

CHAD WaferMateLED 150™ & WaferMateLED 200™ For LED Wafer Handling

Automate Your Wafer Level Process

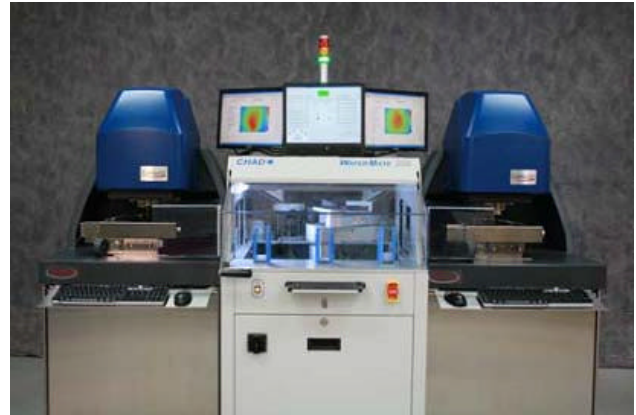
The CHAD **WaferMateLED150™** and the **WaferMateLED200™** workcells are high performance robotic wafer-handling platforms engineered for expert automation of LED wafers from 2" to 6" in diameter.

The **WaferMateLED150™** workcell offers the simplest, smallest possible footprint, and the most cost effective path for Wafer-level process tool manufacturers to deliver automated solutions to the end user. Due to the narrow workcell footprint, a select set of features and options are available for this workcell.

The **WaferMateLED200™** workcell provides a larger workcell platform that can be configured with a wide variety of options and customized features to meet more complex and demanding LED wafer handling application requirements.

Both workcells are based upon CHAD's proven **WaferMate™** platform design, and are adapted to address the unique challenges presented when handling LED wafers and substrates. Design enhancements have been integrated into the mechanical gripper, aligner, and mapper. A suite of software features has been developed to seamlessly integrate the new LED automated wafer technology into the standard **WaferMate™** software that controls the workcell.

The **WaferMateLED™** workcells are suitable for OEM process tool manufacturers handling silicon or sapphire wafers and who need to automate their process tool.



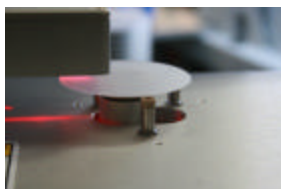
(WaferMateLED200™ Supporting Two Process Tools)

The **WaferMateLED™** workcells offers a standard interface for up to two process tools, enhancing total throughput without increasing automation costs. Engineered with a central MMI, lift-up doors and front/rear maintenance access, the **WaferMateLED™** workcells eliminate interferences with adjacent equipment. Custom interfaces and control integration can be developed for more sophisticated integration requirements.

The **WaferMateLED™** workcells feature extremely reliable components for worry free operation. The absolute encoder, 4-axis robots that are ISO Class-1 and enjoy a worldwide install base in the tens of thousands. The 3-axis wafer aligners are robust and flexible to adapt to different application requirements.



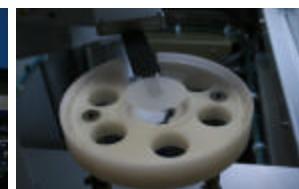
Wafer Placed on Aligner



Wafer Alignment



Wafer Inspection



Wafer Centering Chuck

FOR MORE INFORMATION:

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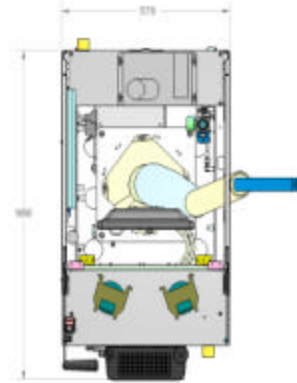


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Automate Your Wafer Level Process

Performance Specifications (both WaferMateLED150 and WaferMateLED200)

- Wafer alignment to +/- .05°
- Wafer Placement +/-100µm
- 180 wafers per hour
- Up to ISO class 4 (optional)
- Full SEMI compliance
- MTBF 60,000 hrs

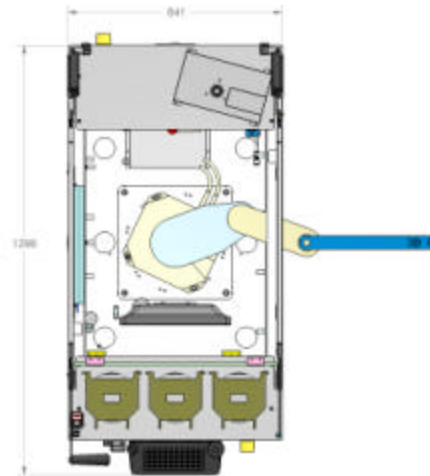


WaferMateLED150

Standard Accessories

(WaferMateLED200 only)

- OCR
- Barcode
- RFID
- Mini environment
- Ionization bar
- Wafer flip module
- SMEMA interface
- SECS/GEM interface
- See CHAD's 'Robotic Wafer Handler Worksheet' for full options listing.
Available online at
www.chadindustries.net



WaferMateLED200

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