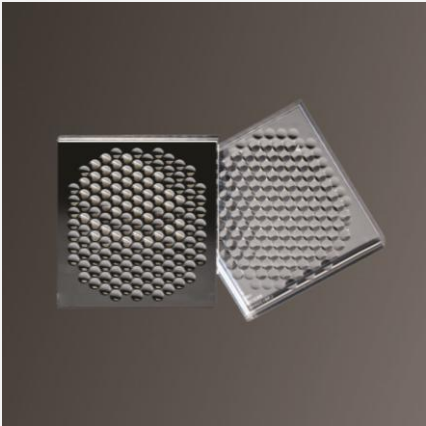


Imprinting of optical components or
lens modules on silicon wafers (e.g.,
for sensors, VCSELs, MicroLEDs)

Products and Services

Consumer Electronics Solutions

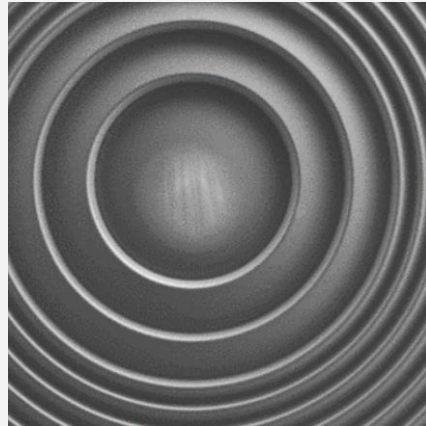
Beam Shaping and Pattern Generating



Pattern-Generating
MLA

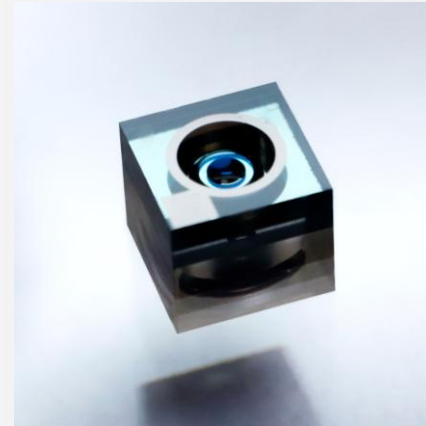


Engineered Diffusers



Diffractive Optical
Element (DOE)

Imaging and Projection



Imaging Lens Modules

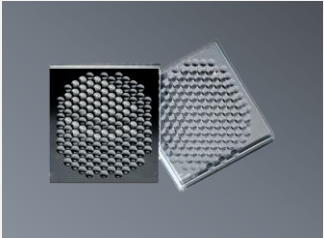


Projection Lens
Modules

Products and Services

Automotive Application Solutions

Projected Lighting

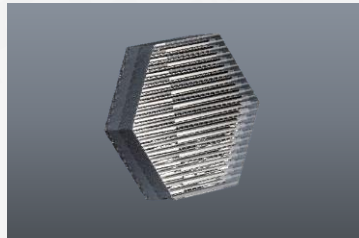


MicroLens Arrays for Projection



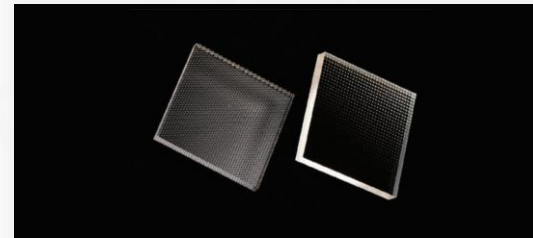
MLA-Based Dot Projectors

Smart Headlights



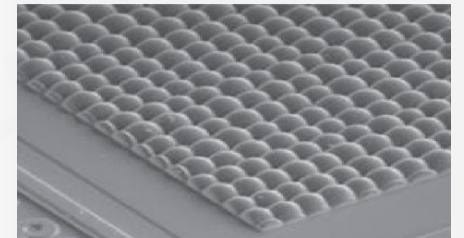
MicroLens Arrays

Driver Monitoring System



Homogenizers / Diffusers for Illuminators

AR HUD



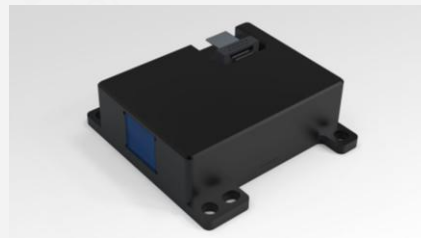
Homogenizers / Diffusers

LiDAR

EEL / VCSEL Based LiDAR Transmitter Modules



VCSEL Flash Transmitter
700W

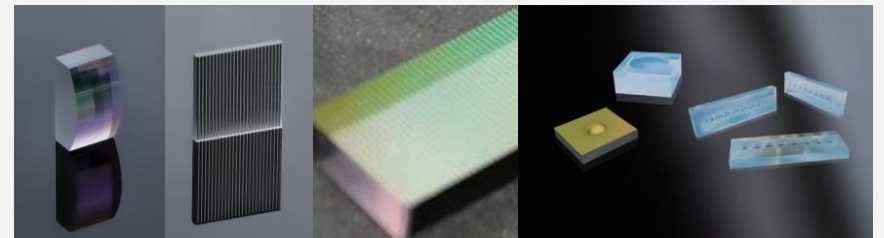


905nm 700W EEL
Line Beam Transmitter



VCSEL Line Transmitter
1000W

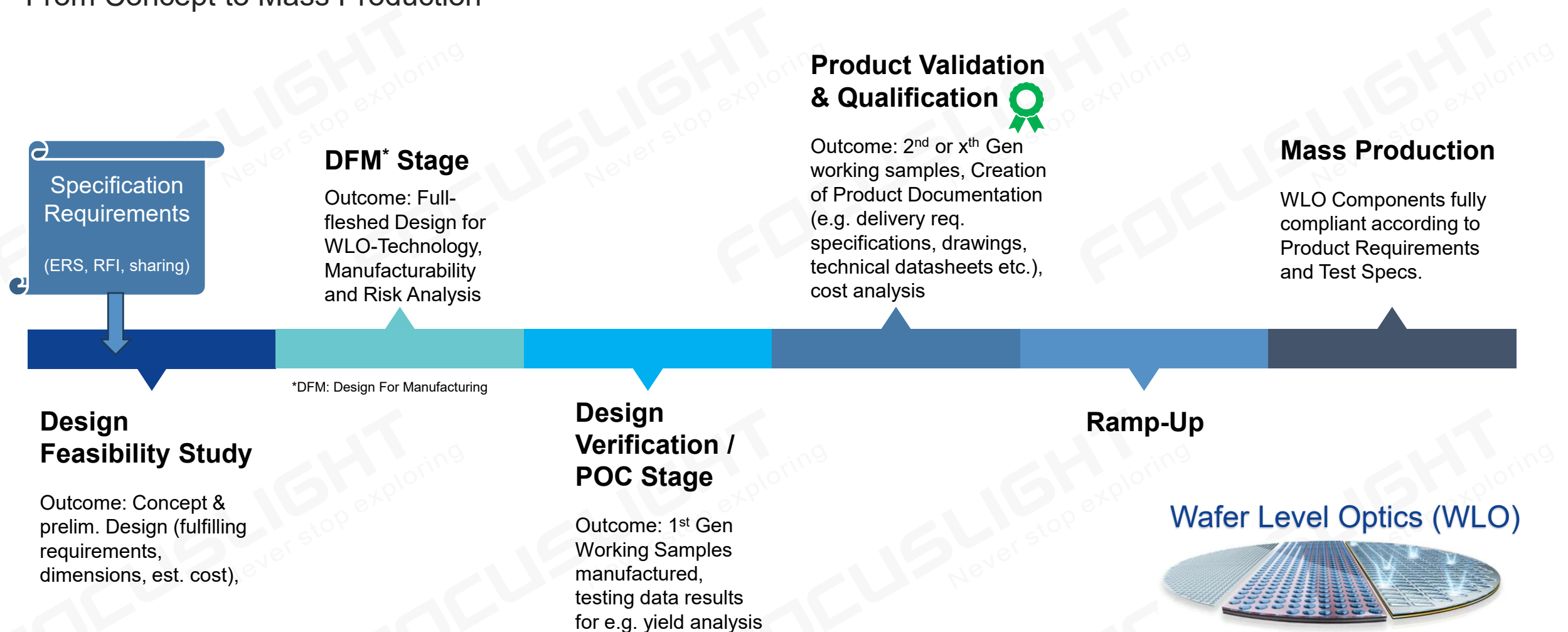
Beam Shaping Optics



Fast Axis Collimators, Diffusers, Homogenizers,
Collimators and Arrays in Glass, Polymer and Silicon

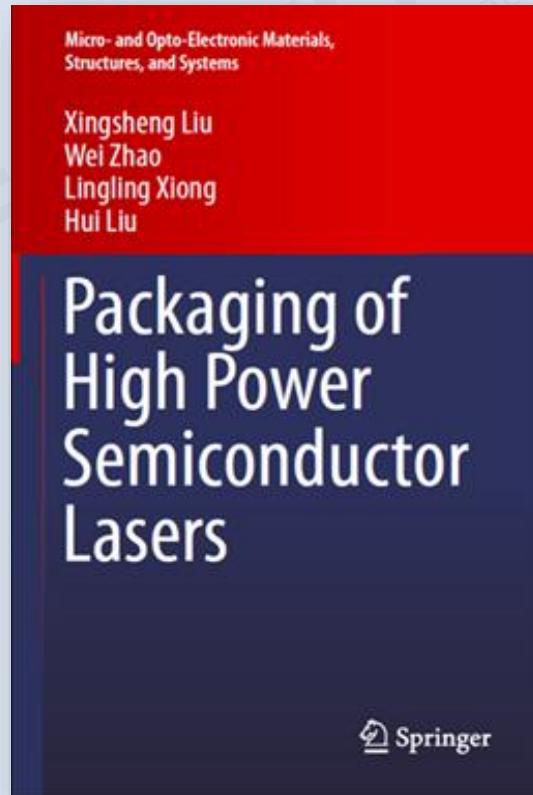
Global Photonics Foundry Services

From Concept to Mass Production

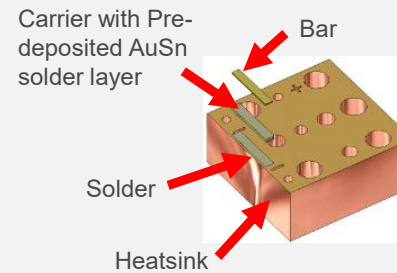


Core Competence

Diode Laser

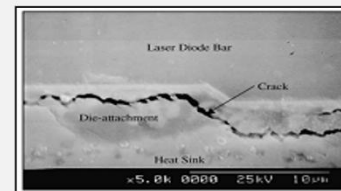


Eutectic Bonding



Significantly enhances thermal conductivity, reducing thermal stress, and thus improving the products' performance and lifetime

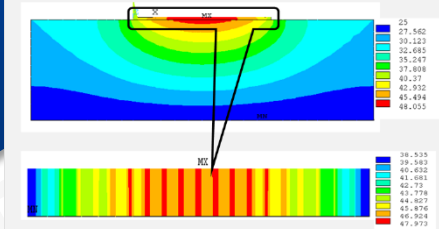
Thermal Stress Control



Lowers and homogenizes the thermal stress, and improve the device performance

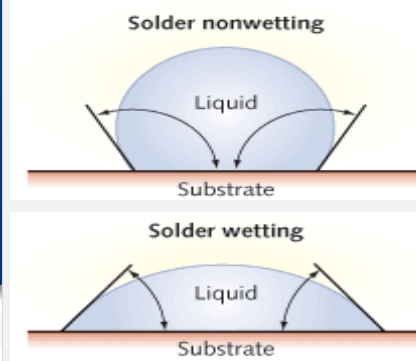
Thermal Management

Finite Element Thermal Analysis and Design



Effectively improves the ability of heat dissipation to ensure a higher output power

Interface Materials and Surface Engineering

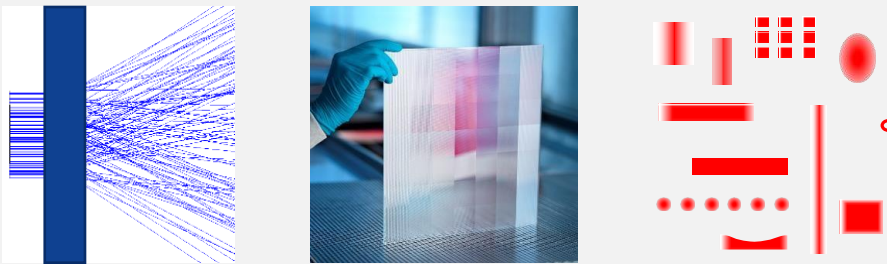


Greatly improves wettability and bonding strength of packaging materials, enhancing long-term reliability

Core Competence

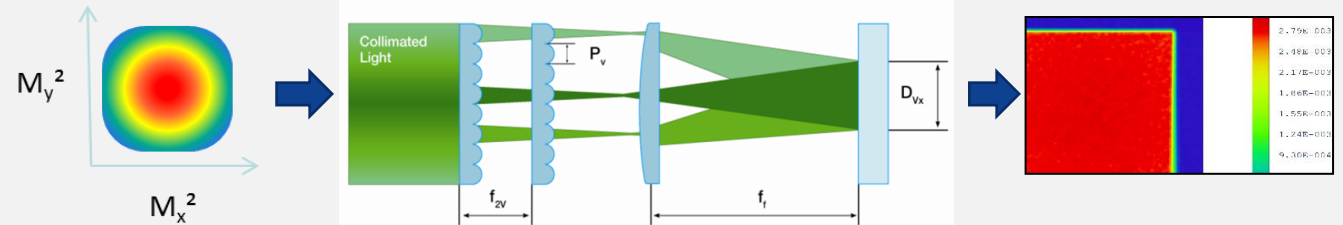
Beam Shaping – *The Right Photon at the Right Place and Time!*

Micro Optics Design and Simulation



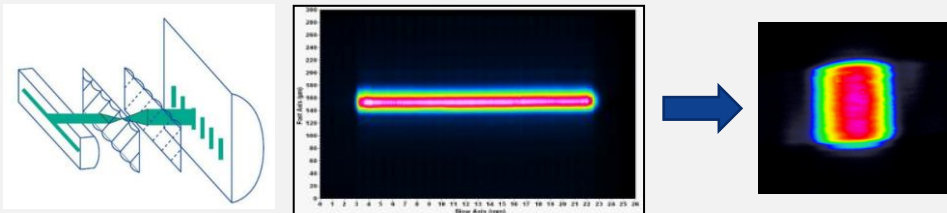
Acyindrical free-form micro-optics / arrays / diffusers /
DOE splitters / beam shaping systems

Homogenization

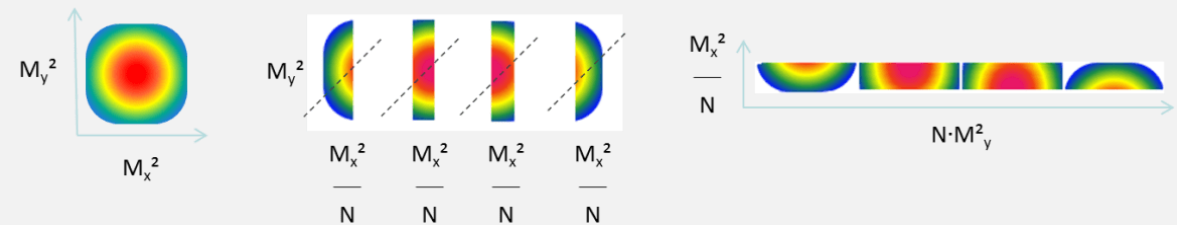


Uniform and homogeneous illumination in any desired shape

Beam Transformation



Asymmetrical → Symmetrical beam



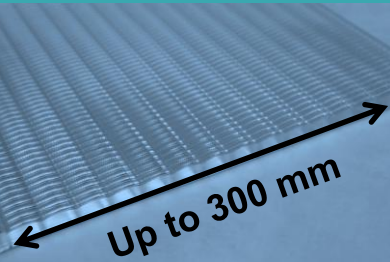

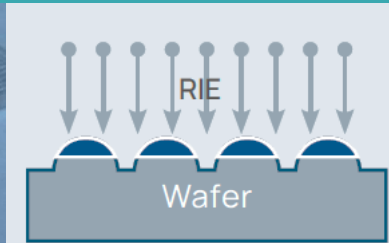
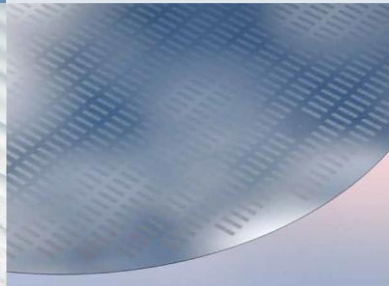
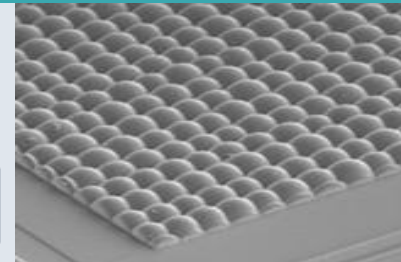
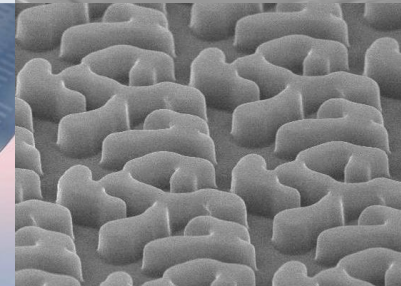
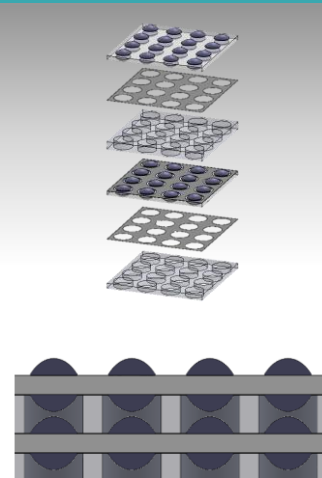

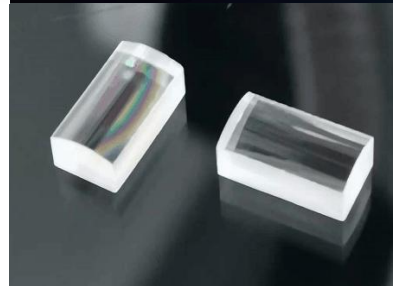

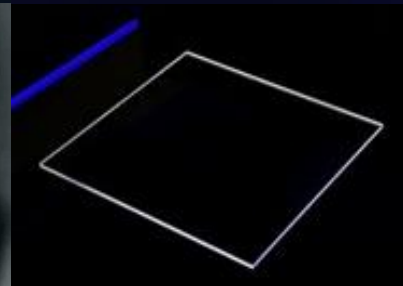
Symmetrical beam → High density line beam

Our UV-L750 System for Laser Lift-Off (LLO) was Prism Awards winner in 2018



Core Competence

Optics Manufacturing

Wafer Level Simultaneous Structuring	Wafer Level Photolithography-RIE (reactive ion etching)	Wafer-Level Optics (WLO) Precision Imprinting	Wafer-Level Stacking (WLS)	Precision Glass Molding	Cold Processing
FE: Dortmund, Germany BE: Asia	FE: Neuchâtel, Switzerland BE: Asia	Shaoguan, China Singapore	Singapore	Dongguan, China	Dongguan, China
 	 	 		 	 
With inorganic materials: Glass, Fused Silica, Silicon, CaF ₂		With polymer on glass		With inorganic materials: Glass, Fused Silica, Silicon, CaF ₂	
High LIDT Optical Coating: Anti-reflection, high-reflection, beam splitter, band filter, and various customization (UV, VIS, IR)					

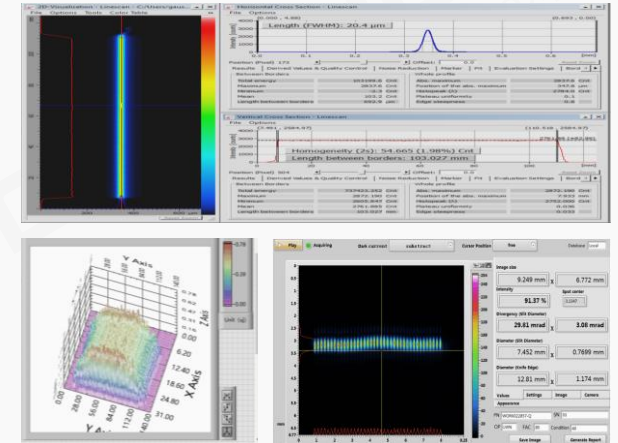
Core Competence

Test, Analysis and Diagnosis

Test and Characterization of High-Power Diode Laser

A comprehensive physical diagnostic model allows full characterization of a set of key parameters, such as:

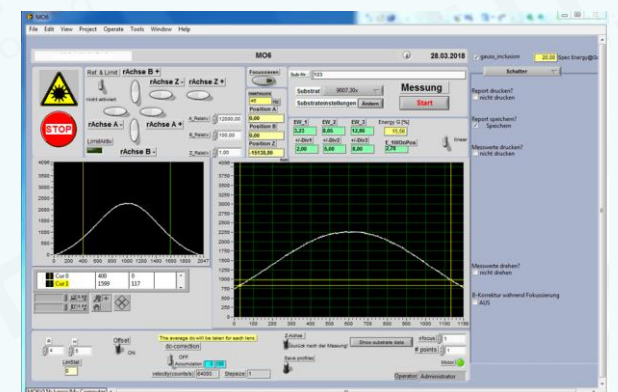
- LIV
- Spectrum
- Polarization
- Far-field / Near-field
- Spatial spectrum
- Spatial polarization
- Spatial beam profile
- Smile effect
- Lifetime



Metrology and Analysis of Optical Components

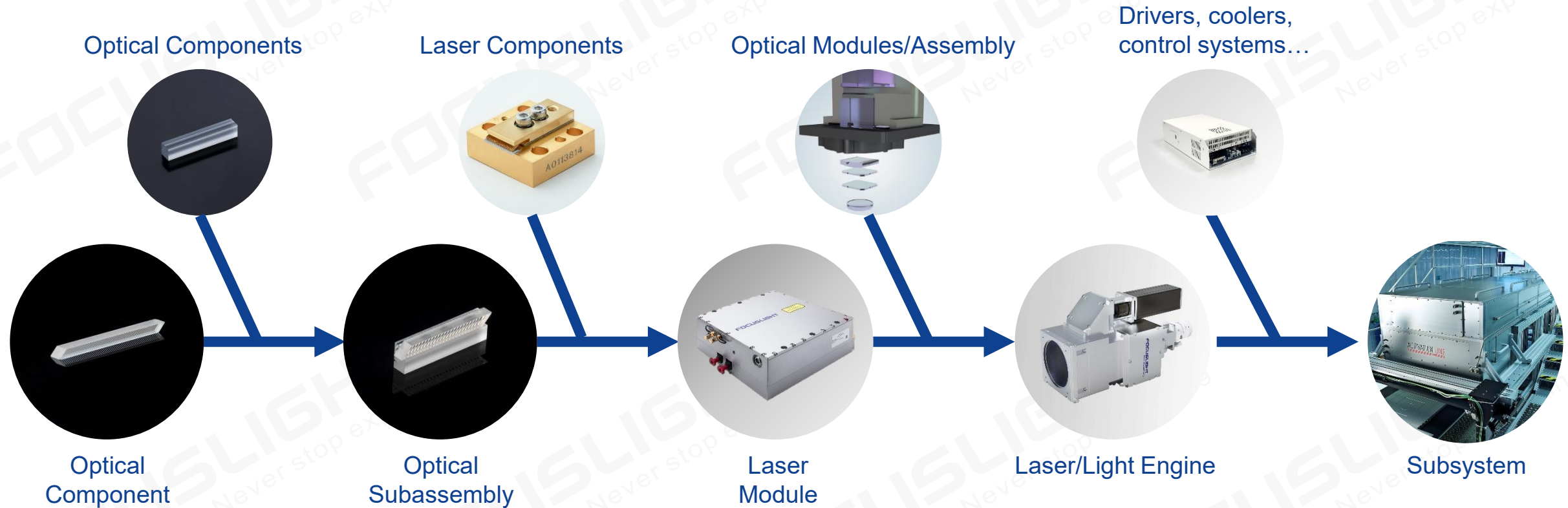
Wave optics models are used in conjunction with tactile surface measurements for precise analysis of optical functions such as:

- Focusing
- Collimation quality
- Beam uniformity



Core Competence

High Precision Optical Assembling Process and In-house Equipment: From Components to Subsystems



A Unified Quality Management System

Governance Framework That Drives Enterprise-Wide Quality Excellence

ISO9001 Certified Quality Management System (QMS)

ISO14001 Certified Environmental Management System (EMS)

IATF16949 Certified Automotive Quality Management System

ISO45001 Certified Occupational Health and Safety Management System

Failure Mode and Effect Analysis (FMEA)

Statistical Process Control (SPC)

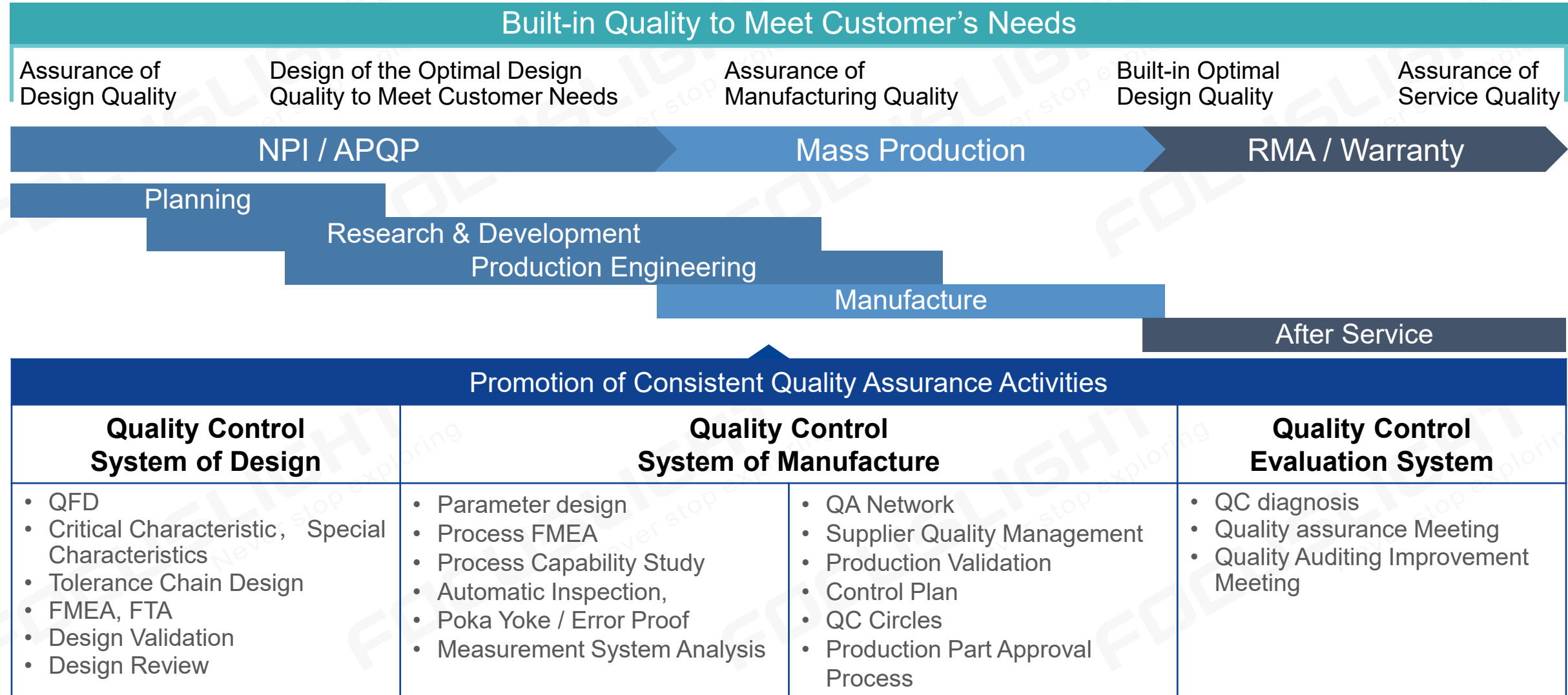
Production Traceability Database

Control Plan (CP)



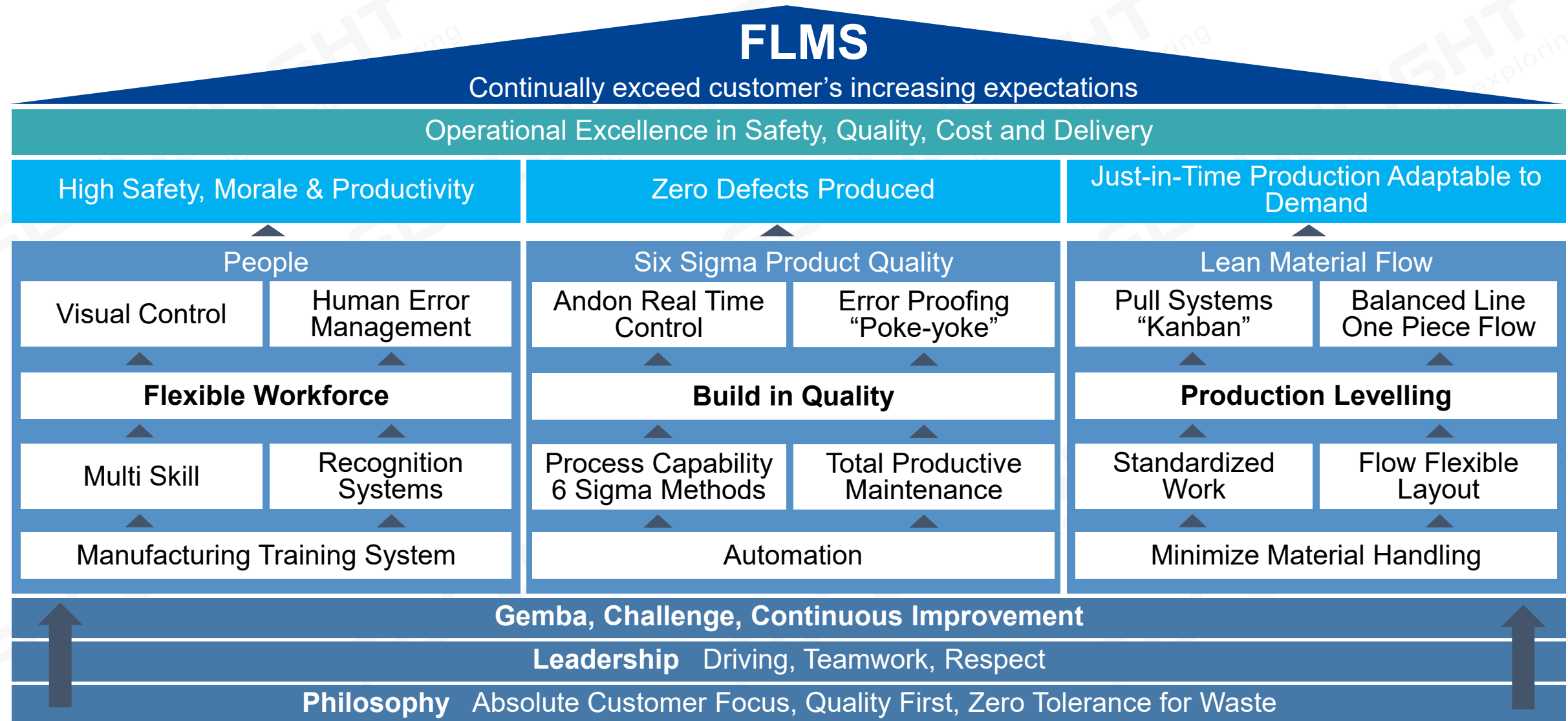
Quality Assurance System

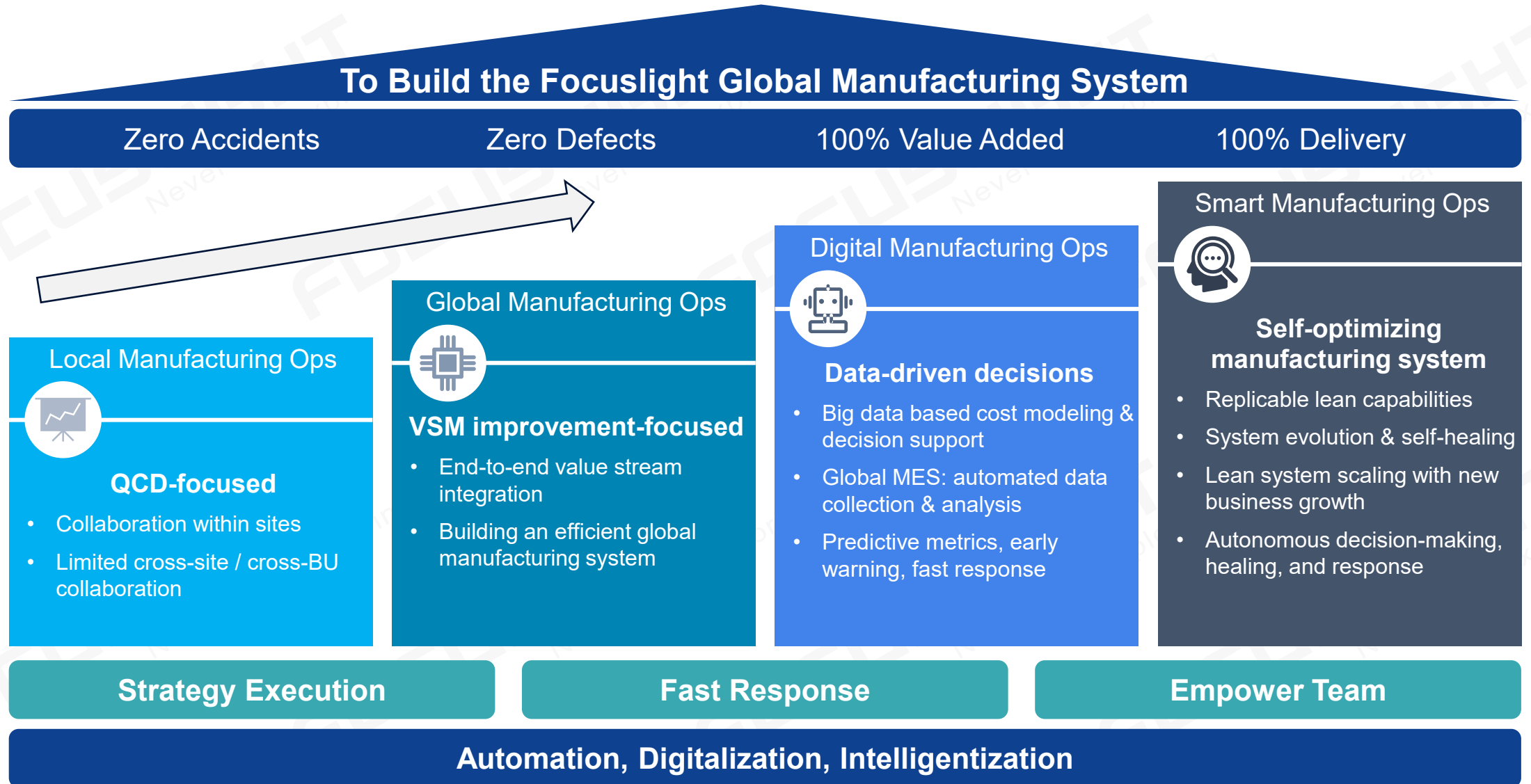
Ensuring Product Reliability Through Rigorous Controls and Verification

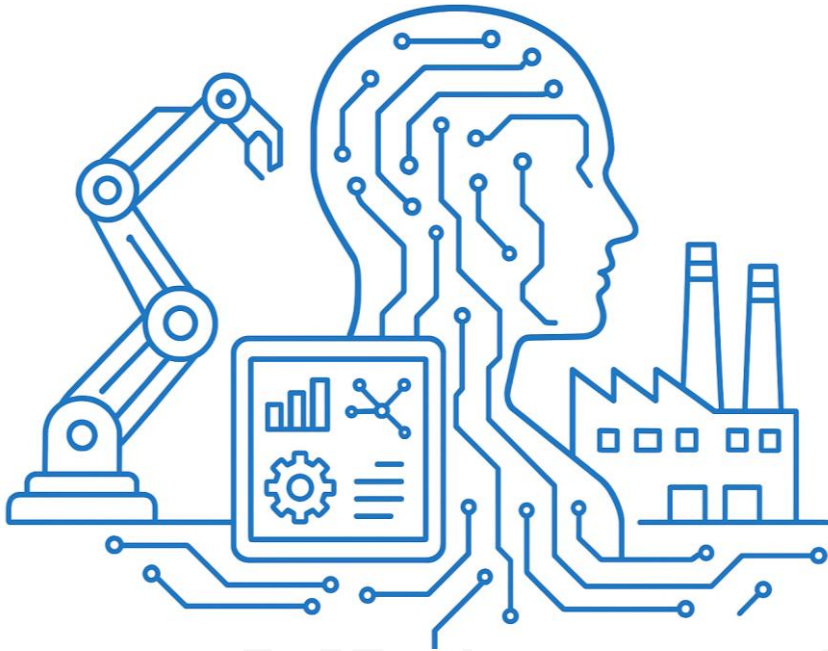


Focuslight Manufacturing System (FLMS)

Building Stable, Efficient, and Scalable Production Capabilities







Equipment
interconnection

MES

- Improved efficiency
- Big data enhances quality through visibility

Big data boosts
decision

Testing

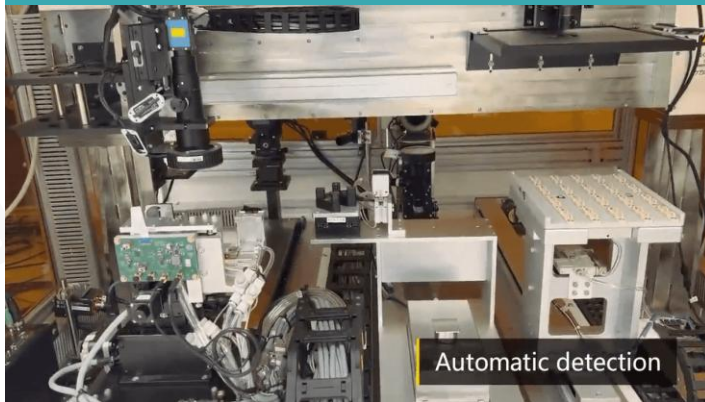
- AA (Active alignment)
- PA (Passive alignment)

Automation

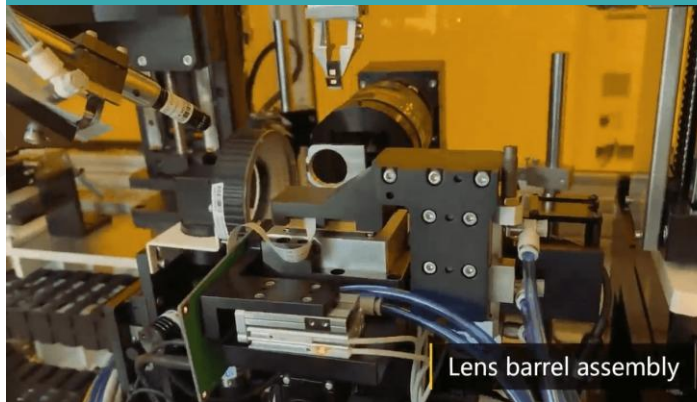
- AOI
- P&P (pick & place)
- CD (collaborative development)

Automation Powered Operational Excellence

Automatic Optical Alignment



Automatic Assembly



Automated Optical Inspection



Laser Optics Production Line



LiDAR Transmitter Production Line



Big Data Powered Production



Video Link: <https://www.focuslight.com/news-events/newslist/focuslight-autonotation-powered-manufacturing-excellence/>

Manufacturing Capacity

Advanced Materials

10+ years high-volume manufacturing experiences + self-owned core technologies

DPC production



Etching production



Au plating



Pattern production



Cleaning



AuSn deposition



Laser marking



Dicing



AOI inspection



Advanced Materials Manufacturing Capacity > 2M pcs / month

Manufacturing Capacity

Laser Sources

Packaging & Assembling



Optical Assembling



Testing & Measurement



Quality Inspection



Burn-in & Lifetime Test

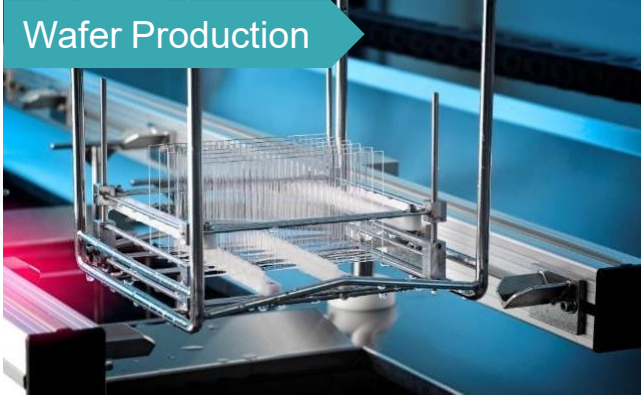


Diode Laser Manufacturing Capacity > 500K pcs / year
Burn-in Capacity 600K pcs / year

Manufacturing Capacity

Micro-Optics: Wafer-Level Simultaneous Structuring Processing

Wafer Production



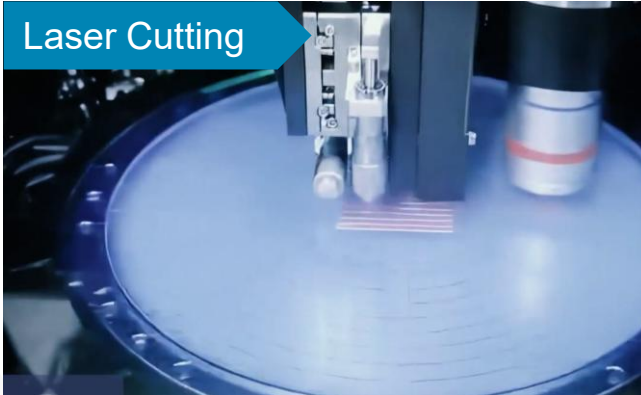
Quality Mapping



Coating



Laser Cutting



Auto Loading



Auto Packing

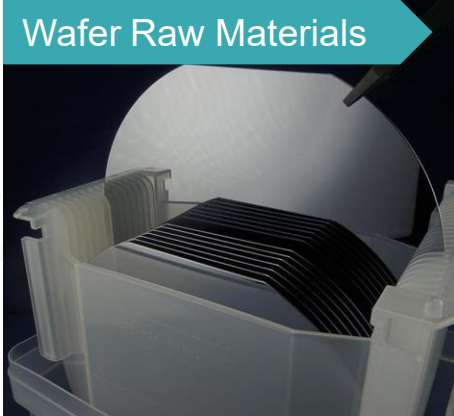


Wafer-Level Simultaneous Structuring Processing:
Manufacturing Capacity > 2K wafers / month or > 5M pcs lenses / month

Manufacturing Capacity

Micro-Optics: Photolithography-Reactive-Ion-Etching Processing

Wafer Raw Materials



Photolithography



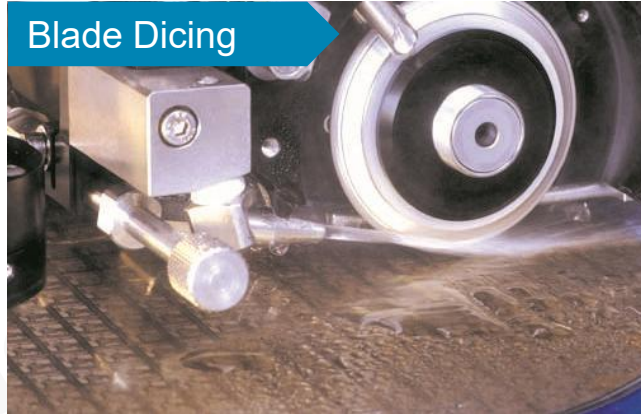
Dry Etching



Thin Film Deposition



Blade Dicing



Pick & Place

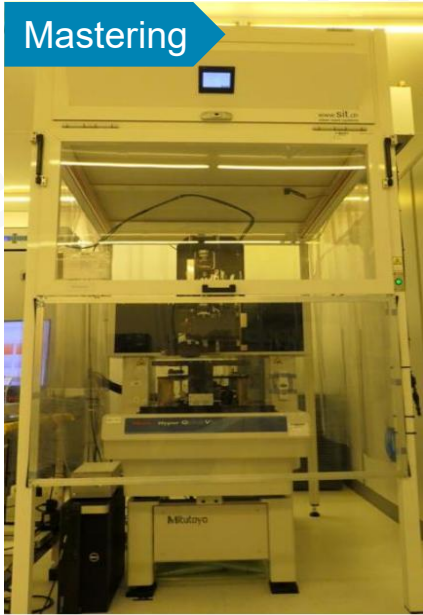


Photolithography-Reactive-Ion-Etching Processing:
Manufacturing Capacity > 300 wafers / month

Manufacturing Capacity

Micro-Optics: Imprinting Processing

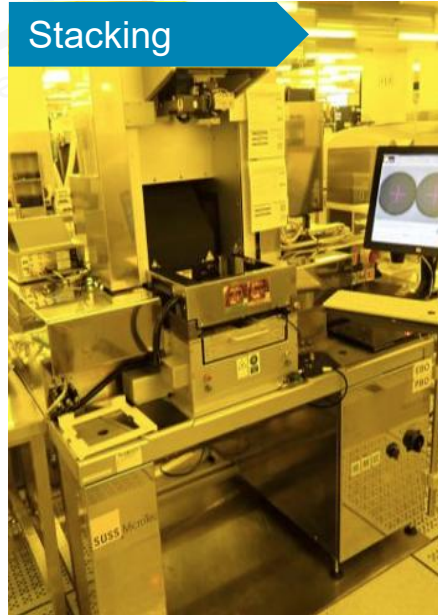
Mastering



Replication



Stacking



Testing



Singulation



Imprinting Processing:
Manufacturing Capacity > 2K wafers / month or > 8M pcs lenses / month

Manufacturing Capacity

Micro-Optics: Precision Molding

Ultra-precision In-house Mold Making



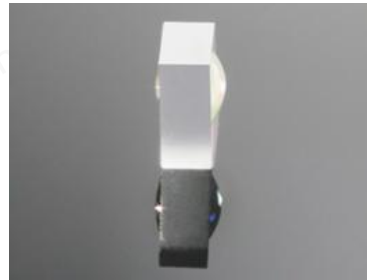
Pressing / Molding



Coating



End Products



Square-shape Lens



Barrel Lens



Bi-conic lens



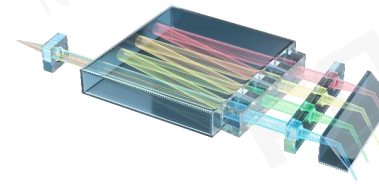
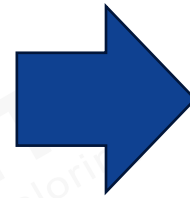
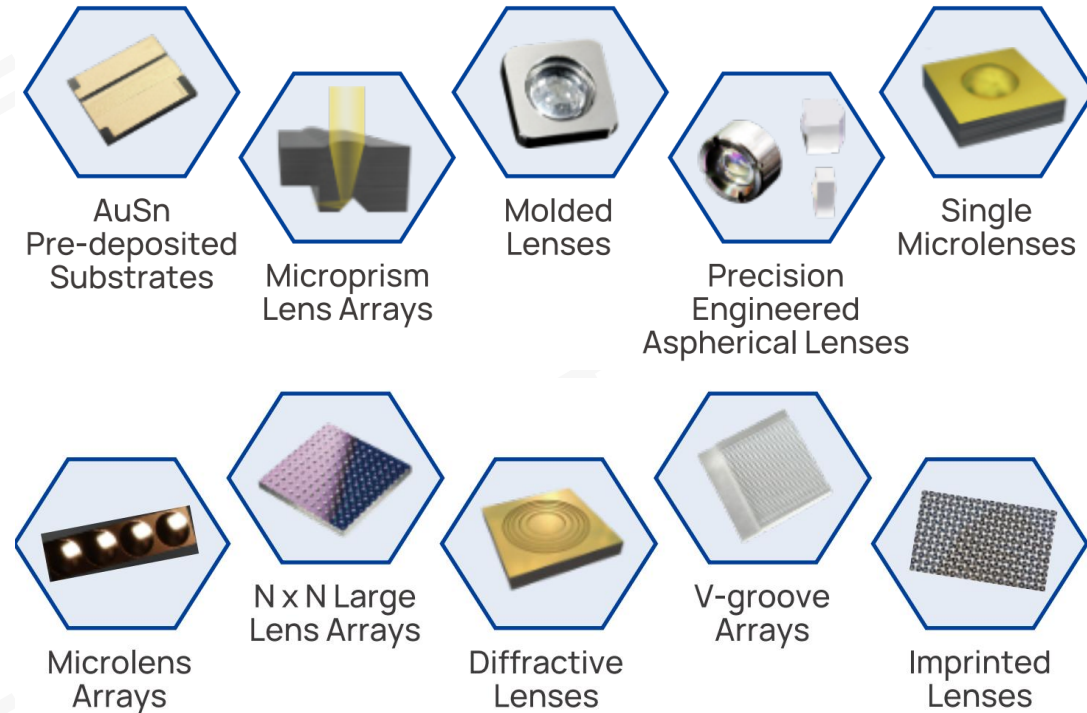
Round lens

Precision Molding: Manufacturing Capacity > 2M pcs lenses / month

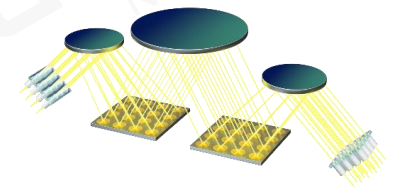
Typical Applications

Optical Communication

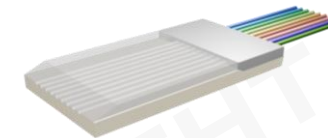
- High precision micro-optics are at the heart of optical communication systems.
- They support efficient data transfer between key optical components.



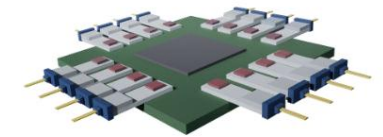
Optical Transceivers



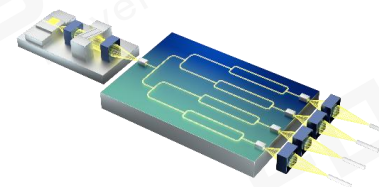
WSS / OCS



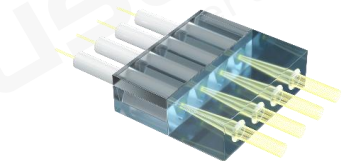
FAU



CPO



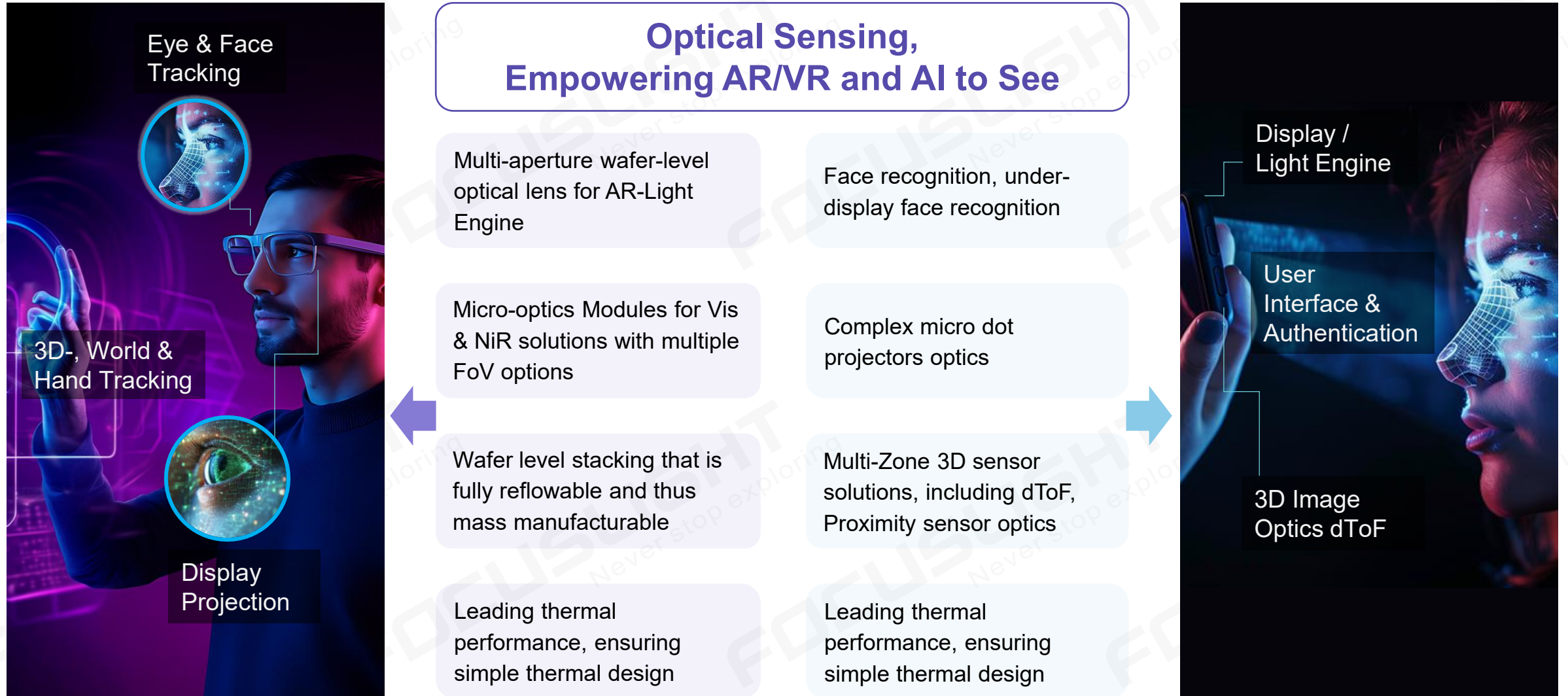
PIC



Fiber Connectors

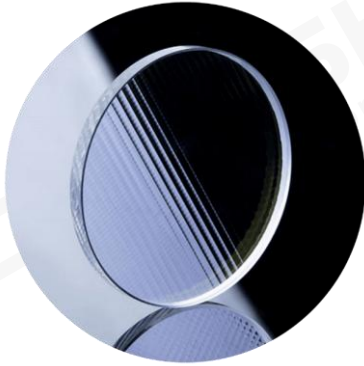
Typical Application

Consumer Electronics

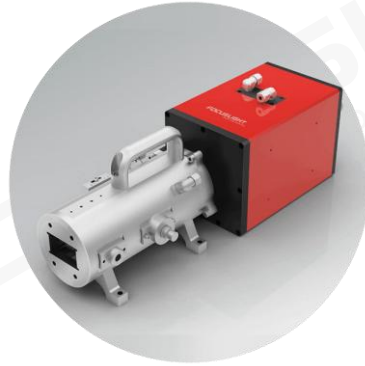


Typical Applications

Semiconductor



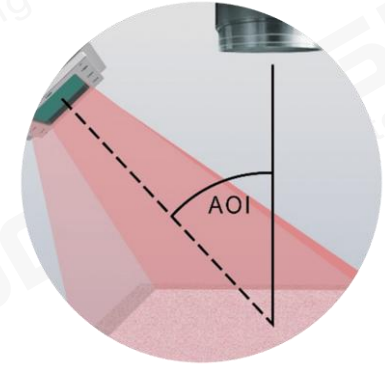
- Beam homogenization technology powers the illumination system – key optical component in **pan-semiconductor systems**
- > 15 years supply to the major manufacturer of semiconductor lithography tools



- Laser system solutions with high power density and different beam profiles, designed for various **laser-based wafer annealing processes** including IGBT backside annealing and SiC annealing



- Based on 976nm diode laser with adjustable beam output and >95% homogenization in energy distribution
- Ideal for **advanced chip packaging processes**, e.g. laser-assisted bonding



- Off-axis beam shaping technology powers laser surface treatment as well as surface inspection
- Typically used in **solar cell industry**

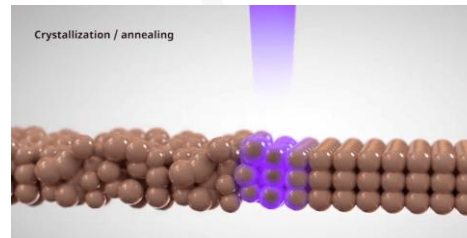
Typical Applications

Display

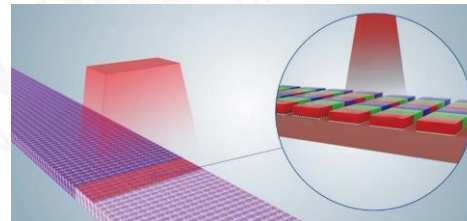


Solid-State Laser Lift-Off (LLO) for Flexible Displays

- Several tens of beam shapers (plasma display pixel structuring)
- Several green 100 mm line beam systems (laser lift-off)
- > 600 mm UV line beam production system (laser lift-off)



Next-gen LTPS Solid-state Laser Annealing Process



Mini and Micro LED Processing

- Laser Mass Transfer and Laser Mass Soldering
- Laser Chip Repair

Typical Applications

Automotive



LiDAR



Driver Monitoring System



Smart Headlight



Projected Lighting



AR HUD



Optical Components
and Assemblies



Laser Transmitter /
Illumination Modules



*Focuslight does not
produce LiDAR /
Lighting full system*

Typical Applications

Medical and Health



Hair Removal



Body Sculpting



Skin Rejuvenation



Ophthalmology



3D Interoral
Scanning



Optical Components;
Laser Components



Optical Solutions;
Laser+Optics Assembly;
Application Handpiece



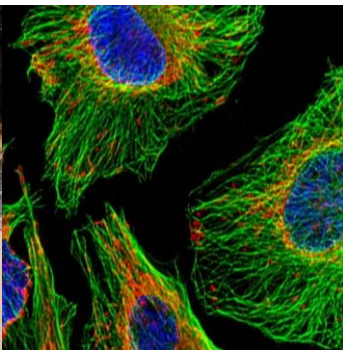
Contract Manufacturing
Services



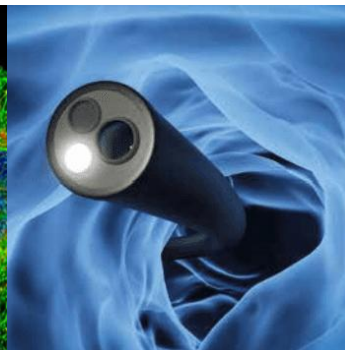
*Focuslight does not
produce medical or
health equipment*



Dermatology



Confocal
Microscopy



Endoscopy



Sensing

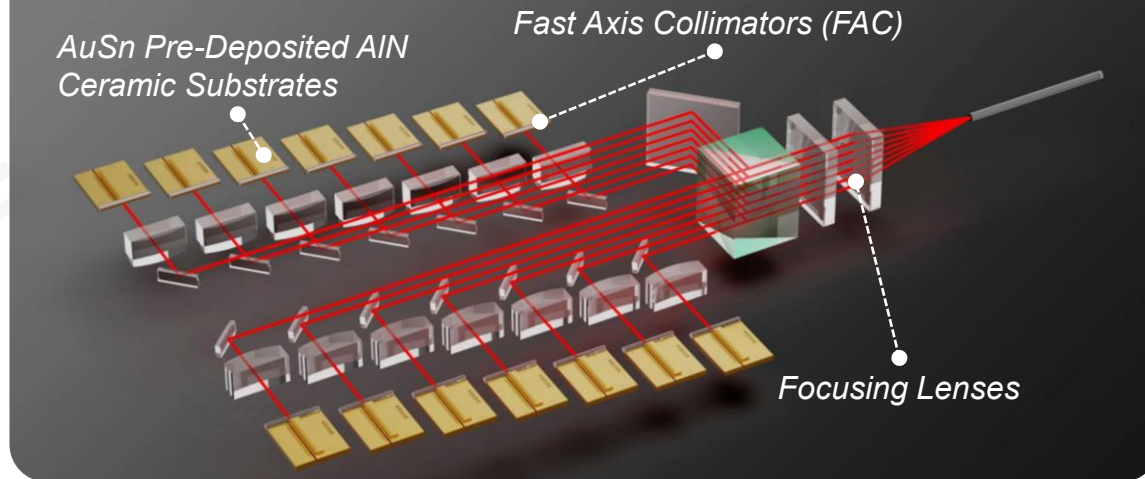


Laser Surgery

Typical Applications

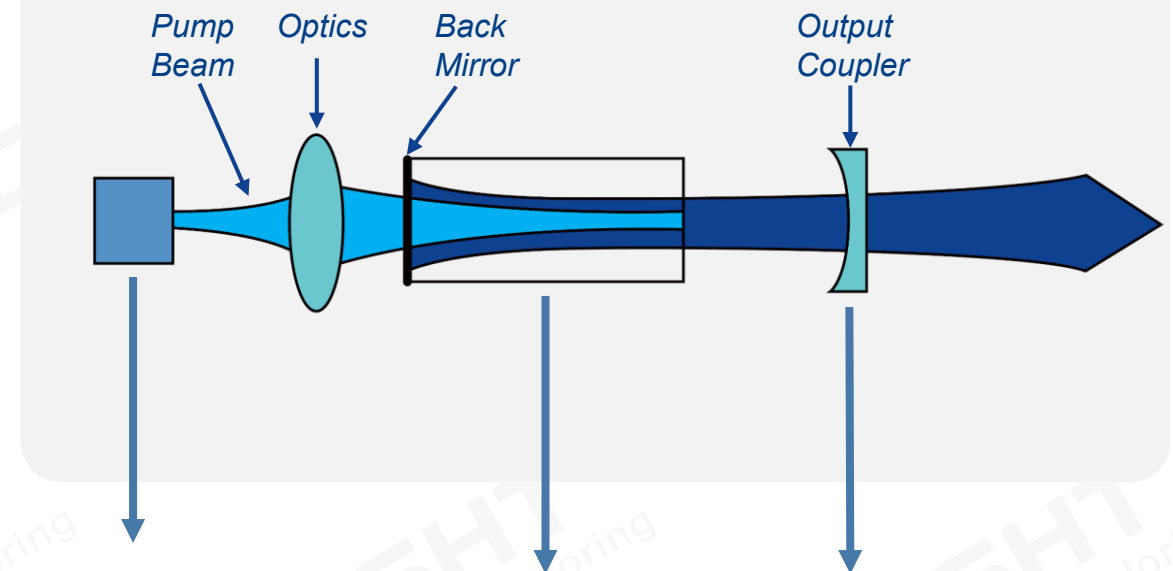
Industrial

Fiber Laser Pumping



- **AuSn pre-deposited ceramic substrates** – stable and reliable thanks to the high thermal conductivity and suitable thermal expansion coefficient;
- **Fast axis collimators (FAC)** – fundamental and efficient solutions for shaping the beam emitted by the pumping sources;
- **Focusing lenses** – coupling the collimated laser beam precisely into the output fiber;

Solid State Laser Pumping



Diode Laser
as Pumping
Source

+

Gain Medium

+

Optical System

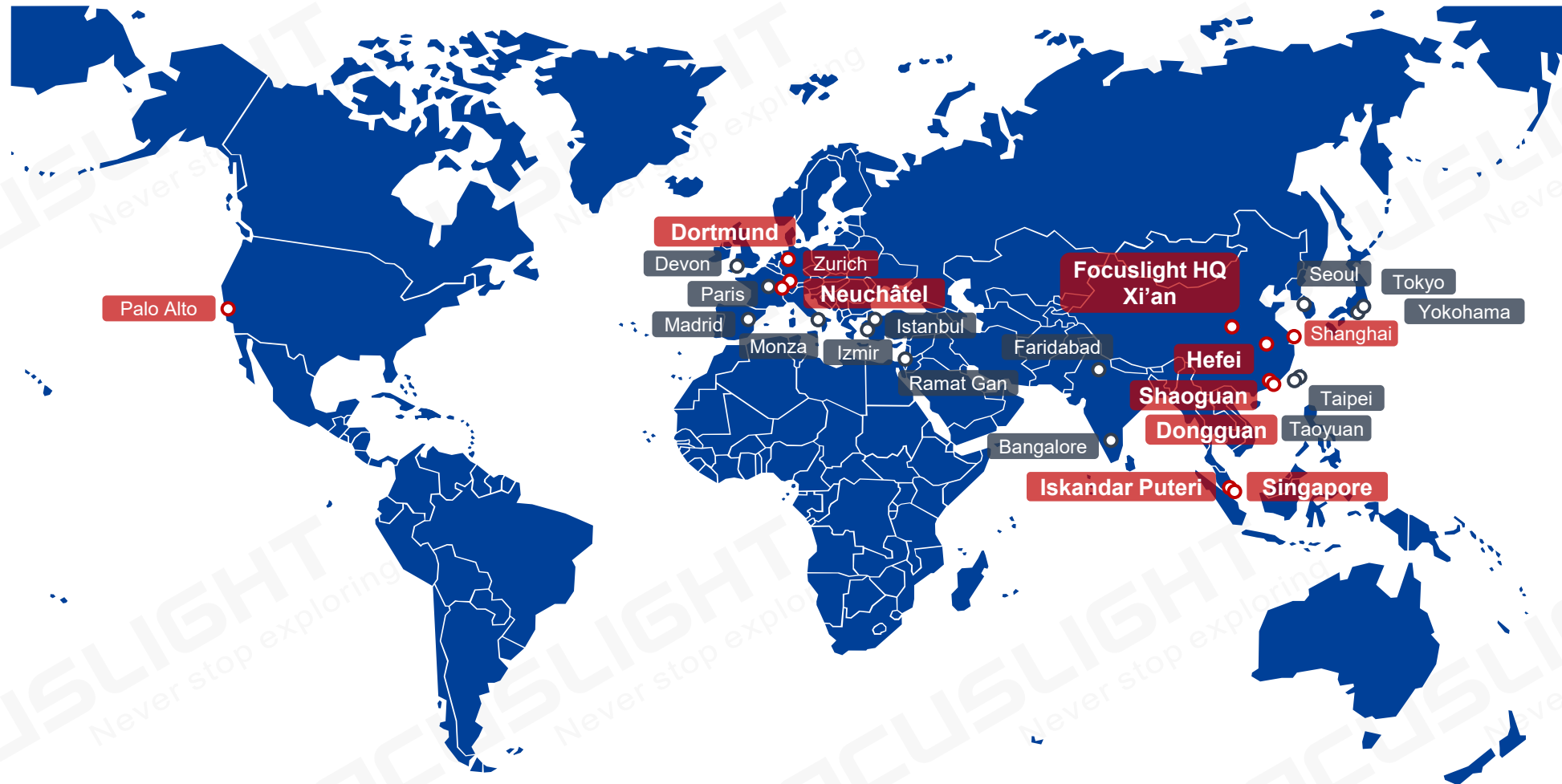
Footprint ↓

Reliability ↑

Efficiency ↑

Cost ↓

Sales Network



- Worldwide established distributors
- Direct sales offices in China, Switzerland and US
- R&D and operation centers in China, Germany, Switzerland, Singapore; Malaysia operation center being constructed

Your committed and reliable long-term partner in photonics components and solutions



Diode laser light source leader and beam shaping expert with strong IP position



One-stop-shop provider of micro-optics choosing from five process technologies best matching customer needs



Global photonics foundry that convert customers' ideas and designs into their own products and solutions



Total solution, versatile customization service and field service provider



Strong RDE capability, high volume production capacity and low-cost manufacturing



Financially healthy and strong financial backing from investors for long term growth

THANK YOU



www.focuslight.com
www.hptg.com

