

Summary of study: EE improvements in baking furnace in foundry: Unit - 1

Industry : Foundry (Investment Casting)

Unit profile : A foundry located in Rajkot (Gujarat) engaged in production of precision steel and alloy castings

Technology : Energy efficiency in baking furnace

Application : Insulation improvements in baking furnace system

Year of investigation : 2011



Key features:

- Surface temperature reduction of side and back walls with use of improved insulation materials such as ceramic fibres.

Energy and cost saving:

Details	Existing	Recommended
Temperature of side and end walls (°C)	70–100	< 70
Natural gas saving (Sm ³ /yr)		7142
Cost of natural gas (Rs/ Sm ³)		28
Energy cost saving (Rs lakh/yr)		2

Note:

This report is an example for investigating the potential of application of Japanese low carbon technology (LCT) in Indian industries. Adoption of energy efficient technologies and practices can generate greater benefits in baking furnaces in Indian industries.