

1230 CLEAN AGENT

fire extinguishing system



A CLEAN ALTERNATIVE

Traditionally, fire extinguishing systems for the offshore and maritime industry have contained components harmful to the environment and personnel, such as Halon and CO₂.

The Unitor 1230 System is a high quality, compliant fire extinguishing system using a clean agent. The system is both environmentally friendly and harmless to people.

THE UNITOR 1230 SYSTEM fulfils the requirements of IMO MSC/Circ. 848 and MSC.1/Circ.1267, and is equivalent to Fire Extinguishing Systems required by SOLAS 1974 as amended, Chapter II-2.

The system can be applied on merchant maritime and offshore structures as design is in accordance to SOLAS, class requirements and IMO MODU Code.

A true Halon replacement

The Unitor 1230 System is designed as a total flooding system for machinery spaces of Category A, cargo pump rooms on tankers, gas carrier cargo compressors rooms and spaces onboard vessels or offshore installations needing fire protection.

Existing piping arrangements can be utilised for Halon retrofits. The solution has a large nozzle coverage designed specifically for the offshore and maritime industry, with a unique nozzle discharge pattern.

Solution benefits

The solution is especially suited where space is limited, and is safe for use as a total flooding agent in occupied areas. Replacement fluid is available worldwide. All components of the Unitor 1230 System are designed for optimal system performance. Small pipe dimensions are saving installation space and weight, and lowering total installed cost.

Harmless to people and environment

The Unitor 1230 System is an environmental friendly alternative. The extinguishing fluid used has no measurable environmental impact, and is safe to use in areas where humans are working. The design gas concentration for extinguishing is far below the acceptable concentration for people.

System description

The Unitor 1230 System uses Novec 1230 fluid developed by 3M, which is stored in steel cylinders. The cylinder valve outlets are connected to distribution pipes with discharge nozzles via flexible hoses.

The cylinder valve assembly is equipped with burst disc and an optional supervisory pressure switch for monitoring the pressure drop in the cylinder. The valves can be actuated electrically, pneumatically or manually.

Installation can be flexible depending on storage accessibility. As a modular system the cylinders are stored directly in protected compartments. As a central system, the extinguishing fluid is stored in central cylinders out of the protected spaces and distributed as needed via distribution valves. The system can also be installed as a combination of these.

Time delay and a predischarge alarm is provided as per Rules requirement.

Extinguishing fire using Novec 1230 fluid

The extinguishing component is stored as a fluid and vaporise when discharged through the nozzles. It suppresses fire by a combination of heat absorption and chemical interference with the flame.

The US EPA Significant New Alternatives Program (SNAP) classifies Novec 1230 fluid as acceptable for use as a total flooding agent in occupied spaces.

Technical data

CYLINDERS

Volume	14 to 345 litres
Storage pressure with Nitrogen	34.5 bar at 21°C
Material	steel
Standards	EN or US DOT
Certificates	all major classification societies

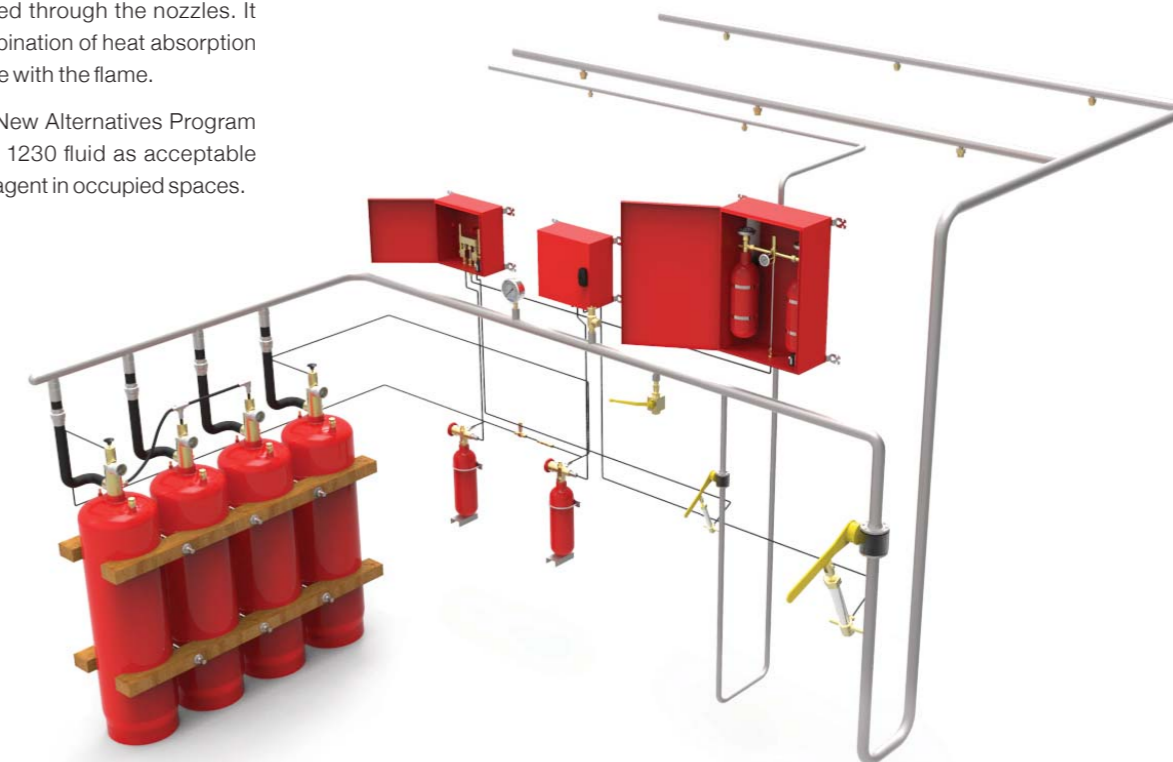
NOZZLES

Material	brass, suitable for applications up to 925°C
Sizes	½" to 2½"



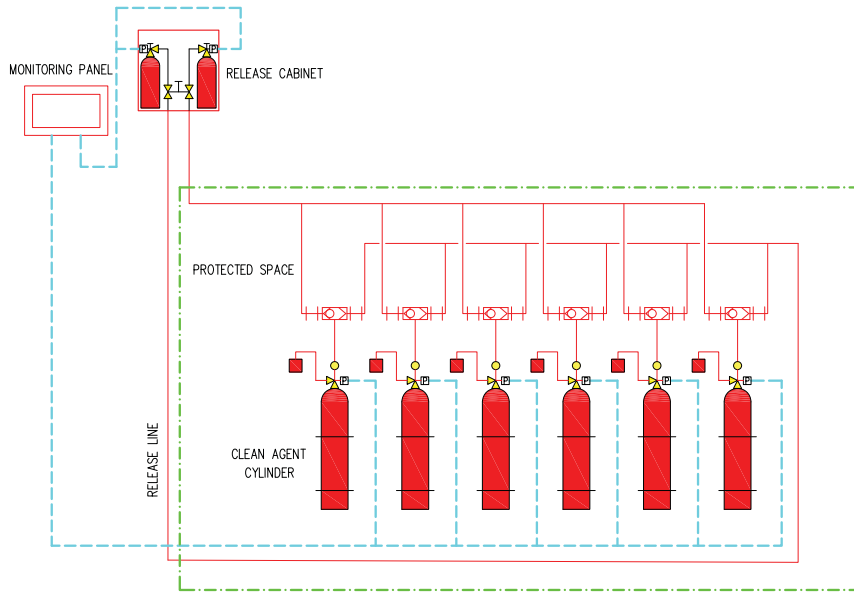
- No measurable impact on climate:
- Ozone Depletion Potential (ODP) equal to zero
 - Global Warming Potential (GWP) is one
 - Atmospheric life time of only five days

- Application of Unitor 1230 System:
- Machinery spaces
 - Pump room
 - Compressors room
 - Control room
 - Switchboard room
 - Other closed spaces

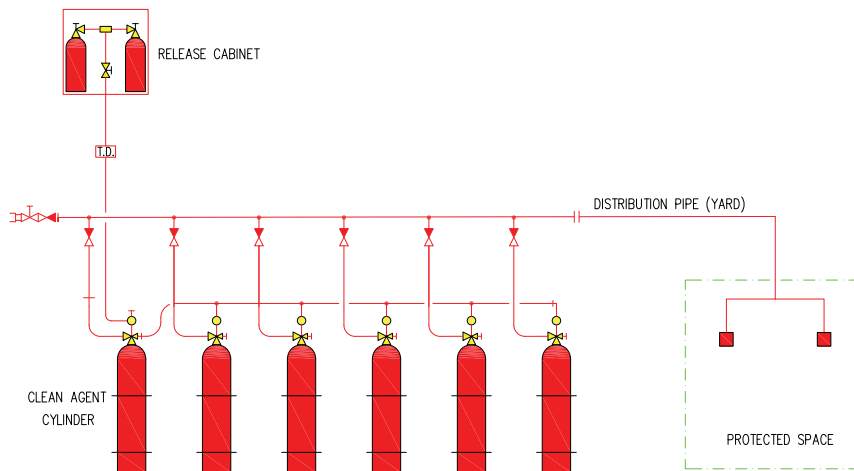


Standard configuration

Modular system:



Central system:



WILHELMSSEN TECHNICAL SOLUTIONS offers safety, HVAC, electrical & automation and insulation solutions for offshore, newbuilds and retrofits.

For more information about safety systems, visit www.wilhelmsen.com/technicalsolutions

WILHELMSSEN SHIPS SERVICE supplies maritime products and services, specialising in Safety products and services, Marine products, Marine chemicals, Maritime logistics and Ships Agency services.

For more information about products and services, visit www.wilhelmsen.com/shipservice