

SF-100 Rotational Substrate Stage



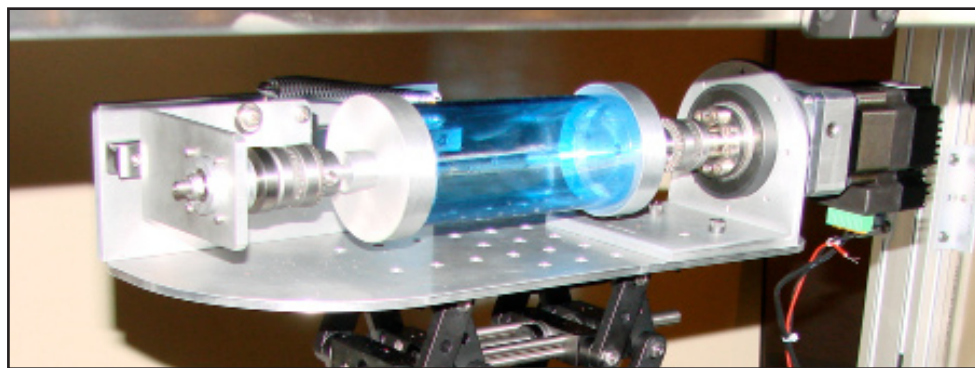
INTELLIGENT
MICRO PATTERNING, LLC

Precision Microlithography for Cylindrical & Curved Substrates

Are you looking for an easy to use method for patterning cylinders and other non flat substrates? If so, then the **SF-100** Rotational Substrate Stage is your answer. This simple and versatile option is elegantly integrated into the standard **SF-100** design, so that operation of this system is intuitive and maintenance free.

Here's how it works: You mount the coated substrate onto the rotational chuck, using our simple self centering chuck assembly. The system then exposes the desired pattern onto the substrate, first patterning a ring around the outside of the cylinder, then moves along the main axis of a cylinder to complete the entire circumference of the device. Using this stitched pattern, large and/or long tubes can be easily patterned and, with our integrated camera system, level to level alignment capability is provided with all **SF-100** systems.

The results are unparalleled process capabilities, plus the ease of use and versatility that you've come to expect from Intelligent Micro Patterning.



Exceptional Benefits from a Simple, Easy to Use Features

- The Rotational Stage Assembly offers precise device movement and low backlash due to the use of high precision encoders and stepper motors.
- High output torque allows for handling heavy substrates.
- Substrate handling and mounting components are easily reconfigured to support different sized substrates and materials. Substrates with diameters on the millimeter scale to the inch scale can all be handled with a single stage assembly.
- Mounting the Rotational Substrate Stage on any XYZT automated stage provides the user with true one button operation.
- Labwindows™ based software integrates all systems functions, while providing an open platform for software customization and integration with other systems.
- Labwindows™ based Vision Developers Module provides the basis for all camera functions on the system, ensuring reliability and versatility.
- Maintenance free components are used to eliminate the need for routine maintenance and spare parts, saving you money and time.
- The Rotational Substrate Stage can be easily added or removed by the user, allowing for easy system reconfiguration.
- This option can be either purchased as an option with a new **SF-100** or added to an existing system as a field upgrade.
- Using our optional dip coater, the user can have cylindrical resist coating capabilities at their site.

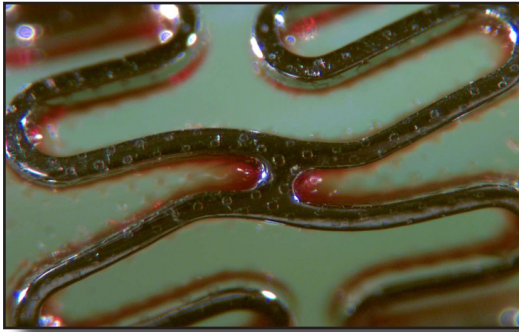
SF-100
XCEL

SF-100
XPRESS

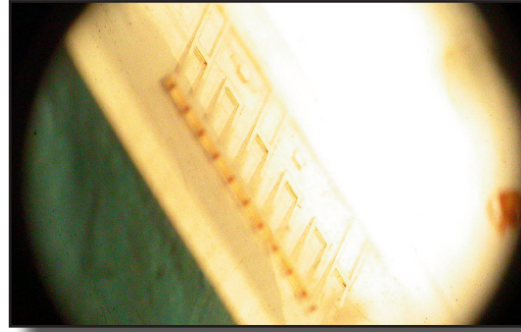
SF-100
XTREME

SF-100
XTEND

Here's What You Can Pattern with the Rotational Substrate Stage...



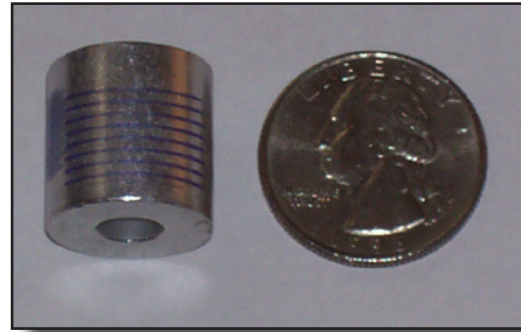
Cut Stainless Steel Stent Patterning with Standard Positive Photoresist



SU8 Patterned Over the Corner of a Ceramic Rectangular Device



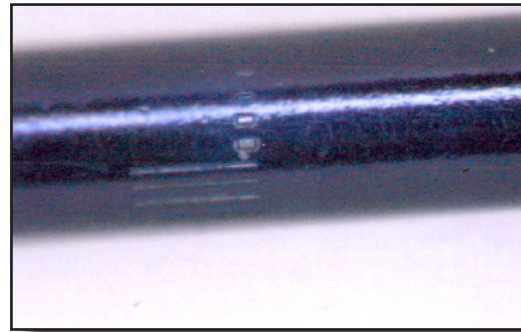
Passive Electronic Devices Patterned on Military Munitions



10 Micron Thick Resist Patterned on Cylinder



Helical Pattern of Positive Photoresist on a 1 mm Diameter Stainless Steel Rod



3 Micron Features on a Hollow Stainless Steel Tube for Medical Stent Fabrication

Contact your local sales representative for more information or to request a list of satisfied customers.



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