## MARKING TEXTURING ENGRAVING CUTTING

THIN FILM REMOVAL

## The accurate, compact, modular, upgradeable micromachining machine

The LS4 has been specifically designed for micromachining applications in an industrial environment. It integrates our complete range of laser sources. It is a modular and flexible machine thanks to its options developed to reach extreme precisions.

The 3D version allows micromachining of complex 3D pieces thanks to the combination of the mechanical axis and optical axis movements.»





LS4 connected to LS-Robot

LS4

MACHINE	LS4 ACCURATE	LS4 ACCURATE 3D
Mechanical axis	XYZ	XYZAC
XYZ Travel	500 x 200 mm	
A Travel	-	-30° / + 90°
C Travel	-	n × 360°
Femtosecond laser source	5 to 50 W	
Scanner	LS-Scan XY	
Lens	Telecentric F-Theta	
Beam management module	LS-Shape	
Vision	Visualization and positioning camera	
Autofocus	Laser distance sensor	
Door	Automatic	
Air conditioned working area	Yes	
Electrical cabinet	Air conditioned	
Software	KYLA™ 2D and EasyKYLA	
Assistance for laser focus	Dual laser guide	
Table	Marble	
ACCURACY / REPEATABILITY		
XY axis (per axis)	A:+/-2 μm R:+/- 0.5 μm	
Axis A	-	A+/-5 arcsec R+/-3 arcse
Axis C	-	A+/-6 arcsec R+/-3 arcse
Options		
_ASER SOURCES		
Picosecond	30 W	
Dual source	Combination of 2 sources (fs and ns)	
LS-MODULES		
3D Scanner	LS-Scan Z (KYLA™ 3D included)	
Zero taper cutting and drilling	LS-Precess	
Vision through the scanner	LS-View	
Robotization	LS-Robot module or external robot	
OTHER		
Vision	Cognex camera, shape recognition	
Metrology	Optical profilometry (confocal sensor)	
Automation	LS-HMI (PLC)	
Autofocus	Laser distance sensor	
Accessories	Power meter, fume extractor, cutting nozzle	