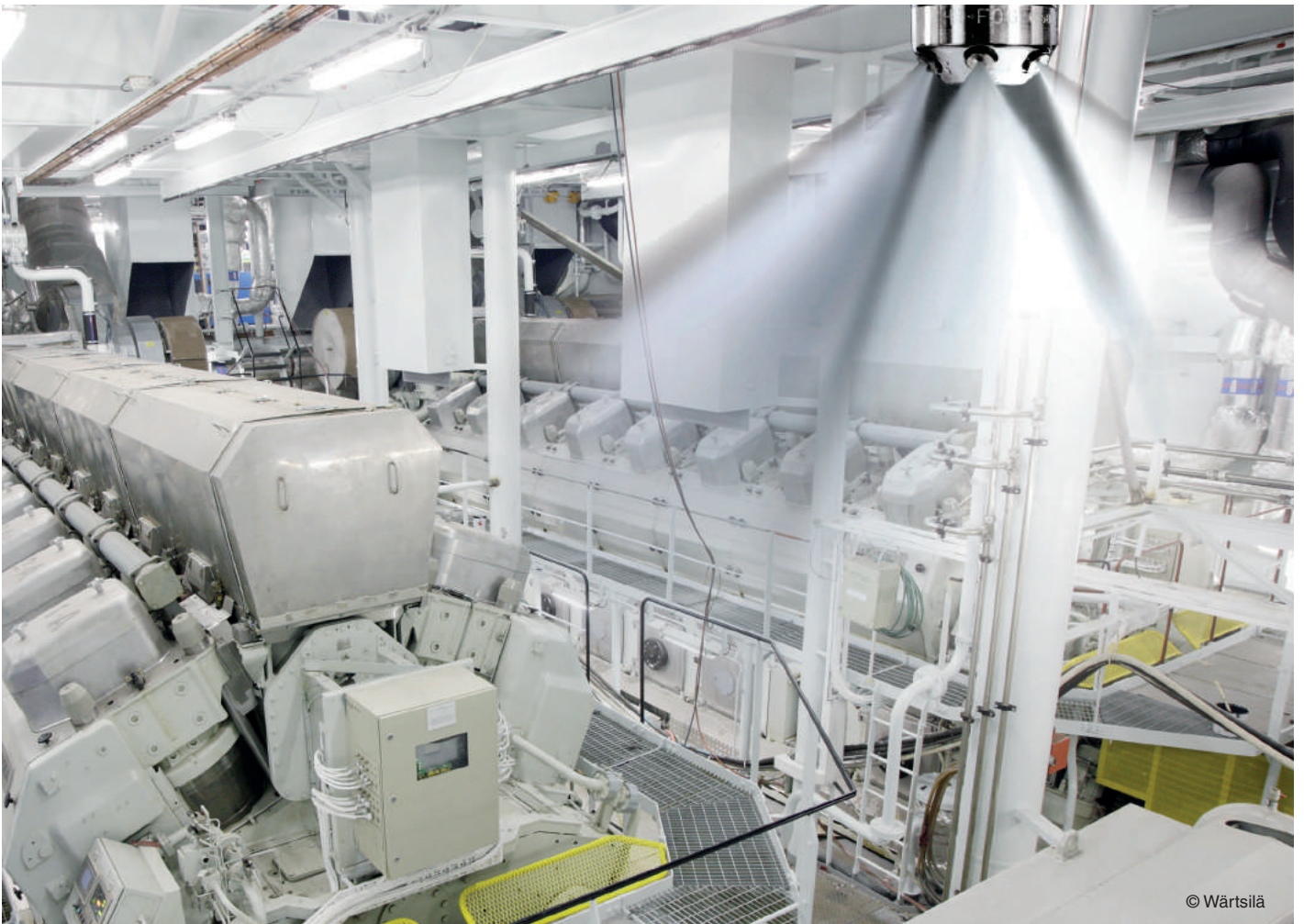


Protecting machinery spaces from fire

HI-FOG[®] total flooding systems

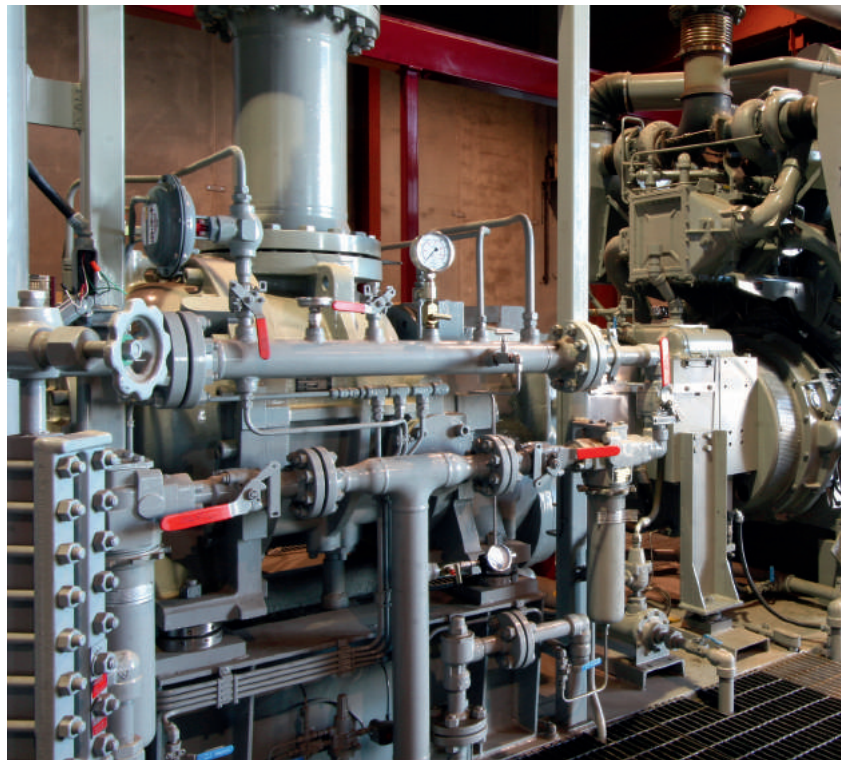


© Wärtsilä

Top performance a

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

The size of the machinery spaces is increasing. The larger the machinery space gets, the harder it is to seal it off, and the more time it takes to evacuate. HI-FOG® high pressure water mist is ideal fire protection solution for the machinery spaces as it can be activated immediately the moment a fire is detected while being entirely safe for people.



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

- Gas turbines
- Diesel generators
- Steam turbines
- Transformers
- Oil pumps
- 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!

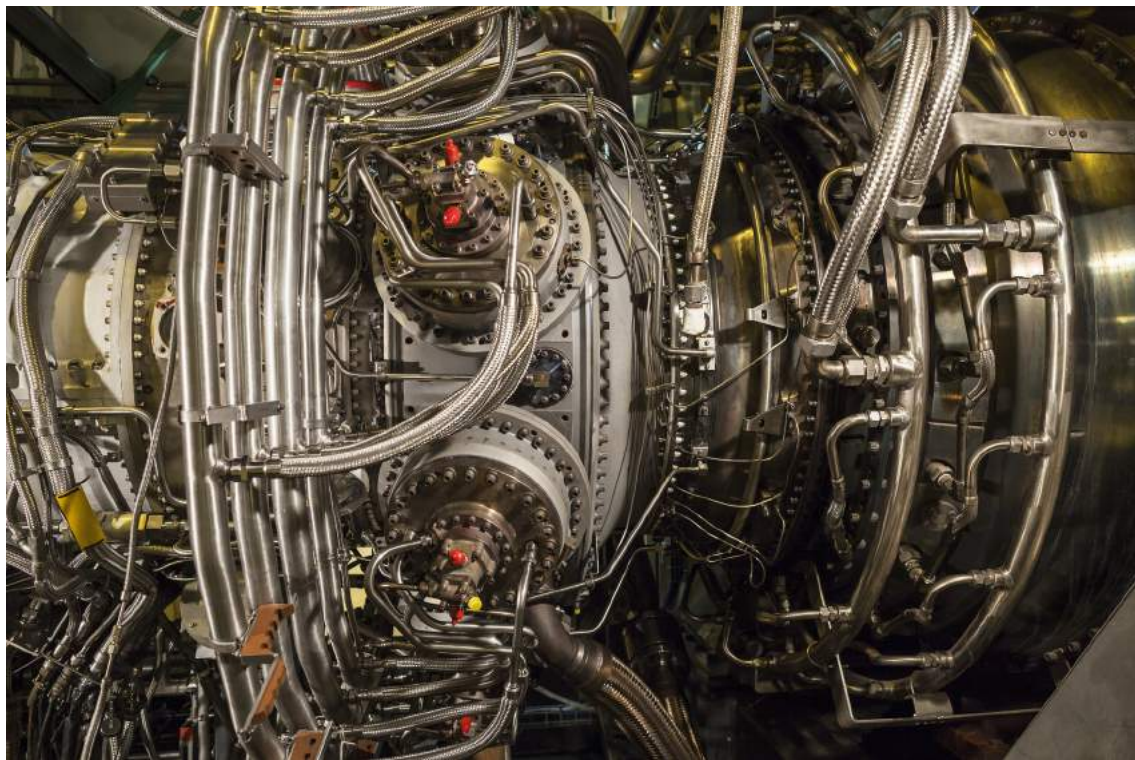
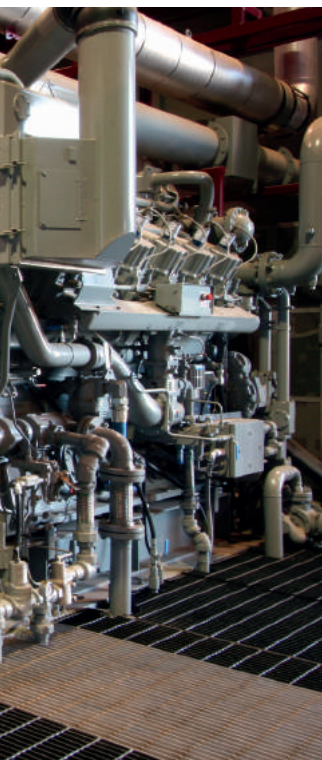
One of the major benefits of HI-FOG® system is that it can be activated immediately the moment a fire is detected, when fire is still in its infancy. This reduces the potential damage fire can cause.

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.



Against 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	≤ 260 m ³	≤ 260 m ³	
GPU	≤ 1500 m ³	≤ 1375 m ³	≤ 1500 m ³
MT4	≤ 1375 m ³	≤ 1375 m ³	≤ 6600 m ³

Different HI-FOG® systems are certified for different -sized spaces.

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 powered by HI-FOG® electric pump units and approved by independent third-party approval bodies.

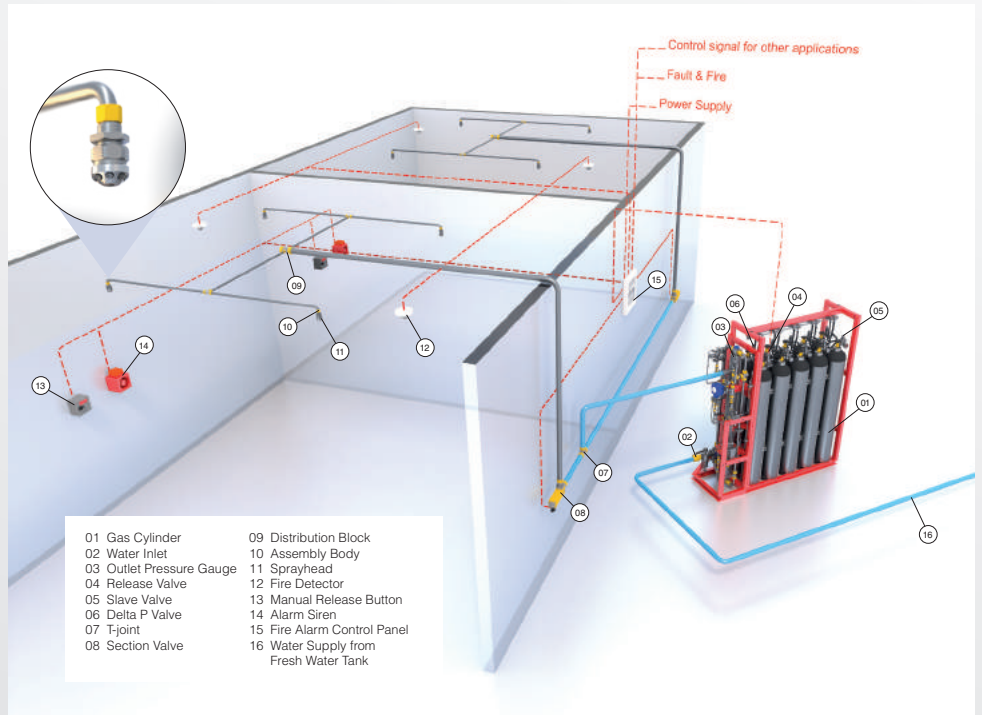
HI-FOG® key benefits:

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





HI-FOG® Spray Heads



HI-FOG® Machinery Space Section Valve



HI-FOG® Machinery Space Accumulator Unit (MAU)



HI-FOG® Gas-driven Pump Unit (GPU)



HI-FOG® Electric Pump Unit (EPU)



Marioff Corporation Oy
 Äyritie 24
 01511 Vantaa, Finland
 +358 (0)10 6880 000
 marioff.com

Marioff reserves the right to revise and improve its products and recommended system configurations as it deems necessary without notification. The information contained herein is intended to describe the state of HI-FOG® products and system configurations at the time of its publication and may not reflect the product and or system configurations at all times in the future.

HI-FOG® and Marioff® are registered trademarks of Marioff Corporation Oy. Marioff is a part of Carrier, a leading global provider of innovative heating, ventilating and air conditioning (HVAC), refrigeration, fire, security and building automation technologies.

© Marioff Corporation Oy 2019. All rights reserved. Ref. 2342E-EN

