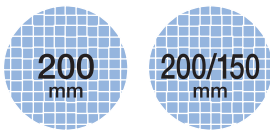## Pursuit of Excellence
Enhanced Versatility for Extended Performance
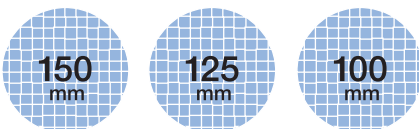
The AL120, built to simplify semiconductor post-process inspection
Under 100 µm thick wafers safely transferred for macro and micro inspection

AL120 (200 mm Configuration) +
Semiconductor/FPD/Industrial Inspection Microscopes MX63

AL120 (150 mm Configuration) +
Semiconductor/FPD/Industrial Inspection Microscopes MX63

Allows for quick inspection, improving throughout. Combines with the MX63
Semiconductor/FPD/Industrial Inspection Microscopes for a complete and reliable
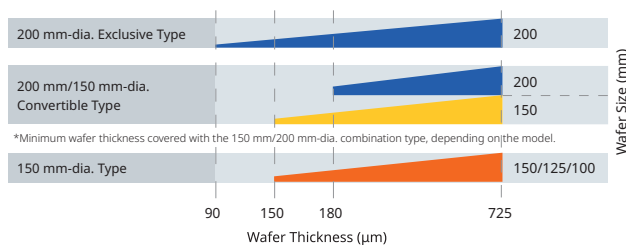wafer inspection solution.

Precision Flexibility

Handles Multiple Wafer Sizes

The AL120 series consists of three models based on wafer diameter, 200 mm exclusive type, 150 mm and 200 mm convertible type and the 150 mm type for sizes of 150 mm or less. Each model is designed for wafer transfer and microscope inspection. Topside and backside macro inspections are also available for all wafer sizes.
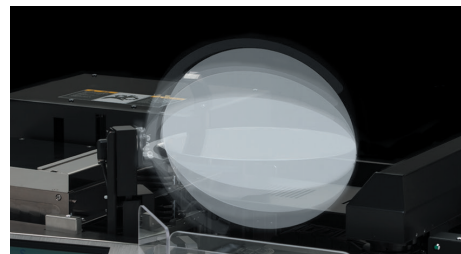
Wafer Transfer of Ultra-thin Wafers Down to 90 µm

To meet the challenging demands of thinner wafers, we specially designed transfer arms to now allow an entire cassette of twenty-five 200 mm wafers with thicknesses down to 90 µm to be safely transferred and inspected. A maximum of ten wafer thicknesses can be preset via a control panel.

200 mm-dia. Exclusive Type	200
200 mm/150 mm-dia. Convertible Type	200 / 150
150 mm-dia. Type	150/125/100

*Minimum wafer thickness covered with the 150 mm/200 mm-dia. combination type, depending on the model.

Wafer Thickness (µm): 90 150 180 725

Wafer Size (mm)

Precision Capability

Enhanced Macro Inspection Functionality

Macro inspection (LMB) now features a 360-degree self-rotating function for a complete macro inspection of the wafer. This allows for easy identification of defects and particles on the wafer surface for both the top and backside surfaces. In addition, top macro inspection includes up to 30 degrees of tilt using the integrated joystick.

Macro Function, with the Wafer Holder Tilting Angle at 360 Degrees (Simulation)

LCD Display Improves Accuracy and Convenience

An LCD display provides the operator with the ability to visually configure inspection recipes and sequences, as well as confirm set-up conditions. Inspection results, including operator input of micro and macro defects, are displayed on the LCD for operator review.

Control Panel and LCD Display

Precision Reliability

Wafer Safety Functions

Macro inspection (LMB) now features a 360-degree self-rotating function for a complete macro inspection of the wafer. This allows for easy identification of defects and particles on the wafer surface for both the top and backside surfaces. In addition, top macro inspection includes up to 30 degrees of tilt using the integrated joystick.

Robust and Reliable Microscope Platform

The MX63 semiconductor inspection microscope provides exceptional image resolution and clarity through observation methods such as brightfield, darkfield, and differential interference contrast (DIC). The motorized objective turret and aperture stop are interlocked allowing optimal illumination and contrast for each objective lens.
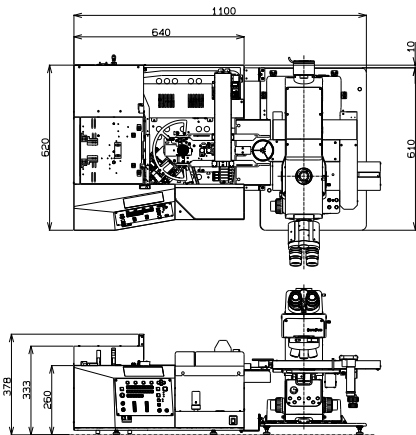
SPECIFICATIONS*

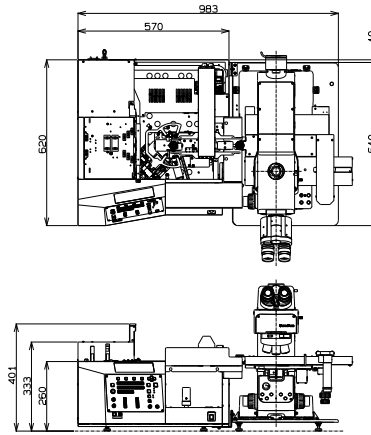|	Model	200 mm Type	200 mm/150 mm Convertible Type		150 mm Type	
Item		AL120-LMB8-90	AL120-LMB86-180	AL120-LMB86	AL120-LMB6-150	AL120-L6-150
Wafer Size (SEMI Standard)		200 mm	200 mm/150 mm		150 mm/125 mm/100 mm	
Minimum Wafer Thickness		90 μm	180 μm	400 μm	150 μm	
Type of Cassette		SEMI stad. 25 (26)-slot				
Number of Cassette		1				
Inspection Recipe		All/Sampling				
Inspection Sequence	Micro (Microscope)	✓	✓	✓	✓	✓
	Top Macro	✓	✓	✓	✓	
	Back Macro	✓	✓	✓	✓	
	2nd. Back Macro	✓	✓	✓	✓	
Wafer Orientation (Every 90º)		Non-contact (O.F./Notch)			Non-contact (O.F.)	
Compatible Microscope Model		Semiconductor/FPD/Industrial Inspection Microscopes MX63				
Dimensions (mm)		640 (W) x 620 (D) x 378 (H) Body Only, 1100 (W) x 620 (D) x 378 (H) with Microscope			570 (W) x 620 (D) x 401 (H) Body Only, 983 (W) x 620 (D) x 401 (H) with Microscope	
Weight (kg) (Main Body Only)		44			40	37
Utility (Power Consumption/ Vacuum)		AC100 V – 120 V, 1 A, or AC 220 V – 240 V, 0.5 A 50/60 Hz, -67 to -80 kpa, 20 Liter or higher/min				

*All types of wafers must be tested in advance, please contact your local Evident office.
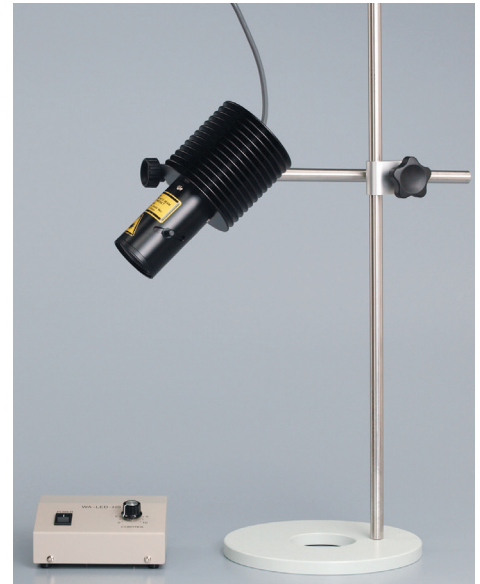
DIMENSIONS

200 mm Type

150 mm Type

Visual Inspection Illuminator WA-LED-2*

High-intensity LED with a wide illuminance area.
Not available in some countries including Republic of Korea
• Manufacturer : HAYASHI WATCH-WORKS CO.,LTD.

EvidentScientific.com

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