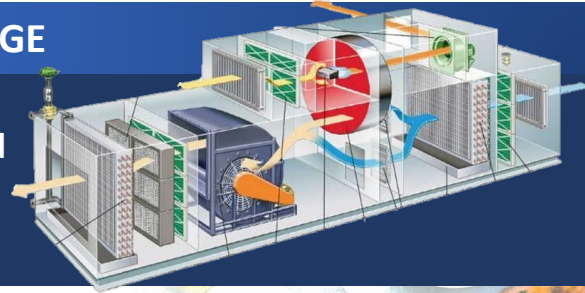


CASE STUDY: COLD STORAGE



Utilize desiccant dehumidification to eliminate fog & condensation, eliminate slippery floors, prevent mold growth, improve worker safety and avoid USDA violations.

Industry: Food & Beverage

Application: Cold Storage

End User: Leading Italian food service distributor in the Eastern US

Product: Munters Desiccant Dehumidification System, Model ICA



SUMMARY

The Challenge:

Humid ambient air infiltrates the loading area and the storage cooler, creating issues with productivity, quality and safety. This excess moisture from outside condenses on cold surfaces, allowing **condensation** to form on ceilings & walls which then spills onto the product (**a violation with the USDA**). Condensation creates an environment susceptible to **mold/fungus growth** as well **corrosion** to structures & other equipment. Moisture infiltration to the cold store also creates large amounts of **fog**, leading to a potential **safety hazard** for employees. **Another challenge** on this project was to maintain desired conditions in the space while having multiple forklift doors open for fast movement of product in and out of the cold storage, creating a significant source of moisture infiltration.

The Solution:

Engineering Driven Design PC partnered with **Industrial Conditioning Equipment** to provide a Munters desiccant dehumidification system sized to deliver 24,000 CFM of dehumidified air (5 gr/lb @ 40°F), including 10% fresh air. System is designed for optimal moisture removal & sufficient airflow to create positive pressure in the storage space for added protection against infiltration.

The Results:

All the customer's moisture related problems have been eliminated, and all Food Safety & Inspection Service Regulations satisfied. Temperature & humidity levels have been reduced, preventing condensation and fog from forming, while creating a more comfortable working environment for the employees

BACKGROUND



Industrial Conditioning Equipment (ICE) is a manufacturer's representative for some of the highest quality industrial air treatment equipment manufactured in the industry.



Engineering Driven Design PC

Engineering Driven Design PC is a consulting engineering firm offering custom Mechanical, Electrical, Plumbing & Fire Protection system designs and industry expertise to their clients - Approaching each task with Architects & Contractors in mind...



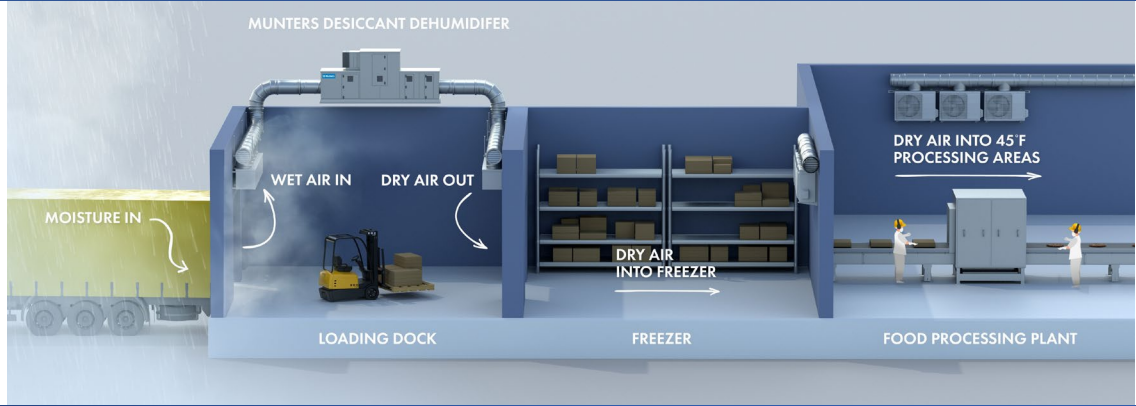
Munters Corporation is a global leader in the manufacturing of industrial desiccant dehumidification systems down to -90F dewpoint. Munters DH systems are used in over 20 major industries including food, pharmaceutical and battery manufacturing.

Our experts will help you find the perfect climate for your business.

Talk with an expert today.



TYPICAL LAYOUT

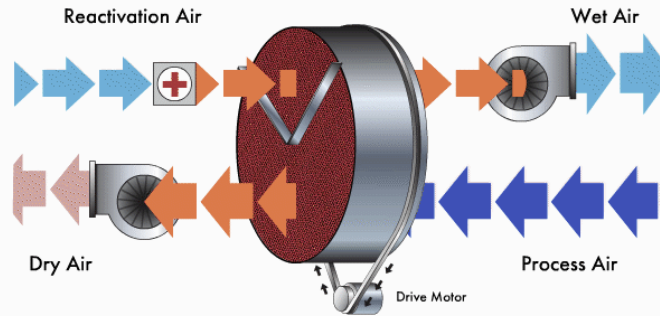


MUNTERS DESICCANT DEHUMIDIFICATION SOLUTION

Munters ICA Features:

- Innovative Double Wall Construction with 22-gauge stainless steel interior & exterior walls
- Superior No-Through Metal Design (Prevents Sweating)
- Triple-sloped floor drains integral to floor panel for wash down & sanitation.
- NEMA 4X stainless steel control enclosure

Munters Desiccant Rotor Principle



Without the use of desiccant dehumidification in food & beverage facilities, excess moisture from delivery, manufacturing and/or washdowns can cause a variety of issues including, but not limited to:

- | | |
|--|---|
| ✓ Condensation forming on ceilings/walls (USDA issues) | ✓ Mold and frost buildup in spiral freezers |
| ✓ Large amounts of fog – potential safety hazards | ✓ Uncomfortable working environment |

TYPICAL RESULTS



732-524-7544

1258 S River Rd
Cranbury, NJ 08512

rflynn@icenj.com

www.icenj.com