

FOCUS ON

EMERGING TECHNOLOGY

HEAT OF COMPRESSION AIR DRYER

Technology Description

A heat of compression (HOC) dryer is a sub-type of desiccant dryer. This type of dryer is the most energy efficient, consuming virtually no energy because it utilizes heat generated during compression to dry compressed air. Heat of compression dryers can be utilized with most oil-free air compressors but not oil-flooded compressors. Both twin tower and rotary units are available. As is the case for all desiccant dryers, HOC can provide -40°F dewpoint air.

Benefits

1. Eliminate the need for purge air (desiccant dryers).
2. Eliminate need for external heat to regenerate desiccant (desiccant dryers).
3. Eliminate energy use for refrigerant system (refrigerated dryers).

Customer Type

Medium to large industrial.

Applications

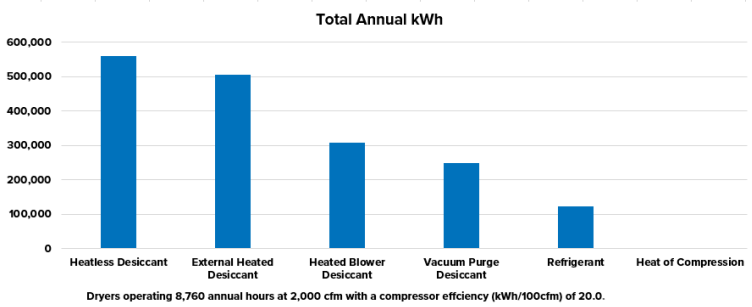
Drying of compressed air from oil-free compressors.

Market Sectors

Industrial.

Potential Energy Savings

One FOCUS ON ENERGY®-incented project showed energy savings of 20,595 lifecycle MMBtu. The chart below shows how the energy usage of a heat of compression unit compares to other common dryer technologies. As an example, a heat of compression dryer will reduce annual kWh usage by 300,000 versus a heated blower desiccant option.



Potential Payback Range

Site dependent.

Incentives Available

Download and complete the Custom Project Incentive Guide [PDF] or Find an Energy Advisor to get started.

REDUCING ENERGY WASTE ACROSS WISCONSIN

Focus on Energy, Wisconsin utilities' statewide program for energy efficiency and renewable energy, helps eligible residents and businesses save energy and money while protecting the environment. Focus on Energy information, resources, and financial incentives help to implement energy efficiency and renewable energy projects that otherwise would not be completed.

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