

Firetrace® Application Briefs

AB008

Tow Motor Engine Compartments

A major manufacturer of paper and lumber products in the South has recently had a fire that was started in a tow motor engine compartment. After losing a \$20 million facility to a simple tow motor engine fire, they began searching for an inexpensive fire suppression system that is mobile, flexible, small and immune to vibration. Firetrace is an excellent option that has been proposed by our distributor. The Firetrace systems will be Direct Low Pressure (DLP) using 3 lbs of dry powder with a Pressure Switch for engine control.

Wind Turbine Nacelles

Firetrace has been proposed to a significant size wind farm in Texas. As wind turbines have grown vastly in size and power output, so have their price tags making fire losses more significant. The main body that houses the electronics and has the blades attached to it is called a nacelle. The nacelles on the larger output turbines have significant components that can pose a fire risk that is almost impossible to protect – except for Firetrace! The nacelles' interiors will be protected with Indirect Low Pressure (ILP) systems using 12 lbs of dry powder localized to the gearboxes and the electrical equipment. A Pressure Switch will be integrated into their control circuitry for shutdown of the machine and notification of the problem to a central location.

Haz-Mat Cabinets

A distributor in the Northeast has installed two Firetrace systems on Hazardous Materials Cabinets. As the contents of these cabinets can be very flammable, interior protection of the cabinets that house them was deemed an excellent safety measure to prevent the building's sprinkler system from activating from a small fire. Each cabinet is protected by an Indirect Low Pressure (ILP) system using 3lbs of FM-200.

Antique/Collectible Automobiles

Collectors who want to protect the significant investment they have in their special vehicles are installing Firetrace on these rare vehicles. Distributors have proposed and installed Indirect Low Pressure (ILP) systems to protect the engine compartments of these collectible vehicles. As these vehicles are occasionally driven, and that's when they're most likely to have the fire, an ILP system was chosen so that detection might take place anywhere "under the hood", yet the discharge of the FM-200 or dry chemical powder will come from nozzles located just behind the head lights and "bathe" the engine with the suppressing agent. Pressure Switches and Audible Alarms are incorporated to notify the operator of a discharge.

Electrical Equipment

A large manufacturer of cement in the South recently had a fire in a capacitor bank that cost them ¼ of the plant production for almost a week. The motor control centers and electrical rooms for the plant are quite substantial and basically operate the entire operation. Firetrace Direct Low Pressure (DLP) systems using 12 lbs of FM-200 have been proposed. Pressure Switches will be incorporated as well to provide notification of system activation. Many of the MCCs have numerous small compartments, and the DLP's tubing flexibility will provide excellent system coverage.



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Conveyor Belt Protection

A distributor on the East coast has discovered a Firetrace application with a major railroad company. Their conveyor belt hazard is well suited for Firetrace as any conveyor downtime is unacceptable to their operations. Should the bearings seize, friction can create excessive heat that can ignite the coal dust or bearing grease. The project will involve Indirect Low Pressure (ILP) systems with a wetting agent (such as F-500) to protect the bearing areas on the coal loading belts. Pressure Switches will be included as well.

Protection of UPS Systems

A major state university in the South has numerous locations where they would like to replace total flooded room systems with Firetrace installed on the *insides* of various cabinets. One area of Firetrace application discussed with the campus Fire Suppression Shop is an entire room of UPS units that will be replaced in the coming fiscal year with smaller, more powerful units. Firetrace will be considered to protect the interiors of the UPS units, doing away with the need for an engineered system for the room. Systems will likely be Direct Low Pressure (DLP) using 12 lbs of FM-200 with Pressure Switches for remote notification.

Bus Fires

A major city in Southeast Asia lost a bus due to an engine fire. The loss was over \$500K. As a result, they're investigating fire detection and suppression systems. After looking at all the "big guys", our distributor introduced them to Firetrace. They couldn't believe that something as simple as Firetrace would work in their application, so they demanded to see an actual demonstration. Working with our Asian Regional office, Firetrace Pte. Ltd., a mock up of the engine compartment was constructed, and a diesel fuel fire created. The Firetrace system detected the fire in less than 10 seconds and suppressed the fire with ABC powder in less than 10 seconds! Negotiations are now underway to purchase 200 Firetrace systems to start, with hundreds more to follow! (See Application Spotlight for more information on bus protection.)

Robotic Assembly Line

Firetrace has been proposed to a West coast manufacturer of semi conductors for protection of electronic assembly line components and robotics. When a fire is detected by an Indirect Low Pressure (ILP) system, 6 lbs of FM-200 is released via pre-positioned discharge nozzles to flood the electrical controls of the assembly line. Pressure Switches are included with the systems to provide an emergency shutdown signal to the assembly line and notification to the local building alarm system.

Hospital Backup Power Supplies

A distributor in the West has proposed Firetrace for the protection of hospital uninterruptible power supply consoles. The consoles, which manage power to critical circuits, are deemed critical to hospital operations during a power outage. Direct Low Pressure (DLP) systems using FM-200 are to be used because of their discharge flexibility along the entire length of the tubing. Pressure Switches are also included for remote notification.



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High Rise Condominium Application

A Firetrace distributor in the western United States has proposed Indirect Low Pressure (ILP) systems using 12 lbs FM-200 for use in a high rise retirement condominium. Firetrace will provide fire protection for electrical cabinets housing elevator control recall circuits, vent damper controls and uninterruptible power supplies. A Pressure Switch mounted on the Firetrace valve is monitored by the existing building alarm system and an alarm central station monitoring facility. In addition to providing a significantly greater level of fire protection for critical building controls, a favorable corresponding financial impact is promised by the insurance underwriter next year.

Heavy Duty Equipment

Firetrace Indirect Low Pressure (ILP) systems have been proposed for protection of heavy-duty equipment operating in a large landfill in the Southwest. Various debris accumulates behind the cab of these front-loading refuse haulers and can come in contact with heat sources such as the exhaust system. The system utilizes 20 lbs of dry powder. Two Manual Release stations would be located in the operator's cab and on the chassis. When the system is discharged, a Pressure Switch activates the Audible Alarm located in the cab.

Radar Control Centers

Firetrace Direct Low Pressure (DLP) systems using FM-200 are being considered by the FAA as a fire protection option for protecting the radar control cabinets at airports. Challenges have been found where fire protection was discussed and Halon or FM-200 total flood systems were out of the question because of the disruption it would cause if activated due to a false alarm. Pre-action sprinklers were subsequently installed as the standard. Firetrace DLP systems in these cabinets would allow fast fire detection and suppression without the activation of the entire room system and allow critical airplane direction to continue uninterrupted.

Underground Fire Protection

A Firetrace distributor in the West is proposing Firetrace Direct Low Pressure (DLP) systems using 6 lbs of FM-200 for the protection of uninterruptible power supplies (UPS) in mines. The UPS equipment provides emergency lighting during a power outage or emergency conditions. Since all Firetrace systems require no electricity or external power, they are basically explosion proof – a strong requirement in a mine. The distributor has proposed keeping spare Firetrace replacement systems on-site for prompt replacement after a system's discharge.

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.

