

OLYMPUS[®]

Your Vision, Our Future

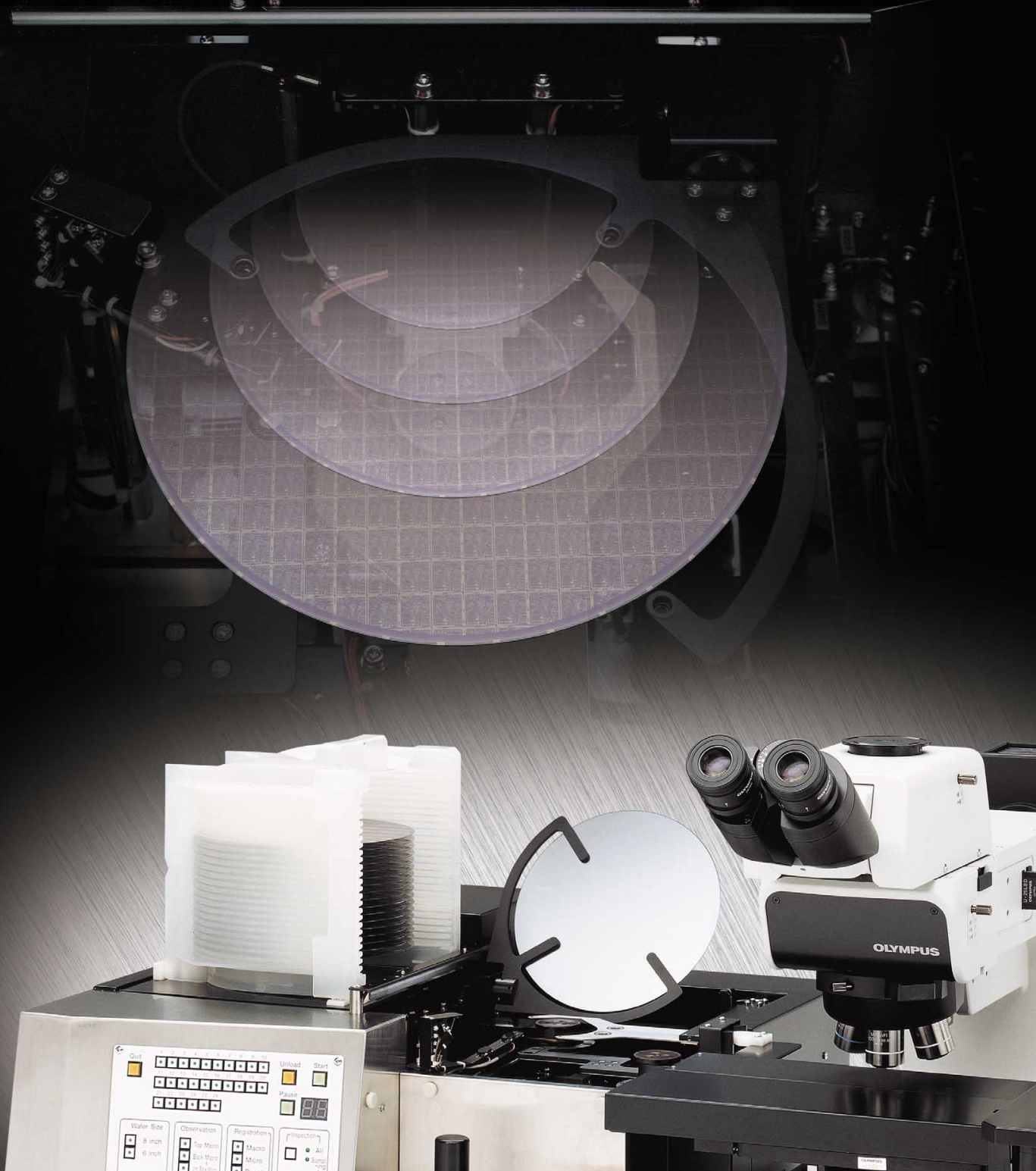
WAFER LOADER

AL110

SERIES

Wafer Loader

Super clean and fast wafer transfer



AL110 Series : Higher Efficiency

AL110-8 SERIES

Standard wafer loader for 150mm and 200mm wafers, with high-performance functions in a truly compact design



AL110-LMB86+
AL110-VS8+MX61

Two types of wafer loaders to cover 100mm-200mm wafer sizes^{*1}

The AL110-8 series is designed for 200mm wafer inspection. It also offers mixed size inspection (200/150mm) optionally. The AL110-6 series is designed for 150mm wafer inspection. It accommodates different size (150/125/100mm) inspection with changing optional parts.

*1 For special specification such as 75mm-size, 50mm-size, thinner wafer, or the SMIF compatible, please contact your nearest OLYMPUS distributors

Over 20% less tact time

The AL110 Series offers the capabilities that reduce wafer transfer time by more than 20% compared with conventional equipment: no-contact centering; high performance transmitted-type photo sensor to detect notches; and faster wafer exchange time.

Improved cleanliness

The use of highly precise no-contact centering ensures that contact between the wafer and the equipment is kept to an absolute minimum. Additional measures to enhance cleanliness include using stainless steel for the macro handle cover to eliminate dust during wafer transfer and other operations.

Complete macro inspection of the wafer's back surface

The AL110 Series offers 100% area back macro inspection. Thanks to the newly developed "2nd back macro inspection" technology. Internal optical reflection is eliminated with matt black finish to the possible parts surface.

Free setting of inspection modes

Micro, top macro and surface macro inspections can be set as required. Sequential/sampling/automatic inspection modes, and their duration can be programmed according to the inspection purpose, while other inspection patterns are pre-programmed for particular applications. The remote control box (optional) allows operations such as registering defected wafers, starting inspection and storing wafers to be performed close to the operator.

Making operation easier and more comfortable

Ergonomic design incorporates low height carrier for easy front loading and comfortable viewing angle. Grips on the microscope stage are also positioned at the front close to the operator to minimize unnecessary arm movements and allow the operator to maintain a natural, relaxed position even during long operations. (Complies with SEMI S8 standards)

ncy For Superior Productivity

AL110-6 SERIES

First-ever no-contact centering for small diameter wafers (100mm-150mm) sets the new loading standard



AL110-LMB6+
AL110-VS6+MX51

Outstanding safety and reliability

Numerous safety sensors are provided to monitor the state of the wafer and prevent damage to the wafer as part of its self-diagnostic program. (Complies with SEMI S2 and CE standards.)

Safe wafer transfer with scanning stage

A combination with scanning stage MS200 which works with AL110 series with its handshake function creates a simple workstation.



MS200

Microscope accessories: Confocal system U-CFU



AL110-LMB8

200mm wafers only

86 Both 200mm and 150mm wafers

6 150mm wafers only

5 125mm wafers only

4 100mm wafers only

*AL110 complies individually with 50mm and 75mm wafers.

L: Micro inspection
The second wafer is prepared while the first is undergoing inspection

M: Top macro inspection
The joystick allows a tilt of up to max. 30°
*Constant settings can be made for direction and rotation speed

B: Back surface macro inspection
10 steps can be set, from horizontal to 90°- 160°

Specifications

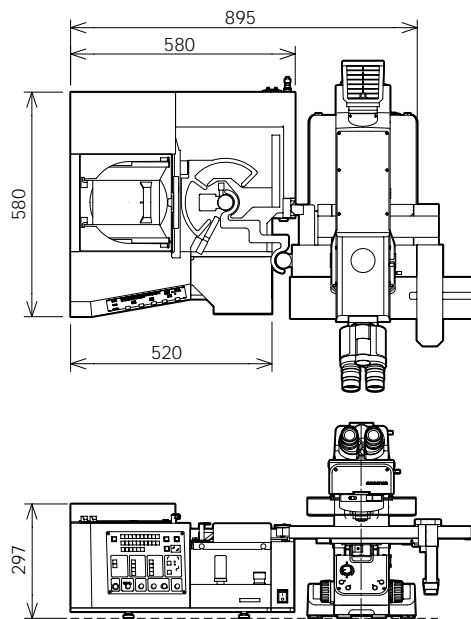
| Item | Model | 200mm versions | | | | | 200/150mm compatible versions | | | | | 100/125/150mm compatible versions | | |
|----------------------------------|--|-----------------------------|----|----|----|-----|-------------------------------|----|----|----|-----|-----------------------------------|----|-----|
| | | L | LM | LB | MB | LMB | L | LM | LB | MB | LMB | L | LM | LMB |
| Wafer diameters*1 | 200mm orientation flat type, 200mm notch type | | | ○ | | | | | ○ | | | | | |
| | 150mm orientation flat type | | | | | | | | ○ | | | | | |
| | 100mm, 125mm and 150mm orientation flat type | | | | | | | | | | | ○ | | |
| Cassette | Fluoroware, H-ber type | | | | | | | | ○ | | | | | |
| Number of cassette | One | | | | | | | | ○ | | | | | |
| Inspection modes | Sequential and sampling | | | | | | | | ○ | | | | | |
| Transfer modes | Micro inspection | ○ | ○ | ○ | | | ○ | ○ | ○ | | | ○ | ○ | ○ |
| | Top macro inspection | | ○ | | ○ | ○ | | ○ | | ○ | ○ | | ○ | ○ |
| | Back macro inspection | | | ○ | ○ | ○ | | | ○ | ○ | ○ | | | ○ |
| | 2nd back surface macro inspection | | | ○ | ○ | ○ | | | ○ | ○ | ○ | | | ○ |
| Orientation flat/notch alignment | One every 90°, O.F./notch alignment also available before unloading wafers into cassette | | | | | | | | ○ | | | | | |
| No-contact centering | | | | | | | | | ○ | | | | | |
| Wafer transfer | Robot arms with vacuum pickup | | | | | | | | ○ | | | | | |
| Adaptable microscope*2 | MX61 | | | | | | | | ○ | | | | | |
| | MX51 | | | | | | | | | | | | ○ | |
| Dimensions (mm) | | 580 (W) x 580 (D) x 297 (H) | | | | | | | | | | 490 (W) x 520 (D) x 297 (H) | | |
| Weight (kg) | | 30 | 32 | 31 | 31 | 33 | 30 | 32 | 31 | 31 | 33 | 26 | 28 | 30 |
| Utilities | Power source: AC100 to 120V 0.90A or AC220 to 240V 0.55A 50/60Hz, Vacuum pressure: -67kPa to -80kPa | | | | | | | | | | | | | |

*1 Applicable for SEMI and JEIDA 6- and 8-inch wafers.

*2 Besides the MX61 and MX51, other equivalent microscopes are available. Please contact your nearest OLYMPUS distributors about the options.

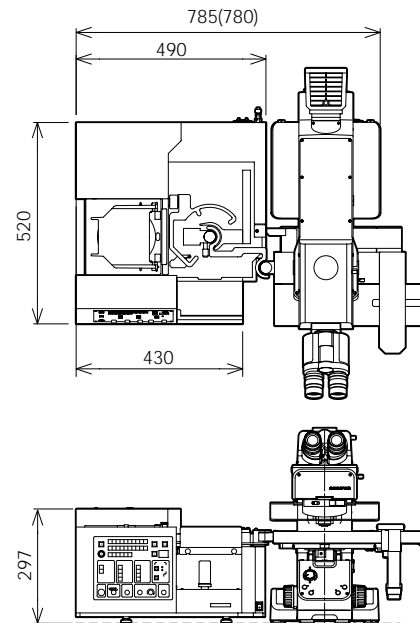
AL110-8 Dimensions

(unit : mm)



AL110-6 Dimensions

(unit : mm)



() Combined with MX51

●OLYMPUS CORPORATION obtains ISO9001.

Specifications are subject to change without any obligation on the part of the manufacturer.

OLYMPUS

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