

# Air Compressors Maintenance & Troubleshooting



## Energy Milestones Corporation Advancing Professionals to the next level

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# Air Compressors Maintenance & Troubleshooting

#### Overview

Compressors' operation and maintenance, along with the troubleshooting mechanism, are among the major articles in most parts of the industry. The techniques obeyed vary from one place to another. As a result, these points are to be discussed in detail.

#### **Course Objectives**

The course aims to perform the standard maintenance strategies and associated steps at the right time. The inspection will be divided into daily, monthly, semi-annual and annual inspections. The inspection will be divided into several intervals with associated activities. The complete compressor overhaul will also be discussed with a great emphasis on the major repair, if any.

#### **Course Content**

- · An introduction to compressors
- · Compressor classification and different types
- Centrifugal compressors, main features and main components
- Rotor inspection and measurements
- Shaft inspection and associated systems
- Belts, pulleys and ways of maintenance
- Gear and couplings maintenance
- Bearing and lubrication systems
- Coolers and the associated compressor components.
- Compressor seals
- Bearing types
- · Bearing and method, and frequency of repair
- · Intake housing inspection and maintenance
- Lubrication methods
- · Maintenance of ports and valves
- Seal and associate devices
- Screw compressor
- Oil filters and ways of inspection





### **Air Compressors Maintenance** & Troubleshooting

#### **Course Content**

- Intake filters
- Labyrinth seals
- Oil levels
- Recording of failure and
- Failure modes FMEA (Risk Priority Num ber) RPN
- Surge prevention systems
- Main compressor overhaul
- · Components to be inspected
- Cleaning methods
- Maintenance vs repair issues
- Replacement components and interval
- Case studies
- Reciprocating compressor
- · Oil type and properties

#### **Targeted Audience**

Mechanical, operation & maintenance engineers and qualified technicians.

#### **Course Methodology**

Facilitated by an experienced professional trainer, this training course will be conducted as a highly interactive workshop session. A variety of training methodologies and facilitation techniques will be employed before and during the course, as applicable. These methods are aimed at enhancing individual and group interaction while maximising learning. Some of these methods are:

- Online Pre-post Test
- Colourful Visual Aids
- Gamification
- Self-Assessment Instruments
- Simulations
- Case Studies
- Videos
- Group Exercises & Discussions
- Role plays
- Indoor & Outdoor games





