SUPERLASERS FOR THE REAL WORLD

LASER MICROMACHINING

Research centers and high-tech industries like aerospace, automotive, medical or semiconductor require precise material processing and surface modifications. Laser machining benefits from high speed and precision, and it is an ideal tool for the processing of hard to cut materials by conventional technologies. It can be deployed on various shapes and types of material, and enables to achieve high throughput with very good quality and precision. High intensity of ultra-short pulses of various wavelengths allow further improvements of precise cutting, drilling and surface modification of metals, alloys, plastics, semiconductors, glasses, ceramics and composite materials.

hilase

EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání

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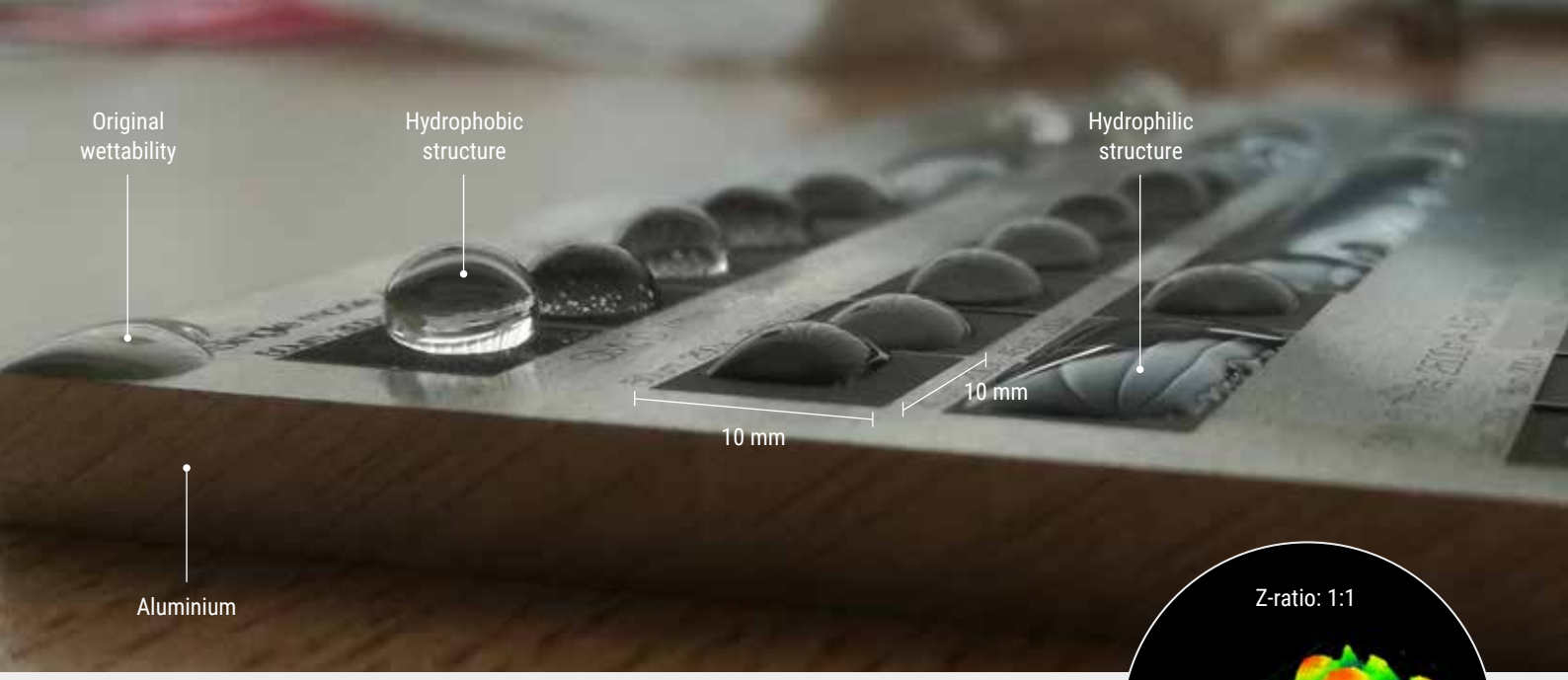
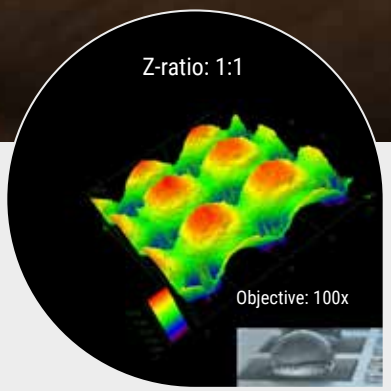
FZU





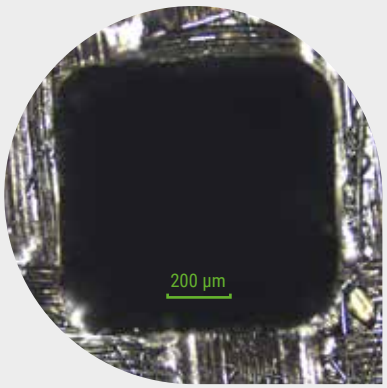
FABRICATED FUNCTIONAL MICROSTRUCTURES:
WATER REPELLENT ALUMINIUM SURFACE

FEATURES / ADVANTAGES

- Clean and eco-friendly technology
- Fast processing of various materials
- High precision and sharp edges

SPECIFICATIONS

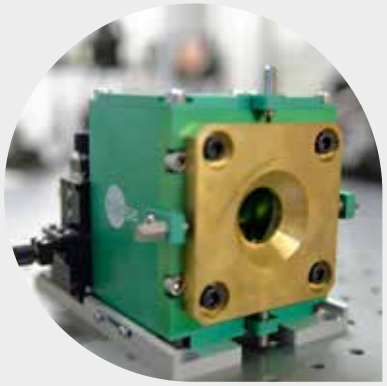
- Pulse energy up to 10 mJ and pulse length < 3 ps
- High average power
- Output wavelength 1030 nm, 515 nm, 257.5 nm, and 206 nm
- Position precision up to 2 µm



PRECISE CUTTING OF COMPLEX COMPOSTIE
MATERIALS WITHOUT HAZ

APPLICATIONS

- Aerospace and automotive
- Semiconductors
- Biology and medical
- Electronics
- Tools production



SELF-DEVELOPMENT OF COMPLEX COMPONENTS
FOR INCREASMENT OF PRODUCTIVITY AND PRECISION

OFFERED SERVICES

- Processing of custom-shape geometries with µm precision
- Fabrication of functional surfaces
- Multi-beam processing and process development

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