

optoSiC® Mersen



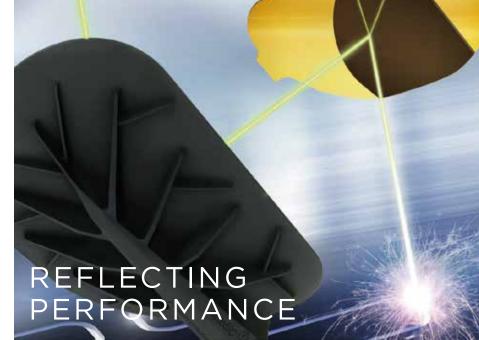




Contact information

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Company

MERSEN optoSiC develops and produces for LASER technologies innovative high-end scanning and fast steering mirrors in a tailored optoSiC+ material (SiC = silicon carbide) for today's and future applications.

Main products and services

GALVO SCANNING: SiC Optics for High-End Laser Processes; OptoSiC scanning mirrors are lightweight mirrors for high-speed laser scanning systems. Our special mirrors design utilizes the inherent stiffness and hardness of SiC to enable the realization of ultra-lightweight with low deformation, even in high-speed applications.

Fast Steering Mirrors: (FSM) in optoSiC+ compensate for input tilt errors generated in a laser and beam-delivery-system. Due to the stiffness of optoSiC+ material, weight savings and high reflectivity our customers are able to increase the performance of their application.

OEM OPTICS: Customer-specific optics offer a wide variety of customer-specific solutions.

In connection with our optics we offer **different coatings:**

OPTOSIC® SCANCOAT: High- power coatings; Low surface tension coatings; Customer specific requirements; Approved package for shipment; Implemented quality assurance

Strengths

optoSiC Optics: Low moment of inertia; Low dynamic flatness; Peak-to-Valley (PV); High resonance frequency; Fast thermal stabilization; Integrated mechanical fasteners, Standard and custom designs; Corrosion and wear resistant; Optically finished to state of the art; Surface specifications; Outstanding optical surface quality.

optoSiC Material: High stiffness; High dimensional & thermal stability; High thermal conductivity, low CTE; Good radiation hardness; Low intrinsic stress; Uniform microstructure, dense; Geometry near net shape; Nontoxic (beryllium replacement); Vacuum and cryo usage.

Target clients

HIGH-END SCANNING MIRRORS: High power laser material processing at UV – IR wavelengths; Airborne and space scanning systems, avionic microsatellite mirrors for UVA's; Bio / medical ophthalmology; Streak camera-mirrors, high-speed photography; reconnaissance, surveillance; Sensing applications LIDAR; Microlithography; Kinematic mounts and optical benches.

FAST STEERING MIRRORS: Optical instruments; Laser Point-to-Point communication; Laser Scanning; Cameras; Laser Beam Stabilization; Image Stabilization; Telescopes; unmanned aerial vehicles (UAV), satellites, spacecrafts, etc...

DEFENSE: Directed energy: Ultra-high power laser system; Target application; Laser Tracking; Electro optic systems embedded on airplanes, helicopters



German Photonics delegation to Glasgow and Exeter; May 22nd - 26th, 2023