



EQUIPASS

Pneumatic Activated Suppression Systems





A small fire in a single cabinet, unchecked, can easily grow to consume adjacent cabinets - or even spread throughout a facility.



THE PROBLEM

Electrical enclosures can be found in virtually any industrial or commercial space. In some cases the enclosure might be a single small panel while in others it may involve a large room filled with electrical boxes. Should a fire occur in one of these cabinets, it would typically destroy the contents, but unchecked the fire could take the room or even the building, costing money and downtime.

Regardless of the number of enclosures, Firetrace® offers a reliable, cost-effective method to increase the fire protection of these areas by detecting and suppressing the fire in the cabinet itself. Typical enclosures include:

- Motor control centers
- Electrical panels
- Control closets
- Wiring harnesses
- Cable trays
- Power vault
- UPS
- Transformer

Below are the most common sources of fire in electrical enclosures:

- Wire fatigue
- Improper installation
- Overloaded circuits
- Equipment failures
- Other environmental causes

THE EQUIPASS SOLUTION

Because EQUIPASS takes the fire detection and suppression inside of the hazard, a growing fire can be caught quickly, preventing the spread of fire to other parts of the building that would require firefighters or water sprinklers to extinguish.

By containing the fire to the individual enclosure, damage is limited to that enclosure and the collateral damage often caused by traditional fire suppression is avoided.

EQUIPASS ADVANTAGES:

- Fast, reliable fire detection
- Clean agents — safe for people, equipment and the environment — no cleanup required
- Installs in new or existing cabinets
- No interference with installation or maintenance of equipment
- EQUIPASS systems do not affect IP ratings
- EQUIPASS Detection Tubing is electrically non-conductive
- EQUIPASS Detection Tubing follows cable routes to penetrate cabinets (no need to drill holes)
- EQUIPASS Detection Tubing allows suppression directly at source of fire — unlike other systems that have to build up an extinguishing concentration which can be difficult with internal airtight sub enclosures
- EQUIPASS can be integrated with fire control systems
- EQUIPASS requires no power and is completely self contained
- EQUIPASS is accepted / endorsed by leading MCC and VFD panel manufacturers



HOW IT WORKS

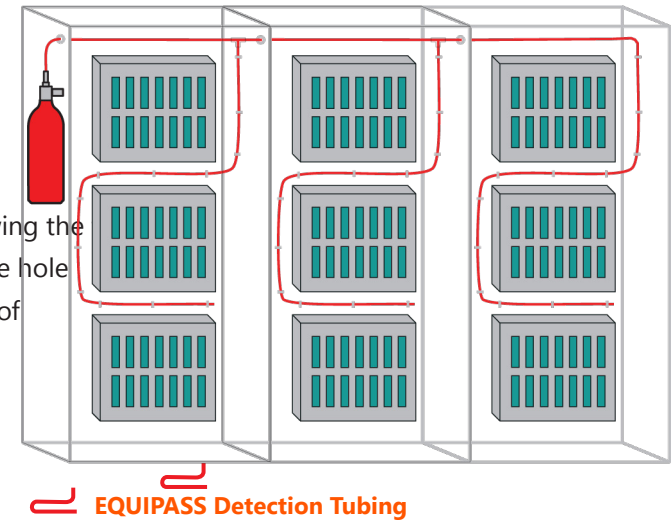
EQUIPASS offers two distinct fire suppression systems to suit the needs of the environment.

EQUIPASS Direct System

The EQUIPASS Direct Low-Pressure System provides simple, reliable protection for critical assets. During the installation, the red EQUIPASS Detection Tubing (FDT) is run into and throughout the cabinet, ensuring that detection is close at hand should a fire start.

Should a fire break out, the point on the pressurized FDT nearest the heat source will burst, allowing the suppression agent to flow from the EQUIPASS cylinder through the tubing, and out of the rupture hole directly at the source of the fire. The result is a long discharge of agent in the immediate vicinity of the fire, suppressing the fire where it starts.

EQUIPASS Direct Systems can also be used in cable runs and trays. Direct systems are fully automatic and cannot be manually activated.



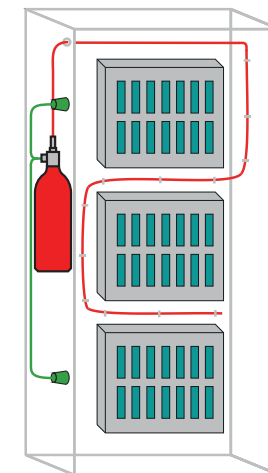
EQUIPASS Indirect System

The EQUIPASS Indirect Low-Pressure System uses the same red EQUIPASS Detection Tubing run throughout the cabinet's components to quickly detect a fire. When the tubing ruptures, the system activates and delivers the agent through a separate piping set, quickly filling the cabinet enclosure with agent and suppressing the fire.

EQUIPASS Indirect Systems also offer the option to activate via a smoke detector or external alarm system (using the EQUIPASS Solenoid Valve) or via a manual release.

Regardless of the system selected, the EQUIPASS Detection Tubing is the reliable solution for detecting fire at its source quickly, before adjacent equipment can be damaged. Either EQUIPASS system can utilize one of a variety of clean fire suppressing agents, selected specifically to suit the environment.

Indirect systems can also be manually activated or activated through external detection



EQUIPASS Detection Tubing
Indirect System Nozzle



Electrical Enclosure Applications

The EQUIPASS platform is underpinned by decades of specialist engineering and standards development experience within the Equipro senior management team.

Equipro personnel were integral contributors to the development of the LPS-1666 fire performance standard for Direct Low Pressure (DLP) suppression systems, working in close technical collaboration with the UK's Building Research Establishment (BRE) to support the evolution of LPCB guidance for fire protection within energised electrical compartments and enclosures.

Alongside standards development, Equipro engineers carried out extensive experimental work into pneumatic detection technologies, leading to the design and refinement of a range of polymer-based detection tubes optimised for different thermal response characteristics, enclosure geometries, and industrial environments. This practical development work directly informed the reliability, response speed, and installation flexibility that define modern EQUIPASS pneumatic actuated suppression systems.

This combination of real-world engineering, applied testing, and direct involvement in internationally recognised fire protection standards ensures that EQUIPASS systems are not only proven in service, but are also aligned with best practice for protecting critical, energised equipment using fast-acting, self-contained suppression solutions.



Equipro Ltd's Nick Grant with BRE's Sarah Colwell in Qatar during LPS1666 standard creation 2007.



Equipro's Nick Grant designing and installing world class in-cabinet suppression systems back in the early 2000's.



EQUIPRO LTD
Barttelot Court
Horsham
RH12 1DQ

office@equiprofire.com
www.equiprofire.com

+44 (0) 333 011 5969