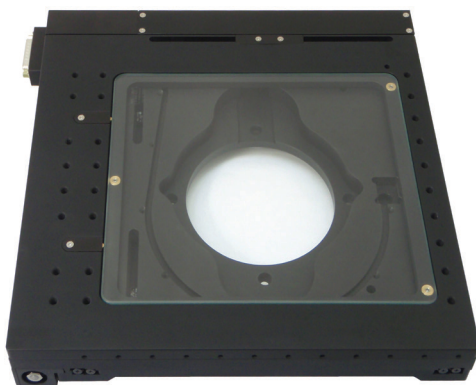


MS-8000 XY Automated Stage



The MS-8000 stage is suited to use with large industrial inspection microscopes such as the Nikon L200/300 series or Olympus MX51/61 series. The open frame allows for transmitted light illumination. The stage can be supplied with either a glass plate insert, or a variety of large format stage inserts, including a vacuum wafer chuck for semiconductor inspection.

The DC servo motor stage is compatible with either small precision anti-backlash gear-head motors or larger spur-head motors for faster speeds. The stage is also compatible with optional high accuracy linear encoders.

Features

- Closed-loop DC servo control for precise positioning and highly repeatable focusing
- Wide dynamic speed range with XY joystick control
- Proven operation with many popular software packages

Linear Encoder Options

Axis	Resolution	Scale Accuracy
XY	10 nm	$\pm 3 \mu\text{m}$ per length of scale

Lead Screw Options with 141:1 Anti-Backlash Gear-Head Motors

Lead screw pitch options	Rotary encoder resolution	Maximum speed
25.40 mm (Ultra-coarse)	88 nm	28 mm/s
12.70 mm (Super-coarse)	44 nm	14 mm/s
6.35 mm (Standard)	22 nm	7 mm/s
1.59 mm (Fine)	5.5 nm	1.75 mm/s
0.635 mm (Extra-fine)	2.2 nm	0.7 mm/s

Standard Lead Screw Accuracy is 0

Lead Screw Options with 3.7:1 Gear Head Motors

Lead screw pitch options	Encoder resolution	Maximum speed	Repeatability
1/16"	210 nm	30 mm/s	4.5 μm
1/4"	0.84 μm	120 mm/s	8.0 μm
1/2"	1.7 μm	240 mm/s	15.0 μm