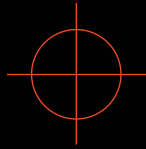


SITE

SPECIFIC



PROTECTING

YOUR

MICRO-ENVIRONMENT

**OFF-ROAD MACHINES
FIRE PROTECTION SOLUTIONS**



FIRETRACE[®]
AUTOMATIC FIRE SUPPRESSION SYSTEMS

Even Small Fires Can Lead to Heavy Losses



Firetrace systems are found in:

- Farm combines
- Logging trucks
- Backhoes
- Bulldozers
- Container Handlers
- Mining Equipment



The red Firetrace cylinder can be seen here, along with the red detection tubing as it is run to the critical areas



Firetrace offers options such as a manual activation station and a warning horn, which is triggered by activation of the system.

Many industries utilize very expensive, heavy equipment and machines in off-road applications. This equipment, while functionally very reliable, can be susceptible to elements of the working environment.

Over time hoses can fatigue and fail, or leaves, twigs and pine straw can build up on the machine and often accumulates in the engine compartment or other hazardous areas. The heat of the engine and exhaust systems can easily ignite the leaking fluid or dry materials, leading to a fire that can envelope the entire machine. In some cases, additional liability arises from a potential secondary grass or wildfire.

Most machines are equipped with manually operated hand fire extinguishers. While these units may work well in the hands of an experienced operator, often a fire may have grown too large to manually control by the time the operator has detected the fire.

Automatic systems for these machines have been troublesome. The vibration, temperature extremes and chaff materials often interfere with detection and operation of these systems. Also, the cost and complexity of these systems has often put automatic protection out of reach for many owners.

Firetrace automatic fire suppression systems were designed specifically for the harsh environment of off-road vehicles. In spite of working conditions that would cause other fire systems to fail, Firetrace's unique design enables it to endure the shocks and vibration associated with the operation of these off-road machines.

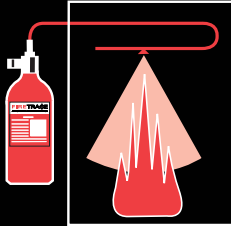
The proprietary red Firetrace Detection Tubing is the key to catching fires when they start. By routing the tubing through the compartment to be protected, Firetrace's detection can get right to the source of the fire. As the detection tubing is a polymer composition, it is immune to the vibration and shocks that would be harmful to other detection systems.

In the event of a fire, The Firetrace system will release its extinguishing agent automatically, resulting in suppression times faster than could be achieved using manual suppression. Every second saved results in less damage- and ultimately down-time – for the machine.

How it works

Firetrace offers two types of suppression systems, Direct and Indirect. Both systems are compatible with both low and high pressure agents.

DIRECT DELIVERY

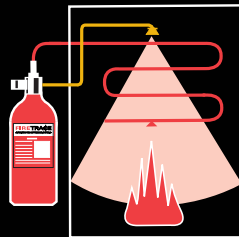


DIRECT RELEASE - LOW PRESSURE SYSTEMS

The Direct Low Pressure (DLP) System utilizes the Firetrace Detection Tubing as both the fire detection device and the fire suppressant delivery system. The portion of the Tube nearest the hottest point of the fire ruptures, forming an effective discharge "nozzle". The pressure drop in the Tube releases the entire contents of the cylinder through this nozzle.

fectively suppressed.

INDIRECT DELIVERY



INDIRECT RELEASE - LOW PRESSURE SYSTEMS

With the Indirect Low Pressure (ILP) System, the Firetrace Detection Tubing is used only as a detection device. The fire suppression agent is delivered via copper tubing, stainless steel tubing or braided hose. Once the tube "bursts", the suppressant is discharged through strategically placed nozzles within the protected enclosure.

Firetrace is compatible with most commercially available agents, including clean agents, CO₂, dry chemical powders, foam, and water.

A Small Solution to a Big Problem

While rare, fires can be a significant problem, endangering personnel, equipment, worksites and even the environment. Firetrace provides an excellent solution to help prevent a small fire from becoming a major event.



Firetrace's Vehicle Applications

Firetrace has more than 50,000 systems installed protecting critical equipment worldwide. Firetrace has its origins in the late 1980's in the United Kingdom as a special hazard fire suppression system. Through the 1990's applications expanded to include enclosures such as machines, fume hoods, data centers and electrical cabinets as distribution increased in Europe.

In 2001, the worldwide rights to Firetrace were purchased by Firetrace USA, a group of fire suppression industry veterans who saw the value in creating fire suppression systems for "micro-environments". This concept is simply providing supplemental protection that suppresses fire quickly within the protected space before larger room or building systems would activate. As a result of this supplemental protection, fire damage, both direct and collateral, and costs associated with cleanup and downtime are significantly reduced or eliminated. Available in multiple system sizes (ranging from one pound systems to 50 pound systems)

utilizing a variety of fire suppressing agent options, Firetrace is now the choice fire suppressing system for virtually any enclosed application, including server racks and closets.

Firetrace can be fitted in virtually any rack, new or existing.

- Fast, reliable fire detection
- Clean agents that are safe for people, equipment and the environment — no cleanup required
- Installs in new or existing racks
- Doesn't interfere with installation or maintenance of equipment

FIRETRACE[®]
AUTOMATIC FIRE SUPPRESSION SYSTEMS

Distributor:

Firetrace is available exclusively through our worldwide distributors, each of which has been properly trained in the installation and maintenance of Firetrace systems. To locate the Firetrace distributor nearest you please contact us at:

Firetrace has more than 20 international approvals and listings including:



Approvals and listings vary by system type and agent.