

South Africa Automatic fire suppression system protecting Gensets

With high-pressure water mist.













THE FIRE TRIANGLE

THE CHALLENGE

A PROVEN FIRE SUPPRESSION SOLUTION



FOGMAKER's fire suppression system effectively attacks all three sides of the fire triangle. We call this unique performance Triple Action³.

Micro droplets of water-based extinguishant are generated by patented nozzles under high pressure. These droplets flood the area being protected and evaporate immediately on contact with heat. During the evaporation process, 1 litre of water will expand into 1700 litres of water vapour, which displaces air and stops the oxygen supply to the fire.

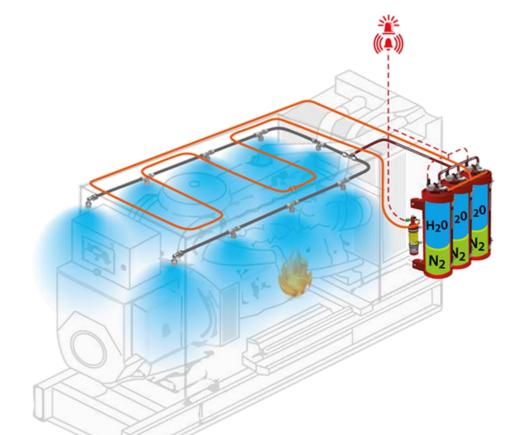
During the vaporization process the water mist cools the hot gases and hot surfaces in the engine compartment. It takes 1 calorie to heat up 1 gram of water by 1°C, but 540 times more energy to evaporate the same amount of water. The cooling achieved by this vaporization reduces the risk of re-ignition.

FOGMAKER's suppressant also includes, in low concentrations, an Aqueous Film Forming Foam (AFFF), which forms a protective barrier on the surface of any flammable material or fuel, thus preventing the fuel from being available for combustion.

Industries that are dependent on uninterrupted power to ensure continuous operation will understand the necessity of a completely reliable back-up generator (genset). Like any machine driven by a diesel engine, a genset is at risk of a fire resulting from the failure of a fuel or oil hose. Should this happen, the lost production due to downtime for repairs would be costly, if not catastrophic.

By installing FOGMAKER's automatic detection and fire suppression system, you'll be ensuring continued power supply to your critical operations. In most electrical applications like GENSETs, FOGMAKER makes use of de-ionised water, which does not conduct electricity, to prevent electrical shorting and damage to delicate electrical equipment. With every installation.

FOGMAKER South Africa objective is to protect your valued assets, your personnel and the environment in which they operate..



several global and local certificates and approvals.

FOGMAKER is the holder of



FPASA

(Fire Protection Association of Southern



ISO 9001 and 14001

(Quality and Environmental Management System)



AS-5062

(Australian Standards)



(International Standard for Automotive Quality Management Systems)



UL listed 1384

(American Standard for Mining Equipment)



FIA (International Automobile Federation)



UNECE

(UN R-107 Vehicle Regulation)



SBF 127 (Certified for Logging and Construction)



(Certified for Buses and Coaches)



SPCR 197 / 183

(Swedish Fire Protection Association)



SAMSA

(South Africa Maritime Safety Authority)



(Bureau Veritas - Marine and Offshore)



(Certification for Ship's Components and Accessories)



(Swedish Maritime Administration)



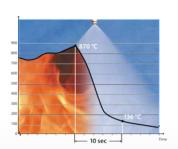
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ASSET PROTECTION

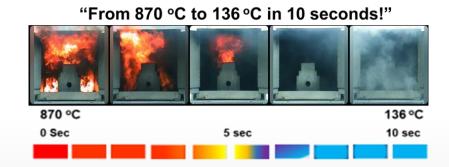
Mitigating the risk of an engine fire with FOGMAKER's automatic fire suppression system is the best way to protect your fleet of valuable assets from the threat of fire. FOGMAKER is fast becoming the fire protection solution of choice, and is trusted by many owners of heavy vehicles mobile industrial machinery to safeguard their machines, save operator lives and protect the environment in which they are working. The FOGMAKER fire suppression system is developed and manufactured in Sweden. FOGMAKER has a successful global track record in Europe, Australia, North and South America, East and Africa – with Middle over 200,000 units installed worldwide since 1995.



Fire suppression test in a simulated engine compartment with a volume of 2.5 m³. The fire source consists of Four 20cm x 40cm trays filled with diesel. A spray fire is then simulated by applying diesel at a rate of 2 litres per minute at a pressure of 5 bar, which engulfs the engine. The combined heat output of the fire is approximately 1600 kW



Temperature of burnt gases



In this simulation the fire is allowed to burn for more than 20 seconds. The burnt gas temperature increases to 870 °C at which point the FOGMAKER system is activated manually. In 10 seconds the temperature of the burnt gases decreases to approximately 136 °C. In addition to the rapid extinguishing the risk of re-ignition is minimized. This means reduced repairs and downtime.

WHY FOGMAKER?

- Extremely effective Triple Action³ fire suppression system attacks all 3 sides of a fire triangle.
- Automatic fire suppression system using loss of pressure (LOP) technology. No electric power required.
- Simplicity Minimal obstruction, low weight and orientation independent.
- Easily installed within one working day by our
 FOGMAKER Field Engineers.
- Low life-cycle cost Periodic inspections and major service every 2 years (MHSA) or 3 years (PER).
- System monitoring including low pressure and fire alarm.
- Automatic engine shut down optional.
- Easy clean-up and quick recharge once system has been triggered.



"The neat and compact layout of the **FOGMAKER** system means that it is not a hindrance when maintenance is conducted on our equipment. I also commend Fogmaker South Africa for the quality of their workmanship when installing the system on site." Richard Blaylock, Branch Manager of Hitachi Construction Machines in Pinetown, South Africa

"The continued support we receive from Fogmaker and the efficiency of their system is second to none and would highly recommend them." Mohamed Sameer, Kascco Project Manager at FQM Kalumbila Sentinel project in Solwezi, Zambia





FOGMAKER South Africa is the sole distributor for Southern Africa, with its head office in Johannesburg, South Africa. **FOGMAKER** South Africa has representative offices in Durban, Cape Town and Steelpoort, as well as in Zambia and Botswana, and has distributor partners based in Ghana, Nigeria and Togo.

At the heart of **FOGMAKER** South Africa are an amazing team who are passionate about our product and the customers we service. What truly differentiates us from our competition is our approach to risk mitigation, our tailored system design, our speedy installation and excellent after-sales service. Our mobile technical consulting team are available to visit you on-site to conduct fire risk assessments, installations and servicing.

FOGMAKER Southern Africa

Head office Address: 5 Jansen Road, Witfield, Boksburg, 1459, Gauteng.

Tel: +27 (11) 894 2906 Email: info@fogmaker.co.za Website: www.fogmaker.co.za Johannesburg Steelpoort Rustenburg Durban Cape Town Zambia Botswana

