MECHANICAL TROUBLESHOOTING

Duration 5 Days

Introduction

The course presents a systematic approach to the basics of mechanical troubleshooting,. It first adopts a general approach to the importance of pumps, bearings maintenance and its main motives. Then it explains what is meant by maintenance types, like preventive maintenance, corrective and adaptive maintenance and the skeletons of maintenance systems. Design, operating, and design pumps, bearings will be explained. Measurements, maintenance and the required misruling devices for pumps and bearings will be deeply involved in this course with some applications in other mechanical utilities.

Who Should Attend
Electrical, Mechanical and Chemical Engineers or Technicians.

Course Objectives

By the end of this course participants will be able to:

- Understand the basic utilities maintenance.
- Troubleshoot problems and the associated actions to be taken, especially in the cases of equipment.

Course Outlines:

- **Effective Predictive And Pro-Active Maintenance (The Four Maintenance Philosophies)**
  - Breakdown or Run to Failure Maintenance
  - Preventive or Time Based Maintenance
  - Predictive or Condition Based Maintenance
  - Pro-Active or Prevention Maintenance
- **Troubleshooting Techniques**
  - Vibration Analysis
  - Oil Analysis
  - Testing Procedures Wear Analysis
- **Alignment Of Rotating Equipment**
  - Soft Foot
  - Preparation for Alignment
- **Troubleshooting Examples**
  - Pump and Driver Alignment
  - Cavitation Wear
  - Steam Turbine Troubleshooting
  - Centrifugal Pump Vibration Readings