INDUSTRIAL CONDITIONING EQUIPMENT, LLC

Industrial Conditioning Equipment
"ICE"

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CASE STUDY

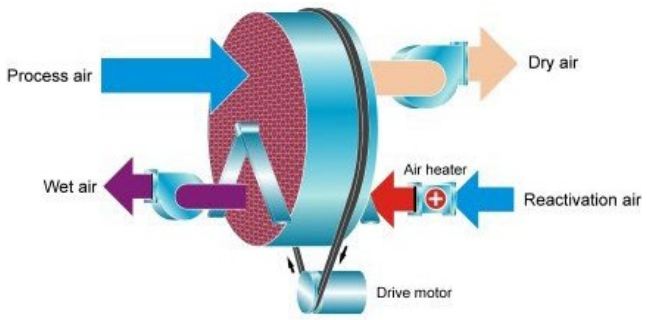
Reduce energy consumption and annual CO^2 emissions with Munters PowerPurge™ energy optimization retrofit installation, which recovers energy from the desiccant wheel's reactivation cycle.

Industry: Pharmaceutical
Application: Cleanrooms
End User: Global leader in providing the solutions to help life science innovators develop and launch successful pharmaceuticals, biologics and consumer health products
Product: Munters patented PowerPurge™ Retrofit System

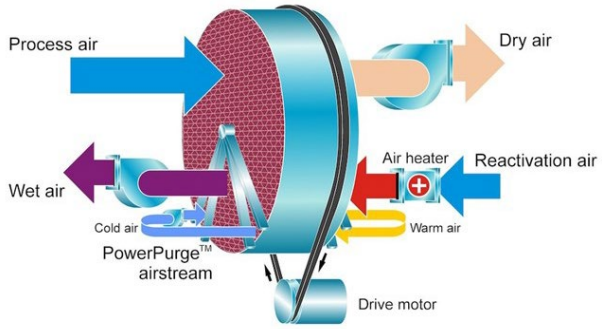
Summary:
A steadily running Munters 30,000 CFM desiccant dehumidification wheel was installed over 20 years ago in north-central New Jersey. Despite the consistent performance, this older unit is the perfect candidate to take advantage of Munters' energy saving technological advances. With a focus on reducing energy consumption and carbon footprint, ICE is called upon to provide Munters' patented energy optimization solution, PowerPurge™

Munters Desiccant Rotor Principle

Original



with PowerPurge™



PowerPurge saves energy in two ways:

The unique patented PowerPurge acts as an energy recovery system, collecting waste heat off the hottest section of the desiccant wheel and using it to help with the regeneration. This reduces the energy required for reactivation whilst also reducing the discharge temperature of the process air, resulting in lower energy costs for post cooling. PowerPurge can also save on investment cost. Equipping a new desiccant system with PowerPurge can reduce the size of the desiccant rotor without diminishing the dehumidification capacity whilst still seeing savings in energy costs.

Benefits:

- ✓ Reduced reactivation energy costs by up to 30%
- ✓ Reduced carbon footprint
- ✓ Reduced post cooling energy costs
- ✓ Increased rotor performance (EEP)
- ✓ ROI of within 1 to 2 years