The first exchanger (Gas to Water) based on technology "Heat pipes" in the Czech Republic - VITKOVICE-HEAVY MACHINERY – Forging plant

This exchanger is used to generate hot water from a waste exhaust stream. The 2.3 Tonne unit was delivered onsite by Mid-August and will deliver a 90C stream of water at the rate of 24 Tonne's per hour.

Input Parameters

Exhaust gas inlet temperature 420°C
Exhaust flow rate 6000 Nm3/h
Hot water inlet temperature 70°C
Desired hot water outlet temperature 130°C

Desired not water outlet temperature 130°C

Hot water pressure 16 bar



Exhaust outlet temperature 140 oC Hot water mass rate 9,698 Hot water outlet temperature 130 oC Exhaust average specific heat 0.25 Kcal/kg Fuel Methane gas



Preheated water

Water from

Cooled

Technical Characteristics

Heat Source - Exhaust Gas Heat Sink - Thermal Oil Recovery rate 618,836 w Exhaust outlet temperature 200°C

Unit Dimensions

Outer diameter 1100 mm Height (between water connection ganges and inspection plate): 1,800 mm Weight 2,200 Kg

Pipe Bundle

Pipe Spec – temperature resistant carbon steel smooth tubes ø 28 x 2.5 mm No of pipes 550 Pipe length 1,700 mm

