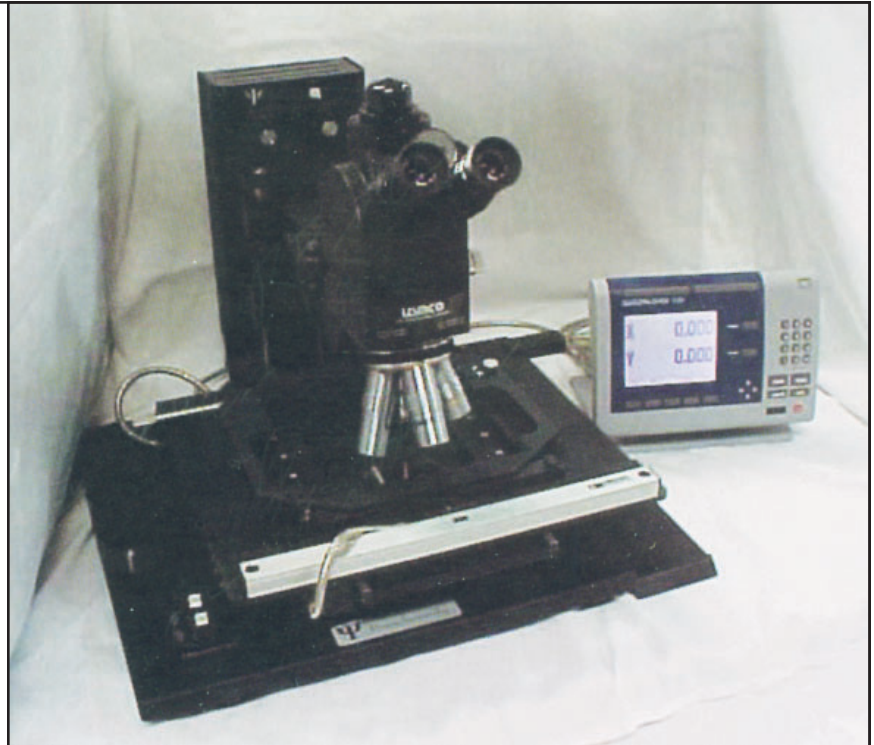


## 9" PHOTOMASK INSPECTION/REVIEW STATION w/DIGITAL READOUT

The 462-PMI Photomask Inspection/Review Station introduces digital location identification of X-Y mask defect, detected by the operator during manual visual inspection. Digitally Displaying the X-Y defect locations on the Digital Readout facilitates easy relocation and repair. 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 simultaneously. This method of multi Bright and Dark Field illumination combinations enables detection of all defects in a single manual scan not found in common single Bright Field mode illumination inspection microscopes.



### *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.
- Digital Readout (DRO) enables location of defect coordinates, or rapid relocation of X-Y.
- Digital Readout comes with front panel function control.
- Easy one touch switches allow for zero reference settings and conversion between millimeters/inches.
- Eight combinations of Bright/Dark field illumination standard on all 300 and 400PMI series Photo Mask Inspection and Review Stations.
- Cleanroom compatibility, constructed from anodize aluminum and stainless steel components.
- Mask Paddles can be co-planar to stage travel.
- 462PMI Digital Readout (DRO) Photomask Inspection/Review Station provides a powerful hands on manual primary defect location and classification inspection station.
- The Digital Readout allows primary defect location information and instant relocation or reinspection, re-classification and rapid decisions on repair.
- 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. Laser calibrated to the Digital Readout  
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 reticle handling  
Digital X-Y scales and Digital X-Y positioning Readout (DRO)  
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, Digital Readout and Accessories, 1 Crate:  
42" (106.7cm) x 42" (106.7cm) x 53" (135cm)  
285 lbs. (129kg)

## **MICROSCOPES**

USMCO microscopes with variable 2X Zoom  
Trinocular head, 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*

Local Sales Representative



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