

SITE  
SPECIFIC



PROTECTING

YOUR

MICRO-ENVIRONMENT

**CNC & EDM MACHINES  
FIRE PROTECTION SOLUTIONS**



**FIRETRACE**<sup>®</sup>  
AUTOMATIC FIRE SUPPRESSION SYSTEMS

“I’ve never had a fire in my shop, but I do know people who have...”

It only takes an instant to become one of those people “who have” experienced a fire in one of their machines. In today's world of tighter margins pushing shops to increase productivity or even 24/7 “lights out” production, there are many shop owners who lock the door each night and hope for the best.

Unfortunately, hope often isn't enough.

Several times each year companies suffer substantial damage, or even lose entire facilities, due to fire. Undetected, a fire in a machine can destroy the machine and spread to adjacent machines or through ducting to the building's structure. Even in the event the building sprinkler system activates the machine, and often much more, is lost. Collateral damage can often exceed the losses caused by the initial fire.



Concubine fermentet orat

Cutting, milling and grinding tools can be susceptible to fire, especially when using oil-based coolants. Mistakes in programming and other mechanical failures can quickly turn a normal operation into a hazardous situation. Fires in EDM machines frequently result from a drop in oil level or other anomaly. When this occurs, the ready supply of coolant oil and oil vapor can turn a small spark into a major fire in moments.



Pompeii agnascor adlauda

Should a fire occur many shops rely upon personnel to control the situation with a portable extinguisher, but unfortunately this often isn't adequate to suppress the fire. The increased danger to the staff, coupled with the increased time that is required to react, can be a costly gamble.

Fortunately, there is a better way, thanks to Firetrace.

Our unique fire detection and suppression system is on guard, even when your operators are away, ready to take action if needed. Our proprietary tubing snakes unobtrusively through the critical “hazard” areas of your cutting, milling or grinding tool. In EDM machines this same tubing encircles the base of the ram, hovering just above the oil's surface. Should a fire start, the tubing will detect it at its hottest point and deliver the extinguishing agent of your choice quickly and effectively to the working area.



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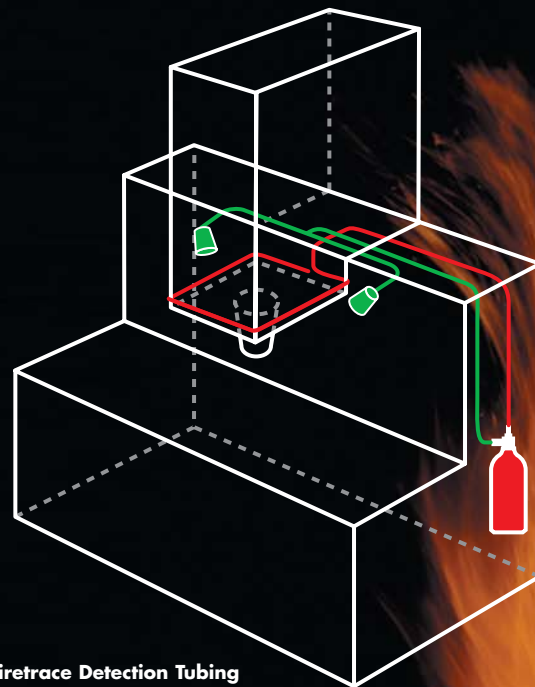
While fires are a rare occurrence, even one event can be devastating. The cost of the direct loss (equipment and facility damage) can be burdensome, but estimates are that the indirect costs of fire including business interruption and missed deadlines - which ultimately cost you customers - can often be four times as costly.



Firetrace helps protect your shop, equipment and personnel by quickly and efficiently containing and suppressing the fire. Given what is at stake, can you afford not to protect yourself with Firetrace?

## EDM

EDM machines, while typically safe, can become significant sources of fire due to the large amount of oil used in their operation. Firetrace approaches EDM protection with our Indirect system, typically using CO2 or FM-200. In the Indirect system, the red Firetrace Detection Tubing (FDT) is run from the cylinder and down the ram, circling the base of the ram just above the typical operating oil level. In the event of a fire, the pressurized FDT bursts, activating the system moments after the first flames become apparent. A set of nozzles, connected by piping to the Firetrace cylinder, is installed well above the oil surface on both side of the ram, then delivers the agent with an even, soft discharge that suppresses the fire without causing dispersion of the burning oil.

Unlike traditional sprinkler head-type systems, Firetrace offers 360 degrees of fire detection and suppression, leading to detection and suppression times up to 10 times faster than traditional systems. Firetrace also only responds to heat and flame, offering reliability without costly false discharges.

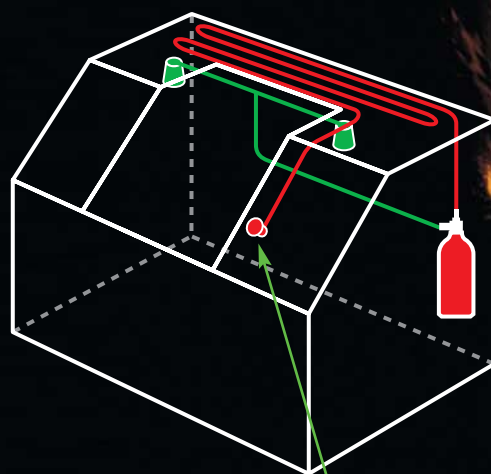





 Firetrace Detection Tubing  
 Indirect System Nozzle

## Cutting, Milling and Grinding Machines

Flash fires in machines using oil-based coolants require fast action in order to prevent significant damage to the machine. In these machines typically a Firetrace Indirect system is recommended. Firetrace's red Fire Detection Tubing (FDT), run inside the machine, provides detection right at the heart of the machine's operation, ensuring a quick activation should a fire break out. Upon sensing the flames, the FDT bursts, allowing the cylinder's valve to open and release the fire-suppressing agent to flow, via piping, to the nozzles directed to optimally deliver an even discharge into the working area.

Often when a customer reports that they have had a fire suppressed by Firetrace, they comment that they are able to return the machine to operation with minimal cleanup, following the determination and correction of the cause of the fire. On average more than one of these reports comes in weekly to Firetrace.



 Firetrace Detection Tubing  
 Indirect System Nozzle  
 Manual Pull (Tagged Pull Station)

All Firetrace Indirect systems can be equipped with manual releases, enabling an operator to activate the system at the first sign of trouble. Firetrace systems are also available with pressure switches, which can be configured to sound alarms or turn off machines and mist collectors. Firetrace is also ideal for protection of the facility's mist and dust collection systems.

## Machines and the Firetrace Technology

Firetrace is in use protecting over 10,000 machines 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 could see 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 1 lb. systems to 50lb. systems) utilizing a variety of fire suppressing agent options, Firetrace is now the choice fire suppressing system for virtually any enclosed application, including machines.

Firetrace can be fitted on virtually any machine, new or existing. A sampling of machines currently protected by Firetrace includes:

- ACME
- Anka
- Charmille
- Cincinnati
- Citizen
- Hawemat
- Ingersoll
- Index
- MGX
- Mitsubishi
- New Britton
- Schütte
- Stüder
- Takamaz
- Walter

**FIRETRACE**<sup>®</sup>  
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 International

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Scottsdale, AZ 85260 USA

1-866-607-1218 (US and Canada)

1-480-607-1218 (Elsewhere)

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