

Summary of study: Air compressor in a textile industry: Unit - 8

Industry : Textiles

Unit profile : A textile industry located in Ahmedabad (Gujarat) engaged in manufacturing of structured fabrics and yarn.

Technology :

- Operating practice improvements

Application : Energy savings in compressed air system

Year of investigation : 2015



Key features:

- Use screw compressor capacity control while operating centrifugal compressor as base load
- Reduction of leakages
- Use fresh, cold, dry air at suction
- Replace receiver with high capacity
- Install automatic energy management system

Energy and cost saving:

Details	Existing	Recommended
Compressed air system	900 kW X 1 + 500 kW X 2 + 250 kW X 2	900 kW X 1 + 500 kW X 2 + 250 kW X 2
Power savings (%)		Significant energy savings with capacity control

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.