



Training Course: Fire Alarm Panels for Industrial Facilities: Best Practices and Standards

> 13 - 24 October 2025 London (UK) Landmark Office Space - Portman Street

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Training Course: Fire Alarm Panels for Industrial Facilities: Best Practices and Standards

Training Course code: HE236124 From: 13 - 24 October 2025 Venue: London (UK) - Landmark Office Space - Portman Street Training Course Fees: 9800 🛛 Euro

Introduction

In industrial environments, fire risks are significantly higher due to the presence of combustible materials, complex systems, and high-energy operations. A properly designed and maintained fire alarm panel is a critical component in managing these risks. These panels not only initiate alarms but also integrate with other life safety systems such as gas suppression, sprinkler activation, and emergency shutdowns.

This intensive 10-day training program, designed by Global Horizon Training Center, focuses on the implementation of fire alarm panels in industrial facilities with an emphasis on best practices, technical compliance, and integration with wider safety systems. It provides participants with both theoretical knowledge and practical skills aligned with global standards including NFPA 72, EN 54, and BS 5839, ensuring the highest level of system performance and regulatory compliance.

Objectives

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

- Understand the operational requirements of fire alarm panels in industrial settings
- Design and configure fire alarm panels to meet industrial safety standards
- Integrate fire panels with suppression systems and plant-wide emergency protocols
- Conduct inspections, testing, and maintenance in line with international codes
- Troubleshoot panel-related faults efficiently and implement corrective actions
- Assess compliance with NFPA, EN, and BS standards
- · Align fire alarm systems with broader safety and risk management strategies

Course Methodology

- Instructor-led technical lectures
- · Hands-on exercises using simulators or demo panels
- Case study analysis of real industrial incidents
- · Interactive workshops on panel configuration and programming
- · Group activities focused on troubleshooting scenarios



• Technical documentation reviews and compliance exercises

Organizational Impact

By investing in this training, organizations can expect:

- Improved reliability and functionality of fire detection systems
- · Enhanced workforce capability in safety-critical operations
- · Reduced risk of downtime and property loss due to system failures
- Higher inspection pass rates and better regulatory compliance
- · Cost savings through in-house troubleshooting and maintenance
- · Increased operational readiness in fire emergency situations

Target Audience

This program is designed for:

- Fire alarm technicians and engineers
- · Safety officers and HSE professionals in industrial facilities
- · Facility and plant maintenance personnel
- · Electrical and instrumentation engineers
- · Contractors and system integrators in fire protection
- Emergency response and safety compliance teams

Course Outline

Day 1: Fundamentals of Fire Detection in Industrial Settings

- · Industrial fire risks and response requirements
- Role and types of fire alarm panels
- · Introduction to conventional and addressable systems
- Overview of international standards NFPA 72, EN 54, BS 5839

Day 2: Fire Alarm Panel Components and System Architecture



- · Control units, input/output devices, and peripherals
- Detection loops and notification circuits
- Panel layout and wiring best practices
- · Sensor types heat, smoke, flame, beam detectors

Day 3: Designing Fire Alarm Systems for Industrial Facilities

- Risk-based system design and zoning
- Area classification hazardous zones, high-ceiling spaces, harsh environments
- Coverage requirements and detector spacing
- Panel selection and load capacity calculations

Day 4: Configuration and Programming of Fire Alarm Panels

- · Configuring addressable systems and logic functions
- Cause-and-effect programming
- Setting up alarm thresholds, delays, and user access levels
- Hands-on simulation: Programming devices and loops

Day 5: Integration with Other Safety Systems

- Fire panels and gas suppression systems
- Interface with HVAC shutdown, access control, SCADA, and ESD
- Voice evacuation and public address integration
- Communication protocols Modbus, BACnet, RS485

Day 6: Testing, Commissioning, and Inspection

- · Pre-commissioning checklists and system validation
- Functional and acceptance testing procedures
- Inspection scheduling and documentation
- Testing standards per NFPA 72 and EN 54 guidelines



Day 7: Troubleshooting and Fault Resolution

- Diagnostic tools and interpreting panel messages
- Common faults: open loops, short circuits, device failures
- Step-by-step fault tracing techniques
- Troubleshooting case exercises using mock scenarios

Day 8: Maintenance Planning and Documentation

- Preventive and corrective maintenance programs
- · Recordkeeping and compliance with logbook requirements
- · Maintenance standards and service intervals
- Managing firmware and software updates

Day 9: Legal Compliance and Regulatory Frameworks

- Overview of global codes: NFPA 72, EN 54, BS 5839
- · Local authority and civil defense requirements
- · Compliance audits and certification processes
- Aligning with insurance and safety audit criteria

Day 10: Practical Workshop and System Evaluation

- Practical assessment: Design and program a panel for an industrial site
- Simulation: Fault diagnosis and resolution under timed conditions
- Group project: Safety integration and system mapping
- Final review, participant feedback, and closing session



Registration form on the Training Course: Fire Alarm Panels for Industrial Facilities: Best Practices and Standards

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

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