

Ψ Probing Solutions 600LS

300MM WAFER PROBING SYSTEM



FEATURES & BENEFITS

- **WAFER CHUCK PULL-OUT FEATURE:**
ALLOWING CONVENIENT SAFE WAFER EXCHANGE WITH 12 INCHES OF UNOBSTRUCTED ACCESS. INCLUDES AN ERGONOMIC HANDLE DESIGN WITH REPEATABLE TRIGGER RELEASE/LOCK AND HEAVY DUTY PRECISION BEARING GUIDE SYSTEM.
- **PLATEN TWO POSITION FAST Z, GAS SHOCK ASSISTED MECHANICAL PLATEN LIFT SYSTEM:**
MICROSCOPE LIFT DELAY WITH ADJUSTABLE OFFSET. AVOIDING MICROSCOPE OBJECTIVE INTERFERENCE WITH PROBE CARDS AND PROBES DURING THE LOADING AND UNLOADING WAFERS.
- **PLATEN COOLING**
AIR COOLED TO REDUCE PROBE DRIFT CAUSED BY HIGH TEMPERATURE TESTING.
- **INTEGRATED VIBRATION ISOLATION TABLE**
PLATFORM WITH ADJUSTABLE CASTERS AND JOY STICK STAND.
- **HIGH RESOLUTION MOTOR DRIVEN**
310mm X-Y STAGE DRIVE WITH SUB MICRON RESOLUTION.
- **JOY STICK CONTROL**
TWO SPEED PROPORTIONAL CONTROL OF X-Y OR Z. JOYSTICK CONTROLS. MAY BE DISABLED FOR SAFETY WHEN LEAVING A SETUP. A QUICK PUSH OF THE CONVENIENTLY LOCATED HI SPEED BUTTON WHILE TRANSLATING IN X-Y OR Z AUTOMATICALLY INCREASES TRANSLATION SPEEDS. RELEASE THE BUTTON AND RESUME DEFAULT LOW SPEED SLEWING.
- **THETA CONTROL WITH 30 DEGREE MANUAL RESOLUTION**
(OPTIONAL MOTOR DRIVEN THETA IS AVAILABLE)
- **MONITOR PLATFORM**
PLACED FOR UNOBSTRUCTED VIEWING
- **MODULAR DESIGNED PLATFORM**
PROVIDES FOR UPGRADE AS PROBING REQUIREMENTS CHANGE. A WIDE VARIETY OF SYSTEM ACCESSORIES AND UPGRADES PATHS ARE AVAILABLE.
- **THE “600 SERIES” PROBE STATION**
IS DESIGNED TO EXCEED PERFORMANCE METRICS OF EQUIPMENT PRICED SIGNIFICANTLY HIGHER
- **PROBE CARD HOLDERS:** ROBUSTLY DESIGNED TO ACCOMMODATE STANDARD 4.5” WIDTH PROBE CARDS.

SPECIFICATIONS and OPTIONS

Microscope Translation:

X-Y Joystick driven, 50.8mm x 50.8mm (2" x 2")
Optional upgrades up to 203mm x 203mm (8"X 8")
Focus (Z) knob driven, 50.8mm (2") standard; up to 100mm (4") with Coaxial coarse/fine focus control knobs.

Microscope Lift delay: Adjustable, raises microscope as a function of the platen Z to prevent damage to probe cards and probe needles.

Microscopes supported:

QIOPTIQ A-Zoom²

Meiji Stereo-Zoom

USMCO, Motec & Seiwa microscopes

Stage/Chuck X-Y-Theta Translation:

X-Y Joystick driven, (310mm) x (310mm)
Theta rotation, manually controlled +/- 15 degrees
Optional Chuck Model 600-EVS-12SS.

Standard ambient 300mm stainless steel surface with Selectable vacuum rings four, six, eight and twelve inch wafers.

Flatness: +/- 12 microns

Pull-Out Chuck:

Wafer Chuck Load/Unload. 12 inch slide out travel for easy unobstructed load/unloading of wafers. Ergonomic handle design with repeatable mechanical trigger release/lock and heavy duty precision bearing guides.

Platen:

Large area accepts 10 or more manipulators. Designed for air cooling as needed for high temperature testing. Magnetic stainless steel surface, stable 4 point lead screw drive.

Includes two positionable vacuum manifolds

Optional: Triax/BNC strain relief's

Fine "Z" Joystick driven raise/lower,

True planar vertical motion with submicron precision.

Z Travel: 50.8mm (2")

Z Quick Lift Control: Quick platen lift with lock Z up position to rapidly clear the work area.

Lift Travel: 50.8mm (2")

Joystick:

Large, convenient Joystick High/Low Speed control button located at top of joystick handle. Rotating joystick handle controls Platen Z Intelligent motor drive (Clockwise: Platen Down, Counter-Clockwise: Platen UP). "Stage X-Y Enable/Disable" locks stage in desired position to avoid accidental movement of joystick handle.

"Align Enable/Disable" Align Enable locks Stage Y axis so that the wafer can be aligned in X axis without accidental movement of Y axis.

Low speed is the default speed. Hi/Low speed button must be depressed and held for Hi speed slewing.

Probe Card Holders: Robustly designed to accommodate standard 4.5" probe cards.
(Optional Custom probe card, holders are available upon request.)

Facility Requirements:

Power: 110VAC/60Hz standard, 10 amps,
220VAC/50-60Hz, 6.3 amps optional

Vacuum: 25Hg minimum for vacuum chuck, and manipulators.

Air : 80psi minimum, for integral vibration isolation

Dimensions, Finish and Weight:

38" (96cm) D x 48" (122cm) W x 55" (140cm) H
(Height depends on scope and laser option)
Grained black anodized aluminum, Stainless-steel Powder coated components for easy maintenance.
Weight: 400lbs. (181kg)

Shipping Information:

48" (122cm) D x 72" (182cm) W x 60" (152cm) H,
Box and Pallet Shipping weight 600 lbs. (272kg)

All weights and measurements approximate and subject to change without notice.

(All Specifications Subject to change without notice. Copy write 2007.)

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