

# Innovative Ultrafast Laser Solutions

### **ADVANTAGES**

Fully-integrated system including:

- Solas II-series laser source
- Multi-axis positioning system
- High-dynamic response 2-axis beam steering
- Beam delivery
- Selection of processing parameters
- Class I safety enclosure
- Integrated, intelligent, onaxis machine vision and inspection system
- Optional digital and analog I/O
- Complete computer control
- CAD import and integrated drawing tools
- Engineered machine base
- Compact size

#### **APPLICATIONS**

- Micro-machining
- Laser ablation
- Micro/Nano patterning
- 3D Tomography
- Small-to-medium scale production

## SolaFab-II

Ultrashort Pulse Compact Micromachining Workstations



Over thirty years experience with ultrashort pulse laser manufacturing combined with hundreds of real world projects and years of processing know-how have led to a new line of femtosecond micromachining workstations.

The SolaFab-II encompasses everything you need to micro-machine with femtosecond lasers. The design benefits from our years of experience learning the optimum combination of components, performance parameters, and software required to micro-machine materials with ultra-short pulses of light.

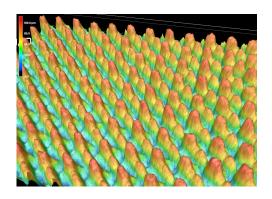
The SolaFab-II includes a sophisticated machine vision and inspections system and complete computer control. The software provides powerful and intuitive access to all system functionality including the laser, motion, and machine vision systems. Solafab-II breaks new boundaries in size, performance, and price to expand the accessibility of femtosecond laser machining into new areas of manufacturing and R&D.

### Specifications:

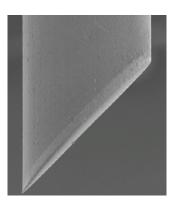
Laser Source	SOLAS-II integrated laser
Positioning system <sup>1</sup>	200 mm X,Y, 100 mm Z stages and 2-axis galvonometer
Vision System	On-axis LED illumintated vision system, optional secondary off-axis
Software <sup>2</sup>	Advanced CNC package including CAD import, drawing tools, advanced hatching, and integrated vision.
Enclosure	Class 1 enclosure with interlocks

- 1 Other options available.
- 2 Contact sales for more details.









Images: Image of part made during the first demonstration of industrial femtosecond laser machining at Laser World of Photonics in Munich, Germany in 1997 (left). 3D confocal laser scanned image of textured surface (center-left), custom made lift-out grid (center-right), and SEM image of a sharpened hypodermic needle (right).

### 20 years of serving the following industries:













# Where your imagination of the very small is realized



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