Crest Ultrasonics
Product Bulletin

Slow Pull Capillary Dryer

Complete and spot-free drying of flat surfaces without solvents

Outstanding features:
- Simple design - for ease of use, low maintenance, safety
- Fast cycle times: typically 3-5 min.
- Automated for ease of use and consistency
- Complete spot-free and particle-free drying
- Stainless steel materials of construction for durability and cleanliness
- Modular construction designed to interface with Crest standard wash/rinse consoles
- Recirculating filtration loop with center sparge return
- 4 sided overflow
- Ground and polished tank construction to eliminate particle adhesion
- PLC-based timed control life
- Compatible with Crest CTS Rigibot transports

Crest Ultrasonics’ unique capillary drying systems rely on the natural surface tension of water to literally “pull” water off the parts while they are slowly removed from the tank. Ideal as a fast and effective final drying method for flat surfaces or as a pre-dry for more complex parts, Crest’s capillary dryer utilizes a four-sided overflow tank with hot DI water and an integral lift mechanism.

The heater is a thermostatically controlled strip heater, mechanically clamped and thermally coupled to the tank. The vertical lift mechanism has dual rail linear guides and a DC motor driver linear actuator lift.
**Slow Pull Capillary Dryer**

A 5 micron and 0.2 micron in series pump and filter system with return back to a bottom mounted tube reduces any disturbance on the water surface. A two sided exhaust removes water vapor that might condense back on the part.

The lift is a multispeed DC motor driven linear actuator lift with internal adjusting spots. The speed can be faster when moving parts outside the liquid and a slow, controllable speed when removing the parts from the liquid. A timer is included to hold the part until it heats up.

**Process:** Components are thoroughly ultrasonically washed and rinsed clean prior to entry into the capillary dry station. In the capillary dryer, the parts are immersed and allowed to dwell until the temperature of the parts and bath are equalized. Parts are then lifted from the hot water bath slowly.

**Specifications:**

**Service Requirements:**

**Electrical:** 208 or 240 Volts/3 Phase/60 Hz. Other voltages such as 380, 415, 460 and 480 are available upon request.

**Deionized water:** 1 - 2 GPM at 190 deg. F

**Other**

All stainless steel frame, countertop and console. All stainless steel and PVDF plumbing.

Recirculating System is all stainless steel magnetic drive pump and filter canister, 10’ long filter cartridge, 5 micron pre-filter, 0.2 micron final filter

**Options:**

High heat package
Inline D.I. water heater

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Capillary Dryer #521