

# € TRAINING

Machine Lubricant Analysis II



8 - 12 December 2024  
Dubai (UAE)



# Machine Lubricant Analysis II

REF: O2591 DATE: 8 - 12 December 2024 Venue: Dubai (UAE) - Fee: 5830 Euro

## Introduction:

This training program provides participants with advanced knowledge and practical skills essential for analyzing machine lubricants. It empowers them to enhance equipment reliability, extend machinery life, and improve maintenance strategies.

## Program Objectives:

At the end of this program, participants will be able to:

- Understand advanced principles of machine lubricant analysis.
- Develop skills in conducting detailed lubricant tests and analyses.
- Learn techniques for interpreting lubricant analysis results.
- Gain insights into industry standards and best practices for lubricant management.
- Enhance capabilities in optimizing machinery performance through effective lubrication practices.

## Targeted Audience:

- Maintenance Engineers.
- Reliability Engineers.
- Lubrication Technicians.
- Condition Monitoring Specialists.
- Mechanical Engineers.
- Plant Managers.

## Program Outline:

### Unit 1:

#### Advanced Principles of Lubricant Analysis:

- Overview of machine lubricant analysis and its importance.
- Key concepts and terminologies in advanced lubricant analysis.

- Roles and responsibilities of professionals conducting lubricant analysis.
- Advanced properties and characteristics of lubricants.
- Case studies on the impact of lubricant analysis on machinery performance.

## Unit 2:

### Conducting Detailed Lubricant Tests and Analyses:

- Techniques for sampling and testing lubricants.
- Advanced methods for analyzing lubricant viscosity, contamination, and wear particles.
- Using spectroscopic and chromatographic techniques for lubricant analysis.
- Evaluating lubricant degradation and oxidation.
- Exercises on conducting detailed lubricant tests.

## Unit 3:

### Interpreting Lubricant Analysis Results:

- Techniques for interpreting results from lubricant tests.
- Identifying and diagnosing common lubricant-related issues.
- Correlating lubricant analysis results with machine conditions.
- Predictive maintenance using lubricant analysis data.
- Case studies on interpreting lubricant analysis results for decision-making.

## Unit 4:

### Industry Standards and Best Practices:

- Overview of relevant industry standards ASTM, ISO.
- Understanding regulatory requirements for lubricant analysis.
- Implementing best practices for effective lubricant management.
- Documenting and reporting lubricant analysis findings.

## Unit 5:



## Optimizing Machinery Performance Through Lubrication:

- Best practices for selecting and managing lubricants.
- Developing and implementing lubrication schedules and programs.
- Techniques for improving equipment reliability through effective lubrication.
- Monitoring and adjusting lubrication practices based on analysis results.
- Real-world examples of optimizing machinery performance through lubrication.