

Experts in fire protection

MINIMAX

Fire protection solutions for naval vessels



BRANCH SOLUTION

NAVY OVERVIEW

Top level of safety on board

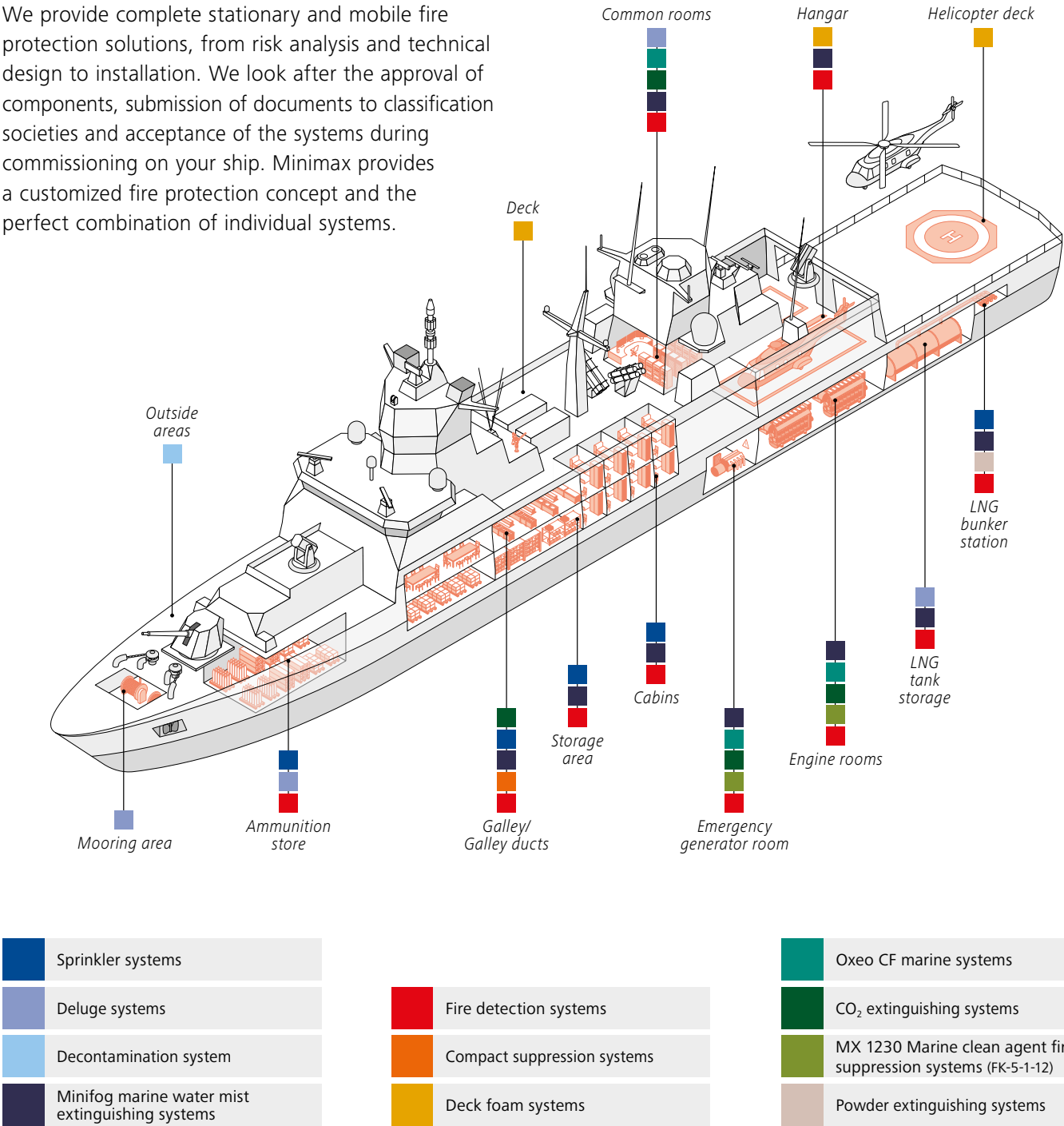
For over 120 years, Minimax has been one of the leading brands in fire protection. Whether for automotive plants, power plants, logistics centers, office and administration buildings, data centers or on ships, Minimax provides tailored solutions wherever there is a fire threat. A comprehensive range of after-installation services completes the offering.

Naval vessels require an above-average level of safety due to special conditions that prevail at sea. Generally, people cannot escape quickly in the event of a fire, or receive external assistance to fight a blaze. Compromised maneuverability and panic add to the dangers of a fire and must be taken into consideration when choosing an extinguishing system.

Minimax extinguishing systems are designed for redundancy and fail-safe operation and can therefore deliver their full performance at all times.



We provide complete stationary and mobile fire protection solutions, from risk analysis and technical design to installation. We look after the approval of components, submission of documents to classification societies and acceptance of the systems during commissioning on your ship. Minimax provides a customized fire protection concept and the perfect combination of individual systems.



Technologies

Minimax has the perfect combination of fire extinguishing systems for every type of vessel, allowing you to source complete solutions for your ship from just a single supplier.

Fire detection systems

Our fire detection systems detect fires quickly and reliably around the clock. They warn persons at risk, inform the people responsible and provide all the relevant information to initiate the correct emergency measures without delay. Minimax offers fire detection and extinguishing control in a single system. This feature is used mainly for the activation of water-based local application firefighting systems in engine rooms.

Sprinkler systems

Sprinkler systems automatically detect and extinguish fires to protect accommodation areas, pantries and galleys as well as sensitive electronics reliably.

Deluge systems

Ideal to protect amphibious transport vessels with loading decks from fire. They cool down the burning substance and also reduce the heat impact in the vicinity, thus preventing the fire from spreading. Additionally, they can be used to prevent the build-up of war-agent residues on exposed surfaces.

Watermist systems

The low-pressure Minifog watermist system is used to safeguard a wide range of objects in accommodation areas or even engine rooms. They are generally used in combination with our high-pressure Minifog systems to ensure full protection of the respective areas.



Minifog marine XP sprinkler systems

An alternative to conventional sprinkler systems, watermist technology represents an extremely safe and economic solution. In the case of a fire, our Minifog marine watermist systems will react quickly and effectively because they are optimally adapted to the protected equipment and the expected fire spread. They spray the tiniest droplets of extinguishing water, thus cooling the surroundings and suffocating the fire effectively. Smoke and harmful substances are contained in the extinguishing water, helping to reduce their impact on people. Watermist technology has the added benefit of reducing pipework dimensions as well as requiring less extinguishing water, reducing the overall weight and size of the entire extinguishing system.

Local application and total-flooding systems

In the event of a fire in an engine room, Minifog marine XP systems can be used to cool down localized fires, i.e. due to a burst fuel pipe, to contain the spread of fire, or flood entire engine compartments up to 8,235 m³.

Advantages

- Reduces water consumption by up to 90 %
- One sprinkler can cover up to 32 m²
- Effective use of space thanks to small pipe diameters
- No separate engine room fire protection system necessary
- Just a single nozzle type can be deployed throughout the entire engine room
- Engine rooms can be protected without use of a foaming agent



Ammunition store protection systems

Deluge systems provide excellent fire protection to ammunition storage areas due to their excellent cooling of walls and ceilings.

CBRN decontamination systems

To protect crew members from coming into contact with harmful warfare agents, deluge systems are used to prevent the build-up of hazardous residues on deck equipment, devices, components, and other exposed surfaces.

Deck foam systems

Low-expansion foam distributed with monitors is a very effective extinguishant for large open areas like combat support ships and helicopter decks.



Powder extinguishing systems

Powder extinguishing systems are ideal where rapid fire “knock-down” is necessary and extinguishing damage is irrelevant, for example on heli decks. The systems are available with different supplies and capacities.

Gas extinguishing systems

Minimax has a range of gas extinguishing systems for the protection engine rooms, pump rooms and power electronics. Foremost among these are our high-pressure CO₂ and high-pressure MX 1230 using the extinguishing agent FK-5-1-12.



Oxeo CF marine systems

Oxeo extinguishing systems use inert gases such as nitrogen IG-100 or inergen IG-541, which are not hazardous to people, to displace oxygen from the fire source. Even concealed fires are safely and reliably extinguished before re-ignition. Therefore, Oxeo inert gas systems are highly suitable for manned stations as well as special risk areas with high fire loads or combustible liquids and other hazardous substances, such as methanol.

Galley protection

Manually or automatically activated Minimax galley protection systems extinguish fat fires in a matter of seconds. The special extinguishant is highly effective, leaves only a small amount of residue, which can be removed quickly, and is generally recognized as hygienically safe. The system helps prevent devastating fire damages and operational interruptions.

Mobile fire protection

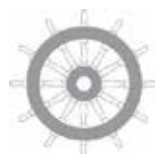
Foam or water hydrants, fire extinguishers and fire extinguishing devices are part of the basic equipment of every ship and offshore unit and round off the Minimax range.



We have the full range

- Minifog marine XP high-pressure water mist extinguishing system
- Sprinkler and sprinkler equivalent fire extinguishing systems
- Foam extinguishing systems for helidecks and tankdecks
- Deluge systems for amphibious transport vessels
- Powder extinguishing system, modular or multi-zone systems and for bunker stations
- Oxeo CF marine systems
- Ammunition store protection systems
- CBRN decontamination systems
- CO₂ extinguishing systems
- MX 1230 clean agent systems with FK-5-1-12 modular or multi-zone systems
- Nitrogen IG-100 and inergen IG-541 extinguishing systems
- KS2000-8 marine compact extinguishing systems for deep fat cooking equipment

Minimax's expert teams know the special requirements of each individual protective area and are standing by to help.



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