

# Custom air handling units for precise temperature and dewpoint control

When a pharmaceutical company in Indiana was in need of a custom air handling system for their process expansion containing clean rooms, chemical laboratories, processing areas and packaging rooms, Munters delivered air handling equipment that would ensure the proper conditions for this type of application.

In order to be successful, the air handling system needed to be capable of conditioning 100% outdoor air to maintain a stable environment in the workspace. Pharmaceutical applications require precise temperature and dewpoint control to ensure preservation of the delicate ingredients. Pharmaceutical manufacturing guidelines specify the required design conditions. Non-compliance of these guidelines would force the owner to shut down the process, resulting in the loss of valuable production time.

Munters' solution was a packaged custom air handling system that included high efficiency particulate filtration, direct expansion cooling, indirect gas-fired heat and microprocessor based DDC controls. Industrial grade construction and components including multi-circuited coils, independent refrigerant circuits, and high turndown Maxon burners were just a few of the features designed into the units. The units were pre-programmed with DDC controls to minimized unit penetrations and shortened the installation and start-up time. A modem was also installed to facilitate remote connection to the unit DDC by the factory or the owner. This allows remote monitoring and troubleshooting of the unit and allows for on-the-fly programming changes to the DDC operating sequence should the need arise as a result of changing owner requirements.

Reliability and serviceability of these units were important considerations when system downtime must be minimized. Proper unit arrangements that permitted ready access to filters, coils and fans were also vital.



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## CASE STUDY: Pharmaceutical Applications



## BENEFITS

- Custom small footprint design
- Multiple heat exchangers stacked and integrated within a single outside casing
- Welded design with almost zero leakage enables the oxidizer to reach high destruction efficiencies

