

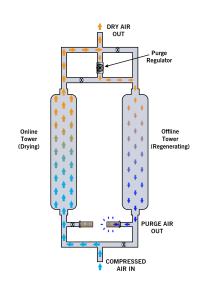


#### **HRL Series Heatless Regenerative Desiccant Air Dryers**

- Flow rates from 15 to 5000 SCFM
- ISO 8573.1 Class 2 -40°F/C Standard Outlet Dew Point
- Includes Factory Installed Pre & After-Filters
- Feature Rich ETL Listed Pro-Logic Controller w/ NEMA 4 Enclosure
- Regulated Purge Flow for Optimum Setting, Regardless of Operating Pressure

#### **How HRL Series Desiccant Air Dryers Function**

Compressed air, saturated with water vapor, flows upward through the Online (Drying) Tower. The water molecules adhere to the porous surface of the Desiccant, where the residual water content of the compressed air is lowered to a Pressure Dew Point (PDP) of -40°F or lower. Concurrently, some of this dry air (15%) is directed downward through the depressurized Offline Tower in a process referred to as Regeneration. This dry air sweep desorbs water molecules from the surface of the Desiccant and is exhausted to atmosphere, preparing that Tower for its next Online cycle. This process is known as Pressure Swing Adsorption (PSA) and is typically completed in a fixed 10-minute NEMA cycle, with the Towers alternating between Drying & Regenerating, typically every 5 minutes.



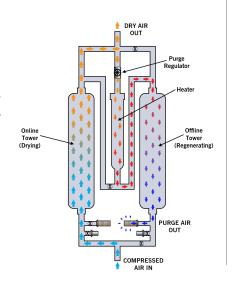


#### **HRE Series Dual Tower Heat Regenerative Desiccant Air Dryers**

- Flow rates from 100 to 6000 SCFM
- ISO 8573.1 Class 2 -40°F/C Standard Outlet Dew Point
- Includes Factory Installed Pre & After-Filters
- Feature Rich ETL Listed Pro-Logic Controller w/ NEMA 4X Enclosure
- Regulated Purge Flow for Optimum Setting, Regardless of Operating Pressure

### **How HRE Series Desiccant Air Dryers Function**

Compressed air, saturated with water vapor, flows upward through the Online (Drying) Tower. The water molecules adhere to the porous surface of the Desiccant, where the residual water content of the compressed air is lowered to a Pressure Dew Point (PDP) of -40°F or lower. A regulated amount (7%) of dried process air is then heated by way of a low watt density heater and passed down through the Desiccant bed of the Offline Tower. This heated purge air, exhausted to atmosphere, removes the water vapor that adhered to the Desiccant during the previous cycle.



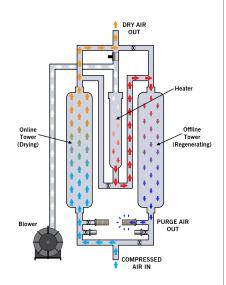


# **HBP Series Dual Tower Heat Regenerative Desiccant Air Dryers - External Blower Purge**

- Flow rates from 100 to 6000 SCFM
- ISO 8573.1 Class 2 -40°F/C Standard Outlet Dew Point
- Includes Factory Installed Pre & After-Filters
- Regulated Purge Flow for Optimum Setting, Regardless of Operating Pressure
- Industrial Duty Blower

#### **How HBP Series Desiccant Air Dryers Function**

Compressed air, saturated with water vapor, flows upward through the Online (Drying) Tower. The water molecules adhere to the porous surface of the Desiccant, where the residual water content of the compressed air is lowered to a Pressure Dew Point (PDP) of -40°F or lower. A high efficiency packaged Blower then directs atmospheric air counter current through a low watt density heater and then down through the Offline Tower Desiccant bed. This heated purge air, exhausted to atmosphere, removes the water vapor that adhered to the Desiccant during the previous cycle. Dew Point spikes or heat bumps are mitigated by enabling the auxiliary cooling / stripping feature that uses a small percentage of dry process air (1.7%).





## **HBS Series Single Tower Heat Regenerative Desiccant Air Dryers**

- Flow rates from 60 to 3000 SCFM
- Dew Points of 0°F to -50°F
- Rugged, simple design may be the last dryer you will ever need
- No moving parts during the drying cycle eliminates downtime
- Includes Factory Installed Pre & After-Filters

# **How HBS Series Desiccant Air Dryers Function**

Online (Drying)

DRY AIR OUT

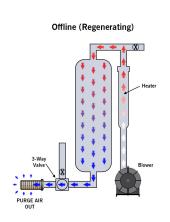
Heater

AIR IN

Blower

**Online (Drying)** - Compressed air, saturated with water vapor, flows upward through the Tower, where water molecules adhere to the porous surface of the Desiccant, resulting in Dew Points as low as -50°F.

**Offline (Regenerating)** - The Blower directs a steady stream of low pressure air through the Heater and then down through the Tower. The heated air desorbs the accumulated moisture from the Desiccant material, with the resulting purge air escaping to atmosphere through the exhaust muffler. Upon completion, the system is cooled and repressurized, ready for the next Drying cycle.



#### Filters & Accessories

Altec AIR provides an extensive range of Compressed Air Filters & Accessories to complement our Desiccant Air Dryers, providing single-source convenience and increased value for our Customer Partners.

- Dual Filter & Bypass Packages
- EcoTronic Dew Point Demand Control
- Low Ambient Temperature Kit
- NEMA 7 and other Hazardous Area Classifications (HRL Series)
- And more...

# **Protecting Compressed Air Systems**

Eliminating water from a compressed air system is vital to protecting equipment and improving productivity. If compressed air is left untreated, moisture can enter the system and cause premature tool failure, product spoilage, failed instrumentation, damage to actuators and cylinders, and more. Clean, Dry Air is a necessity if you want to protect valuable equipment and keep operations running smoothly.

# The Altec AIR Story

Since 1954, Altec AIR (formerly Puregas, LLC) has been an industry leading manufacturer of Compressed Air Treatment equipment for a variety of markets & applications.

In 2003, Altec AIR joined the Altec Family, allowing Altec AIR to reach a new level of manufacturing efficiency and product innovation. Altec is a leading provider of products and services to the electric utility, telecommunications, tree care, lights and signs, and contractor markets. They have a proven record of manufacturing excellence, delivering products and services to more than 100 countries worldwide.

Altec AIR proudly manufactures our quality products in America and offers superior technical support as well as a variety of services.

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For more complete information on Altec AIR products and services, visit us on the web at www.AltecAIR.com.

Material and specifications are subject to change without notice. Featured units in photos may include optional features. Please contact an Altec AIR representative for all available options.

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