DESICCANT DEHUMIDIFIER

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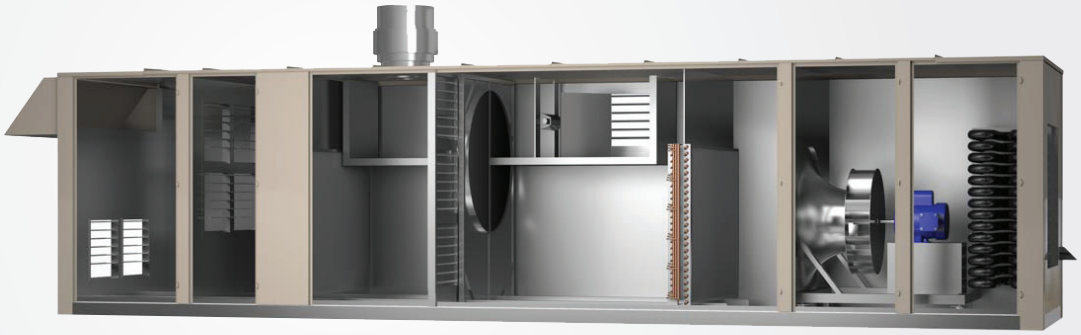


DESICCANT WHEEL TECHNOLOGY

For applications requiring precise humidity levels such as advanced manufacturing, pharmaceuticals or archival storage, Fisen's active desiccant wheel technology maximizes efficiency and removes more moisture than traditional cooling coils.

Active desiccant technology incorporates a desiccant wheel and a heated drying cycle to remove moisture from the air. Traditional cooling coils are then used to reduce the temperature of the air to the desired levels.

Benefits

- A full face air seal separates the process and reactivation air streams, and comes with a minimum 25,000 hour operational life expectancy
- Seamless integration with standard models
- Low operating costs and high energy efficiency
- Consistent dehumidification without over-cooling
- Backed by the Johnson Controls warranty and a national network of over 10,000 service providers

Industries

Advanced Manufacturing
Due to the energy-intensive nature of producing many modern electronics, it's vital to capture and redirect that energy from a cost standpoint. Our custom HVAC solutions utilize energy recovery devices like enthalpy wheels and plate heat exchangers to reduce run times and maximize energy efficiency.

Pharmaceutical & Healthcare
Our highly efficient dehumidification systems offer precise humidity control to meet air quality standards for pharmaceutical manufacturing environments and surgical suites.

Archival Storage
Desiccant wheel technology is extremely effective for applications that require low dew-point depression and cooler supply air levels, like archival storage.

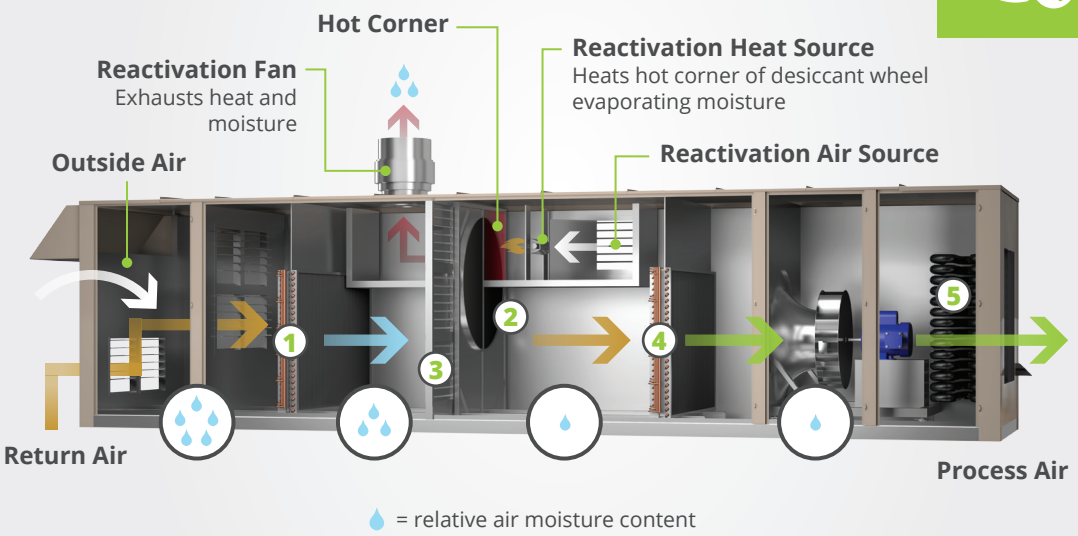
Visit **fisenusa.com** for more information.

Popular Options & Standard Features

- Double-wall insulated & rugged outdoor construction
- 1,000 hour salt-spray tested finish
- 2-inch or 4-inch panel filters, 6-inch or 12-inch cartridge filters
- Epoxy coatings (coils and unit exterior)
- Factory tested refrigeration system
- Microchannel high efficiency condenser coil
- Water or integrated air cooled condenser
- Multiple independent refrigeration circuits
- LonWorks, BACnet, N2 or Modbus communications
- Gas, electric, steam or hot water heat
- Wheel reactivation: Natural gas or electric

How it works

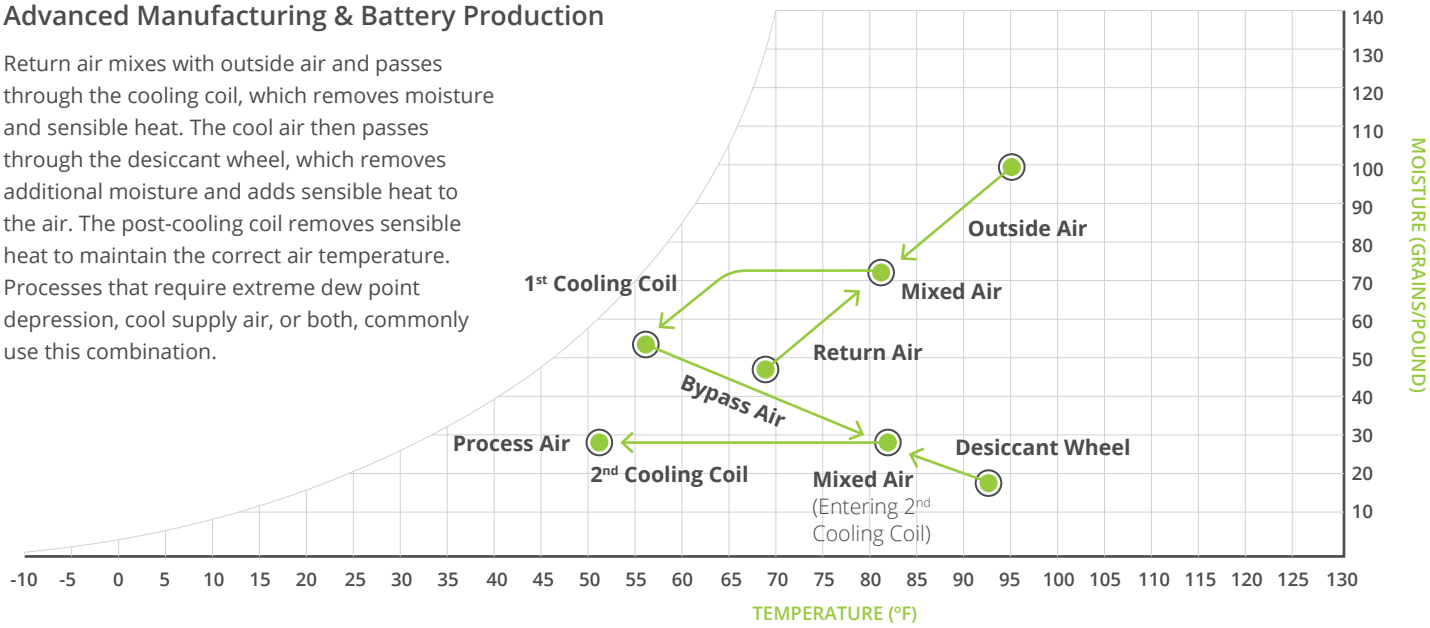
1. **1st Cooling Coil**
   Cools air and removes moisture
2. **Desiccant Wheel**
   Acts as a dry sponge absorbing moisture - air gets warmer
3. **Bypass**
   During dry conditions, air can bypass desiccant wheel
4. **2nd Cooling Coil**
   Cools air to comfortable temperature
5. **Process Heating Source**
   Heats air during colder seasons



Sample Application:

Advanced Manufacturing & Battery Production

Return air mixes with outside air and passes through the cooling coil, which removes moisture and sensible heat. The cool air then passes through the desiccant wheel, which removes additional moisture and adds sensible heat to the air. The post-cooling coil removes sensible heat to maintain the correct air temperature. Processes that require extreme dew point depression, cool supply air, or both, commonly use this combination.



Unit Performance	JCI Product	5	10	20	40	100	XTO	XTI
	Process Air Range	to 2,000 CFM	to 4,000 CFM	to 8,000 CFM	to 16,000 CFM	to 46,000 CFM	to 55,000 CFM	to 70,000 CFM
	Cooling Type	DX	DX	DX	DX	DX	DX, CHW	DX, CHW

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