

Firetrace Application Briefs

AB005

Waste Treatment Pumping Station

A distributor in the Northeast has proposed Firetrace Direct Low Pressure (DLP) systems filled with FM-200® (cylinders range from 3 lbs. to 12 lbs. depending on the volume of the enclosure) to protect enclosures at a sewage pumping station. A total of seven DLP systems and 460 feet of detection tubing were included (“T” connections were used to maintain each tubing run at less than 50 feet). The significant amount of detection tubing is designed to place the fire detection and variable “burst” nozzle as close as possible to all potential fire sources, an inherent benefit of the DLP system. The continuous operation of this pumping station is essential to support downstream waste treatment processes for a large metropolitan area. Firetrace units are located in cabinet enclosures performing roles such as process control, communications, electrical switchgear and constant speed management.

Data and Communications Protection

A distributor on the west coast has proposed Firetrace for use in a new “mini-bank” application. These are small storefront banks that are opening up in grocery stores and strip malls. Each location typically has one closet that houses server and telecommunications for their fast data transfer that is required to process transactions. The Firetrace Indirect Low Pressure (ILP) system using just 6 lbs. of FM-200 will provide excellent fire protection for these critical data and voice systems of the bank.

Test Boxes For Hand Tool Manufacturer

A distributor on the east coast has proposed Firetrace to a manufacturer of hand tools to protect their test boxes. For quality assurance purposes, every tool manufactured is placed in one of these test boxes to run for a predetermined period of time. There have been rare incidents of fire during the testing procedures. Firetrace Direct Low Pressure (DLP) systems will go into the test benches to cover multiple boxes (each is about 3 x 3 x 3) simultaneously. The DLP systems will each contain 12 lbs. of FM-200 and a pressure switch to annunciate the system’s activation.

24 hour Operations - Machine Protection

A distributor in the Northeast has proposed a Firetrace Indirect Low Pressure (ILP) system using 3 lbs. of FM-200 to provide fire detection and suppression for the interior an oil storage area. It is located inside a large metalworking machine that operates 24 hours a day. The interior oil tank volume is less that 62.5 cubic feet, and the role of Firetrace is to deliver automated suppression inside of this enclosure. Detection tubing is located on the bottom of oil tank cover, and a pressure switch is included to shut down machine on system activation. Two nozzles are mounted to penetrate the tank cover, delivering agent directly to the risk area.

Industrial Parts Cleaning Machine

A distributor in the Midwest has proposed Firetrace to protect an industrial parts cleaning machine. The base of the machine has a reservoir with cleaning solvents and poses a potential fire risk. A Direct Low Pressure (DLP) system filled with 3 lbs. of FM-200 will be used to detect and suppress a potential fire inside the 2’ x 3’ x 3’ reservoir tank.



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Motor/Transformer Detection (supplemental protection)

A distributor in the Northeast has proposed Firetrace detection tubing to be located above critical machine areas/processes. The tubing will provide automated detection (i.e. no suppression) above the open risk areas. This detection network runs above motors as well as inside an electrical transformer. The tubing run terminates in an end of line adapter and a pressure switch. A tubing “T” connection in the detection line provides a second end of line adapter supporting the addition of a pressure gauge. In the case of fire detection, the tubing initiates the pressure switch to activate machine shutdown.

Aftermarket Audio Protection

A distributor in the Southwest is working with a high-end car and marine stereo retailer to protect the electronics that are installed. Often, the electronics including amps, decks and even video systems are worth more than the vehicle itself. A Direct Low Pressure (DLP) system that utilizes 3 lbs. of FM-200 would be installed in the vehicle. The Firetrace detection tubing will be woven throughout all of the electronics including the separate alternator and batteries that the electronics require.

Nuclear Fuels Concentration Pans

A distributor in the Southeast has proposed Firetrace to be part of a multi-action fire protection system for uranium fuel production concentration pans (used in a variety of military applications). The Firetrace system would be used to detect a fire in the pan. We are the first hardware they’ve looked at that meets all their criteria for flexibility. Once the Indirect Low Pressure (ILP) system detects a fire in the pan, it releases the cylinder contents to fill a sprinkler line with F-500. If the fire continues, the sprinkler head will dispense the F-500. The hazard is radioactive; therefore, the amount agent must be minimized and the application must be site specific.

EDM Milling Machines

A distributor in the Northeast has proposed Firetrace Indirect Low Pressure (ILP) systems filled with 12 lbs. of FM-200 to provide local application suppression over the oil tank of EDM milling machines. The system configuration includes detection tubing above the milling head and around the open oil tank delivering rapid detection and activation. Nozzles are strategically located to deliver suppressing agent directly into the machine’s risk area. A pressure switch is linked to a relay for alarm notification and machine shutdown on activation. A manual release is included so that the operator can initiate a discharge at any time.



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Fume Cabinets

A distributor on the west coast is installing Firetrace systems in fume cabinets that have been previously protected with sprinkler heads. The fume cabinets are used for mixing chemicals in the adhesives industry. The concern was that these sprinkler heads are slower to detect a fire and can create a hazardous materials situation if they “flow” the chemicals used in the fume cabinet out into the rest of the room. According to the end user, “Firetrace is the clear choice for protecting the fume cabinets on our premises.” These FM Approved Indirect Low Pressure (ILP) systems use 12 lbs. of FM-200.

Remote Cable Television Sites

A distributor in the Southeast has proposed Firetrace to protect remote cable television buildings. Most of these buildings are quite small, and some cannot even be considered to be buildings. Firetrace Direct Low Pressure (DLP) systems that use 12 lbs. of FM-200 are proposed for each building. The Firetrace tubing would be routed throughout the equipment racks inside the buildings. A pressure switch would be used with each system to alert the central office.

Dust Collectors

A distributor in the Midwest has proposed Firetrace to protect dust collectors from a metal cutting facility. The fumes that are generated during the cutting process are collected by a vacuum system and then sent to a collector. The collectors occasionally catch fire and are quite difficult to extinguish. Our distributor is proposing Indirect Low Pressure (ILP) systems using 20 lbs. of dry chemical powder. The system will use Class “D” powder to suppress the metal fire potential.

Automated Paint Booth Fire Protection

A Firetrace distributor has secured an order to install Firetrace in an automotive paint spray line. The painting process is fully automated, and the flexibility of the Firetrace tubing allows it to be installed directly on the robotic arms of the painting machines. Several Direct Low Pressure (DLP) systems are used in this application. They are filled with nitrogen and are intended to activate a total flood CO₂ system. In an effort to be extra cautious, our distributor will be installing two additional pressure switches in each system. One is set and 145 psi and the other at 130 psi. On the remote chance that a slow leak should occur, the two pressure switches will provide warning to call attention to the leak and prevent a complete discharge of the system.

We welcome your submissions on where you are proposing Firetrace as well as where you have already supplied Firetrace. We will make sure the report is published in a “generic” fashion. Just fill us in on the details such as why the customer is looking at or why they chose Firetrace, and we’ll take care of the rest! Submit your application details to: gray@firetrace.com.

