

## Summary of study: Air compressor in a forging unit: Unit - 4

**Industry** : Forging

**Unit profile** : A forging unit located in Mohali (Punjab) manufacturing pressed components for automobile sector

**Technology** :

- Inverter type screw compressor
- Operating practice improvements

**Application** : Energy savings in compressed air system

**Year of investigation** : 2012

**Key features:**

- Adopting inverter type screw compressor (75 kW) in place of existing screw compressor of same capacity
- Replacement of air dryer

**Energy and cost saving:**

Details	Existing	Recommended
Compressed air system	75 kW X 1 unit (screw type)	75 kW X 1 unit (inverter screw type)
Input power (kW)	75.0	56.2
Power savings (%)		25
Energy savings (kWh/yr)		135,360
Energy cost saving (Rs/kWh)		880,000 (@ Rs 6.50 per kWh)
Investment (Rs)		30,00,000
Payback period (yr)		3.5

**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.

