



Lubrication of Rotating Equipment

Course Introduction:

This course is designed to provide participants with a comprehensive understanding of the principles and practices involved in the effective lubrication of rotating machinery. Proper lubrication is essential for the longevity and optimal performance of equipment such as motors, pumps, compressors, and turbines. This five-day theoretical course covers the fundamentals of lubrication, including types of lubricants, lubrication systems, and best practices for maintaining rotating equipment.

Participants will explore the importance of lubrication in reducing friction, minimizing wear, and preventing equipment failure. Through theoretical discussions and case studies, attendees will learn about the selection of appropriate lubricants, the design of lubrication systems, and the implementation of lubrication schedules. By the end of the course, participants will be equipped with the knowledge and skills necessary to enhance the reliability and efficiency of rotating equipment through effective lubrication practices.

Course Objectives:

By the end of the program, participants will be able to:

- Understand the principles and significance of lubrication in rotating equipment.
- Identify different types of lubricants and their properties.
- Design and implement effective lubrication systems for various applications.
- Select appropriate lubricants based on equipment requirements and performance criteria.
- Develop best practices for lubrication management and maintenance.

Who Should Attend?

This course is intended for:-

- Maintenance engineers and technicians involved in rotating equipment.
- Reliability engineers focusing on equipment performance.
- Operations personnel responsible for equipment maintenance.
- Lubrication and tribology specialists in industrial settings.

Course Outline:

Day 1: Introduction to Lubrication

- Overview of lubrication and its importance in rotating equipment
- Types of lubricants: oils, greases, and solid lubricants
- Properties of lubricants: viscosity, temperature stability, and additives
- Understanding friction and wear in rotating machinery

Day 2: Lubrication Systems and Methods

- Types of lubrication systems: manual, automatic, and centralized systems
- Designing effective lubrication systems for various applications
- Lubrication methods: splash, drip, and mist lubrication
- Maintenance of lubrication systems for optimal performance

Day 3: Lubricant Selection and Analysis

- Criteria for selecting appropriate lubricants for different equipment
- Understanding lubricant specifications and standards
- Techniques for analyzing lubricant performance and condition
- Troubleshooting lubricant-related issues in rotating equipment

Day 4: Best Practices in Lubrication Management

- Developing lubrication schedules and maintenance plans
- Importance of cleanliness and contamination control
- Training personnel on proper lubrication techniques
- Case studies on successful lubrication management programs

Day 5: Advances in Lubrication Technology

- Emerging trends in lubrication technology and materials
- The role of condition monitoring and predictive maintenance
- Environmental considerations in lubricant selection and disposal
- Future directions in lubrication research and development

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work

Course Fees:

To be advice as per course location. This rate includes participant's manual, Hands-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session