Marine Fire Suppression Systems

Rev 2.0

Ozone Friendly - Cost Effective - Alternative. FirePro is an exciting new development in fire Protection. It uses no high-pressure cylinders, no pipework, does not require expensive maintenance and is suitable for all types of risk.

FirePro main characteristics.

- Approved by **NSCV** under Australian Maritime Safety Authority.
- Space and weight saving.
- Lower maintenance costs.
- Environmentally friendly.
- Fail-safe activation system ensures operation.
- Has a long operational life.

FirePro can Protect.

- Engine Rooms & Machinery Spaces
- Thruster Rooms
- Control Rooms & Switchgear Spaces
- Cargo Spaces
- Galleys
- Lube Oil Rooms & Paint Lockers

METHOD - FirePro Aerosol Generators use FPC aerosol forming solid compound. On activation the compound is transformed into a rapidly expanding, highly efficient effective fire extinguishing aerosol, based on Potassium salts.

SYSTEM DESIGN

SURVEY VESSELS:— the approach to marine fire protection is taken from the National Standard for Commercial Vessels (NSCV-2018). The determination of your specific design is from the requirements under this standard.

RECREATIONAL VESSELS: This system can be based on the NSCV approach or can be simplified.

MARINE FIRE SYSTEM FEATURES – NSCV Compliant

System Control Panel - The Control Panel (CP) is the "brains" of the system. There are settings available in the control panel to suit each specific system design. The standard requires manual activation and can have shutdown interfaces.

Detection a range of detection systems are available. The panel has 2 detection zones, which will allow up to 30 detectors per circuit. This will allow 1 zone for the engine room, and the second zone for the accommodation and galley spaces.

Agent FirePro generators are self-contained units, which operate together to create the system. This means failure of any one unit will not affect the operation of other units. FirePro generators are stainless steel canisters which have no moving parts and are not under pressure. This reduces the maintenance requirements. FirePro canisters are mounted inside the risk area – no need for an external agent cylinder.



FIREPRO AEROSOL GENERATORS



Units selected based on the size of the risk to be protected.

Multiple units can be used on single risk.









Components are supplied as a kit. This includes a wiring loom using Deutsch plug connections. All cables are color coded to allow for ease of installation and maintenance.



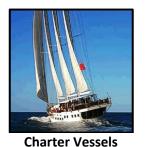


APPLICATIONS











Fishing Vessels Yachts

ENVIRONMENT and SAFETY ISSUES



Environmentally friendly fire-extinguishing technology condensed aerosol fire-extinguishing technology was developed as a result of the Montreal Protocol 1994, which banned ozone-depleting substances. FirePro's products are CFC-free and HFC-free, with zero ODP (ozone-depletion potential) and zero GWP (global-warming potential).

FirePro® aerosol is non-toxic. On activation a white gas is emitted, this is mainly particles, and has an atmospheric life of approx. 20 mins after which it will fall as dust.



©	Ozone Depletion Potential O.D.P.	HE FRIEN	Zero
©	Global Warming Potential G.W.P.	OTTO	Zero
©	Atmospheric Life-time A.L.T.	o = = = = = = = = = = = = = = = = = = =	Low
©	Toxicity	10000	None
©	Corrosiveness	OCKC	None

Residue of Particulate matter after discharge of FirePro Aerosol Generators is approximately 30-35% of the aerosol weight of the generator. The residue is non-toxic and non-corrosive; it is hydroscopic in nature on discharge so will attract moisture. The chemical nature of the residue is slightly alkaline PH is approx. 8.

FirePro® consists of inorganic potassium salts. These salts will not generally cause any damage to human beings or animals. The concentrations of heavy metals and other trace elements are negligible.

Effect on Water Supplies eco systems and potable drinking water there will be no discernible effect on water bodies. The PH of 8 would have an impact but this would not be measurable., and particle sizes which are mainly less than 5 microns are so small that any concentration would be extremely unlikely.

Known health impact associated with direct exposure to the discharged aerosol.

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Hazards Identification				
\odot	Hazards for humans related to the FPC solid compound have not been found.			
\odot	Hazards for humans related to the aerosol released by the solid compound have not been established.			
Signs and Symptoms				
\odot	Eye & Skin Contact	At normal contact no injury		
\odot	Inhalation	Not a likely route of entry		
\odot	Ingestion	At normal contact no injury		
\odot	Medical Conditions Generally Aggravated by Exposure	None known		
\odot	Environment	None established		
Exposure Controls and Personal Protection				
\odot	Respiratory Protection	At normal contact not needed		
\odot	Eye, Skin and Body Protection	At normal contact not needed		

