Fire protection solutions for ships and offshore facilities
Ships and offshore facilities such as oil platforms require an above-average level of safety due to the special conditions that prevail at sea. In most cases people cannot quickly escape in the event of a fire to receive immediate help from the outside to fight a blaze. Apart from many fire risks, panic and compromised manoeuvrability are further typical sources of danger after a fire and must be taken into consideration when choosing an extinguishing system. The variety of fire risks on ships calls for a partner who provides fire protection from planning through to realisation and who takes special requirements into consideration. Minimax is Europe’s leading full-service provider for fire protection and one of the top companies in this area worldwide.

**With Minimax you can play it safe**
We provide complete stationary and mobile fire protection solutions, from risk analysis and technical design through to installation. We look after the approval of the components, submission of documents to classification societies and acceptance of the systems during commissioning on your ship. Minimax provides a customised fire protection concept and the perfect combination of individual systems.
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 fire risks quickly and reliably 24 hours a day. They warn persons at risk, inform the people responsible and provide all the relevant information to initiate the correct emergency measures without delay. Minimax provides 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**
Leading shipyards and ship owners rely on Minimax: our sprinkler systems are used in passenger areas worldwide, including in cabins and restaurants. Minimax sprinkler systems automatically identify and detect fires, and initiate the water-based extinguishing process, thus providing unfailingly reliable protection.

**Deluge systems**
Deluge systems should be used for car decks on ferries and on the tank decks of gas and chemical tankers. They facilitate extensive firefighting and cool down the burning substance. The heat impact on objects in the vicinity is also reduced and the fire is thus prevented from spreading. The system can be activated automatically or manually, according to requirements.
Water-based local application systems
This category comprises our low-pressure Minifog marine water mist system and our high-pressure Minifog marine XP system. These are generally used in combination with our Minifog marine XP sprinkler system in accommodation areas and the Minifog marine XP total-flooding system in engine rooms.

Minifog marine XP sprinkler systems
An alternative to conventional sprinkler systems, water mist technology represents an extremely safe and economic solution. In the case of a fire, our Minifog marine XP sprinkler systems will react very fast and effectively because of their optimal adaptation to the equipment to be protected and how the fire is expected to spread. They spray the tiniest droplets of extinguishing water. Thus, the cooling and suffocation effects are very effective. Environmental protection and its impact on people is reduced by binding smoke and harmful substances in the extinguishing water. Using water mist technology reduces pipework dimensions and weights, the amount of extinguishing water required, special requirements, contaminated extinguishing water residue and extinguishing water damage.

Minifog marine XP total-flooding system
Our Minifog marine XP system is tested for use in machinery spaces of category A of up to 8,235 m³.

Advantages
• Uses 90% less extinguishing water
• Just one sprinkler can cover up to 32 m²
• Protects engine rooms of up to 8,235 m³
• Pipe diameters of between 10 and 42 mm save valuable space
• No separate engine room fire protection system necessary
• Sprinklers can be spaced up to 6 m apart in corridors
• Just a single nozzle type can be deployed throughout the entire engine room
• Stainless steel sprinklers and nozzles
• Engine rooms can be protected without use of a foaming agent
Deck foam systems
Low-expansion foam distributed using monitors is a very effective extinguishant for large open areas like tankers, freight carriers and helicopter decks.

Powder extinguishing systems
Powder extinguishing systems are ideal where rapid fire “knock-down” is necessary and extinguishing damage is irrelevant, such as on the cargo decks of LPG or LNG tankers. The systems are available with different supplies and capacities.

Gas extinguishing systems
Minimax has a range of gas extinguishing systems for the protection of engine rooms, pump rooms, etc. Foremost among these are our high-pressure CO₂, nitrogen and argon systems as well as our high-pressure MX 1230 system.
**Mobile fire protection**

Mobile fire protection: foam/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.

**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 recognised as hygienically safe. Devastating consequential damage and operating interruptions will not occur.