Summary of study: Air compressor in a foundry unit: Unit - 6

Industry : Foundry

Unit profile : A foundry unit located in Rajkot (Punjab) engaged in the manufacturing of automobile and fire fighting related castings

Technology :

- Inverter type screw compressor
- Operating practice improvements

Application : Energy savings in compressed air system

Year of investigation : 2012

Key features:

- Adoption of inverter type screw compressors (30 kW and 18.5 kW) in place of existing compressors
- Reduction of leakages
- Cleaning of air filters
- Improvement of piping network

Energy and cost saving:

Details	Existing	Recommended
Compressed air system	30 kW X 1 unit + 18.5 kW X1 (screw type)	30 kW X 1 unit + 18.5 kW X1 (inverter type)
Power saving (%)		22
Energy saving (kWh/yr)		76,824
CO_2 reductions (tonnes/yr)		71.4

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 compressed air applications in industries.