London TDM

Engineering and Technical Skills Training Courses

Course Venue: Malaysia - Kuala Lumpur

Course Date: From 05 April 2026 To 09 April 2026

Course Place: Royale Chullan Hotel

Course Fees: 6,000 USD

Introduction

This comprehensive 5-day course on 'Mechanical Seals and Pumps Maintenance' is designed for industry professionals seeking to deepen their technical knowledge and skills. Participants will learn the fundamentals of mechanical seals and pumps, understand their operation and maintenance, and become proficient in troubleshooting and repair techniques to ensure optimal performance in various industrial applications.

Objectives

- Understand the fundamentals of mechanical seals and pump operation.
- Identify and classify different types of pumps and mechanical seals.
- Learn best practices for maintenance and troubleshooting.
- Develop skills to perform inspections and diagnostics.
- Enhance safety awareness during maintenance procedures.

Course Outlines

Day 1: Introduction to Mechanical Seals

- Overview of mechanical seals and their applications
- Components and types of mechanical seals
- Seal material selection and compatibility
- Principles of seal operation and performance
- The importance of seal face lubrication

Day 2: Introduction to Pumps

- Classification of pumps: centrifugal, positive displacement, and others
- Pump components and design considerations
- Basic fluid dynamics in pump operations
- Common pump performance curves and their interpretation
- Energy efficiency in pump systems

Day 3: Pump and Seal Installation and Commissioning

- Pre-installation checks and procedures
- Proper alignment and installation techniques
- System flushing and startup processes
- Troubleshooting installation errors
- Documenting installation and commissioning records

Day 4: Maintenance and Troubleshooting

- Developing a maintenance schedule and checklist
- Common mechanical seal and pump failure modes
- Diagnostic tools and techniques for troubleshooting
- Repair procedures for mechanical seals and pumps
- Case studies and real-world problem-solving exercises

Day 5: Advanced Topics and Safety

- Advanced sealing technologies and innovations
- Pump system optimization and upgrades
- Environmental considerations and compliance
- Safety protocols during maintenance operations
- Final assessment and feedback session