

**Course Overview:**

Machines deteriorate as they get older so we can expect a certain amount of performance falloff and general deterioration of the machine. If we understand the failure mechanisms that are in place we can identify which parameters best indicate the deterioration of the machine.

Failure analysis, Troubleshooting and Predictive & Planned Maintenance techniques, including vibration analysis, are discussed in the course with a view to cover the different techniques of alignment and optimizing the maintenance engineering effort while maximising production

**Course Objective:**

To provide the operation & maintenance engineers & technicians with the means to properly operate and support the rotating equipment in a way based on the good acquaintance with the modern technologies applied in this field. Trouble-shooting & forecasting break downs are inclusive. & cover the different techniques of alignment as well as the use of hand - held.

**Course Outline:**

- Technology and operation of rotating machines
- General Aspects of Machine Technology
- Operation and Performance
- Process Aspect
- Mechanical Aspect.
- Technology and Maintenance of the Machine components.
- Coupling and Alignment.
- Different types of couplings, related problems.
- Sealing Devices for Pumps and Compressors.
- Rotors and Shafts.
- Balancing: eccentricity, tolerances.
- Trouble shooting of rotating machinery Forecasting Breakdowns
- Fatigue, wear and tear.

**Who Should Attend:**

- Professionals dealing with the operation and maintenance of rotating equipment
- New technicians who wish to improve knowledge and skills
- Those who are involved in condition monitoring and vibration analysis
- Maintenance technicians who are in charge of correcting the machinery problems.

**Training Language:**

EN / AR

**Training Methodology:**

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation