



**PS AIR COMPRESSOR ENGINEERING  
AND TRAINING ACADEMY**

# **INDUSTRIAL AIR COMPRESSOR**

## **Critical Maintenance Skills Training (5 Days)**



**Managed by : PS Air Compressor (M) Sdn Bhd**





# **Industrial Air Compressor Critical Maintenance Skills Training (5 Days)**

This is Public Face to Face theory classroom and hands-on practical with Full-Scale Training Kit 5 days technical competency training program. Certificate of Technical Competency in Air Compressor Maintenance and Services will be awarded upon pass theory and hands-on practical evaluation as well as completion of training.

(Theory Classroom – 3 days)

(Hands-on Practical on the Training Kit- 2 day)

## **COURSE PURPOSED**

The Critical Air Compressor Maintenance Training is designed to equip participants with the essential knowledge and practical skills to effectively maintain, troubleshoot, and optimize air compressor systems. This program ensures safe operation, minimizes downtime, and improves energy efficiency by focusing on preventive and corrective maintenance techniques. Through a combination of classroom theory and hands-on training with the full-scale equipped real functional air compressor units including air reservoir tank, dryer, air pipeline and air compressor performance audit system equipment training kit. Participants will gain the expertise needed to enhance the reliability and performance as a competent personal in air compressors maintenance and services in industrial applications.

## **COURSE OBJECTIVE**

By the conclusion of the training course, participants will have gained an understanding of the following:

- Gain a comprehensive understanding of different types of air compressors, their working principles, and the components of a compressed air system.
- Conduct thorough inspections, oil changes, filter replacements, and lubrication tasks to ensure smooth compressor operations.
- Develop a strong grasp of maintenance schedules and follow manufacturer guidelines to maximize compressor lifespan.
- Identify, diagnose, and resolve issues like overheating, vibration, leaks, and electrical faults using systematic troubleshooting techniques.
- Perform root cause analysis to address and prevent recurring problems.
- Understand and adhere to best practices for safe operation and maintenance of air compressors.
- Recognize and mitigate common hazards related to air compressors to ensure workplace safety.
- Monitor key performance indicators (KPIs) such as pressure, flow, and temperature to ensure efficient compressor operation.
- Identify air leaks, energy waste, and efficiency issues, and apply corrective actions to reduce operational costs and improve system performance.
- Work on advanced maintenance tasks, including bearing replacements, motor servicing, and calibration of safety devices.
- Conduct performance testing after repairs and maintenance to verify correct functionality.
- Develop the skills necessary to independently manage compressor maintenance in a real-world industrial environment.
- Build confidence in handling hands-on maintenance tasks, from disassembly and inspection to reassembly and testing.





# **Industrial Air Compressor Critical Maintenance Skills Training (5 Days)**

## **COURSE METHODOLOGY**

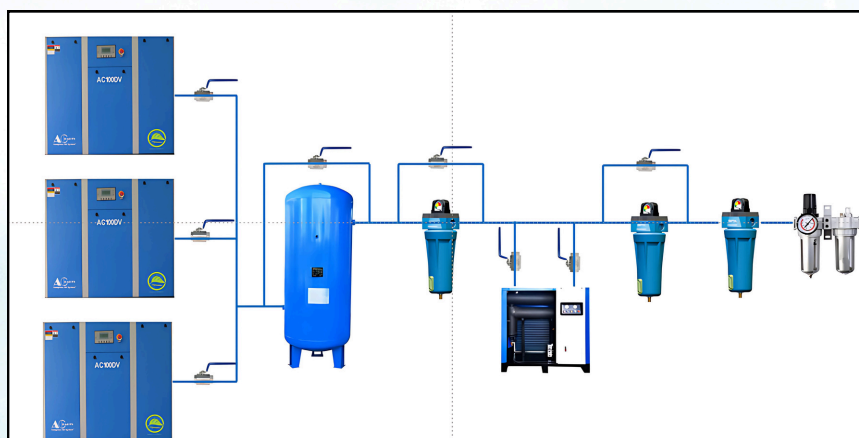
Lectures will be conducted in both English and Bahasa Malaysia, with all handout notes provided in English and PowerPoint presentation slides covering all topics in English. Practical sessions will involve the use of the Full-Scale Air Compressor Training Kit and the Real-Time Compressor Centralized Monitoring System (CCMS).

## **SYLLABUS**

All course syllabuses are developed and created in accordance with the guidelines of the Industrial Air Compressor Service and Maintenance Standard Practice.

## **COURSE MODULES AND TOPICS**

1. Introduction to Air Compressors
2. Working Principles of Air Compressors
3. Key Components & Functions
4. Common Faults and Troubleshooting
5. Maintenance Best Practices
6. Predictive Maintenance Techniques
7. Hands-on Maintenance on the Air Compressor Full-Scale Training Kit:
  - Compressor System Walkthrough – Practical
  - Component Disassembly and Inspection - Practical
  - Fault Diagnosis and Repair – Practical
  - Performance Testing & Optimization – Practical
  - Troubleshooting Exercises - Practical
8. Digital Monitoring & IoT - Based Diagnostics
9. System Testing and Reporting
10. Final Assessment
11. Certification
12. Q & A



Full-Scale PS Air Compressor Maintenance Training Kit - Arrangement





# **Industrial Air Compressor Critical Maintenance Skills Training (5 Days)**

## **TARGET PARTICIPANT**

- Design Manager / Engineer
- Production Manager / Engineer
- Facility / Maintenance Manager / Engineer
- Facility / Maintenance Supervisor / Technician
- Service Manager / Engineer / Technician

## **SEMINAR MATERIALS**

- Handout hard copy.
- Hands-on practical by using the Full-Scale Air Compressor Training Kit and Real-Time Compressor Centralized Monitoring System (CCMS).

## **COMPETENCY PASSING MARK**

- Classroom Theory – 80%
- Hands-on Practical – 80%

## **COURSE DURATION**

- Five (5) days training duration from 0900hr – 1700hr (35 hours).
- Theory Classroom – 3 days (21 hours)
- Hands-on Practical – 2 days (14 hours)

## **NUMBER OF PARTICIPANTS**

Max 10 to 15 pax

## **CERTIFICATE**

A Certificate of Competency in Air Compressor Maintenance and Services will be awarded by PS Air Compressor Engineering and Training Academy to participants who successfully complete both the theoretical and practical tests, in addition to fulfilling the training day requirements.





# Industrial Air Compressor Critical Maintenance Skills Training (5 Days)



## TRAINING CALENDAR FROM MAY-2025 TO DEC-2025

Month	Weeks	Training Days & Date				
		Monday	Tuesday	Wednesday	Thursday	Friday
May	22	26/05/2025	27/05/2025	28/05/2025	29/05/2025	30/05/2025
June	25	16/06/2025	17/06/2025	18/06/2025	19/06/2025	20/06/2025
July	30	21/07/2025	22/07/2025	23/07/2025	24/07/2025	25/07/2025
August	34	18/08/2025	19/08/2025	20/08/2025	21/08/2025	22/08/2025
September	39	22/09/2025	23/09/2025	24/09/2025	25/09/2025	26/09/2025
October	44	27/10/2025	28/10/2025	29/10/2025	30/10/2025	31/10/2025
November	48	24/11/2025	25/11/2025	26/11/2025	27/11/2025	28/11/2025
December	51	15/12/2025	16/12/2025	17/12/2025	18/12/2025	19/12/2025

Note : The above training schedule is the estimation reference and it will be subjected to change from time to time. Depends on the training venue facilities availability.





# Industrial Air Compressor Critical Maintenance Skills Training (5 Days)



**FEES - 5 DAYS**  
**RM 8,000 / pax**  
**100% HRD CORP**  
**CLAIMABLE**



No :  
201001028348



Approved No :  
10001542983

Training Fees including the following:

1. Rental Training Facilities
2. Trainer Fees
3. Classroom Theory Training Materials
  - o Hand-Out Hard Copy
  - o Stationary
4. Practical Training Materials
  - o Practical Training Kits
  - o Used off Training Materials
5. Examination and Competency Certificate Fees
6. Training Refreshment

## CONTACT US



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