Probing Solutions Inc. **PSI 100 / 200™**

ULTIMATE VALUE MANUAL 6" TO 8" Wafer Probe Station

DESCRIPTION

The PSI 100™ and PSI 200™ Vacuum Accessory Probe Stations are economical and easy to use manual probe stations. They are ideally suited for Microwave, Hybrids, Packaged parts, chip-on-board, PC Board and Hot Wafer Probing Applications. The PSI 100™ and PSI 200™ can probe geometrics as small as 8 microns on wafers and packaged devices. The baseplate can accommodate up to 8 standard vacuum base manipulators. A microscope boom mount is offered with a choice of Stereoscopes with magnifications up to 270X. These stations feature manual positioned pedestal bases secured by vacuum. Many of Probing Solutions' accessories may be used including 6" and 8" ambient vacuum chucks, 2" x 2", 4" x 4" and 6" x 6" Hybrid substrate Holders, Packaged Device Adapters, Probes, Manipulators, Low Noise and Hot/Cold Chucks, Light Tight Enclosures, Vibration Isolation Tables, Stereoscope Optics, etc.

Features Include

The ability of the user to quickly and efficiently change the accessories and the test configuration.

Vacuum/356VM Pedestal Mounted accessories as shown above can be easily moved or replaced simply by breaking the vacuum with the switch at the base of each accessory.

Probing Solutions Inc. offers a wide variety of vacuum pedestal mounted chucks. They are available in 6" to 8" ambient chucks, hot chucks, low noise chucks, (SSA) coaxial and triaxial chucks.

Socket Card Adapter, with zero insertion, sockets on PC Cards for probing packaged parts.

Hybrid Substrate Holders (HSH) are a spring loaded design to exert gentle positive pressure on the ceramic substrate or MW stripline package while being probed.

Microwave applications: Use a PSI 100™ or PSI 200™ inside a light tight enclosure (LTE) with a coaxial or triaxial chuck and high frequency or microwave probe accessories and the PSI 100™ or PSI 200™ Probe Station becomes a versatile microwave test station.

STATION BASE

PSI 100™ : 231 square inches (1490 square cm) for 6” wafers
PSI 200™ : 522 square inches (3561 square cm) for 8” wafers
BNC Manifold: 5 BNC connector strain reliefs
Pedestal Base vacuum port and one 5 port vacuum manifold

HYBRID SUBSTRATE HOLDER OPTIONS (*)

Holder sizes: 2” x 2”, 4” x 4” and 6” x 6”
Spring loaded DUT holding
Stainless steel surface
All holders will accommodate any shape substrate as small as 0.5” x 0.5”

SOCKET STAGE ADAPTER OPTIONS (*)

Holds PCB socket cards for probing live packaged devices
Adapters: 2” x 2” to 6” wide cards

MICROSCOPE POST AND MICROSCOPE OPTIONS

Microscope Boom Mount
Consult factory for Stereoscope options
Magnification range is 4X to 270X, scope dependent

DIMENSIONS, FINISH AND WEIGHT

PSI 100™ : 14” (36cm) W x 16.5” (42cm) D x 18.5” (47cm) H
PSI 200™ : 23.5” (60cm) W x 23.5” (60cm) D x 18.5” (47cm) H
Note: 15.5” (39cm) of “behind station space” needed for microscope “E” Extension Arm
Grained black anodized aluminum for long life
50 lbs. (23kg) approximate

VACUUM CHUCK OPTIONS (*)

Stainless steel for low contamination (STD), or gold plated brass 6” (152mm) for 4” to 6” wafers or 8” (200mm) for 6” to 8” wafers with concentric vacuum grooves and tweezer slot
Flatness + 0.0005” (±12 microns)
Electrical isolation exceeds 5 Teraohms
Hot/Cold and Low Noise Chucks available

VACUUM PEDESTAL BASE OPTIONS

Vacuum Pedestal Base is needed for (*) options
Optional fine 0.5” x 0.5” micrometer (100 T.P.I. leadscrew)
5 with the Theta rotation control: ± 12° (100 T.P.I. leadscrew)
Pedestal Bases and Chucks are planarized at factory

FACILITY REQUIREMENTS

Power: 110V/60Hz standard, 220V/50Hz optional
Vacuum: 20 Hg mercury for vacuum chuck and vacuum-based manipulators

SHIPPING INFORMATION

32” (81cm) D x 20” (74cm) W x 23” (58cm) H
Shipping weight 65 lbs. (30kg) approximate

NOTE: (*) options require a 356VM vacuum pedestal base.

PSI 100™ and PSI 200™ stations are not suited for laser applications. PSI recommends the PSI-400-LAS-V0 which has been designed to support USMCO USMC-STD-1X Trinocular, Laser-Ready Microscope and the 45.6 lbs. laser weight with stability. Refer to: PSI-400-LAS-V0 Laser Station or PSI-400LS-V0 Wafer Probe Station.

Visit our website at:
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