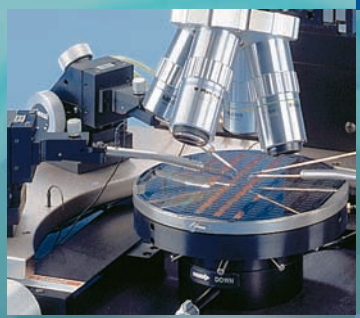




Easy to use 6-inch multipurpose probing for failure analysis and R&D labs

The REL-3200 and REL-4100 Manual Probe Stations are designed to meet the stringent requirements of failure analysis and R&D labs at an affordable price. The vibration-dampening qualities, linear platen lift, and backlash-free stage positioning allows you to easily resolve lines on the order of one micron, making these probe stations ideal for testing integrated circuits in wafer or packaged form.

CASCADE® MICROTECH

Innovating Test Technologies

The low-profile, lever-actuated platen lift makes sample loading and unloading quick and easy while reducing operator fatigue. Superior optics are provided by either a Mitutoyo FS-60 or an A-Zoom microscope. These features along with a full line of accessories, including probe card holders, lasers, and thermal systems, make the REL-3200 and REL-4100 the answer to today's and tomorrow's probing needs.

Features

- 25.4 mm (1 in) linear vacuum chuck z-motion
- Lever action lifts platen without affecting focal points for device repositioning
- Low-profile design for operator comfort
- Vibration-isolation feet standard
- Massive platen and base for superb stability
- Vacuum chuck easily replanarized by user
- Linear backlash-free motions throughout
- Test wafer to 152.4 mm (6 in), packaged devices, individual die, and hybrid devices
- 1 µm (0.04 mils) x-y stage positioning resolution

REL-3200 only

- 2 µm (0.08 mil) platen repeatability/accuracy

REL-4100 only

- Tilt-back microscope mount
- Platen repeatability/accuracy of < 1 µm (.04 mil)

Specifications

X-Y stage

Size: 152.4 mm x 152.4 mm (6 in x 6 in)
Type: ball bearings, V-Ways
Accuracy: 2.5 µm (0.1 mil)
Drives: Precision barrel-driven lead screw
Resolution: 1 µm (0.04 mils)
Standard Pitch: 8 threads per 25.4 mm (1 in)
Fine Pitch: 16 threads per 25.4 mm (1 in)

Platen Lift

Lift mechanism: lever-actuated linear motion
Lift distance (3200 only): 0 to 5.08 mm (0 to 0.2 in) user-adjustable
Lift distance (4100 only): 25.4 mm (1 in.) total. First 5.1 mm (0.2 in) independent of optics
Repeatability: 1 mm
Capacity: 10 positioners mounted either magnetically or by vacuum

Wafer Chuck

Sizes: 152.4 mm (6 in)
Material: stainless steel top plate
Planarization: ±10 µm (0.4 mil) over entire surface
Theta motion: 90° with lock
Z motion: Precision 25.4 mm (1 in) linear; independent of other stage motions

Microscope Transport

Standard microscope transport: x-y motion precision 25.4 mm x 25.4 mm (1 in x 1 in)
Options: motorized/programmable remote controlled 50.8 mm x 50.8 mm (2 in x 2 in) x-y scope motion

Electrical

Interface: instrumentation interface via 14 color-coded 4.8 mm (3/16 in) banana plugs (includes instrument ground). 50 ohm shielded coax wiring is used throughout system.

Facility Requirements

Electrical: 120 V, 50-60 Hz (240V available)
Vacuum: 0.5 CFM @ 15 in Hg

Dimensions

Base: 45.7 cm (18 in) D x 55.9 cm (22 in) W
Height to eyepieces: 48 cm (19 in)
Weight: 55 kg (120 lbs)

Accessories

- Lasers
- CCTV, video systems
- Triaxial, coaxial probes
- Probe card holder
- Packaged device holder
- Vacuum manifold for positioners
- Thermal systems
- Vibration isolation table
- Dark box
- Programmable micropositioners
- High-resolution linear manual micropositioners

Optics

- Mitutoyo
- A-Zoom
- Olympus

Ordering Information

REL-3200 6 inch Analytical probe station *R32/6*
Fine pitch stage drive for REL-3200 . . . . . *R32/F*
REL-4100 6 inch Analytical probe station *R41/6*
Fine pitch stage drive for REL-4100 . . . . . *R41/F*

For Further Information

Refer to the *Alessi Configuration Guide* for compatible accessories

CASCADE MICROTECH

Innovating Test Technologies for better measurements faster

Cascade Microtech, Inc., 2430 NW 206th Avenue,
Beaverton, Oregon 97006, USA
Toll Free: 1-800-550-3279
Phone: 503-601-1000 Fax: 503-601-1002
Europe: +44 1295-812828 Japan: 03-5478-6100
Email: sales@cmicro.com www.cascademicrotech.com

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Innovating the HP Way

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R3241DS-1200
Data subject to change without notice