

Patterson Conaform Double Cone Vacuum Dryer System

(Only English version is available)

This is a used double cone vacuum dryer system being used in one of our research and development projects. The double cone vacuum dryer system with specification as below:

Component 1: PATTERSON Model #5, 1'0" body diameter Conaform® Vacuum Dryer-Double Cone Dryer



Size: 304.8 mm (1'0") inside diameter of body.

Maximum Operating Capacity: 0.32 cu.ft. (9.06 liters)

Nominal Working Capacity: 0.32 cu.ft. (9.06 liters)

Total Body Volume: 0.49 cu. ft. (13.87 liters)

Approx. Heat Transfer Area: 2.9 sq. ft. (0.27 sq.m.)

Materials of Construction: (as specified by client)

All Parts contacting product: 316 Stainless Steel

Jacket: 316 Stainless Steel

Supports Frame/Stands: 304 Stainless Steel

Bearings & Drive Housing: Manufacturer's Standard

Gaskets: BUNA 'N'

EQUIPMENT: Body: Fabricated weldment consisting of body belly-band section and charge-end and discharge-end conical sections. To the belly-band section are welded the reinforced gusseted trunnions, upon which one end is fitted the trunnion bearing and at the opposite end, the main drive gear and trunnion bearing. This body section is machined as a total fabrication, ensuring perfect alignment of the bearing surfaces and the gear seat. To the charge-end is fitted the charging-loading access-Manway, and to the discharge end, the discharge valve mounting flange. Body Swing Radius:

approx. 508 mm (1 '8") Body Jacket: Conventional baffled type over body belly-band and cone sections, complete with baffles to ensure even heat distribution

Drive Train Components: Motor: (Integral with Gear Reducer) 1/2 H.P., (to be advised by client) volts, 1450 rpm, TEFC enclosure, coupled to Gear Reducer. Rated for ATEX zone 2-21 (exceeds 22 requirements). Electrical requirement is 3/50/380V (4 wire). Gear Reducer: Horizontally Installed Right Angle Shafted, Helical Bevel Geared unit with AGMA Class II (1.4 Service Factor mm.) gearing service and 10 rpm output speed, foot mounted for assembly to drive support stand. Body Speed: 10 rpm

Component 2: W8cs Knockout Pot



- Carbon steel, non-code (shipped loose)
- Tangential separation
- Swing bolt quick opening lid
- O-ring lid seal
- SS demister pad 98% effective at 40 microns
- Particulate filter 98% efficient at 5 m

Component 3: Electric Thermal Fluid Heating/Cooling System



GENERAL UNIT OVERVIEW

- Single zone oil circulating temperature control system
- Compact, space saving design, with heavy gauge sheet metal cabinet
- All components easily accessible for servicing when required
- Suitable for operation up to 400° F (204°C)
- 3/4" NPT water supply and drain connections
- 3/4" NPT delivery and return connections
- Heating and cooling capability
- 7.5 gallon, baffled expansion/reservoir tank

PUMP SPECIFICATIONS

- Heavy duty, magnetic drive, "seal-less" circulating pump
- 10 GPM @ 30 PSI pumping capacity

MECHANICAL FEATURES

- 6 KW, low watt density, steel sheath heater element
- "To process" system pressure gage
- "Fulflo" bypass valve (to protect the heating elements and pump)
- 1.5 sq. ft. shell and tube heat exchanger for cooling
- Highly visible system status indicators
 - o Power - on Heating - on Cooling — on

Component 4: Control Station



Patterson Conaform Vacuum Dryer:

- Motor Start-Stop Pushbutton Control
- Digital Display of temperature transmitted by the RTD Transmitter & Temperature Sensor Vacuum System
- Vacuum Pump Start-Stop Pushbutton Control Heating/Cooling System
- Thermal Fluid Circulating Pump Start-Stop Pushbutton Control

The Patterson Conaform double cone vacuum dryer system will be available for sell. If you are interested in purchasing, please provide your offer by 2 February 2023 at info@hkrita.com. If you have any question, feel free to contact us.