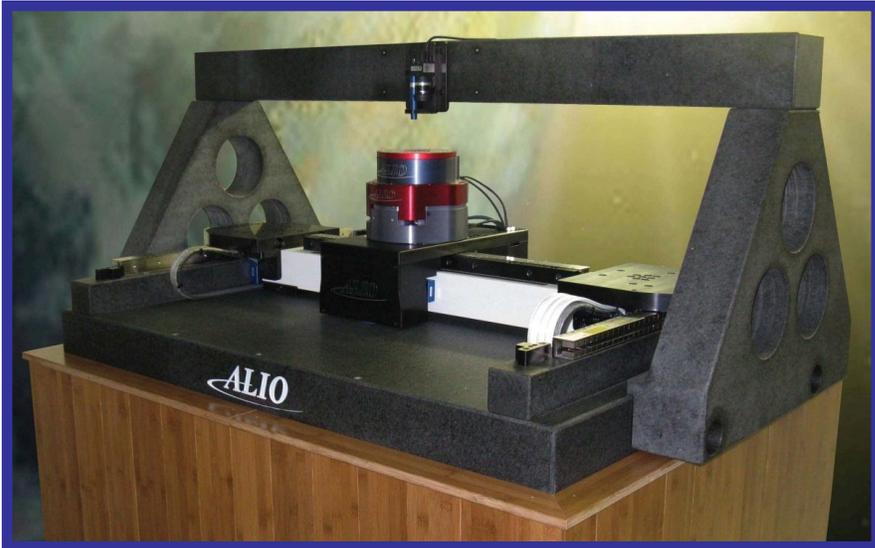


# ALIO 6-D Laser Processing

with ALIO's Unique 6-D Point Precision™



## ALIO Air Bearing Nano Laser Processing

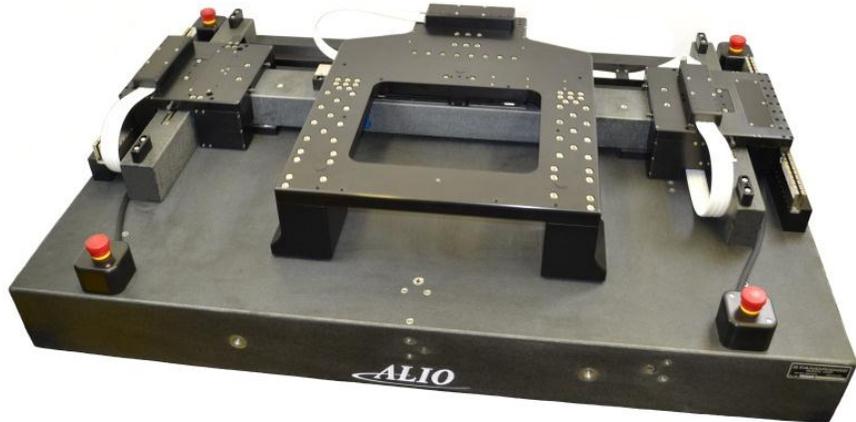
- Industry Leading Precision
- Laser Machining
- Laser Lithography
- Planar Air Bearing Travel Ranges
  - 300mm Planar XY Travel Scalable to 3m+
- Specifications\*
  - Accuracies below 50nm
  - Bi-Directional Repeatability below 10nm
  - Velocities from  $\mu\text{m}/\text{sec}$  to over 1 m/s
  - Flatness of Travel  $< \pm 1 \mu\text{m} / \text{meter}$
  - Pitch/Roll  $< \pm 1 \text{ arc-sec} / \text{meter}$
  - Yaw  $\sim \pm 0.2 \text{ arc-sec}$
- Customer Configured Orientations Available
- MTBF  $\gg 40,000$  hours
- ALIO's Planar Air Bearing Systems are Patent Pending

\*All Specs are System Configuration Dependent, Consult Factory.

ALIO's Large Scale Nano Precision Laser Processing Solutions Offer Industry Leading Performance Backed by Unmatched Reliability and ALIO's Outstanding Customer Support

6-D Nano Precision® Motion Systems

Compact Air Bearing Solution for True Nano® Precision

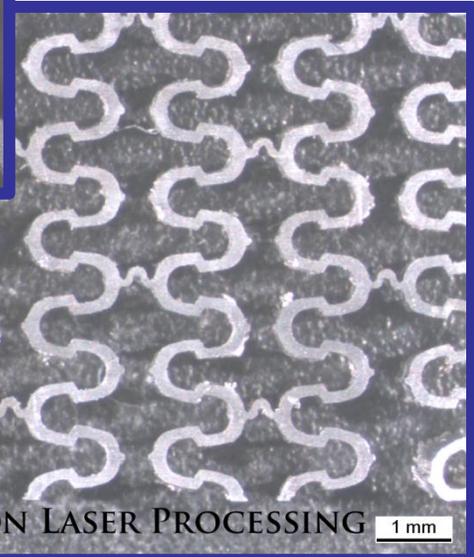
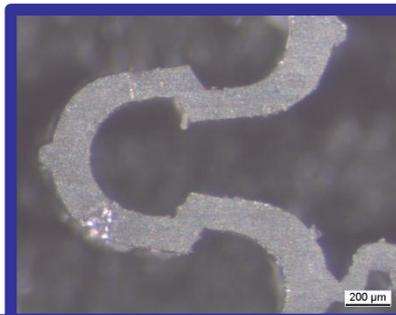


Patent Pending Planar Air Bearing Technology



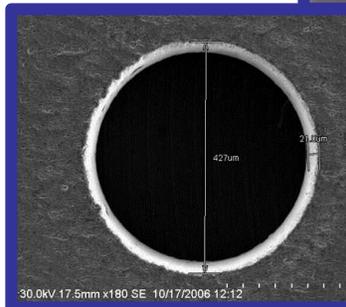
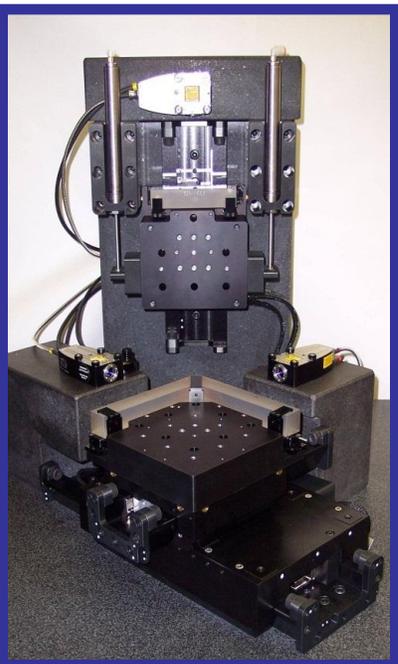
Air Counter Balanced Air Bearing Z-Stage for Extreme Focus Precision

Nano Precision Laser Machined Stents



NANO PRECISION LASER PROCESSING

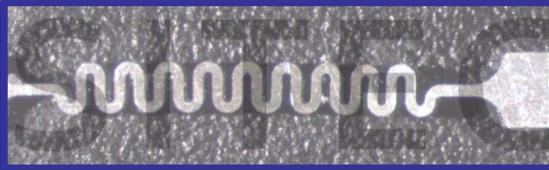
Stent and Clip Photos Courtesy of Politecnico di Milano and IPG-Italy



XY Circle Interpolated Laser Machined Hole

# ALIO 6-D

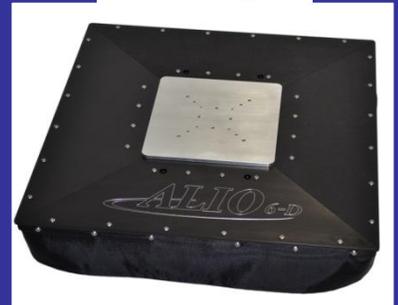
## User Defined Laser Process Configurations for OEM Applications 1-Axis to 6-Axis Integrated Solutions with Point Precision™



Shielded Crossed Roller Bearing Laser Processing Solution



ALIO 6-D Point Precision™



(Shown as Installed at IPG-Italy)

6-D Nano Precision®



### Available Specifications

Accuracy		< +/- 100 nm
Repeatability		< +/- 10 nm
Flatness		< +/- 1 µm/m
Straightness		< +/- 500 nm/m

Please Consult the Factory



Near Air Bearing Precision



6-D Hybrid Hexapod™ Nano Precision System

