12" Compatible Single
Wafer Quartz Glass
Wafer Transfer Equipment

Wafer Quartz Glass Wafer Transfer Equipment 12" Single

Equipment Specifications

Overview
This device is a system that automatically transfers φ300mm (12″) quartz glass wafers sheet by sheet between stage ① and stage ② carriers.
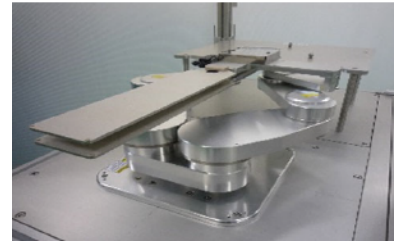
Processed Material

1. Wafer

- φ300mm Quartz Glass Notch
- Diameter: φ300mm ± 0.2mm
- Thickness: 400 - 700μm
- Warpage: 40μm or less
- Contact possible range: Backside of wafer

2. Carrier

- Auto Door FOSB   Model: Specified product
- FOUP   Model: Specified product
- Wafer Storage Pitch: 10mm

Throughput

- In case of aligning the notch
- Takt time/Transfer time: 6 minutes 30 seconds/25 pieces or less

Specifications for Each Part

Specifications for Each Part (1)
Stage 1 (Loader)
1. Front left side stage of the device
2. Compatible Carriers
   ① Auto Door FOSB: Wafer storage pitch 10mm × 25 pieces
   ② FOUP: SEMI standard product, Wafer storage pitch 10mm × 25 pieces
3. Sensor Function
   ① Install a transmission type mapping sensor for confirming wafer presence in the cassette.

Specifications for Each Part (2)
Stage 2 (Unloader)
1. Front right side stage of the device
2. Compatible Carriers
   ① Auto Door FOSB: Wafer storage pitch 10mm × 25 pieces
   ② FOUP: SEMI standard product, Wafer storage pitch 10mm × 25 pieces
3. Sensor Function
   ① Install a transmission type mapping sensor for confirming the presence of wafers in the cassette.

Specifications for Each Part (3)
1. Operation: Extendable, rotatable, up and down - 3-axis robot (servo motor driven)
2. Robot Hand: Made of CFRP, wafer contact part made of PEEK, uses edge hold method
3. Wafer Transfer Specifications: Basically, it should be from the bottom of the cassette to removal → top to storage.
4. Parallel transfer and removal is also possible.