### aircel-logo

**Maryville, TN**

***SCOPE***

Model: BHD-450 Application: \_\_\_\_\_\_\_\_\_\_\_\_\_ Options: \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***OPERATING CONDITIONS***

 Inlet Design Flow Rate:  **450** scfm, (Std. 70°F/14.7 psia)

Inlet Design Pressure: **100** psig

 Inlet Design Temperature: **100** ° F

 System Design Pressure: **200** psig

 Outlet Compressed Air Flow Rate:  **360** scfm (Average)

 Outlet Dewpoint at Design Conditions: **-40** ° F pressure dew point

 Compressed Air Purge Losses: **85** scfm (time average)

 Decompression Air Losses:  **5** scfm (time average)

 NEMA Cycle Time: **10** Minutes (5 minutes per vessel)

 Ambient Air Temperature: **38** °F (Min.); **120**°F (Max.)

 Ambient Relative Humidity: **100 %**

 System Pressure Loss with Clean, Dry Filter Elements**: 6** psid

***SYSTEM COMPONENTS***

Prefilter: Coalescing filter with 1 μm element

 Condensate Drain: Zero-loss Electronic Drain

 After Filter: Activated carbon filter 0.01 μm rated

 Final Filter: Particulate filter with 0.01 μm element

 Desiccant Type: 13X Molecular Sieve, Activated Alumina, and Carulite

 Desiccant Quantity: 290 lbs./vessel

 Desiccant Vessel: ASME Section VIII Division 1, “U” stamped, 200 psig at 450°F

 Controller Type: Programmable Logic Controller (PLC) in NEMA 4 Enclosure

 Controller Model: APC

 Energy Management System: Not available on BHD air purifiers.

 Hygrometer (optional): Capacitive Humidity Sensor, -112°F to +68°F dew point

 Carbon Monoxide Monitor: Electrochemical cell, alarm set at 5 ppm by volume

 Switching Valves: 2 In. Pneumatically operated slanted seat globe valves

 Regeneration Blower: Not Applicable

 Regeneration Heater: Not Applicable

 Regeneration Cooler: Not Applicable

 Piping: 2 In. Sch. 40

***DRYER ASSEMBLY***

 Height: 89 inches

 Width: 50 inches

 Depth: 30 inches

 Connection Size: 2” NPT

 Dryer Assembly Weight: 1,550 pounds