

GAS-TO-AIR CASE STUDY

Automotive, aluminum furnace, U.S.



Overview

- Econotherm GA 360 smooth pipe heat exchanger
- 500-kW combustion air pre-heater
- High particulate matter exhaust from furnace
- Low fouling, easy cleaning and maintenance, high reliability
- Unit positioned outside main factory premises
- Customer advised it was not possible by consultants (e.g., acid, etc)

Parameters

Exhaust temp in/out

400°C/266°C

Air temp in/out

30°C/293°C

Exhaust/air mass flow

12,000/6,374 kg/h

Energy recovered

528 kW

Recovered energy value

\$155K USD/year (€144K/year)

Payback period

16 months

Price per kW recovered

\$123 USD (€114)

