

PHT

Link To The World

PHT株式会社 (英文名 : PHT Inc.)

〒115-00451-41-12 Akabane, Kita-ku, Tokyo

TEL:03-6750-5232 FAX:03-6762-9587

E-Mail:info@pht.co.jp

<https://www.pht.co.jp>

Wafer Transfer Device

PWT2022



Overview

Clean robot application system.

300 mm wafers are transferred to cassettes (containers) A to B in units of 1 wafer. Compatible cassettes (containers) are FOUP, FOSB, OPEN and PFA.

Standard is 1 sheet transfer, but also available in units of 5 or 25 sheets.

Safe batch transfer of wafers between cassettes - Slot-specified transfer (transfer within the same carrier possible).

Loading/unloading is performed by lifting the wafer from the cassette, minimising contact with the cassette and preventing wear, dust and damage to the wafer edge. Wafer mapping detects loading errors such as wafer misalignment and double stacking. Equipped with a sensor to prevent incorrect operation and an emergency stop button.

Device Specs

Workpiece

Semiconductor Substrates

Equipment Weight

Approx. 500kg

Workpiece Thickness

600~850 μ m

Workpiece Size

300mm

Power

AC200V, 15A

Cassettes (containers)

FOUP · FOSB · OPEN · PFA

Throughput

25 sheets/1 cassette transfer time
300s or less

Driving Method

Motor Driving (servo)

Transfer unit

in units of 1 piece · in units of 5 pieces · in units of 25 pieces

Device Size

W1000×D1400×H1800(mm)

Security Mechanisms

with or without a cassette、 with or without a wafer、 overload detection、 abnormal alarm、 emergency stop

Option

Static eliminator (ioniser)
· Full coverage · Area sensor
ID reader · Alignment · Wafer inversion, etc.

Features

- Space-saving
- Anti-static type
- Optical and mechanical sensors monitor errors.
- With mapping sensor
- Compatible with metal cassettes manufactured by FOUP · FOSB · H-Square.
- Class 10 cleanroom-compatible

Case Studies

Want to transport wafers in a simplified way.

Want to reduce abrasion of workpieces in the cassette.

Available for consideration

Number of cassette stages, automation, workpiece size, etc.

Usage

1. Cases used by device manufacturers

- ① The device manufacturer supplies wafers for evaluation in a FOSB (shipping case).
- ② Transfer to a carrier (e.g. FOUP) for use in the equipment manufacturer's system.
- ③ Transfer wafers to FOSB after evaluation. (returned to device manufacturer).

Example of device manufacturer

Etching equipment, ashing equipment, cleaning equipment, coater-developers, exposure machines, etc

2. Cases used by wafer manufacturers

- ① Finished wafers (after completion of final cleaning and inspection) are transferred to the FOSB (shipping case).
- ② Transfer to PFA carrier (cleaning carrier) between processes (e.g. cleaning process).