

Motorized XY Stage For Microscope



MX100 High Resolution



MX100 Advanced

NEXT-GENERATION MOTORIZED XY STAGE SYSTEM

Redefining Precision, Speed, and Control for R&D and Imaging Applications

PRODUCT OVERVIEW

HEXON's newly launched Motorized XY Stage is a precision motion platform engineered for advanced microscopy, material analysis, imaging, and microstructure measurement. Equipped with user-friendly control, high-resolution motors, and intelligent movement tracking, it is ideal for demanding research labs and industrial automation setups.

Whether it's for panoramic image stitching, sample positioning, or nanoscale measurements — this motorized stage brings automation and accuracy to your fingertips.

KEY FEATURES

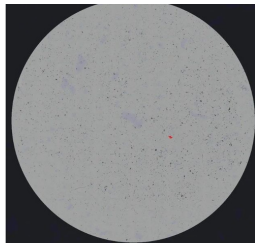
-  Panorama Image Stitching: Ideal for filter paper, textiles, biological samples
-  Precise Microstructure Measurement: Directly on screen via HMI
-  User-Friendly Joystick Navigation: Manual control with ultra-fine speed response
-  Targeted Positioning: Move to exact (X,Y) coordinates
-  Data Logging & Tracking: Know your exact position at all times
-  Automatic Homing System: Repositions stage safely on shutdown or restart
-  Customizable Options: Resolution, travel range, inserts, limit switch type
-  Industrial Build: Durable anodized aluminium construction ensures longevity and stability

APPLICATION AREAS



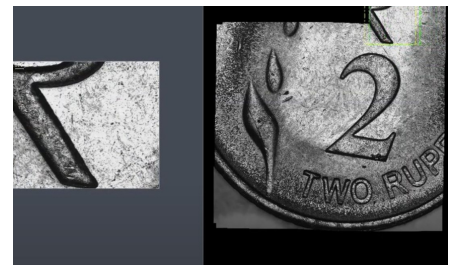
USP<788>, USP <789>, USP <1788.2> and <790> Visible Particulates in Injections.

Filter Paper Imaging and Analysis

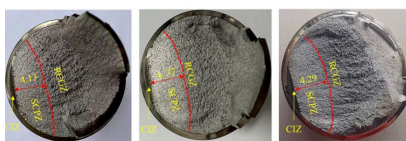


Cleanliness analysis as per ISO 16232

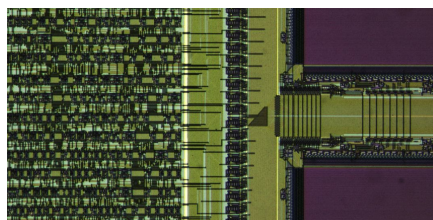
Filter Paper Imaging and Analysis



Panoramic Microscopy Scanning



Material Deformation and Crack Propagation Studies



Semiconductor & MEMS Inspection



Pharmaceutical Material Analysis



DETAILED TECHNICAL SPECIFICATIONS

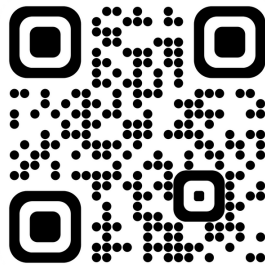
Specification	Details
Travel Range	3 Configurations: 75×50 mm, 100×100 mm, 200×200 mm
Travel Speed	Up to 2 mm/s (customizable models available at 0.66 mm/s for ultra-precision work)
Accuracy	±3 µm (High precision model) ±5 µm (Standard model)
Resolution	Standard: 0.6 µm Optional: 1.13 µm, 244 nm, 65 nm Custom: Down to 15 nm
Motor Type	2-Phase Stepper Motor (Standard) Gear Servo Motor (High-Precision Variant)
Speed Control	Via Ergonomic Joystick with Variable Speed Proportional to Movement
Positioning Control	Move to absolute or relative positions via HMI
Homing Functionality	Manual Homing Button Auto Homing on Power-Off (Premium variant)
Limit Switches	Optical Light Barriers Optional Inductive Limit Switch (for rugged environments)
Position Tracking	Real-time feedback on stage coordinates
Measurement Capability	Integrated tools for microstructure size estimation
Material & Finish	CNC-Machined Aluminium with Black Anodic Coating
Weight	~2.5 kg (Standard Model) ~3.0 kg (High-Precision Servo Model)
Stage Insert	Customizable inserts available upon request
Console Interface	High-Resolution HMI Touchscreen Display with Integrated Joystick
Power Supply	230V / 50 Hz (Custom options available)
Software Compatibility	Optional PC software for automated scanning and data logging (available on request)

WHY CHOOSE HEXON XY STAGE?

- ✓ Customizable Precision — From μm to nanometer resolutions
- ✓ Dual Motor Option — Choose stepper or servo for your application
- ✓ Flexible Interface — Intuitive HMI and joystick control
- ✓ Modular Build — Adaptable stage size and insert
- ✓ Panorama Ready — Built-in for high-resolution imaging
- ✓ Proven Technology — Installed at renowned institutes and Industry.

ADD-ON OPTIONS (ON REQUEST)

- ✓ PC Software for Auto-Scanning
- ✓ Z-axis Integration
- ✓ Remote-Control Access
- ✓ Custom Surface Inserts
- ✓ Camera Mounts & Optical Modules



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