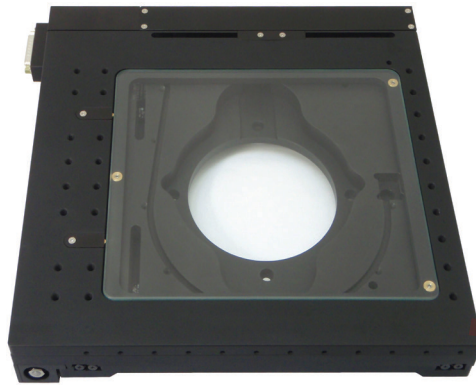


# MS-8000 XY Automated Stage



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
- Backlit LCD display shows X, Y, and Z coordinates
- “Zero” and “Home” button for simple stand-alone operations
- Compact ergonomic tabletop control unit size is 6” D x 9” W x 3” H
- Microprocessor control with RS-232 serial and USB communications
- Proven operation with many popular software packages

## Linear Encoder Options

Axis	Resolution	Scale Accuracy
XY	10 nm	± 3 μm 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/sec
12.70 mm (Super-coarse)	44 nm	14 mm/sec
6.35 mm (Standard)	22 nm	7 mm/sec
1.59 mm (Fine)	5.5 nm	1.75 mm/sec
0.635 mm (Extra-fine)	2.2 nm	0.7 mm/sec

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/sec	4.5 μm
1/4”	0.84 μm	120 mm/sec	8.0 μm
1/2”	1.7 μm	240 mm/sec	15.0 μm