

HB HEATED BLOWER DESICCANT AIR DRYER

HB150 – HB8000

Industrial Technologies
Davidson, NC 28036

Date: 1-May-2010
Cancels: All Previous

STANDARD CONSTRUCTION

DESICCANT - Activated alumina.

PREFILTER – A high efficiency coalescing filter is supplied with the dryer package. The filter is mounted on models HB150 to HB1500. The filter is loose on models HB1800 to HB8000. The compressed air is filtered prior to entering the dryer's drying vessel to collect any contaminants such as dirt, water or oil droplets. The filter has a 0.01 micron rating.

AFTERFILTER – A high temperature particulate filter is supplied with the dryer package. The filter is mounted on models HB150 to HB1500. The filter is loose on models HB1800 to HB8000. The compressed air is filtered after the drying vessel to collect any dusting that may have occurred as a result of the drying process. The filter has a 1.0 micron rating. The filter is rated for 450F.

AUTOMATIC DRAIN VALVE – On models HB150 – HB1500, a mechanical float operated drain valve is supplied on the prefilter. On models HB1800 and larger a manual ball valve is supplied with the prefilter.

DIFFERENTIAL PRESSURE GAUGES – Included on pre- and afterfilter housing to monitor the condition of filter elements.

* It is recommended to change elements at a differential pressure of 5 psi, once a year, or after 6000 hours, whichever occurs first.

DRYING VESSELS – Welded steel construction. All HB models are ASME code stamped. Removable stainless steel screens are provided in the top and bottom of each

desiccant tower to prevent carry-over of desiccant.

SWITCHING VALVES –
HB150 – HB400

- High Performance Actuated Ball Valves
- Carbon Steel body
- Stainless Steel Disc/Ball/Stem
- Purge Valves are Actuated Ball Valves

HB500 – HB8000

- High Performance Actuated Butterfly Valves.
- Carbon Steel Body
- Stainless Steel Disc/Ball/Stem.
- Purge valves are high performance actuated butterfly valves.
- Repressurization and depressurization valves are normally closed spring-return bronzed body poppet valves.
- Outlet check valves are wafer swing type, ductile iron bodied, spring loaded check valves. Disc and seat are stainless steel with a Viton O-ring.

REGENERATION BLOWER – A low-noise reliable centrifugal type blower is used for regeneration. A standard efficiency TEFC motor is provided with blower.

ELECTRICAL ENCLOSURE – NEMA 4 is the standard enclosure. NEMA 4 is also provided with the EMS option.

CONTROLS - A NEMA 4 Microprocessor Controller with integrated keypad and 2 line display is standard. Includes a dryer schematic with visual

indications of: dryer on, dryer alarm, left/right tower drying and left/right tower regeneration.

ASSEMBLY - Fully assembled on self-supporting fabricated steel frame.

TOWER PRESSURE GAUGES – 2-1/2" dial, 0-300 psig, brass bourdon tube locally mounted on the control panel.

TOWER TEMPERATURE GAUGES – 3" dial, 50-500 deg F range mounted on each desiccant chamber in a thermowell.

PURGE ADJUSTMENT VALVE – A dry air cooling adjustment valve included with a locally mounted purge pressure gauge is provided.

PRESSURE RELIEF VALVE – Fire coded safety relief valves are provided on each chamber. Safety valves are set for 150 psig

PIPING AND FITTINGS

1" to 10" Schedule 40,
SA53 Gr. B ERW
Carbon steel pipe.

1" to 3" uses threaded 150# black malleable iron fittings.

4" to 10" Flanged and Welded Fittings. ANSI B16.5 Class 150 raised face flanges.