

Insulation of inlet air duct

Location: Panchakanya Steel Pvt. Ltd., Nepal

Process: Steel bars manufacturing

Before

- The air duct from the recuperator to the burner was not insulated. The outlet temperature from recuperator was 380 °C while the inlet air temperature to the burner was 177 °C. The temperature drop was 203 °C



After

- Hot air duct from the recuperator to burner is insulated. This measure prevented heat loss from the outer surface of the hot air duct. The temperature of the inlet air at burner after insulation is observed to be 270 °C



Costs/benefits

Cost: NPR 400,000

Payback: 2 months

Annual savings: NPR 2,451,000

(57,000 l of Furnace Oil)

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