

# Advanced Industrial Firefighting Techniques



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## Introduction:

This advanced firefighting training course is aimed at training learners in both theoretical and practical firefighting skills and techniques, in order to minimize loss of life and property, by extinguishing fires in their early stages. The best method of stopping a fire is to prevent it. The actions taken to control a fire during the first few minutes following its discovery will determine whether it will be contained or will it spread. Having firefighting systems in place will help save lives and loss of property in a fire should break out.

This course entails revision of all knowledge gained in the basic course as well as additional firefighting techniques and how to apply them in a safe and correct manner. Increasing one's knowledge and skills in the handling of fire is only going to mean better handling of an emergency situation. Although firefighting basics can always be picked up from common sense and a few general instructions, too many lives are lost and too much property is damaged every year worldwide to simply rely on instinct. At Action, this course offers comprehensive, advanced fire awareness training for emergency situations. This course encompasses all skills and knowledge gained in basic firefighting and in addition teaches practical knowledge and the use of hand operated firefighting equipment. Also, part of this very popular course is fire prevention and fire rescues.

## Who Should Attend?

Firefighters (I & II), Senior Firefighters, Fire Operators, Senior Fire Operators, Fire Coordinators, Fire Officers, Industry Personnel.

# **Course Objectives:**

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

- Know more about the theory of combustion
- Control firefighting operations
- Organize and train fire parties
- Inspect and service fire detection
- Inspect extinguishing systems and equipment
- Investigate and compile reports on incidents involving fire
- Know about emergency plans
- Know more about identification of fire hazards
- Know more about types of fire attacks







- Know the principles of fire safety and fire prevention
- Know about PPE
- Be more able to handle emergencies
- Be more able to apply practical firefighting extinguishers, hose reels & hose and hydrant drills

# **Course Outline:**

#### Fire Introduction

- Induction, aims and learning outcomes
- Health & safety brief
- Basic fire awareness
- Fixed installations
- Giving warning of a fire
- The burning process
- The Fire Tetrahedron, Classes of fire
- PPF
- Principles of fire safety and fire prevention
- Identification of fire hazards
- Fire prevention measures, inspection techniques and pre-fire planning

#### Extinguishing Mediums & Extinguishers/ Properties & Use of Various Fire-Fighting Media

- Water, Foam, Carbon Dioxide
- Dry Chemical Powder, CO2, Halon

Fire Equipment Requirements & Hazards of Incorrect Use

**Methods of Operation** 

**Operating Procedure** 

Care and Maintenance of Fire Equipment

**How Fire Spreads & Fire Prevention** 

Fire Hose Reels

Fire Buckets & Fire Blankets





**Lifting and Carrying Techniques** 

Fire Suppression with Hose & Hydrant Operations

**Types of Fire Attacks** 

**Emergency Plan Basics** 

Fire Prevention, Principles & Techniques

#### **Theory of Combustion**

- Fire triangle, Fire tetrahedron
- Ignition, Temperatures
- Spontaneous ignition
- Auto ignition or self-ignition
- Spontaneous combustion, Range of flammability
- Effect of heat on different combustibles and transmission of heat

#### **Principles of Control of Fires**

- Starvation (removal or limitation of fuel)
- Smothering (limitation of oxygen)
- Cooling (limitations of temperature)



