

Probe station MI-WPT2A

The Mine Probe Station (MI-WPT2A) is an advanced research tool designed for precise and repeatable measurement of electrical properties in materials and early-stage electronic devices. It features an Advanced Microscope with a high-resolution Camera and two micro positioners for detailed inspection and accurate positioning. The MI-WPT2A ensures a controlled, non-destructive testing environment, making it ideal for fundamental research and versatile enough for both dedicated and multi-use applications. Its design promotes consistent, reliable data collection, benefiting both individual research and collaborative projects.











Precise Measurement



Back-lash free movement



Low noise vacuum pump



Stable Platen mounted with capacity to mount up to 6 micropositioners.

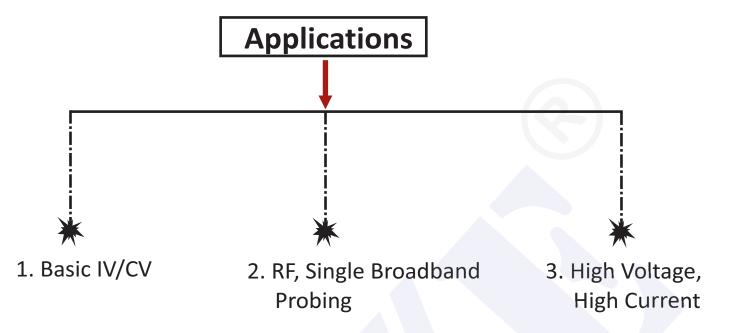


Solid station frame with built-in vibration-isolations.



Ease of use





Technical Specifications

Probe Station:

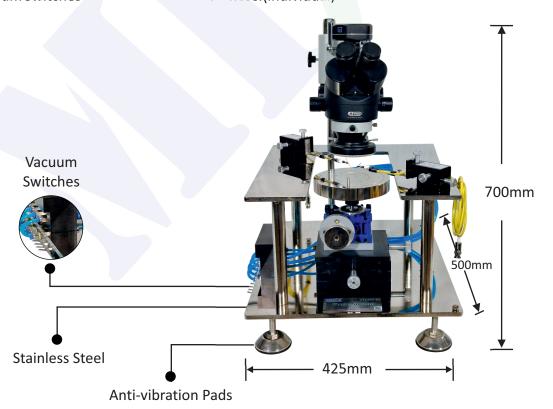
 $Dimensions (approx.) \hspace{1.5cm} : \hspace{.1cm} 425 mm(W) \times 500 mm(D) \times 700 mm(H) \hspace{.1cm} including \hspace{.1cm} microscope \hspace{.1cm} setup.$

Weight(approx.) : 36 Kg without Microscope & Stand

Base Material : Stainless Steel

Anti-vibration Pads : 4Nos.(fitted on base)

No. of Vacuum Switches : 4Nos.(individual)





Probe Platen:

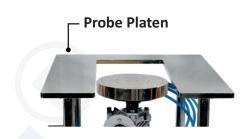
Design type : Four post support

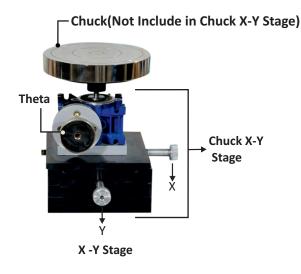
Shape : Rectangular U type

Surface planarity : $\pm 10 \, \mu m$

Maximum number of Micro-positioners : 6x DC/High Power

Platen Material : Stainless Steel





Chuck X-Y Stage

Chuck Movement : X, Y, Z & Theta

X Travel : 60 mm Y Travel : 60 mm

Z Travel : 8 mm

Chuck X-Y Resolution : $< 10 \mu m$

Theta Travel : (Standard) 360°

Motion control mechanism : Coaxial knob gear drive stage.

Chuck

MI-CB3N101

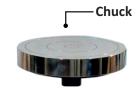
Surface Planarity : $\pm 10 \,\mu m$

Diameter : 101mm

Material : Nickel Plated Brass

Vacuum grooves with pin hole : Center, 20mm, 50mm, 75mm (diameter)

Supported DUT sizes (in mm) : 5, 10, 25, 80, 100





Vacuum Pump

Type : Quiet Vacuum Pump .

Operational Voltage : 230 VAC 50 Hz operation.

Vacuum : -333mbar.

Airflow : 7 Litre/meter.

Power Consumption : 15W.

Inlet & Outlet : 6mm O.D. hose barb.

Weight : 0.7Kg.



Stereo Zoom Microscope

Stereo zoom head : 7X to 45X.

Focus arm boom stand.

LED Lights : 72 led ring light.

Auxiliary lens. : 2.0X

Camera

Resolution : 5 Megapixels.

Trinocular tube inclination : 45° for greater ease of observation.

Magnification : 7X to 45X.

Microscope Zooming ratio : 6.4:1.

Rack-Pinion focussing stroke : 50 mm.

Wide field eyepiece : 10x (Paired).

Objective : 0.7x, 4.5x.

Field of view : 28.6 - 4.4mm.

Standard Working distance : 100 mm (regardless of magnification or better)

Interpupillary distance : 54 to 75 mm.

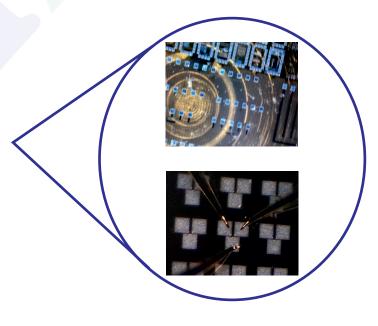
Binocular body Rotation : full 360° (locked in any position desired).

• Once brought in focus, image remains clear and sharp throughout the whole zoom range.

• Crisp, erect images with high resolution and excellent stereoscopic effect.

• Dioptic adjustment with a range of + 5 diopters is possible with both Oculars.







Micropositioner

All micorpositioners are backlash free and available in various options surch as vacuum base, manget base and magnet switch base.

MI-MPS10-1

 $\begin{array}{lll} \mbox{Mounting base style} & : & \mbox{Magnetic.} \\ \mbox{Head style} & : & \mbox{Standard.} \\ \mbox{Resolution} & : & 10 \ \mu m. \end{array}$

Travel range(Linear)



Probe Tip Holder

MI-TH01C

Probe tip holder : Coaxial probe
Temperature range : -60 °C to 300 °C

Connectivity : Coaxial

Connectivity type : Single low noise Coaxial.

Tip Holding Type : Spring.

Characteristics impedance : 50 Ohms



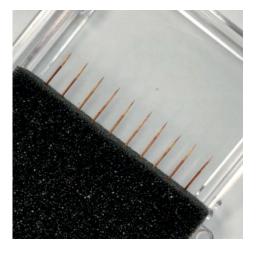
Probe Tips

MI-T100U

Diameter : 100um

Material : Tungsten

Qty : 1 Box (Contains: 10 tips)





Package Contains

Probe Station Base with Platen : 1Nos.

Chuck X-Y Stage : 1Nos.

Chuck (MI-CB3N101) : 1Nos.

Micropositoner(MI-MPS10-1) : 2Nos.

Probe Tip Holder(MI-TH01C) : 2Nos.

Probe Tips (MI-T100U) : 1Box(containg 10 tips).

Vacuum Pump : 1Nos.

Stereo Zoom Microscope : 1Nos.

Standard Accessoires : 1Set.

Standard Accessories

Vacuum tubes : 4 meters(for connecting probe station)

Forceps : 1Nos.

Power Cord : 1Nos.

User Manual : 1Nos.

Note: PC/Laptop and wafer samples must be arrange by user/institution end









Power Cord

User Manual

Vacuum Tube

Forceps



Optional Parts

1. Micropositioner MI-MPS1-1

Fine Travel range(Linear) :

X-Axis Motion : 12mm, 0 to ± 6 Y-Axis Motion : 12mm, 0 to ± 6 Z-Axis Motion : 6mm, 0 to ± 3



2. Probe Tip Holder MI-TH01T

Probe tip holder : Triaxial Probe Connectivity : Standard Triaxial

Connectivity type : Single low noise Triaxial.

Tip Holding Type : Spring.



3. Anti-Vibration Table

MI-C113

Dimensions(in mm):

Length : 915mm Width : 915mm Height : 355mm

Weight : 50mm(approx.)
Top Material : Stainless Steel.

It is recommended that user should use anti-vibration table with Probe Stations for vibration free accurate operations.



Mine Instruments Pvt. Ltd. An ISO 9001:2015 Certified Company

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