

BENEFITS

- Pump delivers Novec™ 1230 Fire Protection Fluid at constant, steady pressure and can be designed for extended discharge duration, cycled operation (on/off) or any series thereof; allowing staff to properly shut down equipment or start damage assessment.
- Pumps can be powered by variety of power sources; including diesel engines, AC (50 or 60 Hz) or DC (12-48 V).
- One storage reservoir can be sized for multiple systems or discharges.
- Supply tank can easily be refilled by onsite maintenance staff.
- Eliminates need to remove/replace pressurized cylinders after system activates.
- Integrates with gas detection system for inerting capability.
- Worldwide availability of Novec™ 1230 fluid — can be shipped via air carrier.
- System can be tested in circulation mode.
- Flexible design can be adapted to new or existing platforms and ships.
- Gives user control to power down engines, electrical equipment, pump rooms, avoid explosions, evacuate crew or maintain system control.
- Novec™ 1230 fluid is SNAP approved for use in occupied spaces.



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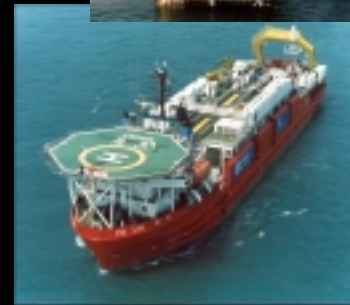
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CAPS Fire Inc.

Clean Agent Pumping Systems

MARINE APPLICATIONS

Clean Agent Pumps for Waterless Fire Protection Systems



Clean Agent Fire Pumps for Marine Fire Protection Systems

Introducing a new (patent pending) tool in fire protection for special hazard waterless systems. Using pumps to deliver an environmentally friendly fire protection fluid provides new solutions to your fire protection problems.



ENVIRONMENTALLY FRIENDLY

This patent pending technology is based on a halon alternative manufactured by 3M Company, called Novec™ 1230 Fire Protection Fluid. Novec™ 1230 fluid is SNAP approved under the US EPA Significant New Alternatives Program (SNAP) and European ELINCS. Unlike PFC's and HFC's, Novec™ 1230 fluid has the critical properties needed for a long term, sustainable alternative to Halon. With an Ozone Depletion Potential of 0, a Global Warming Potential of 1 and an atmospheric lifetime less than one year, Novec™ 1230 fluid is not targeted for phase out.

Technology designed for use with

3M

Novec™ 1230

Fire Protection Fluid

DESIGN FLEXIBILITY

Using a clean agent pump removes the inherent handling risks present with high pressure cylinders used to protect your critical operations, steering, pump or engine room. The clean agent pump system works by delivering Novec™ 1230 fluid through new or existing total flooding system delivery pipes. Pumps can be located adjacent to liquid storage reservoirs, below the storage container on another deck level, or at considerable distance from the hazard allowing for the maximum usage of available storage space. Locating the extinguishing agent on another deck, also provides added convenience and safety for employees during refilling operations without the need to remove and replace high pressure cylinders through small or narrow spaces or hatches.

SOLUTIONS

Designed for marine systems and duty at sea, a CAPS Fire Inc. clean agent pumping system is limited in design by only your imagination. Allowing for long discharge pipe lengths, a clean agent pump can be located away from the hazard being protected and piped to multiple hazard zones without the need for separate multiple systems. A clean agent pump also provides maximum design and application flexibility, allowing for a single discharge, cycled discharge, continuous discharge or any combination thereof. The ability to *easily* alter the delivery mechanism is unique for waterless clean agent systems and eliminates the need for multiple zone valves or large areas of floor space required for back up cylinders.

PUMP SPECIFICATIONS

Pumps are conveniently powered by a variety of electric motors providing a wide range of available flow rates. Pumps can be operated on AC (50 or 60 Hz) power or diesel engine and integrated with existing fire detection systems. All of the components are corrosion resistant to stand up to the harsh environments in marine applications.

- **Flow Ranges** from 38 L/min (10 gpm) to 1893 L/min (500 gpm)
- **Maximum System Pressure** of 18 bar (260 psi)

LOCAL APPLICATION—SPECIFIC USES

Our Bantam pump line provides the ability for local application of Novec™ 1230 fluid, using small DC powered pumps. With flow rates available up to 42 L/min (11 gpm), CAPS Fire Inc. can provide the right pump for integration into any fire protection system.

