London TDM

Engineering and Technical Skills Training Courses

Course Venue: Malaysia - Kuala Lumpur

Course Date: From 14 June 2026 To 18 June 2026

Course Place: Royale Chullan Hotel

Course Fees: 6,000 USD

Introduction

Industrial lubrication and tribology are critical components in ensuring the longevity and efficiency of machinery in various industries. This 5-day professional course is designed to equip participants with the knowledge and skills necessary to understand and apply lubrication and tribological principles in industrial settings. By the end of the course, attendees will have a comprehensive understanding of the selection, application, and management of lubricants, as well as the fundamentals of tribology as they relate to industrial environments.

Objectives

- Understand the fundamentals of lubrication and tribology.
- Learn about different types of lubricants and their applications.
- Identify and select appropriate lubrication strategies for various industrial applications.
- Analyze and solve tribological problems in industrial contexts.
- Develop maintenance and monitoring plans for lubrication systems.

Course Outlines

Day 1: Introduction to Lubrication and Tribology

- Definition and importance of lubrication and tribology.
- History and development of lubrication technology.
- Basic concepts in tribology: friction, wear, and lubrication.
- Types of lubricants and their properties.
- Overview of lubrication systems used in industries.

Day 2: Lubricants and their Applications

- Classification of lubricants: oils, greases, and solid lubricants.
- Additives and their roles in enhancing lubricant performance.
- Selection criteria for industrial lubricants.
- Lubricant testing and quality control methods.
- Case studies on lubricant applications in different industries.

Day 3: Tribology in Industrial Applications

- Mechanisms of friction and wear in industrial machinery.
- Tribological testing and analysis techniques.
- Sectors affected by tribology: automotive, aerospace, manufacturing, etc.
- Innovations and advancements in tribological applications.
- Case studies on tribological failure and solutions.

Day 4: Lubrication Management and Strategy

- Developing an effective lubrication management plan.
- Monitoring and maintaining lubrication systems.
- Condition-based lubricant management and predictive maintenance.
- Environmental and safety considerations in lubrication practices.

- Cost-benefit analysis of lubrication decisions.

Day 5: Hands-on Workshop and Final Assessment

- Practical workshop on lubricant analysis and troubleshooting.
- Simulation exercises on tribological assessments.
- Group projects addressing real-world lubrication challenges.
- Review of key concepts covered in the course.
- Final assessment and feedback session.