

LightShot LSV3

UV Excimer Catheter Processing Workstation

Unparalleled, deep-UV laser catheter processing

A self-contained workstation for R&D or production

Versatile, robust and easy to use, the LightShot V3 (LSV3) makes it possible to bring laser processing in-house and reduce manufacturing costs, without the need for a skilled technician.

Optec's intuitive ProcessPower™ software includes method-development functions that facilitate writing recipes for rapid-prototyping, pre-production and full production.

The LSV3 is equipped with mask-projection optics under PC control for "photolithography precision" ablations that removes insulation, residue and flashing without damaging the metal surface and with sharp transitions from polymer to metal.

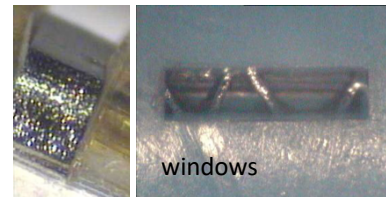
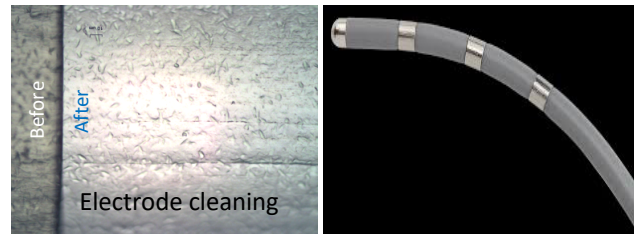
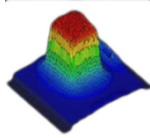


POLYMERS , EPOXY , GLUE

Reduce OD of tubing, ablate windows, drill thru holes and blind holes. Remove flashing from electrical contacts and electrodes, and more.

FEATURING

- * Deep-UV laser micromachining yields minimal HAZ (heat affected zone) without debris, residue or oxides.
- * No damage to electrode.
- * Flat, uniform beam removes $\sim 1/3 \mu\text{m}$ per shot.
- * Confocal performance - when the part is in the laser beam is in focus for rapid processing with high repeatability.
- * Continuously variable demagnification optics amplify the energy density when more power is needed for challenging materials.
- * User friendly software routines make it easy to develop part processing recipes.
- * Precision ablation depth control down to 100nm per shot (material dependent) and energy density control for removing material layer-by-layer.
- * High definition imaging down to $1.5 \mu\text{m}$; sub-micron part positioning resolution and micron level ablation accuracy



Air-cooled, SFF* excimer laser

248 nm or 193 nm wavelengths

Mask-projection "flat" ablations

Live, zoom video microscope color viewing

Pneumatic rotary chuck with collets

Sub-micron resolution motion control

Integrated NEMA 12 gas cabinet

Integrated industrial PC

Auto-focus software function

Fume extraction

Class 1, interlocked, safety enclosure

* Small Form Factor:

OPTIONS: Automatic catheter feeders.

Optec is the leading provider of A-thermal laser processing systems specializing in deep-UV excimer & femtosecond laser configurations, plus fiber, YAG and TEA CO₂ laser systems when required of the application.

Optec products are made-to-measure to suit the specific needs of each customer.

