

DEHUMIDIFICATION DIVISION : Industrial

Integrated Custom Air Handler



Munters – The World Leader in Desiccant Technology



Munters is the world's leading manufacturer of desiccant dehumidification equipment. Munters continues to be the only company in the Americas to develop and build the desiccant rotors that are the heart of an integrated desiccant air handling system. Munters has been selling desiccant dehumidification systems since 1939 and is the developer of the HoneyCombe wheel technology that has become the standard in dehumidification equipment.

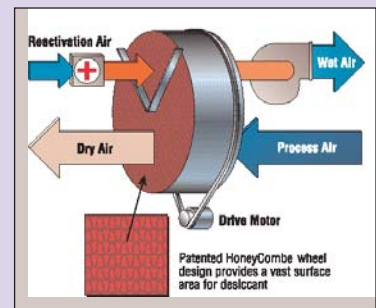
Unlike other HVAC components, the desiccant rotor requires significant experience to be applied correctly. Issues such as methods of humidity control, energy consumption and desiccant selection are critical to insure that you will be provided with the best solution for your specific application. Let Munters show you how over 60 years of experience in designing desiccant systems can help you best solve your humidity control needs.

YOU BENEFIT FROM ADVANCED DESIGN

Munters offers the flexibility and integrity of a custom product; the convenience and value of a pre-configured system backed by the support and capabilities of the world's largest manufacturer of desiccant dehumidifiers. The design offers unusual flexibility in configuring your system, as well as a comprehensive choice of component options. It features double-wall construction, enclosed insulation, easily removed panels, state-of-the-art components, a choice of interior surfaces and finishes, and advanced controls. It may be shipped skid-mounted and fully operational or in modules for quick assembly on the job site.



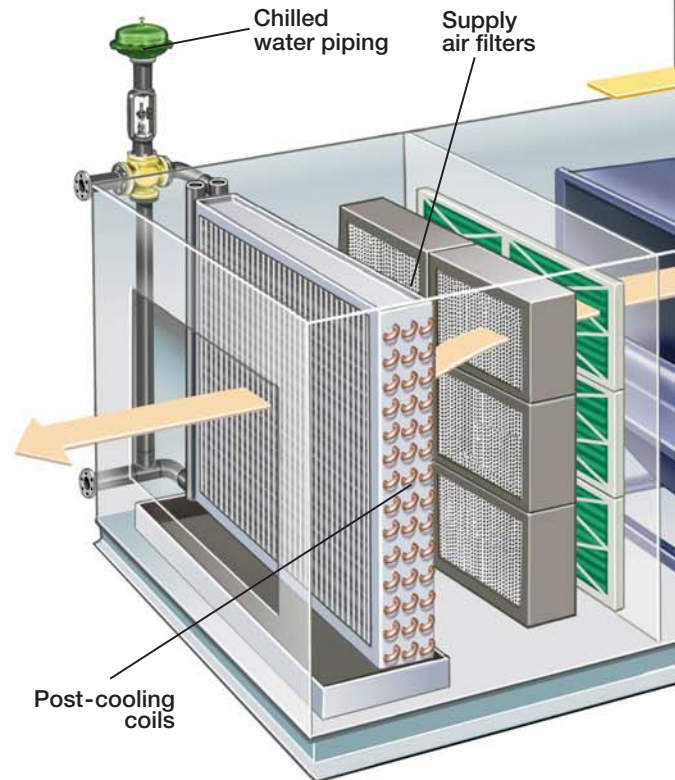
Desiccant Rotors



In the 1950s, 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.

Integrated Custom Air Handler

Munters Integrated Custom Air Handler (ICA) simplifies the complex procedure of adding humidity control to your building or manufacturing process. Now, the complex task of integrating a desiccant dehumidifier with other air conditioning components has been made easy with a truly state-of-the-art dehumidification system. Using advanced selection software, you and your Munters sales engineer will create the perfect system for your application by choosing from multiple configurations, eleven desiccant wheel sizes, five desiccant options, and a range of standard components engineered for maximized performance.



Munters Integrated Custom Air Handling Systems Offer These Advanced Features:

1 ADVANCED HOUSING DESIGN



Adaptable construction provides design flexibility, while large, smooth fitting panels create fewer joints, preventing leaks and improving sanitation. Sloped roof eliminates standing rainwater. System can be split to accommodate size constraints.

2 DOUBLE WALL CONSTRUCTION:

Surface options of galvalume, textured aluminum, stainless steel or any combination permit an effective choice for all operational environments.

3 SUPERIOR PANEL JOINTS:



Cam and lock system fits panels tightly, preventing leaks at seams, while strengthening the housing.

4 CLEAN-IN-PLACE DESIGN:

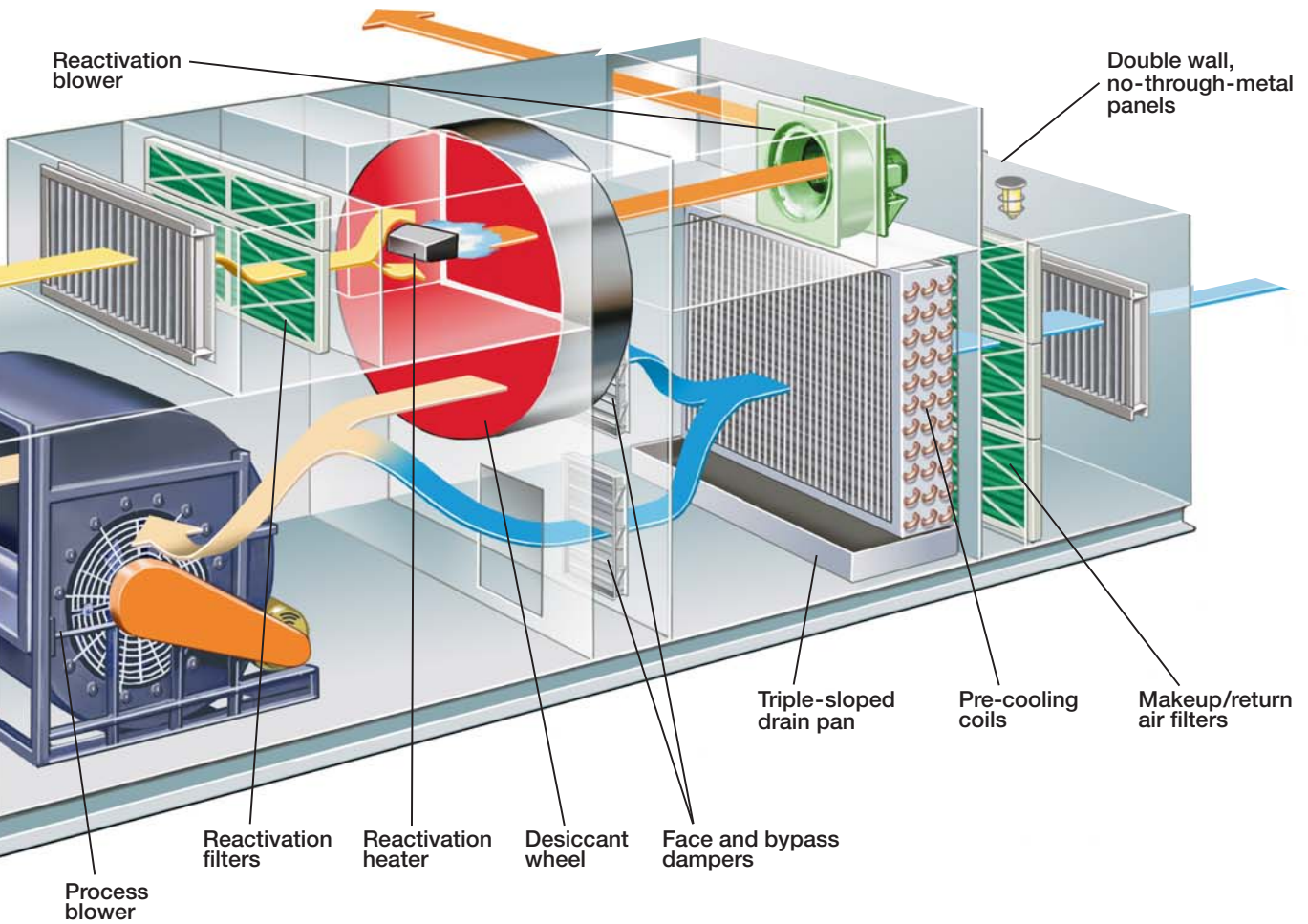


Smooth interior surfaces, “seamless panel joints,” and triple-sloped self-draining floors allow for thorough and fast interior washdowns.

5 INSULATION OPTIONS:



Double wall construction with thermal break design is offered in insulation thickness of 2.5 and 4 inches to prevent external condensation, even in the toughest conditions. Unlike other products, a true thermal break exists on all surfaces, even the system base.



6 ACCESS DOORS:

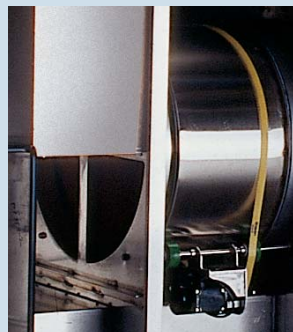


Access doors are available in inward and outward swinging or plug design. Door design maintains the no-through-metal feature of the ICA. Door surfaces match the interior and exterior of the system.

7 CONTROLS:

Humidity control is accomplished with either process air face and bypass dampers or reactivation energy modulation for less demanding applications. Other control options such as temperature and airflow control are available in either electric or pneumatic. Custom control packages are also available.

8 ROTOR INTEGRATION:



The “heart” of the system, no other air handler manufacturer builds its own rotors or has the expertise to match other system components with the rotor for maximized and dependable performance. The position of the desiccant rotor provides unprecedented accessibility, and “cleanability,” while maintaining a small footprint.

9 CUSTOM OPTIONS:

A wide range of custom options are available with the ICA. These include steam, chilled water and refrigerant piping, mounted condensing units, turnkey chiller packages, high pressure fans and many more.



CONFIGURATIONS TO MEET YOUR NEEDS

Standard ICA configurations of air flow and dehumidifier positions provide the flexibility to accommodate most arrangements. Eleven rotor sizes and five desiccant types provide a fast solution to most dehumidification problems. Unique situations can be addressed with special configuration capabilities through 100,000 scfm.

TURNKEY SYSTEM

ICA configurations are full-featured, factory-built air treatment systems which can include: chilled water piping, refrigeration packages, filtration, full temperature and humidity controls, face and bypass, and energy recovery options.

UL COMPLIANT

The ICA is NRTL approved to UL standards and is manufactured in an ISO 9001:2000 certified facility. Beyond this, you can be confident knowing that your ICA has been built by a company that has manufactured more than 20,000 dehumidification systems during the past 60 years. With experience in hundreds of applications, in thousands of demanding manufacturing environments, Munters dehumidification systems have demonstrated unparalleled dependability and performance.

MAXIMUM PERFORMANCE

An ICA from Munters can hold conditions as rigorous as a -70°F dew point with dependability. ICA components are integrated to achieve maximum performance from the dehumidification system. No system built on-site will match the advanced engineering of the Munters ICA.



Advanced features of the ICA make it uniquely suitable for food, electronics and pharmaceutical manufacturing. FDA or GMP sanitation requirements are easily met.

REDUCED INSTALLATION COST

The sole source ICA concept can save thousands of dollars by reducing coordination problems on-site because the system arrives factory-tested and ready to run, requiring only the installation and connection to ductwork and utilities.

EASY TO CLEAN, SANITARY OPERATION

FDA or GMP sanitation requirements are easily complied with in pharmaceutical and food process manufacturing applications. Sweating is prevented by a no-through-metal design that eliminates thermal bridges, and all of the system's interior surfaces can be readily washed.

ALL COMPONENTS ARE STANDARD

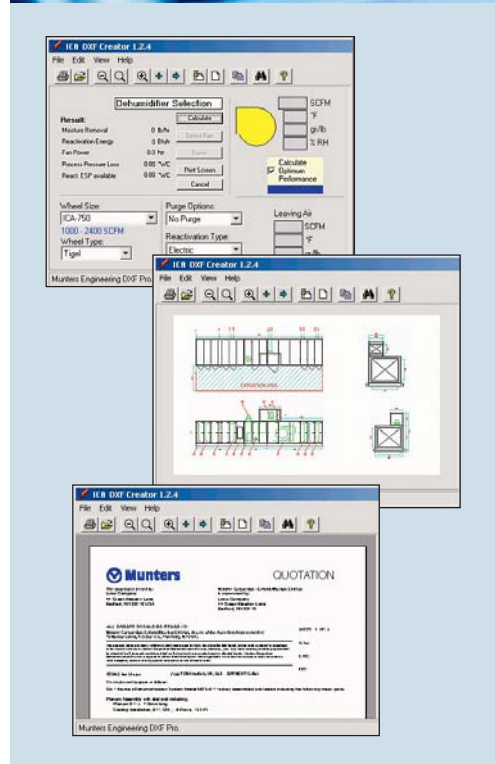
A full line of proven air handling components and accessories are available to complete your system requirements. Component options include:

- Dehumidifier—five desiccant options, eleven rotor sizes.
- Factory-wired control enclosure with main circuit breaker and through-the-door disconnect, plus function and fault indicating lights.
- A full selection of supply and return filters with efficiencies ranging from 30% through 99.97% HEPA. All filters are easily accessed.
- High performance heating and cooling coils. Available in various tube thickness.
- Bypass duct damper maintains constant volume system design.
- Full contact rotor seal.
- Purge configuration for low dew point conditions or reduced reactivation energy requirements.
- Complete refrigeration package—direct expansion or chilled water/brine.
- Reactivation utilities—steam, electric or gas.
- Various access sections.

ACCELERATED PRODUCTION

Munters ICA line has been designed to simplify specification and speed production. Our selection software allows our sales engineers to provide the information you need in a single meeting. Quotations are rendered the same day with plan drawings, specifications, schedules and utility requirements.

State-of-the-art selection software allows you to work with our sales professionals to design the most efficient and cost-effective system to meet your application needs. No selection software offers users more flexibility when considering their specific equipment requirements.



State-of-the-art selection software allows you to work with our design professionals to order the most efficient and cost-effective system to meet your application needs.



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