

## Summary of study: Air compressor in an automobile industry: Unit - 1

**Industry** : Automobile

**Unit profile** : An automobile industry located in Chennai (Tamil Nadu) engaged in production of vehicles

**Technology** :

- Optimum use of inverter screw compressor
- Operating practices improvements

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

**Year of investigation** : 2016

**Key features:**

- Effective use of inverter screw compressors during load variations
- Replacing mechanical boosters with electrical boosters
- Install electronically controlled drainage trap and improve nozzle
- Reduction of leakages
- Improved ventilation for better suction air conditions

**Energy and cost saving:**

Details	Existing	Recommended
Compressed air system	900 kW X 3 unit (centrifugal) + 900 kW X 1 unit (inverter screw)	-
Discharge air (m <sup>3</sup> /min)	9400	9400
Power savings (%)		Significant energy savings by implementing the recommendations

**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.

