

FLUE GAS HEAT EXCHANGER

Turn Waste Heat into Usable Energy

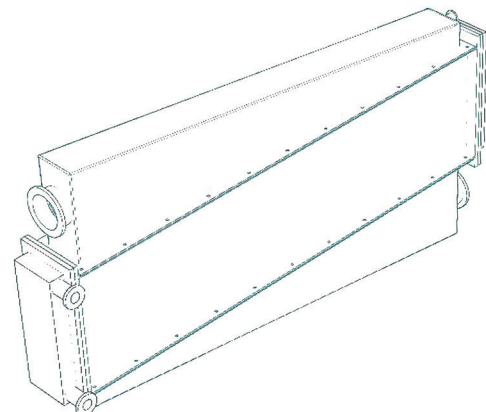
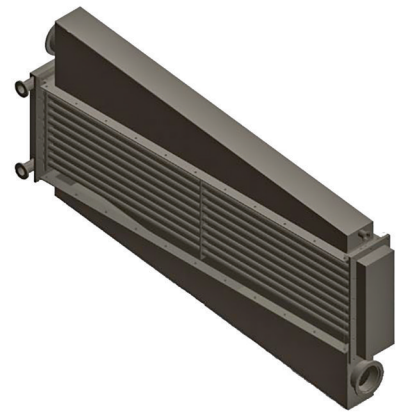
Recover valuable energy from flue and exhaust gases with our high-efficiency, corrosion-free condensing heat exchangers-engineered to maximize thermal and latent heat recovery while delivering substantial fuel and operating cost savings.

Why Recover Waste Heat?

Up to 30–40% of fuel energy is typically lost through flue and exhaust gases. Our advanced heat exchanger technology captures this lost energy and converts it into useful hot water or process heat, improving overall plant efficiency and sustainability.

Key Advantages

- **Superior Energy Efficiency**
 - ▶ Recovers sensible and latent heat from exhaust gases
 - ▶ Flue gas exit temperatures reduced close to dew point
 - ▶ Overall system efficiency improvement up to 90%
- **Condensing Heat Recovery Technology**
 - ▶ Extracts latent heat of water vapor during condensation
 - ▶ Higher heat recovery compared to conventional non-condensing units
 - ▶ Ideal for boilers, furnaces, engines, dryers, and CHP systems
- **Corrosion-Free Design**
 - ▶ Well-matched with Low pH condensation / Cold stream.
 - ▶ Constructed using high-grade corrosion-resistant materials.
 - ▶ Designed to withstand acidic condensate (H_2SO_4 , SO_x)
 - ▶ Long operational life with minimal maintenance
- **Significant Fuel & Cost Savings**
 - ▶ Reduces fuel consumption by 10–25%
 - ▶ Lower operating costs and faster ROI
 - ▶ Reduced boiler load and emissions
- **Sustainable & Environment Friendly**
 - ▶ Lowers CO_2 , NO_x and SO_x emissions
 - ▶ Supports energy conservation & ESG goals
 - ▶ Ideal for green retrofit projects



Typical Applications

Boiler flue gas heat recovery | Diesel & Gas engine exhaust systems | Furnaces & ovens | Dryers & thermal process plants | Waste heat recovery for hot water & process heating

Recovered Energy Can Be Used For

Boiler feed water preheating | Process water heating | Combustion air preheating | Space heating & utility hot water

Technical Highlights

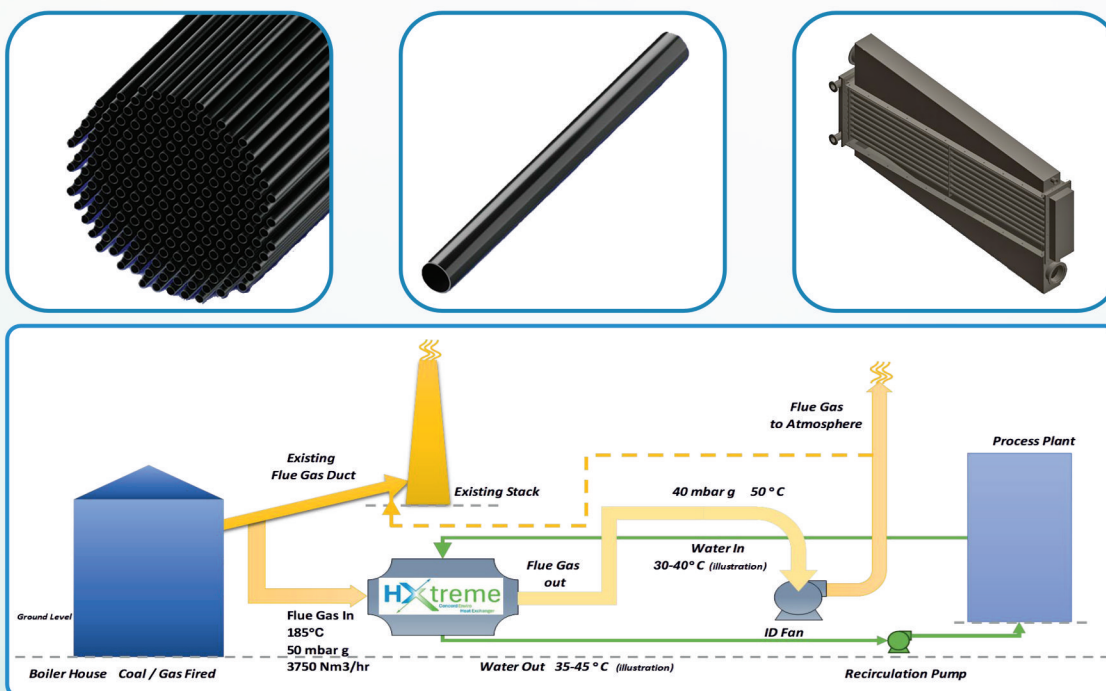
Low pH stream | Low pressure drop | Easy integration with existing systems | Custom-designed for your operating conditions | PN 6/10 flange rating | Condensate drain

Material of Construction

Non Metallic (HPC) Tube | Shell/body of coated Steel | Gasket/O-ring - Viton

Input required

Flue/Exhaust gas flow rate (kg/hr)	Kg/hr	
Gas Inlet and required outlet temperature	°C	Gas temperature not exceeding 185 °C below 1 bar g
Max. allowable pressure drop	Bar	
Cooling water flow rate (kg/hr)	Kg/hr	
Cooling water Inlet temperature °C	°C	Water temperature not exceeding 80 °C at 3 bar g for process water or 30-40 °C at 6 bar g for efficient design
Water source		Cooling tower, Chilled water, process, any other



Convert Waste Energy into Profit

Stop losing energy through the stack. Recover heat, reduce fuel costs, and improve plant efficiency with our Flue & Exhaust Gas Heat Exchanger Solutions.

Contact us for Energy-saving Calculations & ROI evaluation

