

FirePro.

Seoul Metro

Location: **Asia** Representative: **FirePro Korea** Application: **Rolling Stock** Industry: **Transportation**



서울교통공사
Seoul Metro

The Seoul Metro Subway is a railway system located in northwest South Korea. It serves Seoul, Incheon and Suwon plus satellite cities and provinces that lie fairly far from the capital. Seoul Metro is one of the largest and most efficient urban railway systems in the world with over 300 km of track with 3,550 of trains and premium services such as wireless internet and platform screen doors on most stations.

The Task

Design, supply, install and maintain a highly reliable fire suppression system for the high-pressure watercart locomotive engine bay. Since this is a high dependency asset the fire protection specialists needed to endorse that the system works as intended. A series of tests demonstrated that the system remains consistently reliable under stress and supplementary challenges. Engine room monitoring cams recorded and attested to (remove to) the activation, efficiency and robustness of the system employed on this unique vehicle.

FirePro Systems Used
FP-5700

Why FirePro?

FirePro fire protection systems can be integrated with existing control systems, enabling real-time system status feedback. The overall system arrangement has minimal space and maintenance requirements as well as an unmatched 15-year certified product life. These attributes are quite important since everyday operations can damage or even destroy many system components during its useful lifetime. What's more, the extinguishing compound is environmental friendly – a fact that experts around globe are saluting. Consequently, the engineers tested, approved and recommended FirePro as an applicable fire suppression system.

Risks Involved & Consequences

Slippery rail occurs when leaves or fine dust on the rail cause trains to experience low adhesion. The subsequent low wheel grip renders the track provisionally inoperable. Seoul Metro remedies this condition with a special cart that jet blasts impurities away with water. The high-pressure watercart needs to be fully operable at all times in order to keep Seoul Metro safe. This entails that its engine and vital systems must be protected from fire that might render the vehicle utterly inoperable.



Results & Implementation

FirePro Korea supplied and installed the proprietary technology for the fire suppression system as per project specifications. FirePro Korea designed the system and carried out the installation within a set period of time. The system currently protects the engine when activated by the driver. In fact it was able to extinguish a fire that occurred within the engine compartment soon after the installation; consequently reducing engine damage and down-time.

