

PREMIER CONSTRUCTION

FIRE PROTECTION FOR RAIL INFRASTRUCTURES

How to optimise fire safety and reduce carbon footprint with water mist fire protection.

■ Fireworks Fire Protection

The UK government's Spending Review in 2025 confirmed over £31 billion pounds in rail-related projects. This was dominated by major schemes including HS2 Phase One, the TransPennine Route Upgrade and East West Rail. How can these investments include assuring optimal fire safety for rail infrastructures and the passengers they serve?

Water mist fire protection systems are emerging as the solution to rail's fire safety challenges by optimising life safety and reducing environmental impact. With innovative advancements in water mist technologies, we now have the means to safeguard all areas, from tunnels to storage areas and communications rooms.

■ Fire safety risks for rail and controlling smoke hazards

Fires within rail and underground facilities present significant challenges to life safety, with high volumes of passengers and limited escape routes. Of the dangers associated with fire, smoke is the leading cause of casualties, capable of rapidly spreading through passenger walkways and stairwells. The key aspect for fire safety is to minimize the dangers of smoke.

Fireworks water mist fire protection solutions bring significant safety advantages with fast fire and heat suppression and the unique ability to reduce smoke spread.

■ Water mist fire protection for all rail facility areas

Fireworks Fire Protection has designed and installed fire protection at several rail facilities including Woolwich Station, Network Rail archives and Farringdon Station. Thanks to new innovations and testing, we can now bring the benefits of water mist fire protection to all areas including tunnels, storage areas, control rooms, server rooms, under track areas, catering, retail outlets, glass facades, atriums and more.

Whether to protect complete rail hubs, or small server rooms, Fireworks' space saving water mist equipment makes it easier to install, even in difficult-to-access areas.

■ Contributing to carbon footprint reduction with Fireworks fire protection solutions

Supporting the construction sector's commitment to reducing its environmental impact, Fireworks Fire Protection plays a significant role in sustainability efforts. Through lower water and energy consumption, no use

of chemicals and less raw materials needed for equipment, water mist fire protection contributes to reducing the carbon footprint within the construction supply chain.

Fireworks water mist solutions use around 30% fewer metal resources than traditional sprinklers, due to much smaller pipe diameters, water tanks, and fewer nozzles. Added to this is the major advantage of the durability of water mist systems.

■ Find out more.

To learn more about sustainable water mist fire protection for rail facilities, or for advice on your projects, contact Fireworks Fire Protection on **0800 975 7462** or **enquiries@fireworks-ltd.com**. ■

