

# FIRETRACE®

A HALMA COMPANY



# THE WORLD LEADER

## in special hazard fire suppression solutions

Firetrace was the first name in innovative fire suppression solutions and is the first to adapt to new technologies.

Globally accepted as the leader in special hazard fire protection, Firetrace International supplies powerful, flexible fire management solutions worldwide. Firetrace Aerospace, a wholly-owned subsidiary of Firetrace USA, applies the Firetrace core product line to the aviation and defense markets.

Since its inception in 2000, Firetrace International has been headquartered in Scottsdale, Arizona, USA. Growing from a modest 2,000 ft<sup>2</sup> (185 m<sup>2</sup>) facility,

Firetrace has now expanded to occupy over 80,000 ft<sup>2</sup> (7500 m<sup>2</sup>) of office and warehouse space in its current facility. Firetrace's European operations are headquartered just outside Gatwick Airport in London.

To ensure timely, effective support around the world, Firetrace also maintains sales offices in Sydney, Singapore, New Delhi, Dubai and Johannesburg.



# FIRETRACE HISTORY

## 1980s

Firetrace systems developed as a solution for the frequent fires that occurred in farm harvesting equipment due to mechanical failures and the build-up of plant materials.

Firetrace's robust tubing-based system proved the ideal solution to the dirt, vibration and temperature variations that made traditional automatic solutions impractical.

## 2000

Firetrace International founded to market Firetrace's unique systems worldwide.

## 2011

Firetrace expanded its offering with a range of clean agent engineered systems, and the development of E4 – the next generation of engineered systems designed specifically for the unique properties of 3M™ Novec™ 1230.

## 2015

Firetrace International acquired by Halma plc, the market leader in specialist safety, health and environmental technologies.

## 2018

Firetrace launches its new Dual Action System for complex micro-environments, providing twice the protection of a single local application or total flooding system.

## 250,000+

Firetrace systems have been installed around the world to date; in CNC machines, buses, electrical control panels, fume hoods, engine and generator compartments, hazardous storage cabinets and countless other applications.



# PRE-ENGINEERED SYSTEMS: The original is still innovating

Designed for simple installation, often very near the source of a potential fire, Firetrace is a self-activating suppression system that reliably suppresses fires in seconds. It provides a low maintenance, cost-effective solution to the problem of 'micro-environment' fire protection.

Micro-environments are applications where the hazard is typically contained within a critical enclosure, such as equipment, machines, vehicles, or storage compartments.

Firetrace systems can be installed in virtually any enclosed space where high-value assets are located, or where an increased risk of fire could be mitigated by an automatic fire suppression system.

## THE FIRETRACE ADVANTAGE

The effectiveness of a genuine Firetrace system comes from our proprietary polymer tubing that will rupture when exposed to the heat and flame of a growing fire.

This specialized Firetrace Detection Tubing is UL component listed, combines leak resistance, flexibility, durability, and precise temperature sensitivity, in order to react quickly when the heat from a fire is present. The Firetrace tubing connects to one of our custom engineered valves and a Firetrace cylinder that contains the best fire suppression agent for a particular hazard.

Firetrace systems operate without the need for any power source – external or battery – and require no releasing panel to operate.

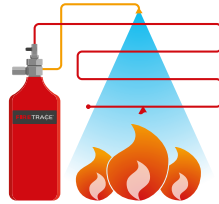






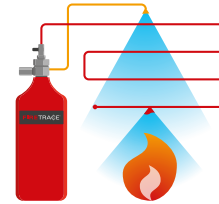
### Direct release system

A local application system that uses the Firetrace detection tubing to both sense the fire and deliver the agent to the protected space. When exposed to fire the tubing bursts, forming a nozzle that directs the suppression agent.



### Indirect release system

A total flooding system that uses the Firetrace detection tubing only as a sensing device. Upon detection, agent is delivered into the protected space using pipes or hoses and fixed nozzles.



### Dual action system

Combines the functionality of the direct local application system and indirect total flooding system. By delivering agent through both nozzles and the tubing burst, a more complete and effective suppression is achieved.

## Choosing the right agent

Firetrace's systems are compatible with most commercially available fire suppression agents, including:

- ✦ Novec™ 1230
- ✦ Foam

- ✦ FM-200™
- ✦ Black Widow

- ✦ Dry Chemical (ABC, BC, D)
- ✦ CO<sub>2</sub>

## FIRETRACE BENEFITS:



**HIGHLY RELIABLE IN HARSH, EXTREME ENVIRONMENTS**



**NO ELECTRICITY REQUIRED OFFERING 24/7 UNINTERRUPTED SERVICE**



**TUBING EASILY ROUTED TO VIRTUALLY ANY HAZARD LOCATION**



**IMMEDIATE DETECTION AND DELIVERY**



**INEXPENSIVE INSTALLATION, MAINTENANCE AND RECHARGE**



**CHOICE OF CYLINDERS FOR GREATER FLEXIBILITY**



**NO FALSE ALARMS OR DISCHARGES**



# ENGINEERED SYSTEMS:

## An evolution in engineered clean agent systems

Firetrace's engineered system breaks the mold. It smashes the design limitations found in most clean agent systems thanks to a 500 PSI (35 bar) system pressurization capability using 3M™ Novec™ 1230 Fire Protection Fluid.

### Why 500 PSI?

For years most engineered systems have been charged to 360 PSI (25 bar). It started with common Halon systems and carried over to the first Halon alternative gas systems. Cylinders for these systems were designed to accommodate the pressure and volatility of these gases. With the widespread acceptance of Novec™, most manufacturers continued this trend.

However, Novec™ doesn't share the same characteristics of other agents. With its lower volatility, it can be safely pressurized to 500 PSI (35 bar) in the same cylinder that could only accept other agents at 360 PSI (25 bar).

### SYSTEM SIZES

Cylinders are available in eight sizes, with fill volumes ranging from 8 lbs to 1,300 lbs (4 kg to 584 kg).



Novec™ engineered systems are UL listed and FM approved. FM-200™ engineered systems are UL listed.

# MORE PERFORMANCE

# MORE DESIGN FLEXIBILITY

# MORE SAVINGS

Firetrace's engineered system was designed from the beginning to optimize the equipment around the unique properties of Novec™. The result is a system that performs significantly better using the cleanest, most environmentally friendly clean agent without a substantial cost impact. Long held design limitations and conventions are a thing of the past – enabling new levels of flexibility in system design, including:

- ✦ Largest single tank capacity in the industry – 1,300 lbs
- ✦ Superior tee splits - Bull T's up to 90/10 split
  - Side T's up to 53/47 & 95/5 split
- ✦ Larger 2.5" nozzle - Nozzle throws at 40 ft (12.19 m) x 40 ft (12.19 m) (Radial throws at equivalent)
- ✦ Height differential and distance from cylinder to nozzle – both up to 300% greater than traditional systems
- ✦ 636% agent volume to pipe volume

## Clean agent decision criteria

Clean	✓	Safe for Equipment	✓
Effective	✓	Economical	✓
Fast Acting	✓	Space Efficient	✓
Broad Spectrum Fire Effectiveness	✓	Ability to Retrofit Halon Systems	✓
Safe for People	✓	Commercially Available	✓
Safe for the Planet	✓	Long-Term Sustainability	✓

Firetrace also offers 360 PSI/25 bar FM-200™ systems in eight cylinder sizes.

## TYPICAL APPLICATIONS FOR THE FIRETRACE ENGINEERED CLEAN AGENT SYSTEMS:

- ✦ ARCHIVES
- ✦ ART GALLERIES
- ✦ BANK VAULTS
- ✦ CONTROL ROOMS
- ✦ DATA CENTERS
- ✦ ENERGY STORAGE SYSTEMS
- ✦ FLAMMABLE LIQUID STORAGE
- ✦ HISTORICAL BUILDINGS
- ✦ HOSPITALS
- ✦ LIBRARIES
- ✦ MUSEUMS
- ✦ OFFSHORE DRILLING
- ✦ PORTABLE ENCLOSURES
- ✦ TELECOMMUNICATIONS
- ✦ TEST LABS



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**Over 500 authorized Firetrace  
distributors worldwide**

From hazard analysis, quotations and installations, to service and system support; Firetrace distributors are there to help you reliably and effectively protect your assets.

Firetrace is the world leader in special hazard protection. Safeguard your critical equipment and micro-environments with pre-engineered systems using the world-renowned Firetrace Detection Tubing. Or for larger rooms and spaces take advantage of the game-changing engineered system with its new levels of flexibility in system design.



Firetrace currently has more than 20 international approvals and certifications, including UL, CE, FM, ULC & ISO9001. Approvals and certifications vary by system type and agent.