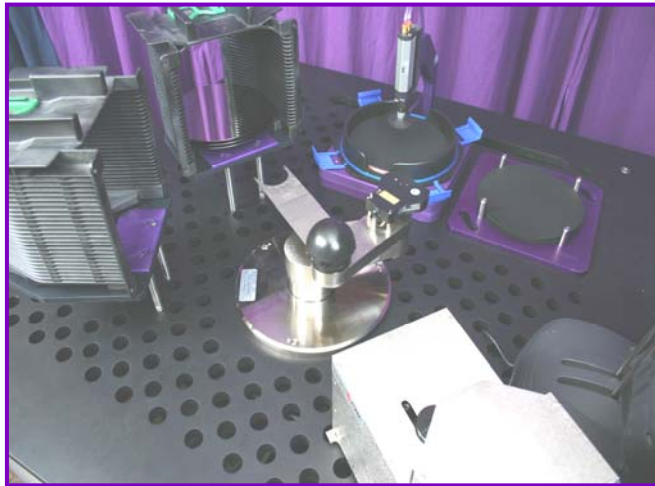


fixeon**Automated Wafer Transfer Tool****TRX200™**

The TRX200 transfers both 150mm and 200mm wafers using a 3 axis theta robot with a wafer flip module and an end effector to accurately place wafers into and out of the shippers. A linear actuator and compliant end effector is utilized to remove and place wafer separators. The wafer pre-aligner is needed to increase placement accuracy into vertical cassettes. The touch screen controller gives you visual access to start, stop or re-route wafers, view throughput rate, scrap and save historical data. Optical sensors help ensure that the process is set up correctly and what to change when sensor detects a fault.

**Standard Configuration:**

- 2 stages for 150mm or 200mm vertical process cassettes (VPC or VWS)
- 1 stage adaptable for 150mm and 200mm horizontal wafer shipper (HWS)
- Size adaptable wafer separator magazine for 150mm and 200mm
- Presence and fault sensors at each stage
- Laser wafer map module for VPC with empty and cross slot detection
- Visual basic software interface with touch screen
- Wafer scribe and character recognition

High Performance Options:

- Mini HEPA environment
- No touch end effector
- 4 axis theta robotics for smaller footprint
- Backside particle or edge scan
- Fault detection
- ACP Inflation unit
- 2nd HWS Platform
- 3rd VWS Platform
- Solar Wafer Loading

Standard Functionalities

Load / Unload HWS, VPC, VWS

Transfer Characteristics

Wafer Throughput: ~500 wph VPC to HWS
 ~300 wph HWS to VPC

MTBF: > 10,000 hours

MTBS: > 5000 hours

Wafer thickness: 150 to 950 microns

Physical Characteristics

Footprint: 38 in. x 38 in.

Max Stage Height: 36 in.

Weight: <500 lbs.