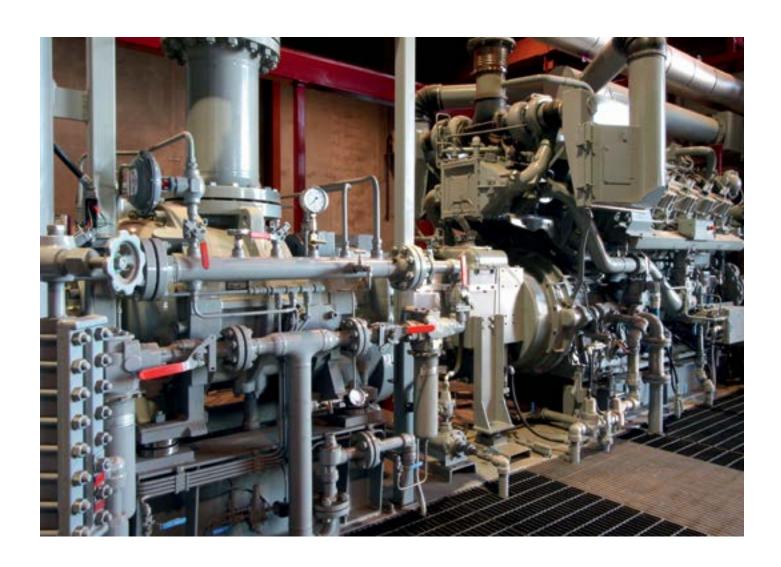


### Protecting machinery spaces from fire

HI-FOG® total flooding systems





## Top performance a

Machinery spaces, such as turbine and generator enclosures, require special fire protection. These spaces are very susceptible to fires due to the presence of heat generated by the equipment and highly flammable liquids. A minor malfunction or leak in machinery spaces can quickly turn into a serious fire.

These spaces are also becoming larger in order to accommodate the size and output of bigger machines. The larger machinery spaces are particularly difficult to protect because they may be hard to seal off, take more time to evacuate, and can result in more intense fires - but HI-FOG® rises to this challenge!



### HI-FOG® total flooding systems protect many types of hazards:

- Gas turbines
- · Diesel generators
- Steam turbines
- Transformers
- Switch gear
- Compressors

#### How HI-FOG® fights fire?

High pressure water mist technology delivers some of the best fire fighting performance available today, making it ideal for challenging applications such as machinery spaces.

HI-FOG® water mist fights fire using three main mechanisms: cooling the fire itself and the air surrounding it, blocking the radiant heat, and starving the fire of oxygen.



#### Don't wait, activate!

One of the major benefits of HI-FOG® system is that it can be activated immediately the moment a fire is detected, when fire is still in its infancy. This reduces the potential damage fire can cause.

The pure water mist of HI-FOG® is equally valuable in terms of personnel safety. It poses no danger to people; a false alarm and discharge is merely a nuisance, not a health hazard.

The third significant benefit of HI-FOG® in machinery spaces is its cooling effect. HI-FOG® discharges a very fine water mist as a high-pressure fog, which as such blocks radiant heat and absorbs heat efficiently through evaporation.



# gainst tough fires





#### Standards and regulations compliant

HI-FOG® is compliant with the relevant land based requirements and the latest International Maritime Organization (IMO) regulations.

The Factory Mutual (FM) standards give special consideration to gas turbines, machinery spaces and special hazard machinery spaces. In Europe, a recognized approval body is VdS Schadenverhütung GmbH (VdS).

Machinery space total flooding systems for marine applications are regulated by IMO and approved by various classification societies.

	FM (Land)	VdS (Land)	IMO (Marine)
MAU	$\leq$ 260 $m^3$	$\leq$ 260 m $^3$	
GPU	$\leq 1500  m^3$	$\leq 1375  m^3$	$\leq 1500  m^3$
MT4	$\leq 1375  m^3$	$\leq 1375  \text{m}^3$	$\leq$ 6600 m $^3$

Different HI-FOG® systems are certified for different space sizes.

The HI-FOG® machinery space accumulator unit (MAU) and gas-driven pump unit (GPU) are approved by FM and VdS.

HI-FOG® MT4 system is approved by a number of marine classification societies in accordance with IMO regulations.

#### HI-FOG® key benefits:

- Fast: immediate activation
- Safe: harmless to people and environment
- **Cooling:** prevents fire from reigniting
- Proven: success in countless type approval tests and real fires









HI-FOG® sprayheads



Machinery space section valve



12 mm and 30 mm stainless steel tubes in actual sizes



The small diameter, high quality stainless steel tubing bends easily around corners and obstructions.



Machinery space



accumulator unit (MAU) Gas-driven pump unit (GPU) Electrically-driven pump unit (SPU)





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