

PROPER SELECTION & LUBRICATION OF BEARINGS - MECHANICAL SEALS

“Optimize Machinery Performance with Expert Bearing Selection and Lubrication Techniques”

Schedule

Date	Venue	Fees (Face-to-Face)
25 - 27 Aug 2026	Muscat, Oman	USD 2495 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

Introduction

Bearings and mechanical seals are crucial components that ensure the smooth operation of machinery across various industries. This course offers in-depth knowledge of proper bearing selection, lubrication techniques, and the role of mechanical seals in maintaining operational efficiency.

Participants will gain the practical skills needed to enhance the reliability of machinery by choosing the right bearings and seals and ensuring proper lubrication, which can significantly reduce maintenance costs and improve performance.

Objectives

By the end of this course, participants will be able to:

- Understand the types of bearings and mechanical seals used in industrial applications.
- Select the appropriate bearing and mechanical seal for specific machinery and operating conditions.
- Implement correct lubrication practices to extend the life of bearings and seals.
- Troubleshoot common bearing and seal failures and apply corrective measures.
- Integrate lubrication management systems for optimized machinery operation.

Why Attend

- Learn how to improve machinery performance by selecting the right bearings and seals.
- Understand the importance of lubrication in preventing costly breakdowns.
- Enhance skills in diagnosing and fixing bearing-related issues.
- Optimize the life span of mechanical components, reducing downtime and repair costs.
- Stay up-to-date with the latest trends and technologies in lubrication and bearing selection.

Target Audience

This program is designed for:

- Maintenance engineers and technicians.
- Mechanical engineers and specialists in rotating equipment.
- Plant managers and operations personnel responsible for equipment reliability.
- Maintenance supervisors and team leads in industries utilizing rotating machinery.
- Equipment suppliers and manufacturers involved in bearing and seal solutions.

Individual Benefits

Key competencies that will be developed include:

- Understanding bearing and seal selection criteria.
- Applying lubrication techniques to maximize component lifespan.
- Diagnosing and preventing bearing-related failures.
- Creating lubrication schedules and selecting proper lubricants.
- Developing maintenance strategies based on bearing and seal performance.

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved machinery uptime through effective bearing and seal management.
- Reduced maintenance costs and fewer breakdowns due to proper lubrication and selection.
- Enhanced troubleshooting capabilities for mechanical components.
- The ability to develop and implement better maintenance practices.
- Increased overall equipment effectiveness (OEE) through optimized machinery components.

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings - Overview of bearing types, mechanical seals, and their role in machinery performance.
- Case Studies - Review of real-world bearing failures and solutions.
- Workshops - Practical exercises in bearing and seal selection, lubrication practices, and troubleshooting.
- Peer Exchange - Group discussions on industry-specific lubrication and maintenance challenges.
- Tools - Templates and checklists for lubrication schedules and bearing selection criteria.

MAWA EVENTS

Address: No. 857, Block A2, Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net



Course Outline

Detailed 3-Day Course Outline

Training Hours: 7:30 AM – 3:30 PM **Daily Format:** 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Fundamentals of Bearings and Mechanical Seals

- Module 1: Introduction to Bearings and Mechanical Seals (07:30 – 09:30)
 - Types of bearings and their applications.
 - Overview of mechanical seals and their importance in machinery.
 - Key factors affecting bearing and seal performance.
- Module 2: Bearing Selection Criteria (09:30 – 11:15)
 - Load capacity, speed ratings, and material considerations.
 - Environmental factors influencing bearing selection.
 - Common mistakes in bearing selection and how to avoid them.
- Module 3: Types of Lubrication and Lubricants (11:15 – 01:00)
 - Overview of lubricants: Oils vs. Greases.
 - Choosing the right lubricant for different bearings and seals.
 - Lubrication techniques and application methods.
- Module 4: Seal Selection and Performance (02:00 – 03:30)
 - Understanding the role of mechanical seals in equipment longevity.
 - Choosing seals based on fluid, pressure, and temperature conditions.
 - Types of seals and their applications in machinery.

Day 2: Lubrication Techniques and Maintenance Best Practices

- Module 5: Lubrication Systems and Maintenance (07:30 – 09:30)
 - Lubrication systems: Manual vs. Automatic.
 - Creating lubrication schedules and intervals.
 - Managing and monitoring lubricant quality.
- Module 6: Troubleshooting Bearing and Seal Failures (09:30 – 11:15)
 - Common causes of bearing failures (contamination, overloading, improper lubrication).
 - Identifying and diagnosing seal failures (wear, leakage, misalignment).
 - Preventative measures to avoid failure.
- Module 7: Best Practices for Bearing Maintenance (11:15 – 01:00)
 - Proper handling and storage of bearings.
 - Installation, alignment, and maintenance procedures.
 - Correcting installation errors and preventing damage.
- Module 8: Preventive Maintenance and Predictive Maintenance Tools (02:00 – 03:30)
 - Introduction to predictive maintenance tools and techniques.
 - Vibration analysis and thermography for monitoring bearings and seals.
 - Using data to predict failures and extend component life.

Day 3: Advanced Applications and Case Studies

- Module 9: Advanced Lubrication Technologies (07:30 – 09:30)
 - Innovations in lubrication technologies and materials.
 - Advanced bearing coatings and their benefits.
-

Smart lubrication monitoring systems.

- Module 10: Case Studies: Real-World Applications (09:30 – 11:15)
 - Analysis of real-life cases where proper selection and lubrication made a significant impact.
 - Common mistakes made in industry practices and lessons learned.
 - Group discussions and problem-solving exercises based on case studies.
- Module 11: Developing a Bearing and Seal Maintenance Plan (11:15 – 01:00)
 - Creating and implementing a comprehensive maintenance strategy.
 - Budgeting for bearing and seal replacements and repairs.
 - Setting key performance indicators (KPIs) for monitoring bearing performance.
- Module 12: Workshop: Bearing and Seal Troubleshooting (02:00 – 03:30)
 - Hands-on troubleshooting exercises using real-life scenarios.
 - Group exercises for bearing and seal selection and lubrication strategies.
- Final Q&A session for clarification and feedback.

Certification

Participants will receive a Certificate of Completion in Proper Selection and Lubrication of Bearings & Mechanical Seals, validating their expertise in bearing selection, lubrication practices, and maintenance of mechanical seals.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation’s unique goals.

<p>In-House / Customized Training</p> <p>Interested in running this course for your team?</p> <p>Please contact us:</p>	<p>TEL:</p> <p>+601116373203</p>	<p>EMAIL:</p> <p>info@mawaevents.net</p>
--	---	---

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.