Electronic Assembly Equipment

ITW EAE

Aquastorm 160

with Chemical Isolation and Torrid Zone®



The Aquastorm 160 cleaning system with chemical isolation and Torrid Zone dryer provides the most advanced cleaning and drying performance in a small in-line cleaning platform.

Small Footprint, Exceptional Performance

The advantages of the powerful Torrid Zone drying system, patented cleaning technologies and the benefits of chemical isolation are combined in the small footprint of the Aquastorm 160 cleaning system. This system can accommodate virtually any cleaning requirement and is ideally suited to RMA and no-clean flux applications that require chemistry, as well as removal of water-soluble organic acid flux. The Aquastorm 160 is designed to optimize the PCB cleaning process while minimizing overall cost. Its compact footprint and patented cleaning and drying technologies make the Aquastorm an energy efficient and cost effective cleaning system.

Unsurpassed Torrid Zone Drying Technology

Integrated into the machine cabinet, the Torrid Zone delivers superior drying power. Typical performance includes drying complex assemblies to within 0.1 gram of prewashed dry weight. The module reduces exhaust requirements by 44% and uses 15% less power when compared with conventional drying systems, providing a rapid return on investment..



Advanced Chemical Isolation

To reduce drag-out, the Aquastorm 160's chemical isolation module provides optimal separation of the wash and rinse sections. The V-Jet spray nozzles and ElectroAir knives ensure the removal of chemistry from under and around tightly-spaced components. The chemical isolation module is powered by the recirculating rinse pump to ensure complete prerinsing and to facilitate closed-loop recycling of the rinse section.



Aquastorm 160

Advanced User Interface

The Aquastorm 160 is configured with a Windows®-based operating system that features process monitoring, datalogging and product traceability via the system software. The system is easily networked for downloading of recipes and remote access to operating data.

- Quick and easy viewing of system pressures, water levels, pump and blower operation, temperature, and fill operation
- · Datalogging, traceability and barcode capability



Patented Cleaning Technologies

Hurricane Jet™

The Hurricane Jet's patented nozzle technology produces a coherent sheet of high-pressure water across the entire width of the conveyor belt. This unmatched high impact force allows water to penetrate under and around fine pitch components.



Intermix Spray Technology

The key to the Aquastorm is the utilization of mixed spray technologies including high impact force for tight space and complete flooding action. A combination of spray nozzles including Jet Impact Cleaning (JIC), V-Jet and Hurricane Jet™; directs dynamic impingement to the product surface and effectively cleans under low stand-off components for difficult cleaning applications.



Simplified Design

Removable front and rear panels and hinged, tempered glass windows offer unparalleled accessibility operational visibility. The Aquastorm is equipped with orbitally welded, stainless steel plumbing to eliminate pressure drops and leaks. All sections can be replaced or upgraded in minutes to maximize uptime and process flexibility.



AQUASTORM 160 SPECIFICATIONS

4910 mm (193") x 1960 mm	(77") x 1406 mm (55")
508 mm (20") x 102 mm (4") 610 mm (24") x 102 mm (4")	- optional
Wet Section:	Two (2) 305mm (12") stacks: $34m^3/min$ (1200 SCFM) @ 25mm (1") of H ₂ O static pressure
With Torrid Zone Option:	One (1) 309mm (12") stack: 19.8m³/min (700 SCFM) @ 25mm (1") of H ₂ O static pressure; One (1) 152.4mm (6") exhaust #1: 14.1 - 19.8m³/min (500 - 700 SCFM) @ 25mm (1") of H ₂ O static pressure; One (1) 152.4mm (6") exhaust #2: 8.5 - 11.3m3/min (300 - 400 SCFM) @ 25mm (1") of H ₂ O static pressure
460 Volt, 60 Hz, 3 Phase, 198	amps maximum. Alternate voltages available
Main drain line:	1½" male pipe thread stainless steel
Closed-loop drain:	1½" male pipe thread stainless steel
Tank fill line:	Two (2) Wash and Rinse: 19mm (0.75") stainless steel fitting (3/4") - 19-95 l/min (5-25 gpm)
Final rinse supply:	19mm (0.75") stainless steel fitting (3/4") - 15.14 l/min (4.0 gpm) @ 50 psi, 60°C (140°F) deionized H ₂ O
	Wet Section: With Torrid Zone Option: 460 Volt, 60 Hz, 3 Phase, 198 Main drain line: Closed-loop drain: Tank fill line:

ITW EAE is a division of Illinois Tool Works, Inc. It is a consolidation of all of its Electronic Assembly Equipment and Thermal Processing Technology. The group includes world-class products from MPM, Camalot, Electrovert, Vitronics Soltec and Despatch.

