

femtosecond

ULTRASHORT PULSE LASER

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LASER ENGRAVING MACHINE

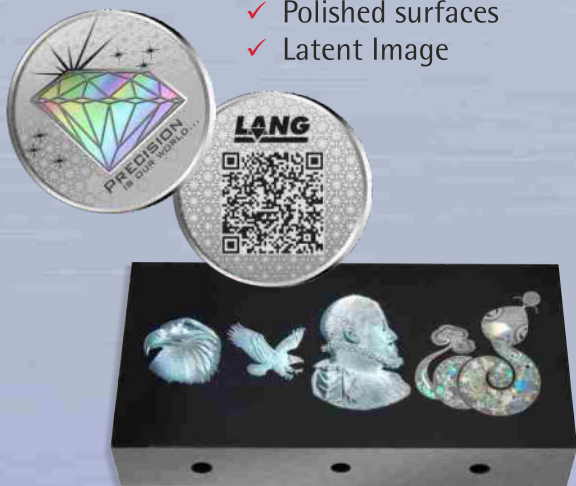
PULSARIS 300fs

Advantages

- ✓ Femtosecond laser technology
- ✓ Burr-free ablation
- ✓ Long-term stability
- ✓ Low-vibration and high-precision due to granite structure

Versatile possibilities

- ✓ High precision engraving
- ✓ Frosting
- ✓ Micro-Lettering
- ✓ Texturing
- ✓ Rainbow effect
- ✓ Polished surfaces
- ✓ Latent Image



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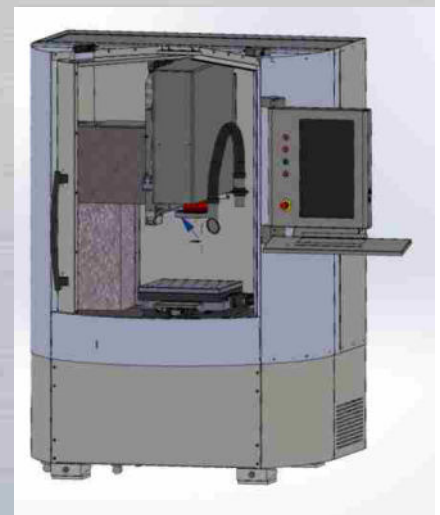
PULSARIS 300FS

The Pulsaris 300fs is the perfect partner to produce dies, engravings, labels and complex, fine structures. The Pulsaris 300fs impresses with its compact and ergonomic design. The machine allows tool free and contactless engraving and marking in hardened and non-hardened steel and other metals and materials. It is equipped with a hole matrix table, which allows different clamping methods.

Femtosecond laser processing opens up new possibilities for 3D machining of embossing dies. Compared to conventional nanosecond lasers, it impresses with a significant increase in precision - as the laser pulses are ultra-short, the material is vaporized almost without heat input. This reduces the thermal effect and ensures smooth, more detailed engravings. Burr-free removal, micro-polishing of the smallest structural details to create almost reflective surfaces and light refraction effects are not only aesthetically pleasing, but also enable microscopically small reliefs for safety-relevant applications. In addition, colored markings and structured designs open new possibilities.

Technical Data

Work range (X x Y x Z) (mm) (")	300 x 300 x 300 (11,81 x 11,81 x 11,81)		
Load capacity max. (kg)	100		
Weight of machine (kg)	2.000 (plus accessoires)		
Machine dimensions (mm) (") (folded control panel)	1560 x 1874 x 2288 (61,42 x 73,78 x 90,08) (WxDxH) (exact dimension acc. to transport plan)		
Controller	LNC express		
Measuring system	Glass scales		
Output software	LDriver		
Standard laser unit			
Laser system	Femtosecond Laser		
Wavelength (nm)	1030		
Laser power (W)	20	40	
Cooling System	Water cooled		
Objective			
F-Theta objective, telecentric (mm)	80	100	163
Scan field (mm) (")	45 x 45	54 x 54	95 x 95
Smallest spot size (µm)	15	18	28



Complete system solutions

We offer complete system solutions for your milling and engraving applications.

From the digitizing system LDigit *express*, the software LErgoCAD and Relief-Designer to the individual machine conception and product-specific training, with LANG you have only one partner from the idea to the finished product.

Our decades of experience in the field of mechanical and control engineering and in the development of software guarantees you process reliability and the highest quality in the machining of your workpieces.

