



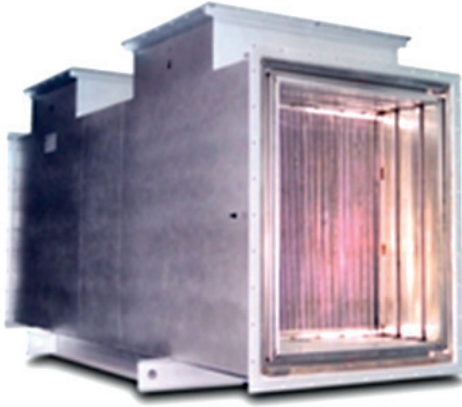
Heat exchanger solves icing issues

Alyeska pipeline turbine manufacturer, USA

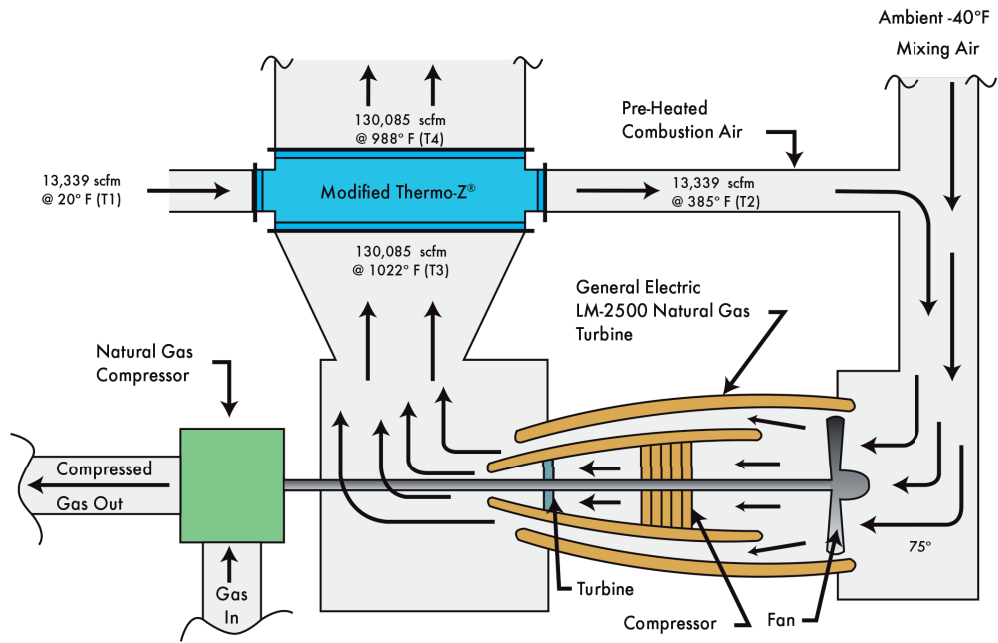
Located along the Alyeska pipeline in the northern slopes of Alaska, a major turbine manufacturer asked for Munters help to find a solution to their icing issues. With outdoor air temperatures reaching a harsh -70°F , turbines that draw in outdoor air can frequently experience inlet icing. To minimize icing, the inlet needs to be tempered. To achieve this, the turbine manufacturer needed a heat exchanger that was not only durable and efficient, but also offered the lowest cost and smallest footprint.

Munters expertise needed

During the heat exchanger design phase, Munters had many factors to consider. First was flow; the hot flow was about 1/10th of the cold flow and had a very high ramp rate. Then, the customer required the unit to fit into a very tight space that required special connection sizes to adapt to their ductwork. Finally, since the application was preheating turbine air, the inlet air had to be free of debris, which required the heat exchanger to be very clean.



Thermo-Z cross-flow heat exchanger.



The Munters solution

The solution for this turbine manufacturer was the Munters Thermo-Z[®] cross-flow heat exchanger with side ribs. The Thermo-Z was designed with tight spacing on the hot side and wide spacing on the cold side. This type of design provides efficiency despite uneven airflows. The unit was made with heavy-gauge (.063 in.) plates and internal expansion compensation so it could withstand high ramp rates. To ensure the highest level of cleanliness prior to shipment, the unit was specially cleaned with brushes and high-pressure air, and then sealed.

A happy customer

To adhere to the turbine's rigorous standards, the heat exchanger was inspected several times prior to installation to ensure the highest level of product quality. A successful final inspection satisfied the customer; they were very happy with the final product and glad they chose Munters.

Case study

- Alyeska pipeline turbine manufacturer gets Munters heat exchanger

Advantages:

- Designed for -70°F ambient air temperatures
- Special transitions supplied for tight inlet/outlet turbine connections
- Specially designed for large flow imbalance and very fast and hot inlet temperature ramp rate
- Meets strict cleanliness requirements

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