



Fire Watch Essentials for Hot Work Safety and Prevention

9 – 13 August 2027
Singapore

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Ref: 103600678_108996 **Date:** 9 – 13 August 2027 **Location:** Singapore **Fees:** 5700 Euro

Course Overview:

Fire Watch Training: Hot Work Safety & Fire Prevention is a practical five-day corporate safety course designed to prepare personnel to safely monitor welding, cutting, grinding, brazing, soldering, and other hot-work activities. The course focuses on Fire Watcher Roles and Responsibilities, fire hazard identification, hot-work controls, permit requirements, emergency response, and Post Hot Work Monitoring.

Participants learn how fires start and spread, how sparks and heat can travel beyond the immediate work area, and how to identify unsafe conditions before work begins. The course also develops practical knowledge of Fire Watch Duties, Fire Watch inspection, Fire Watch procedures, combustible-material control, extinguisher selection, communication with hot-work personnel, and stop-work authority.

By combining Fire Watch Training, Hot Work Safety Training, Fire Prevention Training, and Industrial Fire Safety Training, the program helps participants understand what to check, what to monitor, when to stop work, and how to maintain safe conditions before, during, and after hot work.

Target Audience:

- Fire Watchers and Spark Watch personnel
- Welders and welding assistants
- Maintenance technicians
- Mechanical and fabrication personnel
- HSE officers and safety supervisors
- Permit receivers and permit issuers
- Construction and operations personnel
- Contractor safety representatives

Targeted Organizational Departments:

- Health, Safety & Environment
- Maintenance
- Engineering
- Operations
- Mechanical and Fabrication
- Construction and Projects
- Facilities Management
- Emergency Response

Targeted Industries:

- Oil and gas
- Petrochemical and refining
- Construction
- Manufacturing
- Power and utilities
- Mining
- Marine and shipyards
- Metal fabrication
- Industrial maintenance
- Facility management

Course Offerings:

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

- Explain Fire Watch requirements and responsibilities.
- Identify fire and hot-work hazards.
- Recognize welding, cutting, and grinding risks.
- Review and follow Hot Work Permit requirements.
- Conduct Fire Watch inspections before work begins.
- Control combustible materials and spark migration.
- Monitor changing worksite conditions.
- Apply stop-work authority when unsafe conditions develop.
- Select appropriate fire extinguishers.
- Respond correctly to fire emergencies and evacuation requirements.
- Apply Fire Watch checklists and procedures.
- Conduct effective Post Hot Work Monitoring.

Training Methodology:

The course combines short instructor-led sessions with practical workplace examples, group discussions, hazard-identification activities, permit reviews, Fire Watch scenarios, and industrial case studies.

Participants examine typical hot-work situations and identify hazards such as combustible materials, sparks, flammable vapours, openings, drains, concealed spaces, and unsafe equipment. Group activities focus on reviewing Hot Work Permits, applying Fire Watch checklists, selecting appropriate controls, and deciding when work should be stopped.

The methodology also includes guided discussions on Fire Watch positioning, communication, extinguisher readiness, emergency evacuation, and post-work monitoring. Daily reflection sessions reinforce the most important Fire Watch and fire prevention practices for workplace application.

Course Toolbox:

- Fire Watch Checklist examples
- Hot Work Permit examples
- Fire hazard identification guide
- Fire Watch inspection checklist
- Fire extinguisher selection guide
- Welding and grinding hazard examples
- Post Hot Work Monitoring checklist
- Emergency response scenarios
- Stop-work decision examples
- Hot-work case studies

Note: Physical tools and equipment are not provided. The course provides insights, examples, and guidance on relevant Fire Watch and hot-work safety tools.



Course Agenda:

Day 1: Fire Fundamentals & Hot Work Hazards

- **Topic 1:** Fire Watch Training fundamentals and Fire Watcher responsibilities
- **Topic 2:** Combustion, fire tetrahedron, and fire development
- **Topic 3:** Heat transfer: conduction, convection, and radiation
- **Topic 4:** Flammable materials, vapours, gases, and ignition sources
- **Topic 5:** Welding, cutting, grinding, and other hot-work hazards
- **Topic 6:** LEL, UEL, and atmospheric fire hazards
- **Reflection & Review:** Recognizing common fire and ignition hazards

Day 2: Fire Prevention & Hot Work Controls

- **Topic 1:** Fire Prevention Training and hierarchy of controls
- **Topic 2:** Cold-work alternatives and hot-work designated areas
- **Topic 3:** Hot Work Permit requirements
- **Topic 4:** Fire Hazard Identification around the work area
- **Topic 5:** Combustible-material removal, isolation, and protection
- **Topic 6:** Spark migration, welding blankets, barriers, and housekeeping
- **Reflection & Review:** Selecting effective hot-work fire controls

Day 3: Fire Watch Duties & Inspection

- **Topic 1:** Fire Watch Duties before, during, and after hot work
- **Topic 2:** Fire Watch Inspection and work-area preparation
- **Topic 3:** Reviewing Hot Work Permits and hazard assessments
- **Topic 4:** Fire Watch positioning, communication, and line of sight
- **Topic 5:** Monitoring changing conditions and nearby activities
- **Topic 6:** Stop-work authority and restoring safe conditions
- **Reflection & Review:** Applying the Fire Watch Checklist



Day 4: High-Risk Hot Work & Fire Watch Operations

- **Topic 1:** Continuous Fire Watch during hot work
- **Topic 2:** Welding Safety Training
- **Topic 3:** Cutting and Grinding Safety
- **Topic 4:** Hot work around tanks, piping, equipment, and enclosed areas
- **Topic 5:** Gas testing and atmospheric monitoring awareness
- **Topic 6:** High-risk areas, concealed spaces, and impaired fire protection
- **Reflection & Review:** Learning from hot-work incidents

Day 5: Fire Extinguishers, Emergency Response & Monitoring

- **Topic 1:** Fire classes and extinguisher selection
- **Topic 2:** Fire Extinguisher Training and PASS technique
- **Topic 3:** Fire extinguisher inspection and readiness
- **Topic 4:** Fire Emergency Response Training and evacuation
- **Topic 5:** Post Hot Work Monitoring and hidden fire hazards
- **Topic 6:** Final Fire Watch inspection and permit closeout
- **Reflection & Review:** Applying the full Fire Watch Procedure

FAQ:

What specific qualifications or prerequisites are needed for participants before enrolling in the course?

No advanced qualification is required. Participants should be able to follow workplace safety instructions, communicate effectively, and understand basic site emergency procedures.

How long is each day's session, and is there a total number of hours required for the entire course?

Each day's session is generally structured to last around 4–5 hours, with breaks and interactive activities included. The total course duration spans five days, approximately 20–25 hours of instruction.

How long should Fire Watch monitoring continue after hot work?

The duration depends on the applicable site procedure, permit requirements, workplace conditions, and fire risk. Fire Watch personnel should remain in position for the required monitoring period and continue checking for smoldering materials, hidden ignition, or re-ignition before the area is formally released.



How This Course is Different from Other Fire Watch Training Courses:

This course focuses on the complete Fire Watch process, not only basic fire extinguisher use. Participants learn how to identify hazards, review Hot Work Permits, prepare the work area, monitor welding and grinding activities, stop unsafe work, respond to emergencies, and complete Post Hot Work Monitoring.

The course combines Fire Watch Training, Hot Work Safety Training, Fire Prevention Training, and Industrial Fire Safety Training in one practical program. It emphasizes workplace observation, hazard control, communication, permit discipline, decision-making, and emergency response.

The result is a concise and practical Fire Watch Safety Course that prepares personnel to understand what to check, what to monitor, when to stop work, and how to maintain safe conditions before, during, and after hot work.