

CASE STUDY: INDUSTRIAL

Facility:	Aerospace Manufacturing
Location:	Everett, WA.
Project Type:	Heat Wheel Retrofit
Wheel Type:	Enthalpy High Performance 60,000 CFM / Unit
Scope:	Replacement of 1 SEMCO TE3-70 heat wheel

Problem:

Bearing failure caused seals to rub media closing off air flow. In 2006 the facility's staff contacted Thermotech Enterprises concerning the existing SEMCO energy recovery wheel. The plant mechanical engineer had 2 major concerns, future reliability and down time for the project. After reviewing our product technical specifications and contacting references the customer decided on the Thermotech solution.

Solution:

Thermowheel TR-Series. The retrofit product chosen was a Thermowheel TR-697 14 foot in diameter energy recovery wheel. This product was installed in the existing upgraded frame of the old SEMCO unit. All rotor parts were replaced with the patented Thermowheel system. A new motor and speed reducer were provided and the existing variable speed drives and control system were re-used. Special attention was given to the schedule and staging of materials to complete the work in 48 hours. The plant engineer stated, "We are happy with the installation of the Thermotech wheel. It is a stout design and doing this in 2 days over a weekend helped tremendously".

Results:

Improved production air quality and lower energy costs. There was no surprise to Thermotech that the savings in energy costs and improvement in air quality were immediate as the existing wheel was not operational. Thermotech's fail proof design was a critical factor in the customer's choice of our products. Thermotech has replaced wheels and installed new wheels in hospitals, schools, manufacturing facilities and labs nationwide. Thermotech's goal of providing high performance and reliability coupled with the engineering expertise of the Thermotech team has resulted in a reliability record that is the envy of the industry.