

Stat-X Fire Suppression Systems For Port Handling and Lifting Equipment

Port Handling Marine Transport Industrial Renewable Energy Property

Catering

Nobel fire systems







Port Handling and Lifting Equipment

Within a port, containers, general and bulk cargoes are handled by a range of different equipment types from quay cranes, mobile harbour cranes, RTGs, RMGs, ASCs, reach stackers, forklifts, and terminal tractors.

These large pieces of equipment and mobile plant can be diesel driven, electrically powered, or hybrid. Within the equipment, there are engine compartments, power units, electrical housings, and hydraulic enclosures, all representing potential fire risks, exacerbated by the intense operations and harsh working conditions they are subject to on a daily basis.

Furthermore, these machines operate in relatively isolated areas, which are not supported by readily available fire services, and as a consequence a fire could result in the total loss of the equipment - this could have a dramatic impact on operations and the lead time to replace such equipment can be many months. Any business interruption is a major cost to port owners and operators.



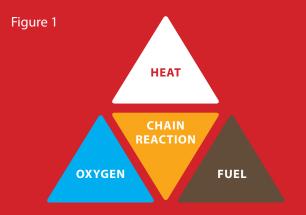


The Industry Solution is Stat-X

Given the working conditions of these machines, it is imperative to design a fire suppression system that is automatic, always-on, durable, compact, easy to install and with minimum downtime for recharging and maintenance.

Requiring no pipework or nozzles, Stat-X[®] condensed aerosol fire suppression systems are a proven solution for heavy equipment fire protection. The Stat-X units can be easily installed in engine compartments, electrical cabinets, and hydraulic enclosures, potentially offering safety and space-saving compared to traditional fire suppression systems such as gas or watermist, as there is no separate area required to house pressurised vessels containing the suppression agent.

How do condensed aerosol suppression systems knockdown a fire? The traditional fire triangle illustrates that heat, a fuel source, and oxygen are required for a fire to propagate. There is a fourth element, often not discussed, that is also required for a fire to propagate - an unmitigated chain reaction. Figure 1 below illustrates the fire tetrahedron. Condensed aerosols suppress fire primarily by disrupting the chemical chain reaction.



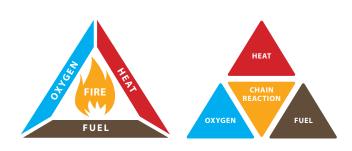








- Requires no pipework or nozzles
- Is compact, with up to 90% reduction in space and weight requirement depending on the application
- Generators are bracket mounted within the engine compartment
- Aerosol suspends in air for extended suppression hold times and is quick and easy to vent after discharge







How Stat-X Works

Stat-X is a self-contained suppression system, proven to be extremely effective where there is a need to protect critical areas and high value enclosures.

Sequence of Operation

- 1 The generator unit is sealed until it is automatically or manually activated
- 2 The actuator at the top of the generator unit energizes a proprietary compound, which creates aerosol agent by liberating energy
- 3 A mixture of micro-particles and nitrogen gas exits the container
- 4 Small amounts of gas and particles fill the space and suppress the fire by disrupting the chemical chain as per the Fire Tetrahedron

Features

- Easy installation-no pressure vessels, piping or nozzles
- Suitable for enclosures and 'local' applications
- Stat-X generator units are compact and placed directly in the risk being protected, bracket mounted within the enclosure, requiring no space elsewhere
- Tested and Listed to UL Standard 2775, ISO 15779:2001 BS EN 15276-2:2019, ULC, MCA, SNAP/US EPA, CE, ATEX, US military MIL-STD and Nato stock listed
- Fitting of a fire suppression system can have significant advantages in insurance premium negotiations
- Low maintenance and Long Operational Life (15 Years)
- Environmentally friendly, Ozone depletion potential (ODP) = 0
- Zero global warming potential



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