



Lube Oil Testing & Analysis



INTERNATIONAL ASSOCIATION FOR
HEALTH AND OCCUPATIONAL
SAFETY AND THE ENVIRONMENT



Project
Management
Institute

EFQM
Member



Course Introduction:

This course is designed to provide participants with a comprehensive understanding of the principles, methodologies, and significance of testing lubricating oils. As machinery becomes increasingly sophisticated, the need for effective lube oil analysis to prevent wear, reduce downtime, and optimize maintenance practices has never been more vital.

Throughout the course, participants will explore key topics such as the chemistry of lubricants, various testing methods, and the interpretation of oil analysis results. By examining case studies and industry best practices, attendees will learn how to utilize lube oil analysis for predictive maintenance and troubleshooting. This course aims to equip professionals with the knowledge and skills necessary to implement effective lube oil testing programs that enhance operational efficiency and reliability in their organizations.

Course Objectives:

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

- Understand the fundamental principles of lubricating oils and their functions.
- Explore various testing methods and standards for lube oil analysis.
- Learn how to interpret oil analysis results for effective maintenance decisions.
- Analyze the impact of lubricant properties on equipment performance.
- Gain insights into best practices for implementing lube oil testing programs.

Who Should Attend?

This course is intended for Maintenance and reliability engineers, Lubrication specialists and technicians, Quality assurance and control professionals and Operations and maintenance managers.

Course Outline:

Day 1: Introduction to Lubricating Oils

- Overview of lubricating oils: types and functions
- Importance of lube oil testing in maintenance strategies
- Key terminology and concepts in lubrication science

Day 2: Chemistry of Lubricants

- Understanding the composition and properties of lubricating oils
- Additives and their roles in enhancing lubricant performance
- Factors affecting lubricant degradation and performance

Day 3: Testing Methods for Lube Oil Analysis

- Overview of standard testing methods (ASTM, ISO, etc.)
- Key tests: viscosity, acidity, wear metals, and contamination
- Understanding the significance of each test in oil analysis

Day 4: Interpreting Oil Analysis Results

- Guidelines for interpreting lube oil test results
- Identifying trends and anomalies in oil analysis data
- Case studies on successful troubleshooting using oil analysis

Day 5: Best Practices in Lube Oil Testing Programs

- Developing an effective lube oil testing program
- Implementing predictive maintenance strategies through oil analysis
- Future trends and advancements in lube oil testing technology

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.

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International Centre For Training & Development

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