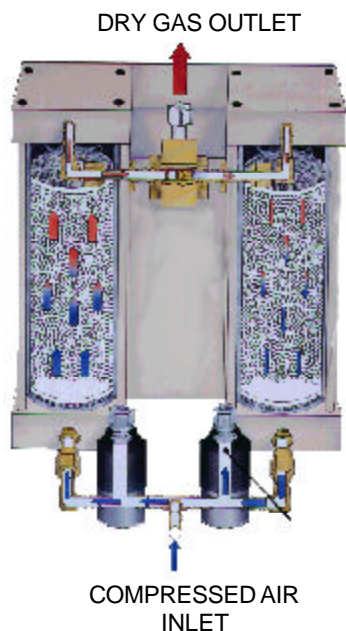


PRINCIPLE OF OPERATION

The HD-Series Heatless Dryers consist of two chambers filled with highly adsorbent desiccant. The standard desiccant is molecular sieve 4A. One chamber dries the gas stream while the opposite chamber is regenerated. The purging air is a small portion of dried air taken from the drying chamber, expanded to atmospheric pressure and flowed countercurrent through the regenerating (wet) chamber. Wet purge air is released from an exhaust port in the vapor state so that no drain is required. Purge air volume is controlled with an orifice housed within the unit.



HD™ - Series Heatless Dryer

User Manual



8 Executive Drive
Toms River, N.J. 08755
Phone: 800-337-3762
732-244-0010
Fax: 732-244-8140
e-mail: info@permapure.com
Web Site: www.permapure.com

HEATLESS DRYER SPECIFICATIONS

Model Numbers

HD-2000-06-110 (7" Dryer, 110 VAC)
HD-2000-06-220 (7" Dryer, 220 VAC)
HD-2000-12-110 (12" Dryer, 110 VAC)
HD-2000-12-220 (12" Dryer, 220 VAC)

Air Requirements

Oil-Free, Non-Condensing Compressed Air

Inlet Pressure

60-100 psig

Inlet Temperature

43 degree C Maximum

Inlet Flow Rate

0-60 LPM (HD-2000-06)
0-90 LPM (HD-2000-12)

Purge Usage

Approximately 10% of Inlet Flow

Outlet Dewpoint

-40 (7" Dryer)
-50 (12" Dryer)

Weight

8 lbs (HD-2000-06)
12 lbs (HD-2000-12)

Depth

5.625" (Both models)

Inlet/Outlet Connections

1/4" Compression Fittings

INSTALLATION

1. Connect 110VAC /60Hz or 220VAC/ 50Hz to Heatless Dryer.
2. Connect compressed air line with minimum of 60 psig and maximum of 100 psig to 1/4" Compressed Air Inlet port (Refer to Figure 1). *Coalescing oil/water pre-filter is recommended for installations where oil or water mist is present.*
3. Purge Air Exhaust ports should be left open to atmosphere to provide venting (can pipe to remote location if desired). An inexpensive particulate after-filter may be used on purge air exhaust to reduce noise.
4. A 1/4" tubing should be used for connection to 1/4" Dry Air Outlet fitting. If length of tubing exceeds 15 meters, 3/8" tubing should be used.

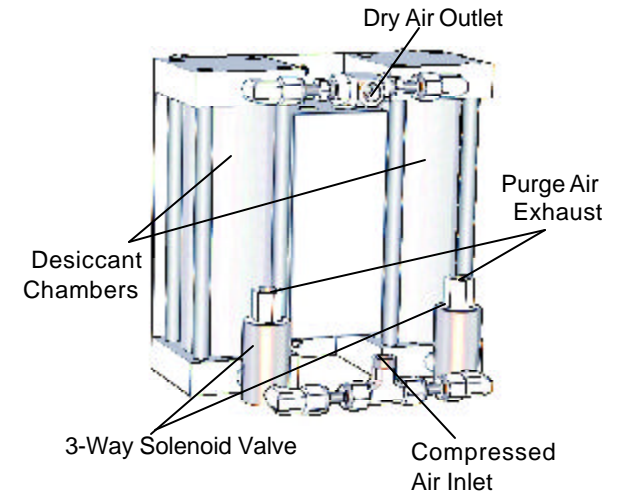


Figure 1

PERFORMANCE

HD-Series Heatless Dryers will operate indefinitely once electrical power and air pressure are supplied. The number one cause of failure to dry is compressor oil contamination of the drying media.