

Firetrace Application Briefs

AB003

PyroFlex Bank Bag Application

A manufacturer of bank bags and diplomat pouches has incorporated the Firetrace PyroFlex tubing for optional fire protection. PyroFlex is a large, clear tube made of the same material as the red Firetrace tubing. It is filled with FM-200[®], pressurized and self-contained with crimped ends. According to the company's owner, PyroFlex provides a fire safety factor that many of his customers desire. It also provides him a competitive advantage. He also said that his entire industry could benefit from the use of the Firetrace fire suppression technology.

Micro-Turbines

A distributor in Canada has proposed Firetrace fire protection to a very large city that is harnessing their abundant methane gas supplies. They have installed "Micro-Turbines" throughout the city to generate power for their grid. At approximately 4' x 4' x 7', the turbines will be protected by a 12 lb. Indirect Low-Pressure (ILP) system utilizing FM-200. A pressure switch will be used to shut down the turbine and cut off the methane gas supply.

Heat Detection in Data Storage Cabinets

A Firetrace distributor in the Carolinas has proposed using Firetrace tubing for fire detection only in large data storage cabinets. At issue: the clearance between the wall of the cabinet and the moveable platforms requires a minimal amount of space be used for a detection circuit. Our tubing seems to be uniquely suited.

Electrical Control Cabinets

A main postal distribution center in California is looking to remove all sprinkler heads within the sorting center and protect only the electrical control cabinets with a clean agent. The local distributor has offered Firetrace as the perfect solution. The Firetrace 12 lb. Direct Low-Pressure (DLP) system would be installed throughout the interior of all of the control cabinets next to the contactors and circuit boards. The system would consist of the large DLP system for an extended discharge time, and a pressure switch would be integrated into the control functions for automatic shutdown of all systems as well as a fire alarm interconnect.

Electrical Substations

A Firetrace distributor in New England has proposed a protection strategy for all electrical switchgear across 30 electrical substations in a large urban rail transport system. In this proposal, older, unenclosed DC switches installed along a wall would be configured with Firetrace detection tubing across the switch face. The tubing would be pressurized with nitrogen only. In the case of an arcing fire, the tubing will rupture and initiate an attached pressure switch to automatically reroute system power and prevent the meltdown of the switches that are difficult and expensive to replace. The enclosed AC switch cabinet banks are protected by 12 lb. Direct Low-Pressure (DLP) systems using FM-200. Multiple cabinets are protected by two Firetrace systems with the tubing implementation designed to protect both the initial cabinet and a second system to protect the adjoining cabinet. A SCADA system provides point addressability with one node in each cabinet and allows for accurate reporting of a fire.



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Motor Control Centers

Three different, major facilities in the South were concerned about their motor control centers (MCCs). One plant was petro-chemical, and they want to install a 12 lb. Direct Low-Pressure (DLP) system using FM-200 in lieu of sprinklers. Another plant was chemical, and the owner currently has no fire protection in the MCCs and knows it is needed. The last plant was petroleum reserve, and a 12 lb DLP with FM-200 would be installed.

Mining Equipment

The mining industry is taking a more proactive role in preventing fire, and many companies in Canada are retrofitting their large industrial shovels. Although the machinery is too large for the Firetrace system, one of our distributors is proposing the protection of the control boxes using the 6 lb. Direct Low-Pressure (DLP) system using FM-200. The low cost of the Firetrace system makes the total expenditure a small fraction of the retrofit.

Gearbox

A distributor in the Northwest is proposing Firetrace for open sided gearboxes used in industrial tooling and machining plants. A hazard that was not previously affordably protected can now be protected using a 10 lb. Indirect Low-Pressure (ILP) system with ABC powder. Firetrace tubing can easily be placed within close proximity of the lubricating fluids within the gearbox for fast detection. The discharge nozzles will be positioned to keep the fire contained within the three sides of the structure during system actuation, and a pressure switch will be added to cut off the power.

Fume Cabinet

A government lab in the Southwest is looking at Firetrace to protect their 75 fume cabinets. Currently, the cabinets are completely unprotected, and as two recent fires have proven, portable extinguishers are not the best way to protect against fire. The application calls for medium to large Firetrace Indirect Low-Pressure (ILP) systems using FM-200. The lab was initially interested in CO₂, but upon review of the application, FM-200 is the clear choice in price and performance.

Recording Studios

Firetrace is already in the movies (protecting a car used in a James Bond movie); well, now Firetrace will be in the recording business, too! Firetrace is being used to protect voice over boxes in recording studios. These boxes are essentially rooms within a room. These 5' x 5' x 8' mini-recording studios require protection per the local AHJ; however, the rooms cannot be penetrated due to the sound insulation properties of the box. Using a 12 lb. Indirect Low-Pressure (ILP) system using FM-200, and a manual release, the distributor can provide a low-cost clean agent suppression system.



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Co-Generation Plant

A distributor in the Northeast has installed a Firetrace Direct Low-Pressure (DLP) system using FM-200 to protect the main process control cabinet operating an electrical co-generation plant. The continuous operation of this control unit is essential to plant operations, thus prompting the decision to install in-cabinet fire protection. The end user highly values the site-specific detection and discharge approach of Firetrace.

Total Flooding or Local App?

A distributor on the Pacific coast has proposed Firetrace in lieu of a \$90,000 total flood application for protecting three 19" floor to ceiling computer racks. The racks are in the middle of fair size room making it economically unfeasible to protect them using a total flood system. The system can, however, be protected using a 12 lb. Direct Low-Pressure (DLP) system with FM-200. Firetrace tubing would be woven throughout the rack systems and suppress any fire through the exact point of detection. The system will incorporate a pressure switch to tie into the building's alarm system.

Grinding Machines

Firetrace distributors continue to make inroads in protecting grinding machinery. Two distributors in the Northeast have proposed 6 lb. Indirect Low-Pressure (ILP) systems with FM-200 to protect Hoffman and Schute grinding machine enclosures. These units are prone to flammable fires resulting from spark ignition of the machine cooling oil. The small cylinder size of the Firetrace unit allows it to be simply installed inside the machine electronics cabinet. The addition of a pressure switch will initiate machine shutdown on discharge.

Earth Movers

A mining company in western Canada is interested in utilizing Firetrace to protect the hydraulic pump box on their earthmovers. These giant dump trucks, costing millions of dollars have an Achilles heel—the pump box sits right next to the cab and is a hazard. If the hydraulics systems are lost, the trucks become inoperable. The fear is that fire could devastate the entire hydraulics system and cost tens of thousands of dollars in down time. The system will be a 6 lb. Indirect Low-Pressure (ILP) system using FM-200. The tubing will place around the pump motor as well as along the walls of the box in the event of a burst hose.

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, and 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



7898 E. Acoma Drive, Suite 106, Scottsdale, AZ 85260 (866) 607-1218