



High efficiency heater supports dairy spray drying

Local cheese producer, Canada

In the Quebec province of Canada, a local cheese producer required an indirect gas-fired heater for one of their systems that makes powdered cheese. This project required 42,000 standard cubic feet per minute (SCFM) of outdoor air to be heated to 400°F, despite an outdoor air temperature of -40°F.

To provide these conditions, the heater must process 20 million BTU/hr. In addition, it had to be at least 90% efficient with high precision controls that met both CSA requirements and food grade construction standards. To meet the specifications, Munters' VariMax® IFRG natural gas-fired indirect heater with a Thermo-Z™ plate heat exchanger was installed.



Munters' VariMax® IFRG.



Stainless meets standards

In order to adhere to food grade construction standards, the entire unit, including the base frame, exterior casing, and exterior supports were made from stainless steel with full seam welding. The control panels and gas train box were also stainless steel and wash down rated. To provide the required BTUs and precision for firing the system, a Maxon Ovenpak® burner system with dual burners and Maxon's Smartlink control system were used, which allowed for high precision control, repeatability, and complete tuning ability for the air-to-fuel mixture ratio.

During the manufacturing of the VariMax system, the customer made periodic inspections, and conducted shop and field performance tests to ensure compliance with CSA standards. Successful tests and inspections left the customer confident in the quality and reliability of the final product. Experience and demonstrated expertise with indirect gas-heating allowed the customer to continue putting their trust in Munters for their heating needs.

Case study:

Cheese producer

Advantages:

- Delivers 20 million BTU/hr NET with 93% system efficiency
- +/- 1°F high precision temperature control
- CSA approved controls and gas train
- Food grade, full seam welded stainless steel construction

Would you like to find out if Munters has a solution for your company too? If so, please visit our website, www.munters.com/food

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