



AUTOMATION SYSTEMS
GROUP

ZARIS™

Automated Reticle Inspection System

TOOL AUTOMATION

Features

- Fully automated reticle inspection and cassette transfer
- Configurable for all common stepper cassettes and shipping cassettes using fail-safe end effectors
- Microscope option
- Pellicle mount option
- Automatic reticle/pellicle identification
- Automatic reticle orientation
- Bright light macro inspection;
 - Unobstructed reticle viewing
 - Joystick control of reticle under bright light for optimum inspection angle
- Ionized nitrogen particle removal system, programmable for glass and pellicle
- GEM/SECS II and HSMS link option
- Class 1 mini-environment
- Standards:
 - SEMI S2 & S8
 - CE
 - Fed Std 209-E

Benefits

- Eliminates reticle/pellicle damage due to manual handling
- Improves process flow and stepper utilization
- Reduces re-pells by 99%
- Automates the movement of reticles between stepper and shipping containers
- Fast ramp-up and reliable operation using proven technology

ZARIS™ bright light macro inspection and nitrogen cleaning system prevents mask damage and mishandling normally encountered in manual inspection processes. Semiconductor fabs can expect improved stepper utilization and reduced lithography rework as a result of defect-free reticles presented in the proper orientation, as well as savings associated with minimizing pellicle and reticle damage.

Proven Track Record.

ZARIS™ has a proven record of reliable operation and ease of use, resulting in faster factory ramp while minimizing reticle and pellicle damage. ZARIS™ has become the industry's leading reticle macro inspection tool and complements Brooks' suite of lithography automation systems.

Flexible.

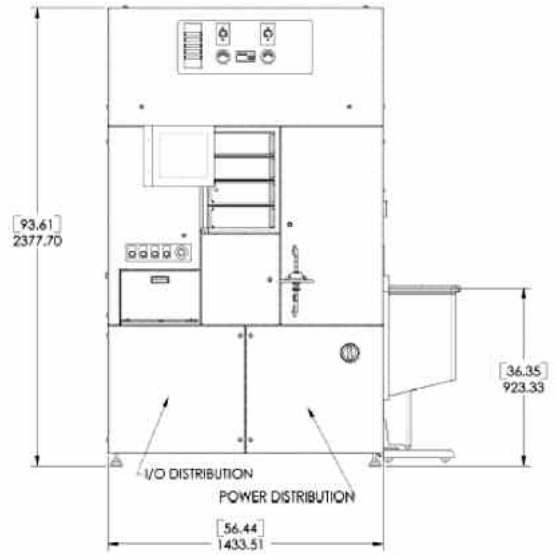
ZARIS™ automates the handling of 5" and 6" reticles from a wide range of shipping and stepper cassettes. Standard capabilities include brightlight inspection, nitrogen clean and the ability to identify reticles and pellicles. ZARIS™ also provides a large set of options, including optical character recognition for reticle and/or pellicle ID, microscope inspection, automated particle detection, pellicle mounting, GEM/SECS link, and capability of integration with stockers and metrology equipment. ZARIS™ provides the maximum in reticle protection through the use of ESD-safe materials and other fail-safe features.



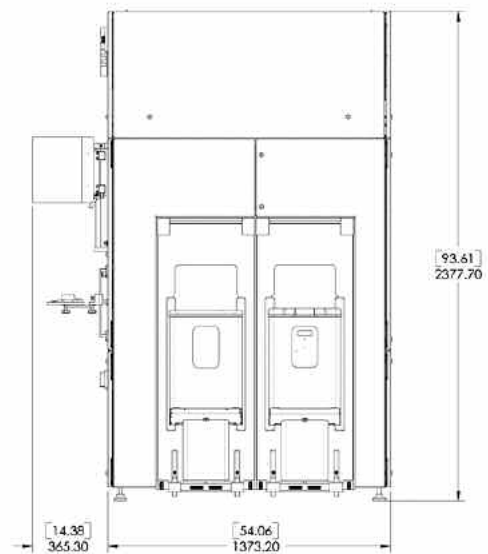
ZARIS™ Automated Reticle Inspection System

Throughput	~20 - 60/hr – dependent on inspection and cleaning requirements
I/O	Up to 13 Ports configured to support: <ul style="list-style-type: none"> • Shipping Cassettes <ul style="list-style-type: none"> - Toppan - DMS - Dai Nippon - Entegris • Nikon Cassettes • Canon Cassettes • SVGL Cassettes • SMIF Multi Pods • SMIF Mono Pods • Others
Process Options	Microscope Pellicle Mounting Automated Particle Detection
Reliability	MTBF: 400 hours
Width	1433.5 mm (56.4")
Depth	1373 mm (54")
Height	2377.7 mm (93.6")
Access Clearance	3 sides: 915 mm (36")
Weight	Approx. 1273 kg (2800 lbs)
Power Required	Standard: 208VAC
Power Consumption	2.5 kW
Standards	CE, SEMI S2 & S8, Fed Std 209-E

Front View of ZARIS



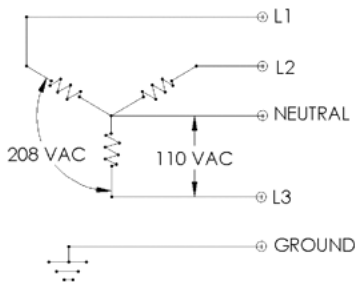
Right Side View of ZARIS



FACILITY REQUIREMENTS:

- 1) 208 VAC/3 PHASE/5 WIRE/30 AMP.
- 2) 90 PSI CLEAN, DRY AIR (1/4" FLEXIBLE TUBE) ONE TOUCH FITTING.
- 3) 40 PSI CLEAN, DRY NITROGEN (1/4" FLEXIBLE TUBE) ONE TOUCH FITTING.
- 4) HOUSE VACUUM (1/2" FLEXIBLE TUBING) ONE TOUCH FITTING.
- 5) EXHAUST (1/2" FLEXIBLE TUBING) ONE TOUCH FITTING.

ESTIMATED MACHINE WEIGHT = 2800 LBS



For more information, please contact your local Brooks Automation sales representative or visit www.brooks.com.

