

Energy Efficient Option for Desiccant Dehumidifiers

BENEFITS

- Reduced reactivation energy
- Reduced postcooling energy
- Energy savings of \$100,000 annually on a 28,000 scfm system*
- Improved drying performance

*Contact factory for specific installation

PowerPurge[™]

Energy Efficient Option

A desiccant dehumidifier has a desiccant wheel that rotates slowly between two primary airstreams, process and reactivation. In the process airstream water vapor is removed as it passes through the desiccant wheel. This dehumidified air is then delivered to a manufacturing process or space. The wheel then rotates into the reactivation sector where a heated airstream is passed through the wheel. The desiccant wheel releases the water vapor to this airstream. The majority of the energy required for the desiccant process is used in heating the reactivation airstream.

PowerPurge saves energy in two ways. The unique patented PowerPurge acts as an energy recovery system, collecting waste heat off of the hottest section of the desiccant wheel and using it to help with reactivation. This reduces the energy required for reactivation while also reducing the discharge temperature of the process air, resulting in lower energy costs for post cooling.

PowerPurge can also save on first cost. Equipping a desiccant system with PowerPurge can reduce the size of the desiccant rotor without diminishing the dehumidification capacity, while still seeing a savings in energy costs. PowerPurge is available in Munters Integrated Custom Air Handling (ICA) products. The ICA is Munters' double wall, no through metal custom air handling product line. Munters HoneyCombe[®] Rotor Technology with PowerPurge[™]



In the 1950's Munters invented modern industrial dehumidification when it introduced the self-regenerating desiccant rotor, the heart of the dehumidifier.

Today, Munters offers rotors with five desiccant formulations and is the acknowledged expert in the integration of rotors into dehumidification systems and air handlers.

