

# OnTrak Synergy™ and Integra™ Wafer and Substrate Cleaners



Your source for leading-edge  
surface processing solutions

These scrubbers combine the successful principles of wafer cleaning established by OnTrak for optimized mechanical slurry particle removal plus metal contamination removal on post-CMP wafers and substrates using chemistries such as HF (optional). The product flow through these tools is linear and the wafers are kept wet throughout until the final drying process.



The OnTrak Synergy is a post-CMP double sided scrubber designed to provide a platform for cleaning recipes that can incorporate a variety of chemical process combinations. The Synergy can also be used in applications such as MEMS and LEDs and is not limited only to post-CMP cleaning. Through-the-brush chemical distribution is included.

The OnTrak Integra is a post-CMP double sided scrubber that uses the components and the successful cleaning technology of the Synergy. This tool is designed to be integrated for use in the cleanroom with a Chemical-Mechanical Polishing tool for complete Dry-In/Dry-Out operation.

## STD FEATURES

- Wet-station wafer loading; wafers in the queue are kept wet by a DI water spray.
- Brush box #1, where the first cleaning step occurs uses double-sided PVA brushes and DI water along with diluted cleaning chemistries such as ammonia.
- Brush box #2, which is identical to brush box #1 is where additional cleaning occurs (HF capable through the brushes).
- The SRD (Spin-Rinse-Dry) module is where the wafer is spun while it receives a final rinse. Drying occurs with the help of an infrared lamp. In addition, there is an optional Megasonics cleaning arm.
- A Mechanical Transfer Arm (robotic arm) transfers the clean and dry wafers to the output station.
- The Output Station has a unique indexer that reliably receives the clean dry wafer from the mechanical arm and places it down into the receive cassette where it is held in a vertical position until the run is completed.

# OnTrak Synergy™ and Integra™

FEATURES	BENEFITS
<p><b>Megasonic Option</b>                      Megasonic transducer mounted on SRD rinse nozzle perpendicular to the wafer surface.                      High-Frequency system (1-2 MHz) that generates acoustic waves and controlled cavitation providing an enhanced cleaning method while protecting the wafer</p>	<p>Provides an additional cleaning for removing larger surface particles using a non-contact method.</p>
<p><b>Pressure Vessel for Chemical Distribution</b>                      16-gallon (60-liter) capacity                      Configured with tubing and connectors needed to interface with the chemical system inputs</p>	<p>Fully configured for chemical mixing and easy set up in your fab</p>
<p><b>Chemical Delivery Upgrade – Single Chemistry</b>                      Features Through-The-Brush chemical delivery Assembly, Kit, Single Chemistry system</p>	<p>Provides much better and more consistent cleaning results by evenly distributing the cleaning chemistries in the brush. In addition, the constant flow of chemistry and water prevents brush loading.</p>
<p><b>Chemical Delivery Upgrade – Dual Chemistry</b>                      Features Through-The-Brush chemical delivery Assembly, Kit, Dual Chemistry system</p>	<p>Enables two cleaning chemistries through the brush modules for maximum production flexibility and provides much better and more consistent cleaning results by evenly distributing the cleaning chemistries in the brush. In addition, the constant flow of chemistry and water prevents brush loading.</p>
<p><b>Idle D.I. H<sub>2</sub>O Conservation/Use Reduction System Upgrade</b>                      A recirculation and filtration system developed by AT that allows for the use of a fixed amount of DI water for a selected period to significantly reduce the use of DI water during idle time.</p>	<p>Significantly reduces the use of DI water during idle time.</p>
<p><b>Crystal Grip</b>                      DSS200 Ontrak cleaner upgrade for handling ultra-thin wafers 300µm and below</p>	<p>Enables sub 300µm thickness wafer handling and fragile wafers without breakage.</p>
<p><b>Transparent Wafer Sensor Kit 200mm</b>                      Kit provides specialized sensors to be able to detect clear or semi-clear wafers</p>	<p>Enables reliable detection of 200mm clear glass wafers in a wet environment.</p>
<p><b>Transparent Wafer Sensor Kit 100mm to 150mm</b>                      Kit provides specialized sensors to be able to detect clear or semi-clear wafers with flat finder</p>	<p>Enables reliable detection of 100mm and 150mm clear glass wafers in a wet environment.</p>