

INDUSTRIAL MICROMACHINING APPLICATIONS



CIGS SELECTIVE ABLATION

- / Clean & selective removal
- / Micron diameter

APPLICATIONS

- / Renewable energies
- / Solar panel



GLASS CUTTING & DRILLING

- / Various holes diameter
- / No recast or HAZ
- / No cracks or chips
- / Tapper angle < 4 deg.
- / Clea, sharp edges

APPLICATIONS

- / Consumer electronics
- / Microfluidics

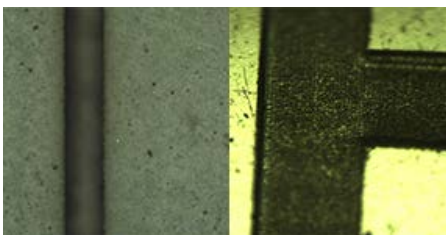


METAL SURFACE STRUCTURING

- / Refractive index changing
- / Colorful grating

APPLICATIONS

- / Consumer electronics
- / Luxury



SELECTIVE METAL ABLATION

- / Different layers of metal ablation
- / Different thickness
- / Micron accuracy

APPLICATIONS

- / Industrial needs

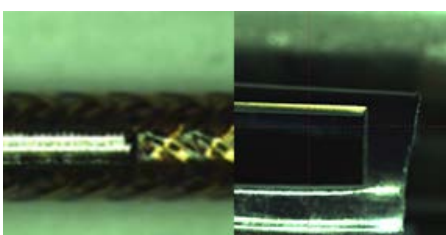


ITO PATTERNING

- / Micron size diameter
- / No burrs
- / 100% hole to the reproducibility

APPLICATIONS

- / Semiconductor industry
- / Consumer electronics



IMPLANTABLE MEDICAL DEVICES

- / No meeting, no HAZ
- / No debris
- / Clean straight cut
- / Micron precision
- / Selective coating removal

APPLICATIONS

- / Stent cutting
- / Drug delivery tube slot cutting
- / Coated Pebax catheter cutting

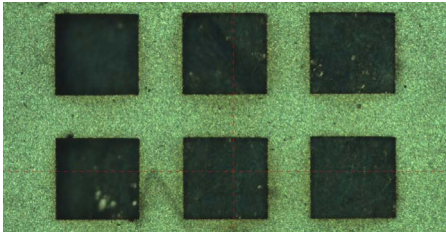


GLASS & SAPPHIRE PROCESSING

- / Inner glass white marking
- / Inner sapphire marking
- / No crack or chips
- / Clean surface rendering

APPLICATIONS

- / Consumer electronics
- / Luxury (anti-counterfeiting)

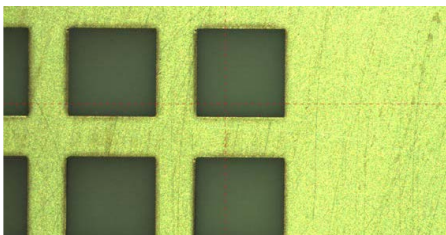


NITINOL MATRIX PATTERNING

- / No burrs, no recasts
- / Sharp edges
- / No discoloration
- / Micron accuracy

APPLICATIONS

- / Consumer electronics

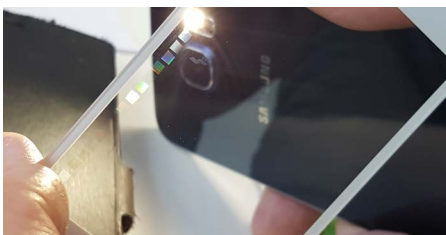


GOLD COATED ALUMINA MATRIX PROCESSING

- / Clean, straight edges
- / No debris, no cracks
- / No HAZ
- / Intact Alumina substrate
- / Micron accuracy

APPLICATIONS

- / Consumer electronics

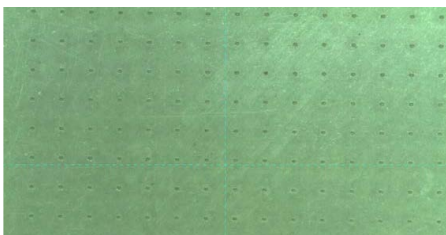


GLASS BULK PROCESSING

- / Refractive index volume changing
- / Birefringent inner glass gratings
- / No influence on substrate strength

APPLICATIONS

- / Consumer electronics
- / Luxury



DRILLING OF LOW DENSITY POLYETHYLENE COATED WITH EVA

- / Clean, straight holes
- / Minimal taper (<4 deg.)
- / No debris
- / < 30 -µm hole diameter
- / Micron accuracy

APPLICATIONS

- / Consumer electronics

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Spark Lasers designs & manufactures compact ultrafast fiber lasers for scientists and high-tech companies. We make picosecond and femtosecond lasers that are smaller, simpler to use and maintain, but offering the same level of performance as larger lasers.

DISCOVER OUR COMPACT LASERS FOR MICROMACHINING

