

SITE
SPECIFIC

PROTECTING

YOUR

MICRO-ENVIRONMENT

**CNC MACHINE
FIRE PROTECTION SOLUTIONS**



FIRETRACE[®]
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 a day companies suffer substantial damage, and can 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.

Cutting, milling and grinding processes 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.

Should a fire occur many shops rely upon personnel to try to control the situation with a portable extinguisher. Unfortunately, this often is not adequate to suppress the growing 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®.

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

Even one fire can be devastating to a company. The direct cost of fire (equipment and facility damage) can be burdensome, but indirect expenses such as business interruption and missed deadlines — which ultimately mean lost customers — can 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?



Red Firetrace Detection Tubing run unobtrusively through the working area



Mounted Firetrace system including pressure switches

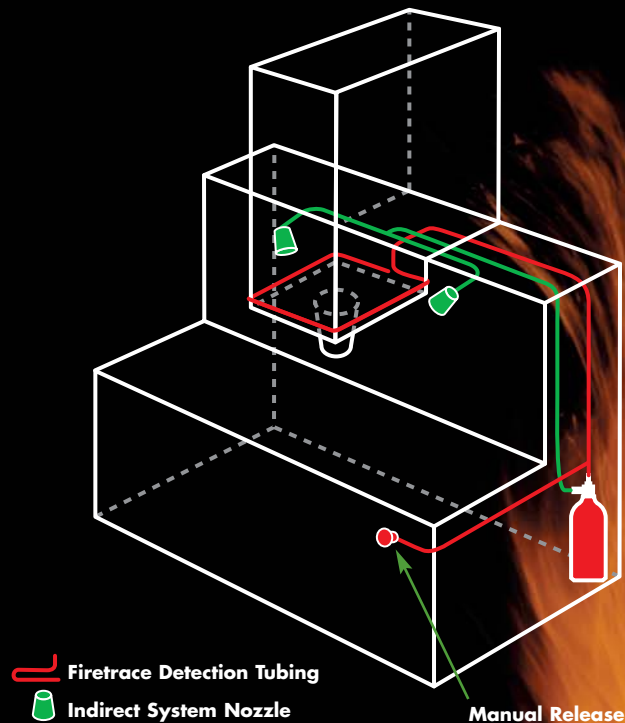


Optional manual release

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, FM-200 or fire-suppressing powder. 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.

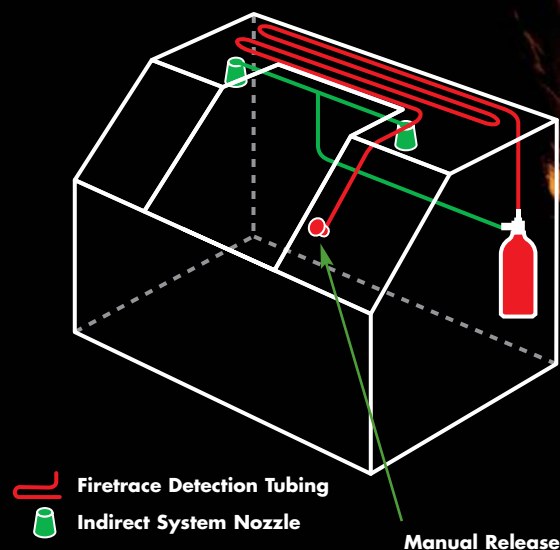
Unlike sprinkler head-type systems, which simply mount on one side of the ram, Firetrace offers 360 degrees of fire detection and suppression, activating up to 10 times faster than other systems. Firetrace also only responds to heat and flame, offering reliability without costly false discharges.



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. The red Firetrace 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, automatically activating the system. The fire-suppressing agent flows to the nozzles which are directed to optimally deliver an even discharge into the working area.

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.



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.

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 one pound systems to 50 pound systems) and 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
- Agie
- Anka
- Charmille
- Cincinnati
- Citizen
- Hawemat
- Huffman
- Ingersoll
- Index
- MGX
- Mitsubishi
- New Britton
- Schütte
- Stryker
- Stüder
- Takamaz
- Walter

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 International

15690 N. 83rd Way, Suite B
Scottsdale, AZ 85260 USA

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

1-480-607-1218 (Elsewhere)

1-480-315-1316 (Fax)

Firetrace@firetrace.com

www.firetrace.com

www.firetrace.eu

Firetrace has more than 20 international approvals and listings including:



Approvals and listings vary by system type and agent.