

MAESTRO

VERSATILE WAFER SORTER

SINGLE TOOL FOR MULTI SIZE, THICKNESS & WARPAGE

As the Wafer Level Chip Scale Packaging fans out to more back-end packaging houses, the need of handling multiple wafer sizes, thicknesses or distorted wafers slowly stops users' relying on the traditional wafer sorters.

Built with over 80% proprietary and innovative components, Quartet Mechanics clearly distinguishes itself from other automation house. Quartet offers "A la carte" menu to tailor a versatile tool to your specifications.

It features handling wafers of 4"~12" in size (with little or no change over required) and 300~1900 μm in thickness; our vortex solution handles 50~800 μm for thin warped wafers (max warpage 8mm).

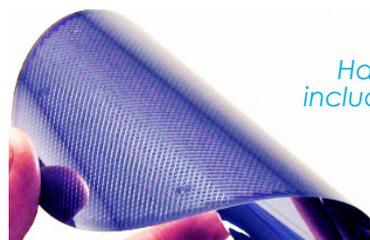
Special intelligence is designed to safely pick, map, align and capture ID for special wafers of wide range.



Modular design for standard or custom platform

SoftTouch flagship products including edge grip end effector and pre-aligners allow the tool to handle the most delicate of wafers, this include the handling of perorated wafers.

Quartet Mechanics offers these tools as a subsystem that can be integrated into a process tool or used as a stand alone tool for cassette to cassette operations prior to transfer to process equipment. All are SEMI and SECS/GEM compliant.

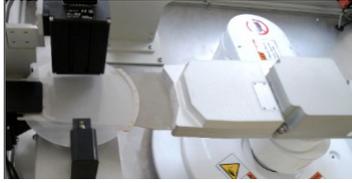


Handles all kinds of wafers including standard, bonded, bumped, framed, thin, warped, perorated

Wafer presence sensor,
programmable grip force,
self-centering

SOFT TOUCH

APPLICATION



Thick wafer in std cassette



Visual inspection

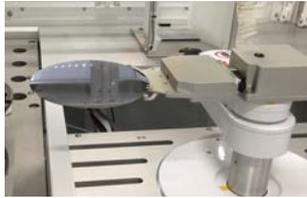


Thick wafer dge grip

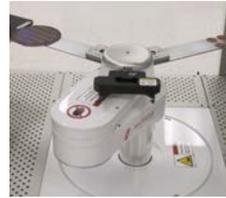
From standard to tailor solution, we design, manufacture and retrofit tools.



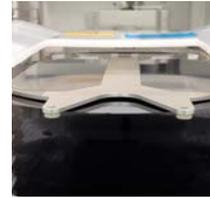
Thin wafer flipping



High precision aligning



Multi size wafer



Top pick



6-axis edge grip

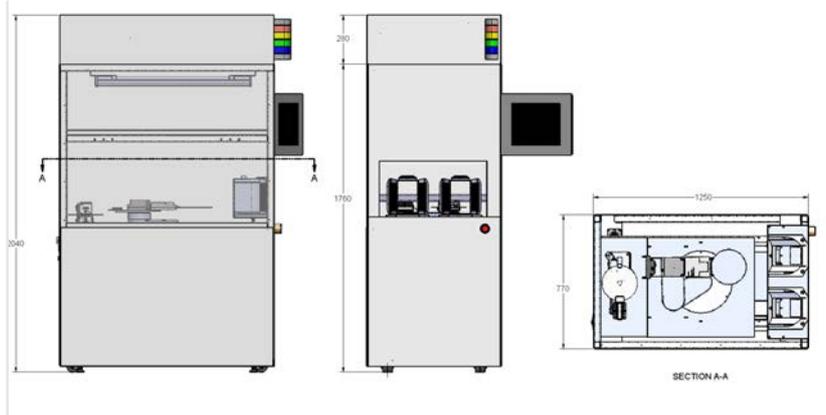
STANDARD FEATURE

- * 4", 6", 8" or 12" in size; standard wafer
- * 2 cassette or auto FOUP ports
- * 1 robot with vacuum end effector
- * Throughput 350~500 WPH
- * Detect carrier presence; detect empty double or cross slotted wafer
- * SECS/GEM protocol compliant

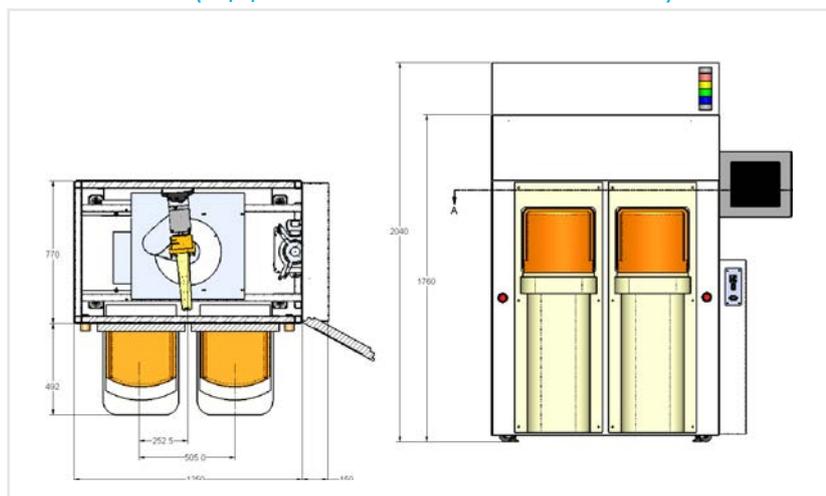
OPTION

- * Special wafers including 50 to 1900 μm thick or perforated; allowable wafer distortion: up to 8mm.
 - * SMIF, FFU/Ionizer
 - * Additional ports
 - * Flipping
 - * Multi wafer size bridge available
 - * Wafer prealign (vacuum + edge grip or edge grip only)
 - * OCR support for top, bottom, or both.
- Most common codes supported
- * Carrier ID (bar code/RFID)
 - * Support thick wafer for std cassette
 - * SECS/GEM communication

4"~8" LAYOUT (Approx. 1250 x770 x2040mm)



12" LAYOUT (Approx. 1400 x1050 x2040mm)



Quartet
MECHANICS

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