

STEAM CONDENSER CASE STUDY

Food, dirty steam, Ireland,



Overview

- Econotherm SC model 400 smooth/finned hybrid pipe through-flow heat exchanger
- 440-kW process water heater
- Contaminated steam; regulatory requirement to condense, fuel savings, stainless steel
- Eliminated existing air-cooled equipment

Parameters

Steam temp in/out

105°C/95°C

Water temp in/out

10°C/88°C

Exhaust/water mass flow

844/8,000 kg/h

Exhaust pressure drop

N/A

Energy recovered

446 kW

Recovered energy value

2x \$25K USD/year (2x €23K/year)

Payback period

Six months

Price per kW recovered

\$28 USD (€26)

