

FirePro.

Eurostar International

Location: **Europe** Dealer: **FirePro UK** Application: **Control Rooms, High Voltage Rooms, Lead-acid Battery Rooms, Electrical Panels**

Industry: **Transportation**



Eurostar is the high-speed rail service directly linking Britain to mainland Europe via the Channel Tunnel. It started operating in 1994, providing city center to city center services. The service is operated by 27 eighteen-coach Class 373/1 trains which run at up to 300 kilometres per hour on a network of high-speed lines. Eurostar is the dominant operator on the routes that it operates, carrying more passengers than all airlines combined.

The Task

Design, supply, install, commission and maintain a fire detection and rapid reaction fixed active fire suppression system for Relocatable Equipment Buildings (REBs). The installation site is where maintenance is carried out for all Eurostar trains operating from the United Kingdom and it is designed to accommodate eight service roads. The task was to provide a rapid response, reliable and efficient firefighting system to tackle a fire scenario that can prove highly disruptive to operations and consequentially endanger passengers.

FirePro Systems Used

FP-80S

FP-100S

FP-3000/FP-3000S

Why FirePro?

The four REB rooms are situated amongst the tracks with 11,000-volt live lines running overhead leading to the main depot where trains are routinely serviced. Access is therefore limited, being reachable only on foot which posed the problem of getting the fire suppression system there. The only feasible way to do this was to hand carry all the equipment which called for a modular system that used light weight and easy to carry components. Importantly, the extinguishing system had to require as little maintenance as possible and to be effective for A, B, C, F, classes of fire.

Risks Involved & Consequences

The obvious fire risks involved in Relocatable Equipment Buildings are mainly related to electrical faults that can appear in the electrical equipment without of course discounting dangers from human error and lightning strikes. The consequences of fire in these buildings are discontinuity of service, endangerment to passengers and loss of equipment in one of Europe's busiest railways.



Results of Implementation

The FirePro systems installed across all REBs match the project's specific provisions and requirements. Each battery cabinet has its own system so if fire is detected within a specific cabinet then only the system of that cabinet activates. FirePro units have been installed in such a way so that they can be easily removed and facilitate the maintenance of the batteries. As it is a space that is not occupied by personnel, only a single-zone fire detection panel is required. For this reason, a linear heat detection cable is employed for the purpose.

