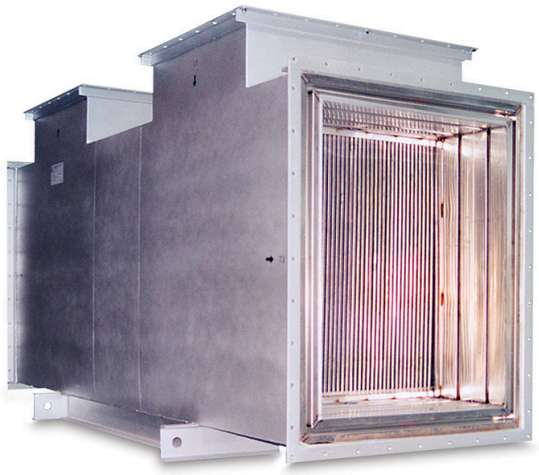
CASE STUDY

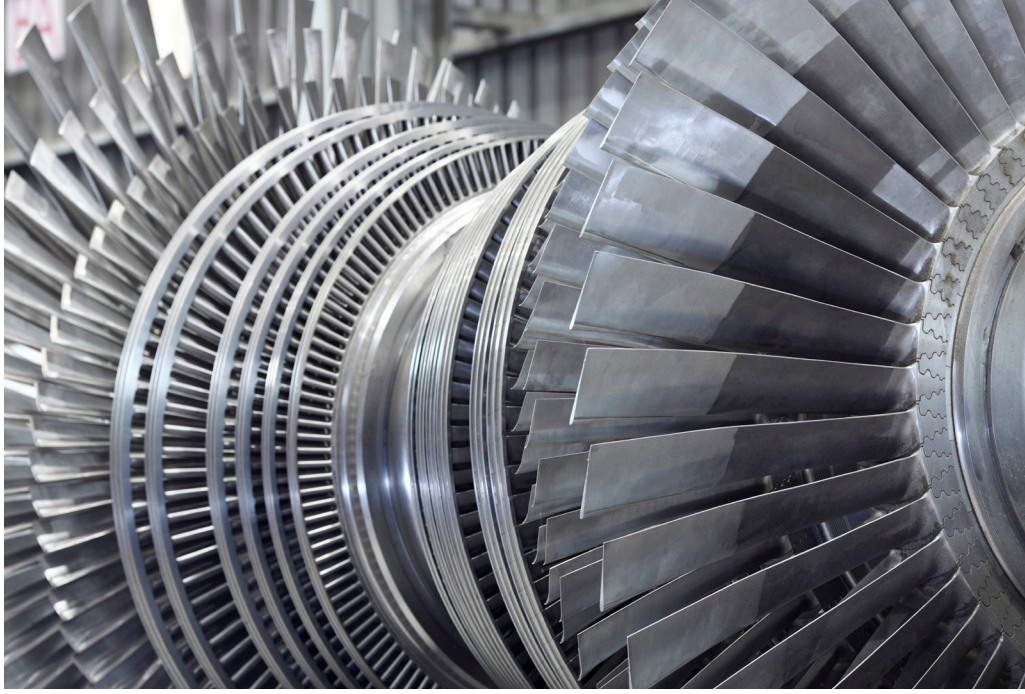
Munters

Marble manufacturer's turbines utilize heat exchangers for increased energy savings

Vermont Marble, USA



Thermo-Z® Welded Plate Heat Exchanger.



Munters supplied Thermo-Z® gas-to-gas heat exchangers to recover energy from two Allison combustion turbines at Vermont Marble.

Munters fabricated over 150 linear feet of high-temperature duct and provided onsite assistance for the installation. The 3.8 MW combustion turbines provide power for the local power grid.

The energy recovered from the 1047°F turbine exhaust gas stream is used to preheat air for two spray dryers that process ultra-fine calcium carbonate dust used in the paper and plastics industry.

The cogeneration cycle helps reduce the cost of producing power to the community and provides preheated combustion to the spray dryer.

Each turbine exhausts 28,195 SCFM of 1047°F gas to each 80% efficient heat exchanger. Fresh air fans supply 23,307 SCFM of ambient air heated to 848°F to each spray dryer recovering over 20,000,000 BTU/HR per turbine.

The project was engineered by Black & Veach of Ann Arbor, Michigan. It is currently operating within the guidelines of the original specification and performance guarantees.

Case study

Vermont Marble gets Thermo-Z® gas-to-gas heat exchangers.

Advantages:

- Recovers energy for reuse
- Reduces local power production costs
- 80% efficient heat exchangers used

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

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