Global Horizon
TRAINING CENTER

Training Course:
Ingersoll Rand SL250 Compressor Maintenance

12 - 16 July 2026
Cairo (Egypt)
Holiday Inn & Suites Cairo Maadi, an IHG Hotel

Training Course:
Ingersoll Rand SL250 Compressor Maintenance

Training Course code: EN236541 From: 12 - 16 July 2026 Venue: Cairo (Egypt) - Holiday Inn & Suites Cairo Maadi, an IHG Hotel Training Course Fees: 4410 Euro

Introduction

This training program has been specifically designed by Global Horizon Training Center to equip maintenance personnel, engineers, and technicians with the technical knowledge and practical skills required to effectively maintain, troubleshoot, inspect, repair, and optimize the performance of Ingersoll Rand SL250 Compressor Systems.

The program provides a comprehensive understanding of compressor construction, operating principles, preventive and predictive maintenance practices, fault diagnosis techniques, component inspection procedures, overhaul requirements, and performance optimization methods. Through a combination of classroom instruction, practical demonstrations, hands-on maintenance exercises, and troubleshooting workshops, participants will gain the competence necessary to improve compressor reliability, reduce downtime, and maximize equipment availability.

Course Objectives

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

- Understand the operating principles and design features of the Ingersoll Rand SL250 Compressor.
- Identify compressor components and explain their functions.
- Apply safe work practices during compressor maintenance activities.
- Conduct routine inspections and preventive maintenance procedures.
- Diagnose mechanical, electrical, and operational faults.
- Perform compressor disassembly and inspection procedures.
- Evaluate component wear and determine maintenance requirements.
- Replace and maintain critical compressor components.
- Carry out alignment, lubrication, and assembly activities.
- Perform startup, commissioning, and performance verification procedures.
- Analyze compressor operating data and identify performance issues.
- Implement maintenance strategies that improve reliability and equipment life.

Course Methodology

The training program incorporates:

- Interactive lectures and technical presentations.
- Group discussions and knowledge-sharing sessions.
- Practical demonstrations on compressor systems.
- Hands-on maintenance exercises.
- Equipment inspection workshops.
- Troubleshooting simulations and fault-finding exercises.
- Maintenance planning exercises.
- Case studies based on industrial compressor applications.
- Performance testing and commissioning activities.
- Daily reviews and competency assessments.

Organizational Impact

Upon completion of this program, organizations can expect:

- Improved compressor reliability and operational availability.
- Reduced equipment failures and maintenance costs.
- Enhanced technical competency of maintenance personnel.
- Improved fault diagnosis and troubleshooting efficiency.
- Reduced downtime and production interruptions.
- Increased compressor service life.
- Better maintenance planning and execution.
- Improved operational safety.
- Enhanced energy efficiency and performance monitoring.
- Stronger maintenance and reliability culture.

Target Audience

This course is designed for:

- Mechanical Maintenance Engineers
- Rotating Equipment Engineers
- Reliability Engineers
- Maintenance Supervisors
- Compressor Technicians
- Mechanical Technicians
- Operations Personnel
- Maintenance Planners
- Asset Integrity Engineers
- Technical Service Engineers
- Plant Maintenance Personnel

Outlines

Day 1: Ingersoll Rand SL250 Compressor Fundamentals

Compressor Technology Fundamentals

- Principles of compressed air generation
- Industrial compressor applications
- Compressor classifications and operating concepts
- Overview of Ingersoll Rand compressor technologies

Ingersoll Rand SL250 Design and Construction

- Compressor configuration and specifications
- Airend design and operation
- Drive systems and transmission components
- Cooling and lubrication systems

Major Compressor Components

- Airend assembly

- Bearings and seals
- Inlet control systems
- Oil separation system
- Cooling components
- Electrical and control systems

Practical Workshop

- Identification of SL250 compressor components
- Compressor walk-down inspection
- Safety inspection exercises
- Review of operation and maintenance manuals

Day 2: Preventive Maintenance and Inspection Techniques

Maintenance Best Practices

- Preventive maintenance requirements
- Predictive maintenance concepts
- Reliability-centered maintenance principles
- Maintenance planning and scheduling

Inspection Procedures

- Visual inspection techniques
- Vibration monitoring
- Temperature monitoring
- Lubricant condition monitoring
- Leak detection methods

Routine Maintenance Activities

- Air filter maintenance

- Oil filter replacement
- Separator element maintenance
- Cooling system maintenance
- Drive coupling inspections

Practical Workshop

- Filter replacement exercises
- Lubrication system inspection
- Vibration measurement practice
- Temperature monitoring exercises
- Maintenance checklist preparation

Day 3: Compressor Troubleshooting and Fault Diagnosis

Understanding Compressor Failures

- Common mechanical failures
- Electrical system failures
- Performance-related problems
- Operational issues

Troubleshooting Methodologies

- Root cause analysis
- Fault identification techniques
- Diagnostic procedures
- Reliability improvement methods

Performance Monitoring

- Pressure analysis
- Flow analysis

- Temperature analysis
- Power consumption monitoring

Practical Workshop

- Troubleshooting simulated compressor faults
- Vibration analysis exercises
- Performance data interpretation
- Fault diagnosis case studies
- Corrective action planning

Day 4: Compressor Disassembly, Inspection and Repair

Compressor Shutdown Procedures

- Isolation procedures
- Lockout/tagout requirements
- Safety precautions

Disassembly Procedures

- Airend disassembly
- Component handling techniques
- Inspection procedures
- Measurement and dimensional checks

Component Repair and Replacement

- Bearing replacement
- Seal replacement
- Coupling maintenance
- Cooling system repairs
- Lubrication system servicing

Practical Workshop

- Compressor component disassembly
- Bearing inspection and replacement
- Seal replacement exercises
- Dimensional measurement activities
- Repair assessment and reporting

Day 5: Reassembly, Testing and Commissioning

Reassembly Procedures

- Component installation procedures
- Torque requirements
- Alignment techniques
- Lubrication requirements

Commissioning Activities

- Pre-startup inspections
- Startup procedures
- Functional testing
- Safety verification

Performance Verification

- Pressure testing
- Flow testing
- Temperature monitoring
- Efficiency evaluation

Practical Workshop

- Compressor reassembly exercise

- Alignment using precision tools
- Startup and commissioning practice
- Performance testing activities
- Final troubleshooting and competency assessment

Registration form on the Training Course: Ingersoll Rand SL250 Compressor Maintenance

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

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Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
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Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
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