



AMI

SPINSAM

Acoustic Inspection

Operator-Free Inspection and Analysis

The SpinSAM automated inspection tool delivers high throughput and better sensitivity for accurately locating defects in wafer based assemblies. Successful applications include bonded wafers, Chip-on-Wafer, stacked wafers, MEMS, over-molded wafers and more. Efficiently spin scan up to 4 wafers simultaneously with matched transducers, wafers can be inspected over the widest frequency range ever achieved in a production environment.

Waterfall transducer provides non-immersion scanning which minimizes risks of contamination and false bond indications.

Fastest data collection possible 41 WPH @ 100 μm

A key feature of the SpinSAM is the use of a continuous non-stop scan path. Using four combined scanners (each capable of 10 WPH @ 100 μm) provides unmatched speed. Back-to-back jobs can also be scheduled. Once the last FOUP is loaded, another job can start.

Uniform, streak free images

Continuous water avoids trapping air resulting in streak free, uniform images as well as a clean operation with no moving parts above the scanner. With minimal water exposure, wafers are scanned and dried in place to decrease processing steps.

Wafers Per Hour (300mm standard configuration)	
200 μm Pixel Pitch	95 WPH
100 μm Pixel Pitch	41 WPH
50 μm Pixel Pitch	12 WPH
25 μm Pixel Pitch	3 WPH

H Series Transducers	
H050/050	12.7 mm Focal Length F2 50 MHz
H115/050	12.7 mm Focal Length F2 115MHz
H165/0375	9.5 mm Focal Length F2 165MHz
Customized transducers	For specific applications available upon request

Options	
Warpage	Create clear and focused images with built in handling of warped wafers +/- 1.5mm warpage.
OCR wafer reader	Read and report laser scribed wafer ID
200mm	System configured to handle 200mm wafers

Full wafer scans take less than six minutes

A 100 μm scan (from wafer load to wafer load) takes less than six minutes. Wafers also enter and leave the system completely dry. The SpinSAM also includes a bar coded reader for recipe verifications and uploads parameters, triggers calibration requests and historical records.

High Efficiency

EFEM robot to provide faster exchange of wafers. Wafers are returned to the FOUP without requiring any additional alignment.

System	
Footprint	2750 W x 2230 D x 2240 H mm
System Weight	Scanner 1700 kg (3747 lbs) EFEM 900kg (1984 lbs) Total weight 2900 kg (6363 lbs)
Power Supply	200-240 VAC, 50/60 Hz, 100A Three phase, 4 wire
Typical Power Consumption	Full Load Amps – 40A
Air Supply	CDA 0.62-0.90 MPa Peak 900 L/Min @ 1000kPa
CDA typical	900 lpm @ 650kPa
DI Water	Temperature: 10-50°C Resistivity minimum: 5MΩ-cm Pressure: 0-10-0.50 MPa Flow 6 L/Min
Water DI typical	Single use 6 lpm; Recirculated 2 lph
Process Chilled Water	Temperature: 2 -18°C Pressure 0.10 - 050MPa Flow 2-8 L/Min
PCW typical	4 lpm Recirculated only
Recirculate Water	Switch from single use water to recirculate and reduce water usage and maintain critical temperatures using an inline water purification and filtration system.
Operating Environment	15 -30°C Humidity <85% (non-condensing)
Operating System	Windows 11 64-bit
Standard Warpage Handling	+/- 1mm

For more information, speak with your Nordson representative or contact your Nordson regional office

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