Summary of study- Air compressor in a medical equipment industry: Unit 1

Industry: Medical equipment

Unit profile : A medical equipment manufacturing unit located in Faridabad (Haryana) engaged in manufacture of cannula, injection, nebulizer etc.

Technology :

- Installation of appropriate air compressor
- Use of suitable material for compressed air handling
- Improvement of operating practices

Application : Energy savings in compressed air system

Year of investigation: 2018

Key features:

- Replacement of existing air compressors with oil-free compressor to improve product quality
- Use of stabilized stainless steel piping for anti-corrosion
- Switch over to SUS material receiver tank for cleaner air or painting inner surface of existing tank with epoxy resin
- Re-shaping the design of vertical pipelines
- Reduction of compressed air leakages
- Improving inlet air conditions of air compressors
- Installation of pressure gauge and managing air pressure in different end-use points

Energy and cost saving:

Details	Existing	Recommended
Compressed air system	Screw compressor	Same as existing
Energy saving (%)		Marginal to medium