

Maintenance and Troubleshooting Techniques: Ensuring Equipment Reliability and Efficiency

.....



Energy Milestones Corporation Advancing Professionals to the next level

Energy Milestones is proud to be accredited, partner and associated with the following association bodies:



info@energymilestones.com



energymilestones.com

Maintenance and Troubleshooting Techniques: Ensuring Equipment Reliability and Efficiency

Overview

The seminar will introduce participants to Mechanical Troubleshooting Pumps, Bearings and Lubrication. It will also enable participants to optimise the Mechanical Troubleshooting of different types of pumps and bearings.

Course Objectives

Upon successful completion of this course, participants will be able to:

- Understand basic utility maintenance tools, Such as Ammeters, voltmeters, wattmeters, Power factor meters, and Oscilloscopes.
- Troubleshoot problems and the associated actions to be taken, especially in the cases of equipment failure
- Diagnose common mechanical faults using structured troubleshooting approaches to minimise equipment downtime and prevent recurrence.
- Apply advanced maintenance strategies (preventive, predictive, and corrective) to enhance equipment life and performance.
- Utilise diagnostic tools and measurement instruments (e.g., ammeters, oscilloscopes, and vibration analysers) for effective fault identification.
- Interpret failure patterns in pumps, bearings, and lubrication systems to recommend efficient corrective actions.

Course Content

- Importance of Maintenance
- Troubleshooting Problems -Pumps, Bearings Faults
- Fault Types -Troubleshooting System
- Mechanical Equipment
- Materials and Heat Treatments
- Bearings
- Lubrication System
- Maintenance for Pumps, Bearings, Equipment



Maintenance and Troubleshooting Techniques: Ensuring Equipment Reliability and Efficiency

Course Content

- Preventive maintenance
- Corrective maintenance
- Predictive maintenance
- Measurements

Targeted Audience

- Electrical, mechanical, and chemical Engineers and technicians
- Senior technicians who work in the electrical control and power utilities

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

