

# PRELUDE WAFER JAR TOP PICK (UN)PACKING

## STARTING BACK-END PROCESSING THE RIGHT WAY

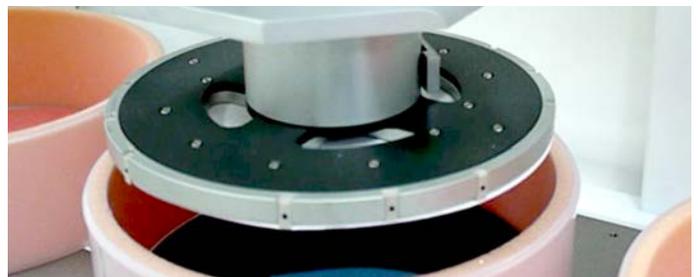
Quartet Mechanics Prelude AWP family of wafer packing systems provides superior performance at an affordable price. The AWS platform has been optimized to provide a uniform solution for the transfer of wafers of most sizes and thicknesses. The utilization of vortex end effectors with our proprietary SoftTouch gripping mechanism ensures damage free wafer transfers between shipping containers and cassettes.

Designed for manufacturability and end-of-line configurability the base platform can be configured to meet a range of market requirements beginning with the basic model that packs about 80 WPH to the upgraded model that can achieve well over 120 WPH. Other enhancements are available that will improve the tolerance for very thin and warped wafers.

All packing systems are shipped with SECS/ GEM compliant factory interface software with optional communication service.

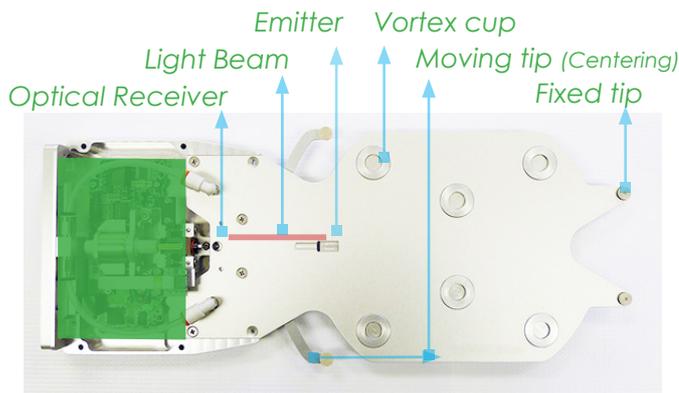
### FEATURE

- **Highly configurable platform**
- **Vortex “contactless” wafer handling**
- **Configurable for most containers types**
- **Common platform design for all wafer sizes; compact footprint**
- **End-of-line configurability**



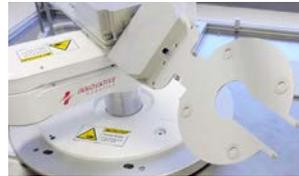
*Top approach vortex chuck unpacks a wafer jar*





### SAFE UNPACKING

When the vortex gripper is ~2.5mm away from wafers or interleaves, an optical wafer presence sensor, integrated within the end effector, allows the robot to activate the vortex and SoftTouch mechanism at precisely the right time.



Hybrid vacuum and SoftTouch edge grip prealigner for thin and warped wafers

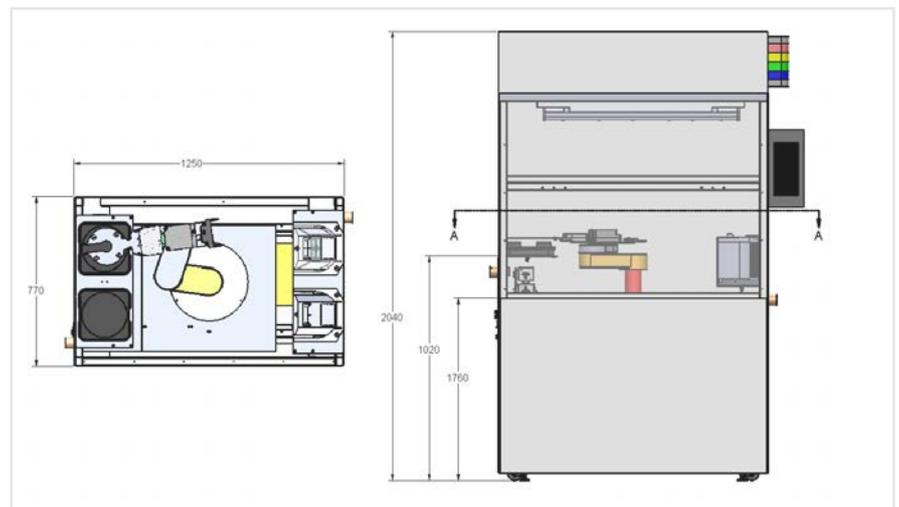
### STANDARD FEATURE

- \* 4", 6", 8" or 12"; standard wafer; multi color, material interleaves
- \* Support canister with side approach
- \* 2 canister ports
- \* 1 carrier(cassette or auto FOUP) port
- \* 1 robot with absolute encoded flipper and vortex edge grip end effector
- \* Throughput ~80 WPH
- \* Detect carrier presence; detect empty double or cross slotted wafer
- \* SECS/GEM protocol compliant

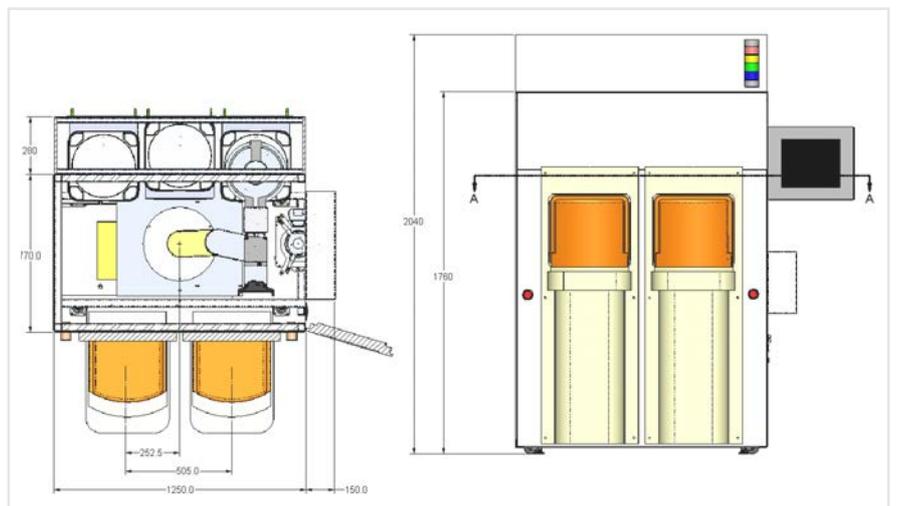
### OPTION

- \* Special wafers including 50 to 1500  $\mu\text{m}$  thick or perforated; allowable wafer distortion: up to 8mm
- \* High Throughput ~120 WPH
- \* SMIF
- \* FFU/Ionizer
- \* Additional ports
- \* 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 jar with top approach only
- \* SECS/GEM communication

### 4"~8" LAYOUT ( Approxi. 1250 x770 x2040mm)



### 12" LAYOUT (Approx. 1400 x1050 x2040mm)



### QUARTET MECHANICS INC.

email: [inquiry@quartetmechanics.com](mailto:inquiry@quartetmechanics.com) / [www.quartetmechanics.com](http://www.quartetmechanics.com)  
 P +1.408.200.8345 / 408.200.8346 F +1.408.200.8341  
 2343 Bering Drive, San Jose, CA 95131, USA