



Maintenance & Reliability Management

# Reliability-Centered Lubrication Practices

## Course Introduction

---

Reliability-Centred Lubrication (RCL) is a vital component of effective maintenance strategies, focusing on the proper application of lubricants to enhance equipment performance and longevity. Lubrication plays a critical role in reducing wear, preventing corrosion, and minimizing friction, directly impacting the reliability and operational efficiency of machinery. Adopting RCL principles helps reduce maintenance costs, increase asset life, and ensure that systems operate at peak efficiency.

This training program covers the essential aspects of RCL, including lubricant selection, application, and maintenance best practices. Participants will learn how to implement and optimize lubrication programs, troubleshoot lubrication issues, and continuously improve practices for enhanced reliability.

## Target Audience

---

This course is designed for maintenance managers, engineers, technicians, and anyone responsible for managing or implementing lubrication practices within industrial or manufacturing environments.

## Learning Objectives

---

- Understand the key principles of Reliability-Centred Lubrication (RCL) and its role in equipment reliability.

- Learn how to choose the right lubricants and systems for different types of equipment.
- Gain knowledge of lubrication best practices for preventive and predictive maintenance.
- Learn how to develop and optimize a lubrication program to ensure long-term reliability.
- Understand troubleshooting techniques and continuous improvement strategies for lubrication practices.

## Course Outline

---

### • 01 DAY ONE

#### Introduction to Reliability-Centred Lubrication

- What is Reliability-Centred Lubrication?
- The role of lubrication in equipment reliability and performance
- How lubrication affects wear, corrosion, and friction in machinery
- Benefits of RCL in reducing maintenance costs and downtime
- The connection between RCL and overall reliability-centered maintenance (RCM)
- Key components of a successful lubrication program
- Common lubrication challenges and how to overcome them

### • 02 DAY TWO

#### Lubrication Systems and Types of Lubricants

- Overview of lubrication systems (manual, automatic, centralized systems)
- Types of lubricants: oils, greases, and dry lubricants
- Choosing the right lubricant for different equipment and conditions
- The importance of viscosity, additives, and base oils
- Understanding lubricant specifications and certifications
- How to select the proper lubrication equipment and tools
- Common issues caused by improper lubrication selection

### • 03 DAY THREE

#### Lubrication Best Practices for Preventive and Predictive Maintenance

- Integrating lubrication into preventive maintenance programs
- Importance of lubrication schedules for different equipment types
- Techniques for monitoring and assessing lubricant condition

- Using oil analysis to predict equipment failure
- Best practices for lubricant application and storage
- Understanding contamination control and cleanliness in lubrication
- Impact of lubrication on energy efficiency and operational costs

#### • 04 DAY FOUR

##### Implementing and Optimizing Lubrication Programs

- Steps to develop and implement an effective lubrication program
- Conducting lubrication audits and assessments
- Creating and maintaining detailed lubrication schedules
- Training maintenance teams on proper lubrication techniques
- Optimizing lubrication intervals to balance cost and reliability
- Leveraging technology and automation for lubrication management
- Monitoring and evaluating the performance of the lubrication program

#### • 05 DAY FIVE

##### Troubleshooting and Continuous Improvement in Lubrication Practices

- Identifying common lubrication problems and their causes
- Techniques for troubleshooting lubrication failures
- Using root cause analysis (RCA) to improve lubrication reliability
- Continuous improvement methods in lubrication practices
- Monitoring lubricant performance to ensure long-term reliability

## Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 30, 2025	July 4, 2025	5 days	5950.00 \$	USA - Texas
Sept. 15, 2025	Sept. 19, 2025	5 days	4250.00 \$	UAE - Dubai
Nov. 23, 2025	Nov. 27, 2025	5 days	4250.00 \$	KSA - Riyadh

