

## 450PM manual analytical probe station

The Model 450PM 8" probe station offers value with its low cost of ownership and stable, reliable probing performance. With a design based on Micromanipulators popular Model 4060 probe station, extensive application coverage and flexible options, the 450PM is quickly becoming the probe station of choice for test labs around the world.

Our customers expect Micromanipulator probe stations to provide stability with open, flexible designs that incorporate precise, dependable mechanics. The 450PM continues this tradition in a more economical station for those customers not needing the low current capability, precise positioning and additional convenience features of the popular 4000 and 8000 series probe stations.

The Model 450PM provides a very capable probe station solution for everyday analytical probing, and offers standard options so that you can configure a 450PM for your specific needs. Probe card holders, thermal chucks, manipulators, unique probe holders, vibration isolation tables, and camera systems are popular options.

The Model 450PM offers the lowest cost of ownership from a name you know and trust.



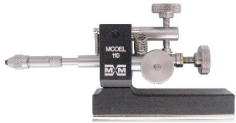
# Micromanipulator

1555 Forrest Way  
Carson City, NV 89706

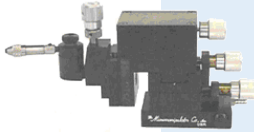
TF : 800.654.5659  
PH : 775.882.2400  
FX : 775.882.7694

[www.micromanipulator.com](http://www.micromanipulator.com) • [info@micromanipulator.com](mailto:info@micromanipulator.com)

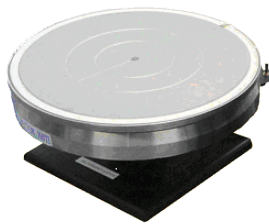
110 / 210 Series Manipulators



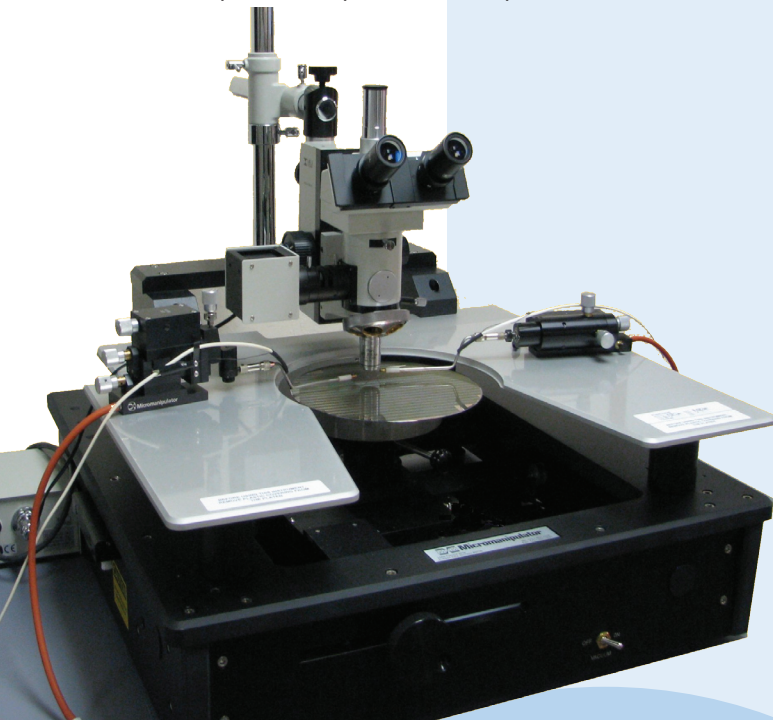
525 Series Manipulators



H1000 Series Thermal Chucks (optional)



Station with optional Compound Microscope



#### 450PM Features and Benefits

- Manual lead screw control of stage for long life and stable, quick positioning.
- Lead screw control of platen offered on 450PM-A models for probe card positioning.
- Manual chuck theta rotation with a convenient lock.
- Stereo Zoom or Compound microscope on stable boom allows manual X-Y positioning with precise focus control.
- Ergonomic, compact design enhances ease of use while increasing stability.
- Compact foot print for efficient use of lab space.
- Large aluminum platen allows operators to choose from a variety of convenient manipulator placement options.
- 8-inch (200mm) ambient vacuum chuck with full 8"x8" wafer stage travel.
- Optional hot chuck may be added including internal cable/hose handling assembly with convenient termination at the rear of the probe station.

#### Station specifications:

##### Test Station Dimensions

- Footprint (Width x Depth) 22.75" x 23.35" (57.7x59.3cm). Station Width, Depth, Height 28.5" x 26.75" x 21.5" (72.3x67.9x 54.6cm). Weight: 191 lb. (86.6 kg).

##### X-Y Stage Movement

- Cast stage cores for faster settling time.
- Cross roller bearing way construction for high reliability and precision.
- X and Y axis range 8" x 8" (200mm x 200mm). Manual control
- Resolution 1  $\mu\text{m}$  per degree.

##### Chuck Theta:

- Provided through easy-to-use thumb screw secured rotatable hub on fixed chuck post.

##### Microscope

- Boom mount allows up to 8" (200mm) in Y positioning. Rotation on mounting pole up to 180 degrees.
- Vertical positioning up to 8" (200mm) gross with 1" microscope fine focus control.

##### Large-area Aluminum Platen

- 450PM-A: 1" (25.4mm) Z axis range via platen fine lift control, resolution 40 microns (0.0015") per rotation.
- 450PM-B: Fixed, stable platen.

#### Full range of accessories and options available including:

Probe card holders, Light Tight Enclosures, Thermal Chucks, Video accessories, Manual/Motorized manipulators.