**MAWA EVENTS**

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

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# AUTOMATIC LUBRICATION SYSTEM - TYPES & APPLICATIONS, DESIGN, OPERATION & MAINTENANCE

*""Enhancing Equipment Reliability through Automated Lubrication Technologies""*

## Schedule

| Date | Venue | Fees (Face-to-Face) |
|---|---|---|
| 25 – 26 Nov 2026 | Doha – Qatar | USD 1995 per delegate |

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

## Introduction

Automatic lubrication systems (ALS) play a vital role in improving machinery uptime, reducing manual maintenance, and optimizing lubrication efficiency in industrial operations. Whether applied to mobile equipment, conveyors, or fixed plants, ALS ensures consistent delivery of lubricants to critical components—reducing friction, wear, and unplanned downtime.

This intensive 2-day course provides an in-depth understanding of various ALS types, their design principles, operational considerations, and maintenance practices. Participants will explore system selection, installation best practices, troubleshooting methods, and alignment with reliability-centered maintenance (RCM) strategies.

## Objectives

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

- Understand the components and types of automatic lubrication systems
- Identify the appropriate ALS type for specific equipment and operating conditions
- Design and implement ALS systems to improve equipment performance
- Perform routine inspection, troubleshooting, and maintenance tasks
- Integrate ALS into broader asset management and RCM frameworks

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## Why Attend

- Reduce lubrication-related equipment failures and production stoppages
- Extend asset life and improve energy efficiency through proper lubrication
- Minimize manual intervention and HSE risks in difficult-to-access lubrication points
- Gain practical knowledge of ALS design, selection, and servicing
- Support reliability and maintenance engineering initiatives with automation

## Target Audience

This program is designed for:

- Maintenance Engineers and Technicians
- Mechanical and Reliability Engineers
- Plant and Operations Supervisors
- Asset Management and RCM Professionals
- Anyone responsible for lubrication, equipment reliability, or mechanical systems

## Individual Benefits

Key competencies that will be developed include:

- Knowledge of single-line, dual-line, progressive, and multi-point ALS systems
- System design and lubricant flow calculation
- Inspection, refill, and adjustment techniques
- Fault diagnosis and troubleshooting practices
- Integration of ALS with CMMS and condition monitoring tools

## Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved asset reliability and reduced maintenance costs
- Reduced lubricant waste and environmental impact
- Higher equipment availability and reduced unplanned downtime
- Improved worker safety in lubrication-intensive tasks
- Better alignment with asset management standards (ISO 55000, etc.)

## Instructional Methodology

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

- Strategy Briefings – ALS system types, design principles, and performance factors
- Case Studies – ALS applications in mining, manufacturing, and mobile fleets
- Workshops – Hands-on ALS design calculations and fault simulations
- Peer Exchange – Troubleshooting challenges and lessons learned
- Tools – Maintenance checklists, design templates, and flow diagrams

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## Course Outline

DETAILED 2-DAY COURSE OUTLINE

**Training Hours:** 07:30 AM – 03:30 PM **Daily Format:** 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

**Day 1: ALS Fundamentals and System Design**

- Module 1: Introduction to Lubrication and ALS (07:30 – 09:30) • The role of lubrication in equipment reliability • Manual vs. automatic systems – benefits and limitations
- Module 2: ALS Types and Applications (09:45 – 11:15) • Single-line, dual-line, progressive, and circulating oil systems • Selection criteria based on equipment type and usage
- Module 3: ALS Design Principles (11:30 – 01:00) • Lubricant flow calculations, line routing, and metering devices • System layout considerations for fixed and mobile assets
- Module 4: Workshop – System Selection and Layout (02:00 – 03:30) • Group activity: designing a lubrication solution for plant equipment

**Day 2: Operation, Maintenance and Troubleshooting**

- Module 5: ALS Components and Operation (07:30 – 09:30) • Pumps, reservoirs, injectors, lines, and controllers • How ALS delivers lubricant precisely and automatically
- Module 6: Inspection and Preventive Maintenance (09:45 – 11:15) • Visual checks, pressure monitoring, and refill strategies • Maintenance intervals and predictive techniques
- Module 7: Troubleshooting ALS Systems (11:30 – 01:00) • Common issues: blockages, leaks, under/over-lubrication • Diagnostic steps and corrective measures
- Module 8: Workshop – Fault Simulation and Corrective Action (02:00 – 03:30) • Hands-on practice identifying and resolving ALS failures

## Certification

Participants will receive a Certificate of Completion in Automatic Lubrication System – Types & Applications, Design, Operation & Maintenance, confirming their competence in selecting, installing, operating, and maintaining ALS solutions to support reliability-focused plant operations.

## 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.

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