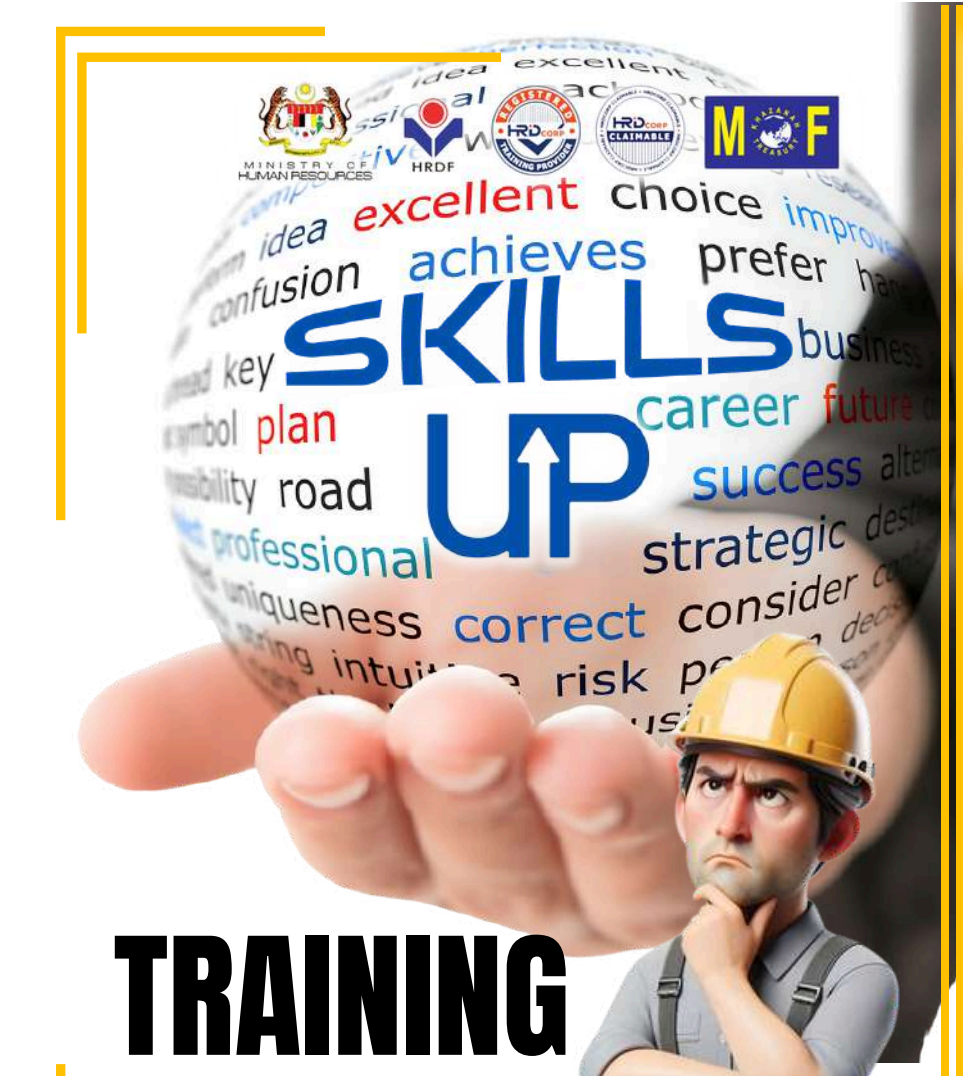


TRAINING COURSE 2025

PS AIR COMPRESSOR ENGINEERING AND TRAINING ACADEMY

MANAGED BY : PS AIR COMPRESSOR (M) SDN BHD (912267-A)

PS Air Compressor Engineering and Training Academy

Managed by:

PS Air Compressor (M) Sdn. Bhd.

HRD Corp Accredited Training Provider

Registered No: 201001028348

List of Content

1) The Company

Message From Founder

Dear Valued Stakeholders,

It is my honour to speak on behalf of PS Air Compressor (M) Sdn Bhd, a company committed to innovation, reliability, and excellence in the manufacturing of air compressors. Our dedication to quality is evident in every facet of our operations, from advanced engineering to dependable customer support and sustainable practices.

We also take pride in sharing our expertise through training initiatives. We recognize the vital role that compressed air systems play in ensuring your operations run smoothly, and we are proud to be your partner in achieving efficiency and reliability.

As we continue to evolve and respond to the dynamic demands of the industry, we remain dedicated to providing cutting-edge, one-stop solutions that empower businesses across various sectors. Your trust and support inspire us to uphold the highest standards in quality, energy efficiency, and sustainability.

We are moving forward by exploring new technologies, expanding our global presence, and nurturing meaningful collaborations that drive growth for our customers and communities. At PS Air Compressor, we understand that our success is intricately linked to the success of our customers, employees, and partners.

Looking ahead, we are excited to announce new initiatives aimed at enhancing operational efficiency while minimizing environmental impact. Together, we aspire to create a sustainable future powered by green energy, innovation, and collaboration.

On behalf of our team, I want to express our heartfelt gratitude for your unwavering support and trust in us. We remain dedicated to serving you with excellence and building stronger partnerships in the coming year.

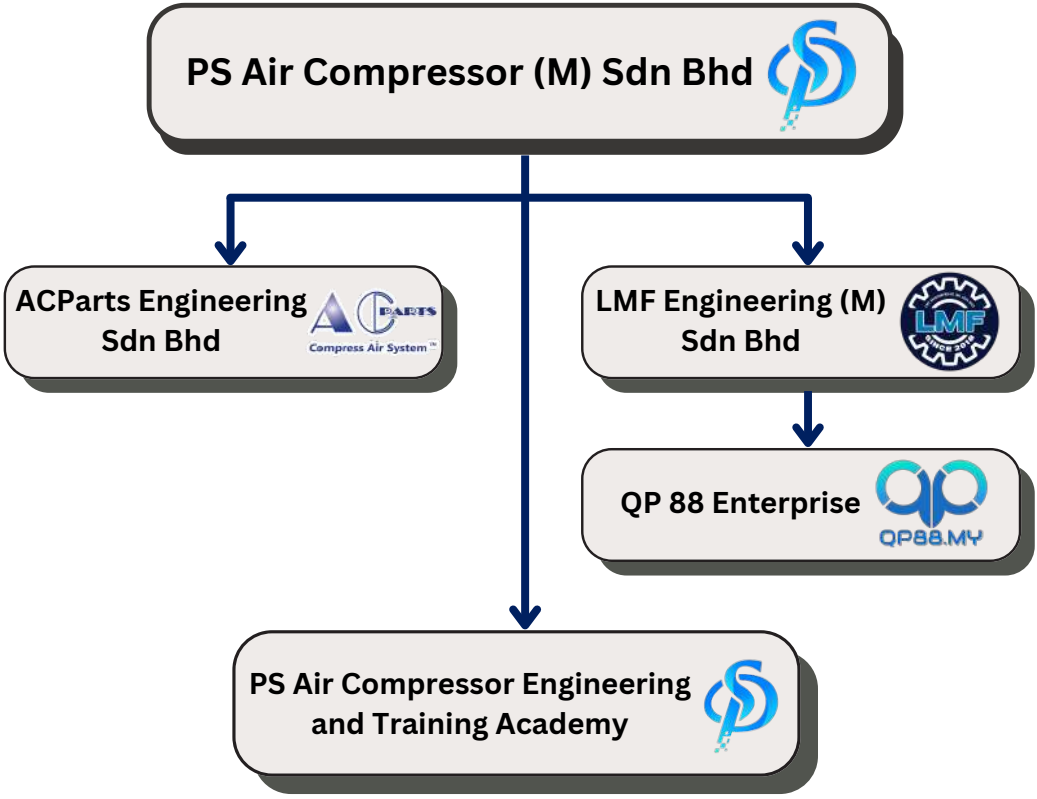
Thank you all for your continued trust and support. Together, we will shape a future of green technology innovation and success.

Thank you for being an essential part of our journey.

Warmest Regards,

Ng Soon Huat
Managing Director

Company Subsidiary



Company Profile

PS Air Compressor (M) Sdn Bhd was established in 2010 by Mr. Ng Soon Huat, who has a rich background and expertise in air compressor technology. Headquartered in Johor Bahru, the company has evolved into one of Malaysia's leading **One-Stop Solutions** for air compression systems, offering services in manufacturing, sales, service, and training.

The company is dedicated to ensuring complete customer satisfaction by delivering exceptional quality, performance, and pricing, along with reliable after-sales service and ongoing training and development. PS Air Compressor's primary goal is to maximize value for all its customers, particularly in terms of after-sales support.

PS Air Compressor offers user-friendly and space-saving units that are straightforward to operate and maintain. Our compressors feature an effective capacity control system that guarantees optimal energy efficiency. We are committed to enhancing product quality and performance while fostering a sustainable ecosystem in every aspect of our design process.

PS Air Compressor deliver more than just mere Vision, as set a GOAL. A Goal to attain the highest standards of services and provide the best **Quality of One-Stop Solution for Compressor Systems.**

In order to achieve the company GOAL, the company embark on extensive Research & Development (R&D) procedures including the Compressor Centralized Monitoring Unit as known as CCMS in the field of Compressor Maintenance & Services.

PS Air Compressor promised to deliver on the 6 Core Principles:

- Accurate Performance
- Creative Solution
- Professional & Proficient Service
- Accurate Execution
- Real Value for Customer
- Total Satisfaction Guaranteed

And with slogan "Looking Forward to Serving You" all time.

The Company Profile

ONE-STOP PRODUCTS Solution in supply and services of the following products

Air Compressor

Air Dryer

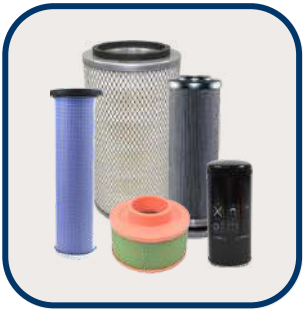
Air Receiver Tank

Main Line Filter

Oil Water Separator

CCMS

Power Saving



Spare Parts

By choosing PS Air Compressor Engineering and Training Academy as Your Training Partner, you can benefit from :

Tailored Solutions — Customized training programs to meet the specific needs of your organization.

Expert Trainers — Our instructors bring a wealth of industry knowledge and practical experience to ensure a high-quality learning experience.

Measurable Impacts — Assessment tools and evaluations to track progress and demonstrate the tangible benefits of training.

Ongoing Support — Post-training resources and follow-up sessions to reinforce learning and provide continuous support.

2) PS Air Compressor Training Courses

2-1) Industrial Air Compressor Core Training Programs

2-1) Industrial Air Compressor Core Training Programs: Content

A) Industrial Air Compressor Safe Handling and Operation Training	2 Days
B) Industrial Air Compressor Critical Skills Inspection and Maintenance and Air Leak Audit Training	5 Days
C) Industrial Air Compressor - Competency Critical Maintenance Skills Training	5 Days
D) Industrial Air Compressor - Competency Performance Audit Inspection and Reporting	4 Days
E) Industrial Air Compressor - Engineering Design and Implementation	2 Days
F) Industrial Air Compressor - Competency IR 4 Compressor Centralized Monitoring System (CCMS) Technology	3 Days

2-1) Industrial Air Compressor Core Training Programs:

A) Industrial Air Compressor Safe Handling and Operation Training – 2 Days – 1/3

This is In-house or Public Face to Face theory classroom 2 days training program. Certificate of Attendance will be awarded upon completion of training.
Two (2) - Theory Classroom from 0900hr to 1700hr (14 hours)
Note: - If the training program is held at the company's own facilities as an in-house course, a site visit to the plant's compressor systems will be part of the training.

1) Course Purposed:
TThe purpose of this training program aims to equip participants with the essential knowledge and practical skills required to safely and efficiently operate, maintain, and troubleshoot industrial air compressors. The program emphasizes workplace safety, preventive maintenance, and operational best practices to minimize risks, enhance equipment performance, and ensure compliance with industry standards.
By the end of this training, participants will be capable of handling air compressors confidently, reducing downtime, and preventing accidents, ultimately contributing to a safer and more productive work environment.

2) Course Objective:
By the conclusion of the training course, participants will have gained an understanding of the following:

- Identify different types of industrial air compressors and their applications.
- Explain the working principles and key components of air compressors.
- Recognize potential hazards associated with compressed air systems.
- Apply appropriate personal protective equipment (PPE) for safe operation.
- Follow industry best practices for handling compressed air safely.
- Identify proper installation requirements, including ventilation and electrical setup.
- Conduct pre-startup inspections and safely start an air compressor.
- Follow standard operating procedures, including monitoring pressure, temperature, and moisture levels.
- DDemonstrate proper loading, unloading, and shutdown techniques.
- Implement routine maintenance schedules, including lubrication, filter replacements, and draining moisture traps.
- Inspect belts, couplings, and electrical components for wear and potential failures.

2-1) Industrial Air Compressor Core Training Programs:

A) Industrial Air Compressor Safe Handling and Operation Training – 2 Days – 2/3

- Diagnose and resolve common problems such as overheating, pressure fluctuations, and leaks.
- Address air quality issues, oil contamination, and mechanical faults.

3) Course Methodology:
Lectures will be delivered in both English and Bahasa Malaysia, and all handout materials will be available in English. The PowerPoint slides will also be in English and will cover all pertinent topics.

4) Syllabus:
All course syllabuses are formulated in alignment with the guidelines of the Industrial Air Compressor Safe Handling and Operation Standard Practice.

5) Course Content:
- Introduction to Air Compressors
- Components and Working Principles
- Safe Handling & Personal Protective Equipment
- Installation & Start-Up Procedures
- Standard Operating Procedures
- Preventive Maintenance
- Troubleshooting Common Issues
- Q/A and Discussion

6) Target Participant:
- Design Manager / Engineer
- Production Manager / Engineer
- Production Supervisor / Technician
- Facility / Maintenance Manager / Engineer
- Facility / Maintenance Supervisor / Technician
- Service Manager / Engineer
- Service Supervisor / Technician

2-1) Industrial Air Compressor Core Training Programs:

A) Industrial Air Compressor Safe Handling and Operation Training – 2 Days – 3/3

7) Seminar Materials:

- Hands-out hard copy

8) Course Duration:

Two (2) - Theory Classroom from 0900hr to 1700hr (14 hours).

9) Number of Participants:

Max 10 to 15 pax

10) Certificate:

Participants who successfully fulfill the classroom training requirements and attend the specified training sessions will be awarded a Certificate of Attendance from PS Air Compressor Engineering and Training Academy.

2-1) Industrial Air Compressor Core Training Programs:

B) Industrial Air Compressor Critical Skills Inspection and Maintenance and Air Leak Audit Training – 5 Days – 1/7

This is Public and In-house Face to Face theory classroom and hands-on practical with Full-Scale Training Kit 5 days training program. Certificate of Achievement in Air Compressor Maintenance and Air Leak Audit will be awarded upon pass theory and hands-on practical evaluation as well as completion of training.
Five (5) days - Training duration from 0900hr – 1700hr (35 hours)
Three (3) days – Theory Classroom from 0900hr – 1700hr (21 hours)
One (1) day – On Site Practical – Air Compressor Maintenance - from 0900hr – 1700hr (7 hours)
One (1) day – On Site Practical – Air Leak Audit – from 0900hr – 1700hr (7 hours)

1) Course Purposed:
In today's industrial and manufacturing environments, compressed air systems are among the most widely used utilities, often referred to as the "fourth utility" after electricity, water, and natural gas. These systems power a diverse range of equipment, from pneumatic tools to automation controls, and significantly impact overall plant productivity, reliability, and operational cost. However, compressed air systems are also notoriously inefficient if not properly maintained, leading to excessive energy consumption, increased downtime, and costly repairs.
This comprehensive 5-day training program on Air Compressor Critical Skills in Maintenance & Air Leak Audit is purpose-built to equip maintenance professionals, engineers, energy auditors, and plant managers with the essential theoretical knowledge and practical skills necessary to optimize compressed air systems for reliability, safety, and cost-effectiveness.

The course addresses two core aspects:

i) Critical Air Compressor Maintenance:
Understanding the construction, operation, and maintenance of various air compressor types is fundamental to ensuring long-term system reliability and avoiding unexpected failures. Participants will gain in-depth insights into preventive and predictive maintenance strategies, troubleshooting methods, and practical hands-on skills to carry out essential maintenance tasks confidently and safely. This focus on proactive care reduces unplanned downtime, extends equipment life, and optimizes performance.

2-1) Industrial Air Compressor Core Training Programs:

B) Industrial Air Compressor Critical Skills Inspection and Maintenance and Air Leak Audit Training – 5 Days – 2/7

ii) Air Leak Auditing Using Ultrasonic Leak Detection:

Air leaks in compressed air systems are a significant source of energy waste and operational inefficiency, often accounting for up to 30% or more of total compressed air production. Identifying, quantifying, and prioritizing air leak repairs through advanced ultrasonic leak detection techniques empowers organizations to drastically cut energy costs and reduce environmental impact. The training guides participants through the physics of ultrasonic detection, field audit methodologies, and cost-benefit analysis for repair decision-making.

By integrating 3 days of classroom theory with 2 days of intensive hands-on practical's, this course ensures that participants do not merely acquire theoretical understanding but also master real-world skills essential for immediate application on the plant floor.

Upon successful completion, participants will emerge as competent professionals capable of contributing directly to improved system efficiency, enhanced safety, and significant cost savings through optimized maintenance and leak management.

2) Course Objectives:

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

- Understand the complete structure and function of compressed air systems, including compressor types (reciprocating, screw, centrifugal), dryers, filters, receivers, and distribution networks.
- Interpret system behaviour and performance indicators such as pressure (PSI), flow (CFM), duty cycles, and temperature ranges.
- Develop and follow preventive and predictive maintenance schedules using checklists, OEM guidelines, and condition-monitoring tools.
- Safely perform hands-on maintenance on air compressors.
- Identify early warning signs of component failures through vibration, noise, temperature, and pressure analysis.

2-1) Industrial Air Compressor Core Training Programs:

B) Industrial Air Compressor Critical Skills Inspection and Maintenance and Air Leak Audit Training – 5 Days – 3/7

- Diagnose and resolve common compressor problems such as:
  - Low output pressure
  - Overheating
  - Abnormal noises
  - Excessive oil carryover or moisture
- Confidently use an ultrasonic leak detector to identify leaks at fittings, hoses, drains, valves, and quick-connects in a live or simulated industrial environment.
- Tag and document leak locations with accuracy, using GPS/photo tools or audit templates.
- Quantify air losses and financial impact by estimating leak rates in CFM and converting to energy and cost losses (kWh/year, $/year).
- Compile a complete maintenance and leak audit report
- Apply industry-standard safety procedures (e.g., Lock-out/Tag-out) during maintenance and audits.
- Comply with local and international standards (e.g., ISO 8573, OSHA) relevant to compressed air system maintenance and quality.

3) 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. Theory evaluation in Classroom and Practical evaluation on site Air Compressor Systems.

4) Syllabus:
All course syllabuses are formulated in alignment with the guidelines of the Industrial Air Compressor Maintenance and Air Leak Audit Standard Practice.

5) Course Modules and Topics:
Day 1 - Classroom Training – Introduction to Compressed Air System
1) Overview of Compressed Air Systems
2) System Components and Layout
3) Safety, Standards & Regulations

2-1) Industrial Air Compressor Core Training Programs:

B) Industrial Air Compressor Critical Skills Inspection and Maintenance and Air Leak Audit Training – 5 Days – 4/7

Day 2 - Classroom Training – Air Compressor Maintenance, Troubleshooting and Energy Management

4) Preventive & Predictive Maintenance
5) Predictive Tools & Techniques
6) Troubleshooting Strategies
7) Energy Efficiency in Compressed Air Systems

Day 3 – Classroom Training – Air Leak Detection & Audit Strategy

8) Understanding Air Leaks
9) Ultrasonic Leak Detection Principles
10) Planning an Air Leak Audit
11) Report Writing & Communication
12) Classroom Theory Assessment

Day 4 – Hands-on Practical – Air Compressor Maintenance

i) **Morning (Hands-On Station Setup):**

- PPE briefing and risk assessment
- Overview of tools: torque wrench, feeler gauge, alignment kit
- Lubrication change procedure on rotary screw compressor
- Separator filter disassembly and inspection
- Intercooler inspection for fouling or scaling

ii) **Afternoon (Real Maintenance Tasks):**

- Change air and oil filters under supervision
- Perform drain valve operation and test
- Record performance metrics before and after maintenance
- Use digital thermometers and vibration sensors
- Simulated fault diagnosis (e.g., blocked intake, oil bypass)

2-1) Industrial Air Compressor Core Training Programs:

B) Industrial Air Compressor Critical Skills Inspection and Maintenance and Air Leak Audit Training – 5 Days – 5/7

Day 5 – Hands-on Practical – Air Leak Audit with Ultrasonic Leak Detector

i) Morning (Detector Familiarization):

- Power-up and calibration
- How to identify high vs. low-frequency leaks
- Testing on controlled test bench
- Field Walk (Plant/Simulated Site):
- Air Leak Detection by using following device and tagging kit:
  - Ultrasonic Leak Detector
  - Leak Tagging Kit
  - Leak Audit Template
  - Real-time leak identification

ii) Afternoon (Analysis and Reporting):

- Estimate total air loss (CFM)
- Calculate financial impact (kWh, annual cost)
- Propose prioritized repair list
- Deliver a 5-minute team presentation (Group Role Play)

6) Q & A Session

End of 5 days Training

7) Target Groups:

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

2-1) Industrial Air Compressor Core Training Programs:

B) Industrial Air Compressor Critical Skills Inspection and Maintenance and Air Leak Audit Training – 5 Days – 6/7

8) Seminar Materials:

- Handout hard copy
- Digital Thermometer
- Vibration Sensor
- Ultrasonic Leak Detector (ULD)
- Leak Tagging Kit
- On Site Air Compressor Operation Unit (Prepared by Client)

9) Course Duration:

- Five (5) days - Training duration from 0900hr – 1700hr (35 hours)
- Three (3) days – Theory Classroom from 0900hr – 1700hr (21 hours)
- One (1) day – On Site Practical – Air Compressor Maintenance - from 0900hr – 1700hr (7 hours)
- One (1) day – On Site Practical – Air Leak Audit – from 0900hr – 1700hr (7 hours)

10) Number of Participants:

Max 5 to 10 pax

11) Certificate:

A Certificate of Achievement in Air Compressor Basic Maintenance and Basic Air Leak Audit 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.

2-1) Industrial Air Compressor Core Training Programs:

B) Industrial Air Compressor Critical Skills Inspection and Maintenance and Air Leak Audit Training – 5 Days – 7/7

Full-Scale PS Air Compressor ULD Audit Training Kit - Arrangement

2-1) Industrial Air Compressor Core Training Programs:

C) Industrial Air Compressor Critical Competency Maintenance Skills – 5 Days - 1/5

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.

- Five (5) days - Training duration from 0900hr – 1700hr (35 hours)
- Three (3) days - Classroom from 0900hr – 1700hr (21 hours)
- Two (2) days - Hands-on Practical on the Training Kit from 0900hr to 1700hr (14 hours)

1) 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. Participant will gain the expertise needed to enhance the reliability and performance as a competent personal in air compressors maintenance and services in industrial applications.

2) 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.

2-1) Industrial Air Compressor Core Training Programs:

C) Industrial Air Compressor Critical Competency Maintenance Skills – 5 Days - 2/5

- 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.

3) 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).

4) Syllabus:

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

2-1) Industrial Air Compressor Core Training Programs:

C) Industrial Air Compressor Critical Competency Maintenance Skills – 5 Days - 3/5

5) Course Content:

- Introduction to Air Compressors
- Compressed Air Systems
- Key Maintenance Concepts
- Safety Guidelines
- Maintenance Procedures
- Performance Monitoring
- Troubleshooting Techniques
- Energy Efficiency
- Advanced Maintenance Techniques
- System Integration and Upgrades
- Workshop Orientation
- Component Disassembly and Inspection
- Hands-on Maintenance on the Air Compressor Full-Scale Training Kit
- Troubleshooting Exercises
- System Testing and Reporting
- Theory Evaluation

6) Target Participant:

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

7) Seminar Materials:

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

2-1) Industrial Air Compressor Core Training Programs:

C) Industrial Air Compressor Critical Competency Maintenance Skills – 5 Days - 4/5

8) Competency Passing Mark:

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

9) Course Duration:

- Five (5) days - Training duration from 0900hr – 1700hr (35 hours).
- Three (3) days - Classroom from 0900hr – 1700hr (21 hours)
- Two (2) days - Hands-on Practical on the Training Kit from 0900hr to 1700hr (14 hours)

10) Number of Participants:

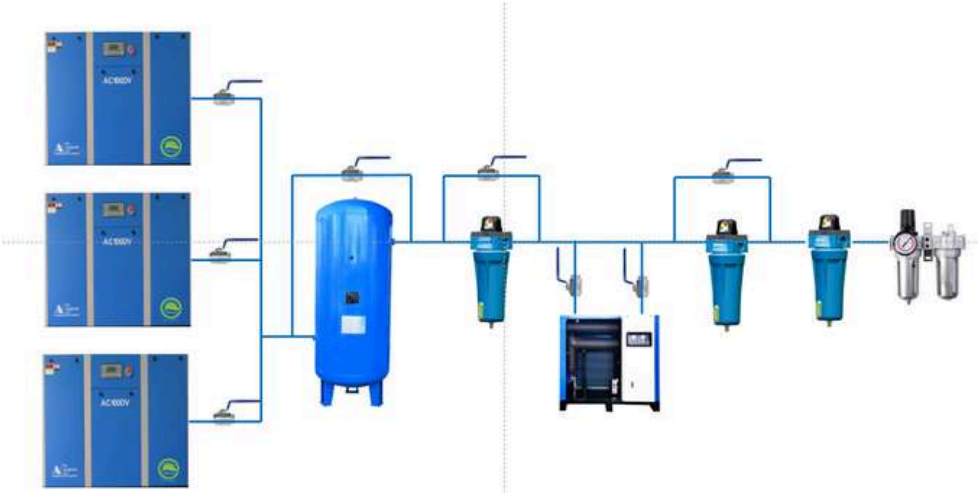
Max 10 to 15 pax

11) 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.

2-1) Industrial Air Compressor Core Training Programs:

C) Industrial Air Compressor Critical Competency Maintenance Skills – 5 Days - 5/5



Full-Scale PS Air Compressor Maintenance Training Kit - Arrangement

2-1) Industrial Air Compressor Core Training Programs:

D) Industrial Air Compressor - Competency Performance Audit Inspection and Reporting – 4 Days – 1/5

This is Public Face to Face theory classroom and hands-on practical with Full-Scale System Air Compressor Performance Audit Training Kit 4 days technical competency training program. Certificate of Technical Competency in Air Compressor Performance Audit will be awarded upon pass theory and hands-on practical evaluation as well as completion of training.

- Four (4) days - Training duration from 0900hr – 1700hr (28 hours)
- Two and half (2.5) days – Classroom training from 0900hr – 1700hr (17 hours)
- One and half (1.5) days - Hands-on Practical on the Training Kit from 0900hr – 1700hr (11 hours)

1) Course Purposed:

The Air Compressor Performance Audit Training aims to equip participants with the knowledge and skills required to assess, analyze, and optimize air compressor systems for maximum efficiency and cost savings. Through a blend of theoretical sessions and hands-on practical exercises, participants will learn the fundamentals of air compressor operation and performance metrics by conduct detailed performance audits using advanced tools and techniques.

Identify inefficiencies such as leaks, air flow rate, pressure drops, filter condition, oil condition, dryer condition, reservoir tank condition, pipeline, vibration and energy losses, and implement practical solutions to enhance system performance and reduce operational costs as well as adhere to industry standards and adopt best practices in compressed air system management.

This course empowers professionals to improve the energy efficiency of compressed air systems, contribute to sustainable industrial practices, and drive operational excellence.

2) Course Objective:

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

- Describe the working principles of various types of air compressors.
- Identify the key components and their functions.
- Explain the significance of dew point pressure, flow rate, and energy efficiency in air compressor performance.

2-1) Industrial Air Compressor Core Training Programs:

D) Industrial Air Compressor - Competency Performance Audit Inspection and Reporting – 4 Days – 2/5

- Measure and interpret key performance parameters such as pressure, flow rate, power consumption, and efficiency.
- Evaluate compressor load patterns and identify areas of energy wastage.
- Plan and execute a full air compressor performance audit.
- Utilize specialized tools and instruments for data collection and analysis.
- Identify inefficiencies, such as leaks, pressure drops, or incorrect settings, and their impact on performance.
- Recommend practical solutions to improve system efficiency and reduce energy costs.
- Diagnose and resolve common operational issues in compressed air systems.
- Understand the root causes of inefficiencies and propose corrective measures.
- Compile audit findings into structured, actionable reports.
- Present recommendations to stakeholders with clear cost-saving and energy-efficient strategies.
- Adhere to relevant ISO, ASME, and other industry standards for air compressor performance and safety.
- Incorporate preventive maintenance strategies to sustain long-term efficiency.
- Gain practical experience in using a full-scale training kit for real-time performance assessments.
- Confidently operate tools such as flow meters, ultrasonic leak detectors, and power analyzers.

3) Course Methodology:

Lectures will be delivered in both English and Bahasa Malaysia, with all supplementary materials provided in English. PowerPoint presentation slides will cover all topics. Practical sessions will utilize the Full-Scale Air Compressor Performance Audit Training Kit.

4) Syllabus:

All course syllabuses are created and developed in accordance with the relevant ISO and ASME Industrial Air Compressor Performance Audit Standard Practice guidelines.

2-1) Industrial Air Compressor Core Training Programs:

D) Industrial Air Compressor - Competency Performance Audit Inspection and Reporting – 4 Days – 3/5

5) Course Content:

- Introduction to Air Compressors
- Air Compressor Performance Parameters
- Energy and Cost Implications
- Standards and Best Practices
- Introduction to Performance Auditing
- Audit Methodology
- Troubleshooting and Problem Solving
- Reporting and Recommendations
- Familiarization with the Training Kit
- Conducting a Performance Audit
- System Optimization
- Hands-on Practical on the Air Compressor Performance Audit Full-Scale Training Kit
- Practical Report Preparation
- Theory Evaluation

6) Target Participant:

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

7) Seminar Materials:

- Hands-out hard copy.
- Hands-on practical by using the Full-Scale Air Compressor Performance Audit Training Kit.

8) Competency Passing Mark:

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

2-1) Industrial Air Compressor Core Training Programs:

D) Industrial Air Compressor - Competency Performance Audit Inspection and Reporting – 4 Days – 4/5

9) Course Duration:

- Four (4) days - Training duration from 0900hr – 1700hr (28 hours)
- Two and half (2.5) days – Classroom training from 0900hr – 1700hr (17 hours)
- One and half (1.5) days - Hands-on Practical on the Training Kit from 0900hr – 1700hr (11 hours)

10) Number of Participants:

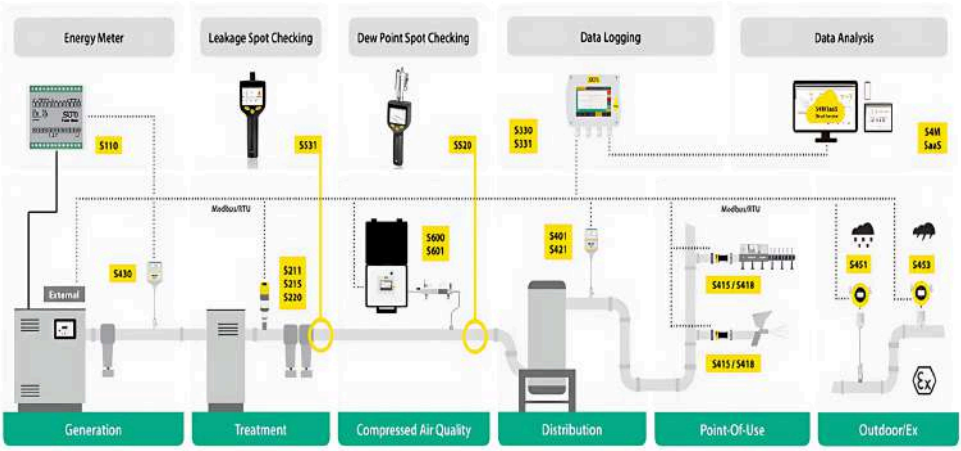
Max 10 to 15 pax

11) Certificate:

Participants who successfully complete the theory and practical components of the training, along with the required training days, will be awarded a Certificate of Competency in Air Compressor Performance Audit from PS Air Compressor Engineering and Training Academy.

2-1) Industrial Air Compressor Core Training Programs:

D) Industrial Air Compressor - Competency Performance Audit Inspection and Reporting – 4 Days – 5/5



Full-Scale PS Air Compressor Performance Audit Training Kit - Arrangement

2-1) Industrial Air Compressor Core Training Programs:

E) Industrial Air Compressor - Engineering Design and Implementation - 2 Days – 1/3

This is Public Face to Face or Online theory classroom 2 days engineer training program.
Certificate of Attendance will be awarded upon completion of training.
Two (2) days – Classroom training from 0900hr to 1700hr (14 hours)

1) Course Purposed:

Industrial Air Compressor - Engineering Design and Implementation" training course is designed to equip participants with the knowledge and skills to integrate sustainable, energy-efficient solutions into industrial air compressor systems. The course covers the fundamentals of air compressors, green energy principles, and advanced technologies that reduce energy consumption and environmental impact.

Participants will learn how to design, optimize, and implement air compressor systems that utilize renewable energy sources like solar and wind. Through practical exercises and real-world case studies, attendees will gain the expertise to assess existing systems, apply energy-saving strategies, and stay ahead of industry innovations. Ultimately, the training prepares participants to lead initiatives for more sustainable and cost-efficient industrial operations.

2) Course Objective:

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

- Identify key sustainable practices and technologies that can be applied to industrial systems.
- Describe the working principles of different types of industrial air compressors (e.g., reciprocating, rotary screw, centrifugal).
- Assess the role of air compressors in industrial processes and their energy consumption patterns.
- Apply green design principles to optimize air compressor efficiency and reduce energy consumption.
- Select and size compressors based on energy efficiency considerations and operational requirements.
- Incorporate renewable energy solutions, such as solar, wind, and hybrid systems, into compressor designs.

2-1) Industrial Air Compressor Core Training Programs:

E) Industrial Air Compressor - Engineering Design and Implementation - 2 Days – 2/3

- Perform energy audits and evaluations on existing air compressor systems to identify efficiency gaps.
- Use diagnostic tools and performance monitoring techniques to optimize compressor operations and reduce wasteful energy consumption.
- Develop strategies to integrate renewable energy sources (solar, wind, geothermal) into industrial compressor systems for sustainable energy use.
- Understand how to hybridize traditional and green energy sources for more efficient power supply to air compressors.
- Implement best maintenance practices to ensure long-term energy efficiency and performance of air compressors.
- Stay informed about the latest trends in compressor technology, including the use of AI, IoT, and smart technologies.
- Understand regulatory standards and incentives related to green energy integration in industrial systems.
- Apply learned concepts through hands-on training, evaluating real-world systems and making recommendations for improvement.
- Engage in real-time troubleshooting and optimization activities to reinforce theoretical knowledge.

3) Course Methodology

Lectures will be conducted in both English and Bahasa Malaysia, with all handout materials provided in English. PowerPoint presentation slides will also be in English to cover all topics.

4) Syllabus:

All course syllabuses are developed and created in accordance with the guidelines outlined in the Air Compressor Design and Implementation Standard Practice.

2-1) Industrial Air Compressor Core Training Programs:

E) Industrial Air Compressor - Engineering Design and Implementation - 2 Days – 3/3

5) Course Content:

- Introduction to Industrial Air Compressors
- Basic Engineering Principles
- Air Compressor Selection and Sizing
- Compressor Components & Design
- Air Compressor System Design and Integration
- Installation and Commissioning
- Maintenance and Troubleshooting
- Case Studies
- Group Project Discussion and Practical Application

6) Target Participant:

- Design Manager
- Design Engineer

7) Seminar Materials:

- Hands-out hard copy

8) Course Duration:

- Two (2) days – Classroom training from 0900hr – 1700hr (14 hours).

9) Number of Participants:

Max 10 to 15 pax

10)Certificate:

Participants who successfully complete the classroom training syllabus and attend the designated training days will receive a Certificate of Attendance from PS Air Compressor Engineering and Training Academy.

2-1) Industrial Air Compressor Core Training Programs:

F) Industrial Air Compressor - Competency IR 4 Compressor Centralized Monitoring System (CCMS) Technology – 3 Days – 1/4

This is Public Face to Face theory classroom and hands-on practical with Full-Scale Air Compressor Centralized Monitoring System (CCMS) Training Kit 3 days technical competency training program. Certificate of Technical Competency in Air Compressor Centralized Monitoring System - CCMS will be awarded upon pass theory and hands-on practical evaluation as well as completion of training.
Three (3) days – Training duration form 0900hr – 1700hr (21hours)
Two (2) days - Classroom training from 0900hr – 1700hr (14 hours)
One (1) day - Hands-on Practical on the Training Kit from 0900hr – 1700hr (7 hours)

1) Course Purposed:
The purpose of this training program is to equip participants with the knowledge and practical skills required to effectively operate, monitor, and maintain the Industrial Air Compressor IR 4 Centralized Monitoring System - CCMS.
Through a combination of classroom theory and hands-on practical training, participants will gain:

- A solid understanding of air compressor functionality and the role of continuous monitoring systems.
- Expertise in setting up, configuring, and troubleshooting the IR 4 system.
- The ability to interpret real-time data for optimizing compressor performance and implementing predictive maintenance strategies.

By the end of the course, participants will be prepared to enhance operational efficiency, minimize downtime, and ensure the long-term reliability of industrial air compressor systems.

2) Course Objective:
By the conclusion of the training course, participants will have gained an understanding of the following:

- Explain the working principles, components, and applications of the IR 4 industrial air compressor.
- Identify key specifications and operational parameters.
- Set up and configure the monitoring system hardware and software.

2-1) Industrial Air Compressor Core Training Programs:

F) Industrial Air Compressor - Competency IR 4 Compressor Centralized Monitoring System (CCMS) Technology – 3 Days – 2/4

- Interpret real-time data, including pressure, temperature, vibration, and power consumption trends.
- Diagnose common system issues using the continuous monitoring interface.
- Calibrate sensors, update software, and reset system components.
- Respond to system alerts and take appropriate corrective actions.
- Use data analytics tools to predict system failures and schedule preventive maintenance.
- Minimize downtime and improve system efficiency through proactive monitoring.
- Apply knowledge of continuous monitoring to various industrial setups.
- Understand how the IR 4 monitoring system enhances performance and operational reliability.
- Confidently use the IR 4 training kit to set up, configure, and troubleshoot the system.
- Address simulated fault conditions with practical solutions.

3) Course Methodology:

Lectures will be conducted in both English and Bahasa Malaysia, with all handout materials provided in English. PowerPoint presentation slides will also be in English, covering all topics comprehensively. There will be hands-on practical sessions using the Full-Scale IR4 Compressor Centralized Monitoring System (CCMS) Training Kit.

4) Syllabus:

All course syllabuses are developed and crafted in accordance with the PS Air Compressor IR4 CCMS Standard Practice guidelines.

5) Course Content:

- Overview of Industrial Air Compressors
- Continuous Monitoring System Basics
- Understanding System Architecture
- System Installation and Configuration
- Data Analysis and Maintenance
- Industry Applications

2-1) Industrial Air Compressor Core Training Programs:

F) Industrial Air Compressor - Competency IR 4 Compressor Centralized Monitoring System (CCMS) Technology – 3 Days – 3/4

- Hands-on Practical training with the IR 4 Full-Scale Training Kit
- Practical Report
- Theory Evaluation

6**) Target Participant:**

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

7) Seminar Materials:

Hands-out hard copy.
Hands-on practical by using the Full-Scale IR 4 CCMS Full-Scale Training Kit.

8) Competency Passing Mark:

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

9) Course Duration:

- Three (3) days – Training duration form 0900hr – 1700hr (21hours)
- Two (2) days - Classroom training from 0900hr – 1700hr (14 hours)
- One (1) day - Hands-on Practical on the Training Kit from 0900hr – 1700hr (7 hours)

10) Number of Participants:

Max 10 to 15 pax

11)Certificate:

A Certificate of Competency in the Air Compressor Centralized Monitoring System will be awarded by PS Air Compressor Engineering and Training Academy to participants who successfully pass both the theoretical and practical exams, as well as complete all training days.

2-1) Industrial Air Compressor Core Training Programs:

F) Industrial Air Compressor - Competency IR 4 Compressor Centralized Monitoring System (CCMS) Technology – 3 Days – 4/4

Full-Scale PS Air Compressor Centralized Monitoring System Training Kit - Arrangement

2-2) Lists of PS Air Compressor Engineering and Training Academy Industrial Training Courses

Our diverse range of training courses includes:

- A) Industrial Mechanical Technology Training Courses
- B) Industrial Electrical Technology Training Courses
- C) Industrial Hydraulic and Pneumatic Technology Training Courses
- D) Construction and Civil Technology Training Courses
- E) Industrial Automation & IR 4 Technology Training Courses
- F) Industrial Green and Renewal Energy Training Courses
- G) Industrial Steam Boiler, Pressure Vessel and Pipeline Training Courses
- H) Industrial Crane & Material Handling Training Courses
- I) Industrial Operator Competency Based Training Courses - (OSHA - Act 514 - 2024)
- J) Offshore Operation Based Training Courses
- K) Certification Inspector Competency Training Courses
- L) Industrial Development Training Courses
- M) ISO Awareness and Internal Auditor Training Courses

A) Industrial Mechanical Technology Training Courses

A) Industrial Mechanical Technology Training Courses – 1/5

Industrial Pumps Technology – Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Industrial Gearbox System Transmission Technology – Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Gasoline Engine Technology – Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

A) Industrial Mechanical Technology Training Courses – 2/5

Industrial Diesel Engine Technology – Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Industrial Blower Technology – Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Industrial Fan Technology – Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

A) Industrial Mechanical Technology Training Courses – 3/5

Industrial Fan Technology – Dynamic Balancing – Classroom Theory + Hands-On Practical

- Installation
- Function and Calibration
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Hydraulic Bolt Torque and Tensioning Competency Training – ASME PCC – 1 – 2010 – Classroom Theory + Hands-On Practical

5 Days

Welder Certification Program for following Welding Process – Classroom Theory + Hands-On Practical

- SAW, SMAW, MIG, FCAW, GTAW (TIG)

5 Days

Machinery Preventive Maintenance (MPM) – Classroom Theory + Case Study

2 Days

Mechanical Preventive Maintenance (MechPM) – Classroom Theory + Case Study

2 Days

A) Industrial Mechanical Technology Training Courses – 4/5

Automotive Preventive Maintenance – Light and Heavy Vehicle – Classroom Theory + Case Study — 2 Days

Industrial Corrosion Protection Technology – Classroom Theory + Case Study — 2 Days

Critical Maintenance Skills for the Elevator and Escalator – Competency Based – Classroom Theory + Hands-On Practical — 4 Days

Critical Maintenance Skills for the Automotive – Light and Heavy Vehicle – Competency Based – Classroom Theory + Hands-On Practical — 4 Days

Elevator and Escalator Trainer - Train The Trainer (TTT) Training for Institute Instructors – Classroom Theory + Hands-On Practical — 5 Days

Rigging and Slinging Training for Rigger (ASME B30) – Competency Based Training – Classroom Theory + Hands-On Practical — 3 Days

A) Industrial Mechanical Technology Training Courses – 5/5

Onshore Lift Supervisor Training – Competency Based Training – Classroom Theory + Hands-On Practical

3 Days

Flexible Steel Wire Rope (FSWR) – Classroom Theory + Case Study + Sample

- Identify
- Installation
- Inspection
- Rejection Criterial
- Selection
- Maintenance and Storage

3 Days

Engineering Hand Tools Handling and Effective Application – Classroom Theory + Tools Practical

2 Days

HANDTOOL

Industrial Power Tools Handling and Effective Application – Classroom Theory + Tools Practical

2 Days

WER TOOLS
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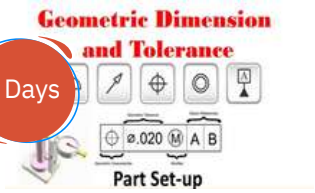
Geometry, Dimension and Tolerance (GD & T) Training – Classroom Theory + Case Study

2 Days



B) Industrial Electrical Technology Training Courses

B) Industrial Electrical Technology Training Courses – 1/9

Industry Electrical Safety – Classroom Theory + Case Study

2 Days

Basic Industrial Electrical System – Classroom Theory + Case Study

- Circuit
- Components
- Inspection
- Maintenance
- Servicing
- Application

Low Voltage (LV) – 1 kV

2 Days

Intermediate Industrial Electrical System – Classroom Theory + Case Study

- Circuit
- Components
- Inspection
- Maintenance
- Servicing
- Application

High Voltage (HV) – 11 kV

2 Days

B) Industrial Electrical Technology Training Courses – 2/9

Advance Industrial Electrical System – Classroom Theory + Case Study

- Circuit
- Components
- Inspection
- Maintenance
- Servicing
- Application

High Voltage (HV) – 33 kV

2 Days

Advance Industrial Electrical System – Classroom Theory + Case Study

- Circuit
- Components
- Inspection
- Maintenance
- Servicing
- Application

High Voltage (HV) – 66 kV

2 Days

B) Industrial Electrical Technology Training Courses – 3/9

Electrical Switchgears - Classroom Theory + Hands-On Practical

- Dismantle
- Installation
- Function and Calibration
- Inspection
- Maintenance
- Servicing

Low Voltage (LV) – 1 kV

4 Days

Electrical Switchgears - Classroom Theory + Hands-On Practical

- Dismantle
- Installation
- Function and Calibration
- Inspection
- Maintenance
- Servicing

High Voltage (HV) – 11 kV

4 Days

Electrical Switchgears - Classroom Theory + Hands-On Practical

- Installation
- Function and Calibration
- Inspection
- Maintenance
- Servicing
- Application

High Voltage (HV) – 33 kV

4 Days

B) Industrial Electrical Technology Training Courses – 4/9

Electrical Switchgears - Classroom Theory + Hands-On Practical

- Installation
- Function and Calibration
- Inspection
- Maintenance
- Servicing
- Application

High Voltage (HV) – 66 kV

4 Days

Industrial DC Motor Technology: - Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Industrial LV Electrical Motor Technology - Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

B) Industrial Electrical Technology Training Courses – 5/9

Industrial HV Electrical Motor Technology - Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Industrial DC Electrical Motor Starter Technology - Classroom Theory + Hands-On Practical

- 2-Point Starter
- 3-Point Starter
- 4-Point Starter
- Automatic Starters
- Solid State Starters

3 Days

Industrial LV Electrical Motor Starter Technology - Classroom Theory + Hands-On Practical

- Direct On Line (DOL)
- Star & Delta
- Auto -Transformer
- Soft-Starter
- Variable Frequency Control (VFD)

3 Days

B) Industrial Electrical Technology Training Courses – 6/9

Industrial HV Electrical Motor Starter Technology - Classroom Theory + Hands-On Practical

- Direct On Line (DOL)
- Star & Delta
- Auto Transformer
- Primer Resistant Starter
- Soft-Starter
- Variable Frequency Control (VFD)

3 Days

Industrial Generator Technology - Classroom Theory + Hands-On Practical

- Installation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Electrical Power and Energy Generation Industrial – Classroom Theory + Case Study

2 Days

B) Industrial Electrical Technology Training Courses – 7/9

Industrial Electrical Cables – Classroom Theory + Case Study

- (**IEC 60445** - Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals, conductor terminations and conductors)

2 Days

Industrial Electrical Cables - Classroom Theory + Case Study

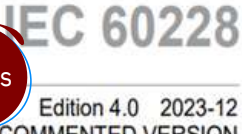
- (**IEC 60092** - Electrical installation in ships)

2 Days

Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 60228** - Conductors of insulated cables)

2 Days



Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 60331 -** Tests for electrical cables under fire conditions)

2 Days

Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 60332-1 & IEC 60332-3** - Tests for electrical and optical fibre cables under fire conditions)

2 Days

Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 60502** - Power cables with extruded insulation and their accessories – 1kV to 30kV)

2 Days

B) Industrial Electrical Technology Training Courses – 8/9

Industrial Electrical Cables – Classroom Theory + Case Study

- (**IEC 60702-3** - Mineral insulated cables and their terminations – up to 750V)

2 Days

Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 60754-1** - Test on gases arising from burning cables. Part 1: halogen acid gas)

2 Days

Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 60811-2-1** - Test for insulating and sheathing materials of electrical cables and optical cables.
  - Part 2: elastomeric compounds.
  - Section 1: ozone resistance, hot set and mineral oil immersion tests)

2 Days

Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 60840** - Power cables with extruded insulation and their accessories – 30kV to 150kV)

2 Days

Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 61034** - Measurement of smoke density of cables burning under defined conditions)

2 Days

B) Industrial Electrical Technology Training Courses – 9/9

Industrial Electrical Cables – Classroom Theory + Case Study

- (**IEC 61158** - Digital data communications for measurement and control.
  - Fieldbus cables for industrial control systems)

2 Days

IEC 61158-1
Edition 2.0 2019-04

Industrial Electrical Cables - Classroom Theory + Case Study

- (**IEC 60364** – Circuits supplied at nominal voltages up to and including 1000 V AC or 1500 V DC)

2 Days

IEC 60364-6
Edition 2.0 2016-04

C) Industrial Hydraulic and Pneumatic Technology Training Courses

C) Industrial Hydraulic and Pneumatic Technology Training Courses – 1/2

- **Industrial Hydraulic Technology System – Classroom Theory + Site Visit Practical** — 3 Days

- **Hydraulic Course for the None Hydraulic Technical Personnel (Domestic & Industrial) – Classroom Theory + Case Study** — 2 Days
- **Industrial Electro- Hydraulic and Pneumatic Technology – Classroom Theory + Site Visit Practical** — 3 Days

- **Basic Industrial Hydraulic Technology & Application - Competency Based Training – Classroom Theory + Hands-On Practical** — 4 Days

- **Intermediate Industrial Hydraulic System – Competency Based Training – Classroom Theory + Hands-On Practical** — 4 Days

- **Advance Industrial Hydraulic System – Competency Based Training – Classroom Theory + Hads-On Practical** — 4 Days

C) Industrial Hydraulic and Pneumatic Technology Training Courses – 2/2

Critical Maintenance Skills for Industrial Hydraulic System – Competency Based Training – Classroom Theory + Hands-On Practical

4 Days

Critical Maintenance Skills for Industrial Pneumatic System – Competency Based Training – Classroom Theory + Hands-On Practical

4 Days

Pneumatics Preventive Maintenance – Classroom Theory + Case Study

2 Days

D) Construction and Civil Technology Training Courses

D) Construction and Civil Technology Training Courses - 1/3

Industrial HVAC – Classroom Theory + Site Visit Practical

- Installation & Generation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Water Treatment System Technology – Classroom Theory + Site Visit Practical

- Installation & Generation
- Function and Setting
- Inspection
- Maintenance
- Servicing
- Application

3 Days

Building Facility Management Training – Classroom Theory + Case Study

- Facilities Function and Location
- Inspection
- Preventive Maintenance Schedule
- Servicing
- Application

3 Days

D) Construction and Civil Technology Training Courses - 2/3

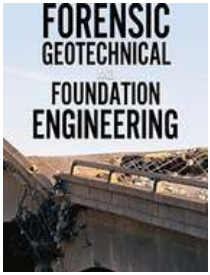
Structural Design Code Based Training - BS 5950: Structural Steelwork – Classroom Theory + Case Study	2 Days
Structural Design Code Based Training - Eurocode 2: Concrete Design – Classroom Theory + Case Study	2 Days
Structural Design Code Based Training - Eurocode 7: Geotechnical Design – Classroom Theory + Case Study	2 Days
Structural Design Code Based Training - FEM 1.001: Structural Analysis of Cranes (for civil heavy lifting structures) – Classroom Theory + Case Study	2 Days
Structural Design Code Based Training - ACI 318: Concrete Building Code – Classroom Theory + Case Study	2 Days

D) Construction and Civil Technology Training Courses - 3/3

Geotechnical Forensic Technology – Classroom Theory + Case Study

- Is the same concept with FMEA for prevent civil structure from failure - more to geotechnical structures, i.e. slope, retaining wall, foundation and road embankment settlements at approach structures.

3 Days



Geotechnical & Soil Engineering Based Training - Soil Investigation and Interpretation – Classroom Theory + Case Study

2 Days

Geotechnical & Soil Engineering Based Training - Slope Stability Analysis – Classroom Theory + Case Study

2 Days

Geotechnical & Soil Engineering Based Training - Retaining Wall Design – Classroom Theory + Case Study

2 Days

Construction & Site Execution Courses - Site Engineers, Supervisors, Foremen - Construction Project Management – Classroom Theory + Case Study

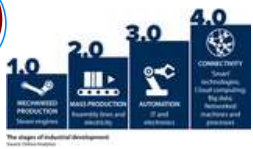
2 Days

E) Industrial Automation & IR 4 Technology Training Courses

E) Industrial Automation & IR 4 Technology Training Courses – 1/2

- **Introduction of Industrial IR4/I4 Technology – Classroom Theory + Case Study** — 2 Days
- **IR4/I4 & IoT - combination for intelligent and smart automation in industries – Classroom Theory + Case Study** — 2 Days

- **Understanding IR4/I4 and applying it intelligently in industries – Classroom theory + Case Study** — 2 Days
- **Understanding and appreciating IR4/I4 and IoT through practice – Classroom Theory + Hands-On Practical** — 4 Days



- **Practical approach to learning and understanding IR4/I4 and IoT – Classroom Theory + Hands-On Practical** — 4 Days
- **Industrial Compressor Centralised Monitoring System (CCMS) – Classroom Theory + Hands-On Practical**
  - Ladder Diagram (LD)
  - Function Block Diagram (FBD)
  - Structured Text (ST)
  - Instruction List (IL)
  - Sequential Function Chart (SFC)

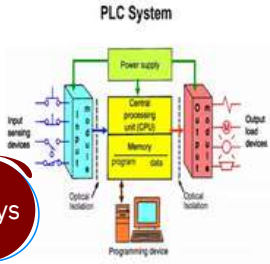
  — 4 Days

E) Industrial Automation & IR 4 Technology Training Courses – 2/2

Industrial Automation System – Programmable Logic Controller (PLC):

- Replacement and Installation
- Program Download and Upload
- System Program Verification by according to the program setting after replacement

3 Days



Industrial Automation System – System Sensors:

- Types of Sensors
- Function
- Installation, Setting and Calibration
- Application

3 Days

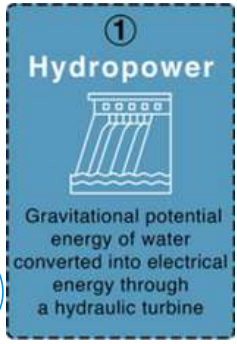
F) Industrial Green and Renewal Energy Training Courses

F) Industrial Green and Renewal Energy Training Courses - 1/3

Industrial Hydropower Energy Technology – Classroom Theory + Case Study

- Installation & Generation
- Function
- Storage
- Inspection & Maintenance
- Servicing
- Application

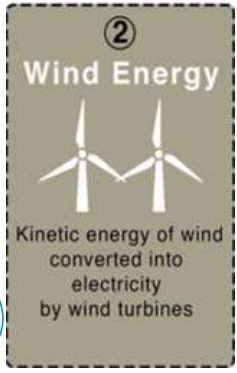
2 Days



Industrial Wind Energy Technology – Classroom Theory + Case Study

- Installation & Generation
- Function
- Storage
- Inspection & Maintenance
- Maintenance
- Servicing
- Application

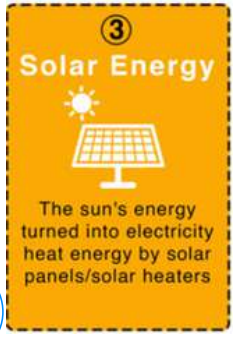
2 Days



Industrial Solar Energy Technology – Classroom Theory+ Case Study

- Installation & Generation
- Function
- Storage
- Inspection & Maintenance
- Maintenance
- Servicing
- Application

3 Days

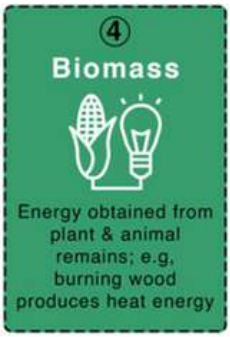


F) Industrial Green and Renewal Energy Training Courses - 2/3

Industrial Biomass Energy Technology – Classroom Theory + Case Study

- Installation & Generation
- Function
- Storage
- Inspection & Maintenance
- Servicing
- Application

2 Days



Industrial Geothermal Energy Technology – Classroom Theory + Case Study

- Installation & Generation
- Function
- Storage
- Inspection & Maintenance
- Maintenance
- Servicing
- Application

2 Days

Industrial Ocean Energy Technology – Classroom Theory + Case Study

- Installation & Generation
- Function
- Storage
- Inspection & Maintenance
- Maintenance
- Servicing
- Application

2 Days

F) Industrial Green and Renewal Energy Training Courses - 3/3

Industrial Hydrogen Energy Technology – Classroom Theory + Case Study

- Installation & Generation
- Function
- Storage
- Inspection & Maintenance
- Servicing
- Application

2 Days

Industrial Green Compressed Air Energy Technology – Classroom Theory + Case Study

- Installation & Generation
- Function
- Storage
- Inspection & Maintenance
- Servicing
- Application

2 Days

G) Industrial Steam Boiler, Pressure Vessel and Pipeline Training Courses

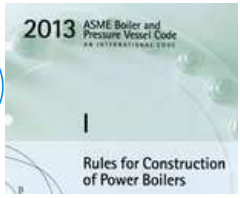
G) Industrial Steam Boiler, Pressure Vessel and Pipeline Training Courses – 1/3

- **Basic Steam Boiler Inspections Maintenance and Servicing Training – Classroom Theory + Hands-On Practical** — 5 Days
- **Intermediate Steam Boiler Inspections, Maintenance and Servicing Training – Competency Based Training – Classroom Theory + Hands-On Practical** — 5 Days

- **Advance Steam Boiler Inspections, Maintenance and Servicing Training – Competency Based Training – Classroom Theory + Hands-On Practical** — 5 Days
- **Best Practice of Boiler Maintenance, Inspection, Repair, and Alteration for Power, Process and Utility – Classroom Theory + Hands-On Practical** — 5 Days

- **Boiler Material Degradation, Corrosion, and Failure: Risk Identification and Inspection for Field Practitioners – Classroom Theory + Hands-On Practical** — 5 Days

- **BPVC – ASME I - Rulers for Construction for Power Boiler – Classroom Theory + Case Study** — 5 Days



G) Industrial Steam Boiler, Pressure Vessel and Pipeline Training Courses – 2/3

BPVC – ASME VIII – 2023 Division 1: Rules for Construction of Pressure Vessels Rulers for Construction for Power Boiler – Classroom Theory + Case Study — 5 Days

BPVC – ASME Section IX: Welding and Brazing Qualifications – Classroom Theory + Hands-On Practical — 5 Days

Pressure Vessels Material Degradation, Corrosion, and Failure: Risk Identification and Inspection for Field Practitioners – Classroom Theory + Hands-On Practical — 5 Days

Power Piping Engineering for fields practitioners according to ASME B31.1: Design, Maintenance, Inspection, Repair and Alteration – Classroom Theory + Hands-On Practical — 5 Days

G) Industrial Steam Boiler, Pressure Vessel and Pipeline Training Courses – 3/3

Power Piping Engineering for fields practitioners according to ASME B31.3: Design, Maintenance, Inspection, Repair and Alteration – Classroom Theory + Hands-On Practical

5 Days

Power Piping Engineering for fields practitioners according to ASME B31.8: Design, Maintenance, Inspection, Repair and Alteration – Classroom Theory + Hands-On Practical

5 Days

H) Industrial Crane & Material Handling Training Courses

H) Industrial Crane Material Handling Training Courses – Safe Handling and Engineering Design 1/1

Cranes Load Rating Chart Interpretation – Classroom Theory + Case Study	2 Days	
Overhead Travelling Crane (OTC) for DOSH Manufacturing License Renewal – Classroom Theory + Case Study	3 Days	
Tower Crane Design, Implementation and Operation – Classroom Theory + Case Study	3 Days	
Tower Crane Safe Operation, Maintenance and Inspection (Basic Level) – Classroom Theory + Site Visit Practical	3 Days	
Mobile Crane Safe Operation, Maintenance and Inspection (Basic Level) – Classroom Theory + Site Visit Practical	3 Days	
Crawler Crane Safe Operation, Maintenance and Inspection (Basic Level) – Classroom Theory + Site Visit Practical	3 Days	

H) Industrial Crane Material Handling Training Courses – Critical Maintenance Skills – Competency Based 1/2

Critical Maintenance Skills for the Electric Overhead Traveller Crane (EOTC) – Classroom Theory + Hands-On Practical — 4 Days

Critical Maintenance Skills for the Ship To Shore (STS) Container Crane – Classroom Theory + Hands-On Practical — 4 Days

Critical Maintenance Skills for the Rubber Tyred Gantry (RTG) Container Crane – Classroom Theory + Hands-On Practical — 4 Days

Critical Maintenance Skills for the Container Reach Stacker – Classroom Theory + Hands-On Practical — 4 Days

Critical Maintenance Skills for the Forklift – Classroom Theory + Hands-On Practical — 4 Days

Critical Maintenance Skills for the Narrow Aisle Reach Truck – Classroom Theory + Hands-On Practical — 4 Days

H) Industrial Crane Material Handling Training Courses – Critical Maintenance Skills – Competency Based 2/2

Critical Maintenance Skills for the Tower Crane – Classroom Theory + Hands-On Practical — 4 Days

Critical Maintenance Skills for the Mobile Crane – Classroom Theory + Hands-On Practical — 4 Days

Critical Maintenance Skills for the Crawler Crane – Classroom Theory + Hands-On practical — 4 Days

I) Industrial Operator Competency Based Training Courses - (OSHA - Act 514 - 2024)

I) Industrial Operator Competency Based Training Courses - (OSHA - Act 514 - 2024) – 1/2

Electric Overhead Travelling Crane (EOTC) Operator – Classroom Theory + Site Practical Evaluation — 2 Days

Ship To Shore (STS) Container Crane Operator – Classroom Theory + Site Practical Evaluation — 2 Days

Rubber Tyred Gantry Container Crane (RTG) Crane Operator – Classroom Theory + Site Practical Evaluation — 2 Days

Container Reach Stacker Operator – Classroom Theory + Site Practical Evaluation — 2 Days

I) Industrial Operator Competency Based Training Courses - (OSHA - Act 514 - 2024) – 2/2

Forklift Operator – Classroom Theory + Site Practical Evaluation — 2 Days

Narrow Aisle Reach Truck Operator – Classroom Theory + Site Practical Evaluation — 2 Days

Industrial Excavator Operator – Classroom Theory + Site Practical Evaluation — 2 Days

Industrial Earth-Moving Machinery Operator – Classroom Theory + Site Practical Evaluation — 2 Days

J) Offshore Operation Based Training Courses

J) Offshore Operation Based Training Courses – 1/2

Offshore Rigging and Slinging Training for Rigger- API RP 2D – Classroom Theory + Site Practical Evaluation	4 Days	
Offshore Pedestal Mounted Crane Inspector Certification - API RP 2D- Classroom Theory + Site Practical Evaluation	6 Days	
Offshore Pedestal Mounted Crane Mechanical - API RP 2D – Classroom Theory + Case Study	3 Days	
Offshore Pedestal Mounted Crane Hydraulic System (DIN ISO 1219) – Classroom Theory + Case Study	3 Days	
Offshore Pedestal Mounted Crane Electrical System (IEC 60079) – Classroom Theory + Case Study	3 Days	
Offshore Pedestal Mounted Crane Erection / Installation – Classroom Theory + Case Study	2 Days	

J) Offshore Operation Based Training Courses – 2/2

Offshore Pedestal Mounted Crane Engineering Design (API Specification 2C) – Classroom Theory + Case Study	2 Days	
Offshore Pedestal Mounted Crane Familiarization – Classroom Theory + Case Study	2 Days	
Offshore Pedestal Mounted Crane Commissioning – Classroom Theory + Case Study	2 Days	
Critical Maintenance Skills for the Offshore Mounted Pedestal Crane(API RP 2D) – Classroom Theory + Case Study	4 Days	
Offshore Lift Supervisor Training – Classroom Theory + Site Practical Evaluation	4 Days	
Offshore and Onshore Lifting Operation – Classroom Theory + Case Study	2 Days	

K) Certification Inspector Competency Training Courses

K) Certification Inspector Competency Training Courses – 1/2

Overhead Crane Inspector Certification - Classroom Theory + Site Practical Evaluation	6 Days	
Ship To Shore (STS) Container Crane Inspector Certification – Classroom Theory + Site Practical Evaluation	6 Days	
Rubber Tyred Gantry (RTG) Container Crane Inspector Certification – Classroom Theory + Site Practical Evaluation	6 Days	
Container Reach Stacker Inspector Certification – Classroom Theory + Site Practical Evaluation	6 Days	
Forklift Inspector Certification – Classroom Theory + Sita Practical Evaluation	6 Days	
Narrow Aisle Reach Truck Inspector Certification – Classroom Theory + Site Practical Evaluation	6 Days	

K) Certification Inspector Competency Training Courses – 2/2

Tower Crane Inspector Certification – Classroom Theory + Site Practical Evaluation — 6 Days

Mobile Crane Inspector Certification – Classroom Theory + Site Practical Evaluation — 6 Days

Crawler Crane Inspector Certification – Classroom Theory + Site Practical Evaluation — 6 Days

Onshore Rigging Inspector Certification – Classroom Theory + Site Practical Evaluation — 6 Days

L) Industrial Development Training Courses

L) Industrial Development Training Courses – 1/4

Advance Production Quality Planning (APQP) – Classroom Theory + Case Study	3 Days	
Failure Mode Effect Analysis (FMEA) – Classroom Theory + Case Study	3 Days	
Measurement System Analysis (MSA) – Classroom Theory + Case Study	3 Days	
Statistical Process Control (SPC) – Classroom Theory + Case Study	3 Days	
Production Part Approval Process (PPAP) – Classroom Theory + Case Study	3 Days	
Overall Equipment Effectiveness (OEE) – Classroom Theory + Case Study	3 Days	

L) Industrial Development Training Courses – 2/4

IATF 16949 Quality Core Tools Awareness – Classroom Theory + Case Study	3 Days	
IATF 16949 Quality Core Tools Implementation and Control – Classroom Theory + Case Study	3 Days	
7 QC Tools - Basic Standard and New – Classroom Theory + Case Study	3 Days	
8D Problem Solving Tools – Classroom Theory + Case Study	2 Days	
Root Cause Analysis Problem Solving Tools (RCA) – Classroom Theory + Case Study	2 Days	
Essential of PoKa-YoKe Technique of Error Proof – Classroom Theory + Case Study	2 Days	

L) Industrial Development Training Courses – 3/4

6 Thinking Hats Problem Solving Tools – Classroom Theory + Case Study	2 Days	
5S & 6S Implementation and Establishment - Classroom Theory + Case Study	2 Days	
Effective and Productive Manager Skills – Classroom Theory + Case Study	2 Days	
Effective and Productive Engineer Skills – Classroom Theory + Case Study	2 Days	
Effective Production Supervisor Skills – Classroom Theory + Case Study	2 Days	
Effective and Productive In Design and Implementation – Classroom Theory + Case Study	2 Days	

L) Industrial Development Training Courses – 4/4

Shop Floor Management Training – Classroom Theory + Case Study — 2 Days

Lean Six Sigma Awarenes Training - Classroom Theory + Case Study — 2 Days

Clean Room Design Training – Classroom Theory + Case Study — 2 Days

Total Preventive Maintenance (TPM) – Classroom Theory + Case Study — 2 Days

M) ISO Awareness and Internal Auditor Training Courses

M) ISO Awareness and Internal Auditor Training Courses - Classroom Theory + Case Study – 1/4

ISO 9001:2015 - Quality Management System Awareness Training	1 Days
ISO 9001:2015 - Quality Management System Internal Auditor Training	2 Days
ISO 14001:2015 - Environmental Management Awareness Training	1 Days
ISO 14001:2015 - Environmental Management Internal Auditor Training	2 Days
ISO 45001:2018 - Occupational Health and Safety Awareness Training	1 Days
ISO 45001:2018 - Occupational Health and Safety Internal Auditor Training	2 Days
ISO 22716:2007 - Cosmetic - Good Manufacturing Practice Awareness Training	1 Days
ISO 22716:2007 - Cosmetic - Good Manufacturing Practice Internal Auditor Training	2 Days

M) ISO Awareness and Internal Auditor Training Courses - Classroom Theory + Case Study – 2/4

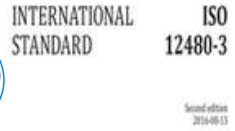
BS EN ISO/IEC 80079-34 - Explosive Atmospheres Application of Quality Systems for Ex Product Manufacture	3 Days
ISO 22000:2018 – Food Safety Management Awareness Training	1 Days
ISO 22000:2018 – Food Safety Management Internal Auditor Training	2 Days
ISO 5001:2018 – Energy Management Awareness Training	1 Days
ISO 5001:2018 – Energy Management Internal Auditor Training	2 Days
ISO 28004:2004 – Security Management System for Supply Chain Awareness Training	1 Days
ISO 28004:2004 – Security Management System for Supply Chain Internal Audit Training	2 Days

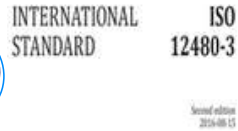
M) ISO Awareness and Internal Auditor Training Courses - Classroom Theory + Case Study – 3/4

IATF 16949:2016 – Quality Management System Awareness Training	1 Days
IATF 16949:2016 – Quality Management System Internal Auditor Training	2 Days
AS9100D:2016 International Aerospace Quality Management System Awareness Training	1 Days
AS9100D:2016 International Aerospace Quality Management System Internal Auditor Training	2 Days
Electrostatic Discharge - ANSI/ESD S20.20 – Awareness Training	1 Days
Electrostatic Discharge - ANSI/ESD S20.20 – Internal Auditor Training	2 Days

M) ISO Awareness and Internal Auditor Training Courses - Classroom Theory + Case Study – 4/4

- **IPC/WHMA-A-620 Standard Practice Awareness Training** — 2 Days
  

- **ISO 12480 -3:2020 –Safe Use -Tower Crane Training** — 2 Days
  

- **ISO 12480 -2:2020 –Safe Use - Mobile Crane Training** — 2 Days
  

- **ISO 21132:2019 –Marine Crane Operation and Maintenance Training** — 2 Days
  

- **ISO 12482:2014 –Crane Design Monitoring Period Training** — 2 Days
  

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