

Vacuum Dryer Console
Model CVDS

Precision drying for critically dry parts needs



Outstanding features:

- Simple design - for ease of use, low maintenance, safety
- Fast cycle times
- Automatic cycle - for consistently dry parts - time after time
- Complete spot-free drying, even for parts with complex geometries
- Stainless steel materials of construction for durability and cleanliness
- Power sliding cover
- Chamber has strip heater with thermostat to heat the chamber
- Quartz heat lamps used to warm parts and prevent freezing

Crest Ultrasonics' vacuum drying systems are a proven effective method for drying parts that trap water because of complex geometries or absorb water onto the surface. Vacuum drying is usually used as a secondary drying method to remove trace amounts of residual water. Vacuum drying is done by placing parts in a heated vacuum chamber to flash off the water. The system is typically used in an in-line batch configuration.

Vacuum drying is accomplished by creating a vacuum atmosphere that reduces the vapor pressure of water molecules on the substrate being dried. The water rapidly reaches its boiling point and it "flashes" off the surface. By pulling a vacuum and thereby reducing the pressure in the chamber, the boiling point of the water in the chamber is reduced and the water is flashed off the surface.

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The Crest vacuum dryer is capable of drawing the chamber down to the desired vacuum in 30 seconds. Parts are placed into the drying chamber either via automation or manually. The vacuum pump then brings the chamber to the desired setpoint. After the preset dwell time has expired, a vent valve opens, relieving the vacuum in the chamber through a 0.2 micron filter. At this point, the parts can be removed.

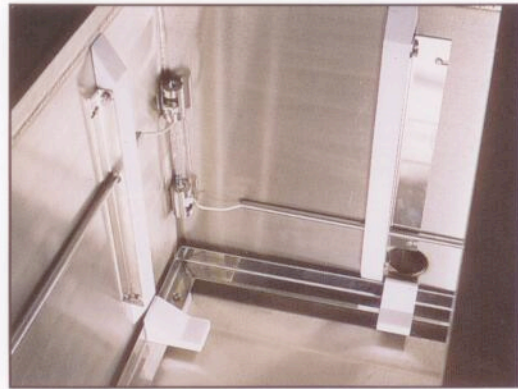
The upper and lower vacuum setpoints are controlled via front panel control. This controller also provides a direct analog readout of the chamber vacuum.

The system is supplied with safety interlocks. Materials of construction are stainless steel with a Viton A cover seal and tygon wire tubing as required, a vent valve and a 10" stainless steel canister, 0.2 micron filter assembly for inlet air. The system may be supplied with a wide range of mechanical pump sizes to meet the exact requirements of the application. The vacuum chamber is designed in accordance with all applicable codes and standards. Other electrical construction specifications are available upon request.

Specifications:

Utilities:

- Air:** 2 SCFM at 60 PSIG minimum, 125 PSIG maximum.
- Elect:** 240 or 208 Volts, 3 phase standard. Other voltages such as 415, 380, 460 and 480 are available upon request. All models available in 60 Hz, 50 Hz optional.
- Vent:** As required for Vacuum pump exhaust 3" exhaust collar



View of inside of vacuum dryer chamber.

Dimensions:

Model	Internal Dimensions	Approximate Overall Dimensions
CVDS-1014	10 x 14 x 10" deep	32 x 27 x 42" high
CVDS-1218	12 x 18 x 12" deep	40 x 32 x 43" high
CVDS-1622	16 x 22 x 16" deep	51 x 36 x 44" high
CVDS-1826	18 x 26 x 18" deep	62 x 42 x 45" high



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Vacuum Dryer # 522