



STORAGE & HANDLING

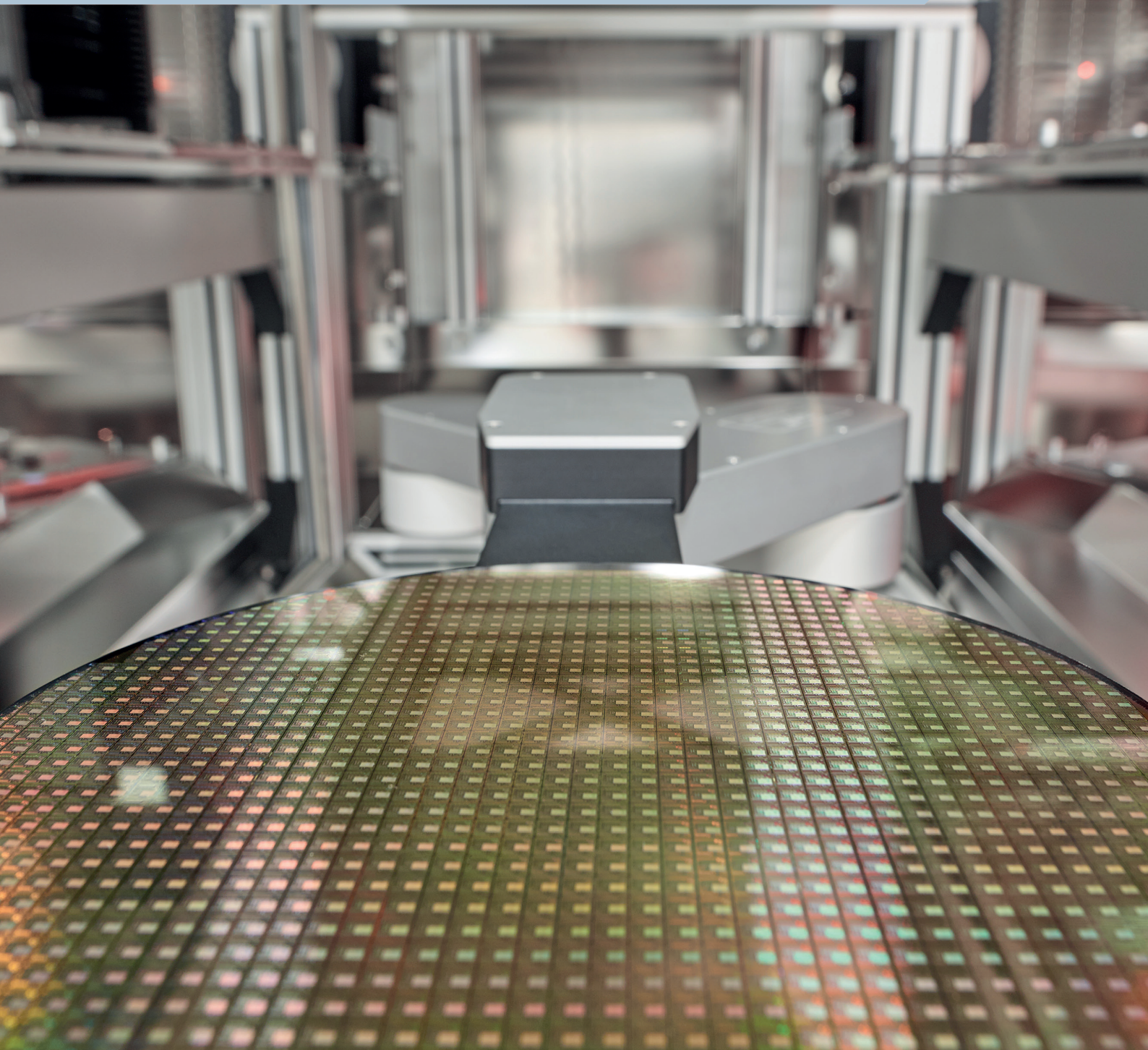


**FABMATICS**

Automate your success

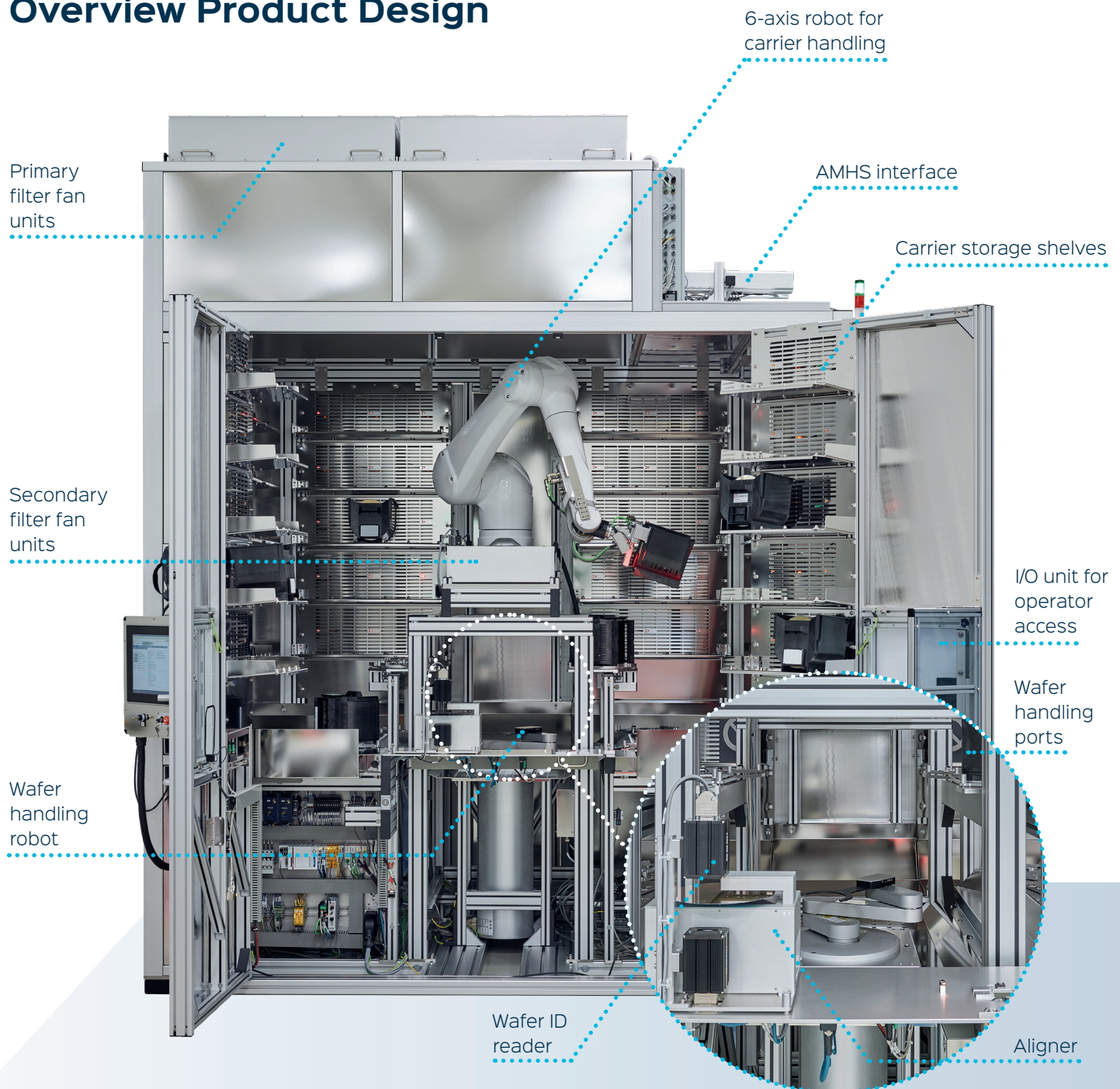
# TEST WAFER CENTER

The All-In-One Test Wafer Management Solution





## Overview Product Design



# TEST WAFER CENTER

Revolutionizing test wafer management in semiconductor manufacturing

Test wafers are indispensable for semiconductor manufacturing, crucial for equipment qualification and process monitoring. They constitute up to 50% of a fab's wafer inventory. Managing test wafer lots manually is time-consuming and prone to errors.

The Test Wafer Center (TWC) fully automates kitting and de-kitting of test wafer lots as well as their storage. Its compact and highly flexible layout allows up to 93 storage bins and up to 14 material handling locations making it the perfect solution for complex equipment qualifications scenarios. It gives you complete (remote)

control for determining timing and content of each test wafer lot & enables just-in-time delivery to your process equipment.

Featuring SECS host communication, camera-based robot routing, optional wafer alignment & identification, and various carrier identification options, the TWC ensures safe, accurate, & fully traceable material control.

Connecting to any Automated Material Handling System (conveyor or vehicle based) as well as allowing manual carrier input or output, the integration with your fab is seamless & quick.



# Key Features & Benefits

## Speed & Efficiency

- Commissions test & qualification lots fully automated, just-in-time and with complete traceability
- Reduces carrier transfers freeing up AMHS or manual transport capacity

## Cleanliness & Material Protection

- Operates within its own ISO 3 mini environment, suitable for gray space installations & boasting a dedicated ultra-clean wafer handling area
- Detects handling errors (cross-slotting, double slotting etc.) & data inconsistencies (missing wafer, extra wafer, wrong wafer)

## Space & Footprint

- Frees up expensive cleanroom space with a centralized test wafer management solution instead of numerous scattered handling tools
- Allows layout optimization with an advanced design ideal for tight spaces, suitable even for a wall or corner installation

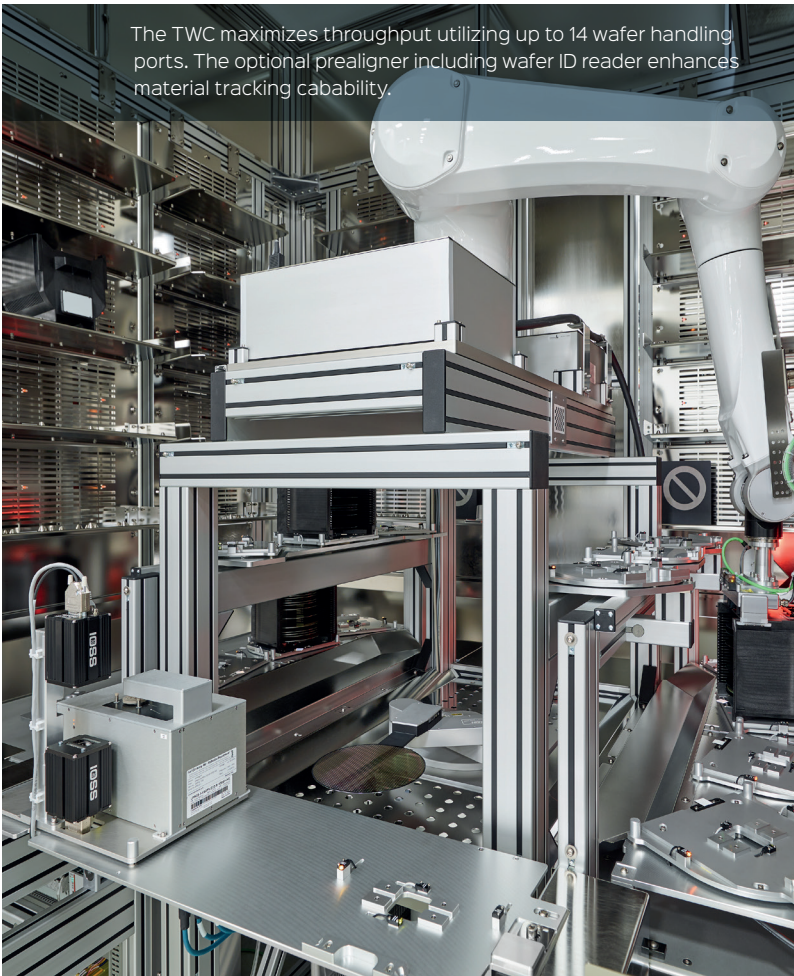
## Resource Optimization

- Builds a complete wafer history with uninterrupted substrate tracking per SEMI E90
- Features automated error recovery & speeds up maintenance procedures providing best-in-class OEE via its auto-inventory function

# Technical Data

Test Wafer Center	
Dimensions (LxWxH)	2,840 x 2,040 x 3,491 mm (112" x 80" x 137")
Weight	2,500 kg
Substrate type	200 mm wafers / 8" wafers
Carrier type/capacity	Up to 93 open cassettes (2,325 wafers)
Internal handling ports	Up to 14
Throughput	Carrier transfers: ~ 150/h Wafer transfers: ~ 360/h
Power supply	400 VAC (3 phase) / 50 – 60 Hz / 12 A
Nominal power	4.12 kW
Cleanroom class	ISO 3 / FED Class 1
Host interface	SEMI E153
Options	Wafer aligner, Wafer ID reader, Manual load ports

Up to two manual input/output stations allow operator access. Standard loading/unloading scenarios use the AMHS interface (for conveyor or vehicle based systems) on top of the TWC.





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