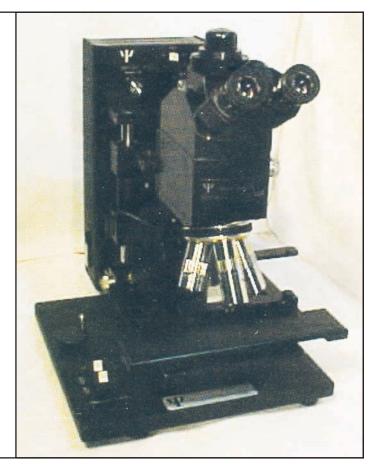
9" MANUAL PHOTOMASK INSPECTION/REVIEW STATION

The 442-PMI Photomask Inspection/Review Station allows hands-on operator manual visual inspection. Defect detection is further enhanced through the utilization of four (4) independent or eight (8) combined illumination modes with color contrast filters; Top and Backside Bright and Dark field illumination modes simultaneously. This method of multiple Bright and Dark illumination combinations enable detection of all defects in a single manual scan not found in a single Bright Field mode of illumination. Adding the 9" x 9" mask allows for handling capabilities for 300mm wafers.



Features Include

- Stage capacity for 4" to 9" Mask Reticles. Accepts Pellicles on both sides. Facilitates rapid Mask and Paddle interchangeability with maximum safety and minimum inspection time delay.
- · Mask Paddles can be co-planar to stage travel.
- Easy manual location of mask defects.
- Eight combinations of Bright/Dark field illumination standard on all 300 and 400PMI Photo Mask Inspection and Review Stations.
- · Cleanroom compatibility, constructed from anodize aluminum and stainless steel components.

- 442PMI Photomask Inspection Station provides a powerful hands on manual primary defect location and classification inspection station. For 4" x 4" to 9" x 9" mask reticles.
- · Makes handling safe while utilizing 4" to 9" mask paddles. These have a large pick handling access opening and is a secure handling device for transporting individual mask reticles to and from the Inspection Station.
- Visual sub-micron defect detection and review.
- Visual review of all defect classifications, pinholes, edge defects, bridging, non-connects, scratches, thin metal and contamination.
- Greater advantage and probability of defect detection with eight (8) Bright/Dark field lighting combinations afford visual light shading and intensity for clarity.

GENERAL

9" x 9" manual stage controlled by convenient coaxial X-Y knobs

Provides precise positioning X-Y for each axis.

Eight combined incident and transmitted bright and dark field lighting modes on all 300 and 400 series Photomask Inspection Stations

Vari-rails accommodate mask or paddle size flexibility Stage accepts 4" to 9" Photomask reticles with pellicles on one or both sides

Theta rail alignment of reticle edge with stage X axis

FACILITY REQUIREMENTS

Voltage / Frequency: 110VAC/60Hz standard or

220VAC/50Hz optional

Current: 3 Amps @ 110VAC standard or 1.5 Amps @ 220VAC optional

SHIPPING DIMENSIONS

Station and Accessories, 1 Crate: 36" (91.4cm) x 36" (91.4cm) x 36" (91.4cm) x 36" (91.4cm) 225 lbs. (101kg)

MICROSCOPES

USMCO microscopes with variable 2X Zoom, standard Trinocular head, standard

Adjustable 4-Port Turret, standard

10X ultra-wide eyepieces with one crossline alignment reticle, standard

2XL, 10XL and 20XL objectives, standard

MICROSCOPE OPTIONS

Tilthead available, reduces neck strain and adapts to operator height differences. May be ordered with flip mirror or prism Measuring Eyepiece Reticle available 15X or 20X eyepieces available 50X, SL50X and SL100X objectives available Polarizer Kit

OPTIONAL ACCESSORIES

CCD Cameras and wide field adapters
Digital Video Image Enhancement
Digital Video Camera with High Resolution Monitor

MASK PADDLES/MASK HANDLING SAFETY

WP4040 4" x 4" square (133mm 3" & 4" Wafer) WP5050 5" x 5" square (152mm 6" Wafer) WP6060 6" x 6" square (200mm 8" Wafer) WP7070 7" x 7" square or semi-round (200mm 8" Wafer) WP9090 9" x 9" square (300mm 12" Wafer) Contact factory for special configurations

Visit our website at: www.probingsolutions.com

Local Sales Representative