

Summary of study- Air compressor in a textile industry: Unit 9

Industry : Textiles

Unit profile : A textile unit located in Mumbai (Maharashtra) engaged in manufacture of cotton yarn, knitted fabrics and trims

Technology :

- Installation of energy efficient air compressor
- Improvement of operating practices



Application : Energy savings in compressed air system

Year of investigation: 2018

Key features:

- Replacement of reciprocating air compressor with energy efficient inverter type compressor
- Optimisation of compressed air piping system
- Reduction of compressed air leakages
- Improving inlet air conditions of air compressors
- Installation of measurement diagnostic tool

Energy and cost saving:

Details	Existing	Recommended
Compressed air system	Screw compressor + Reciprocating compressor	Screw compressor + Inverter compressor
Energy saving (%)		75,000 kWh considering 50% air load factor