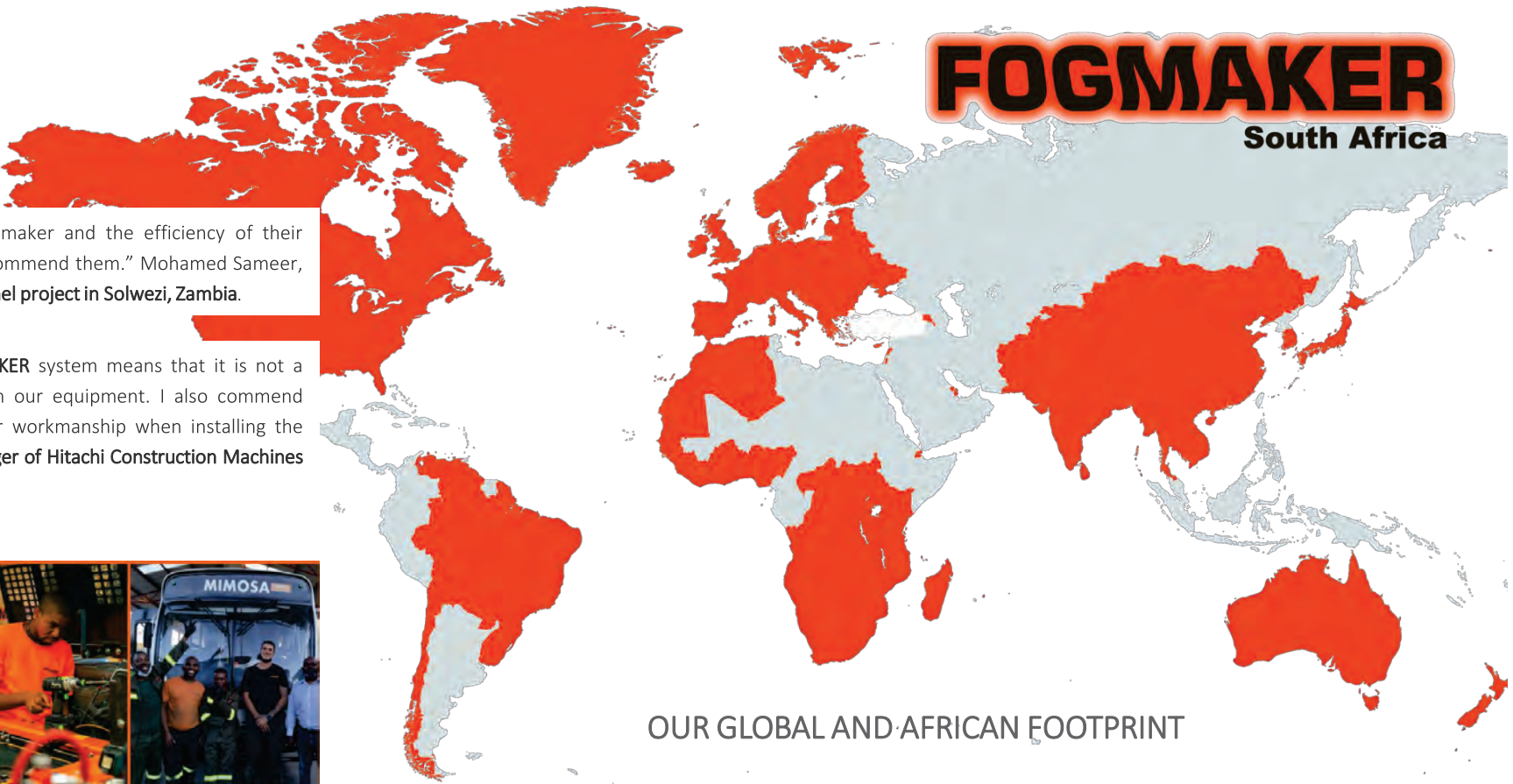


"The continued support we receive from Fogmaker and the efficiency of their system is second to none and would highly recommend them." Mohamed Sameer, Kascco Project Manager at FQM Kalumbila Sentinel project in Solwezi, Zambia.

"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.



OUR GLOBAL AND AFRICAN FOOTPRINT

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  
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 Website: www.fogmaker.co.za

Johannesburg  
 Steelpoort  
 Rustenburg  
 Durban  
 Cape Town  
 Zambia  
 Botswana

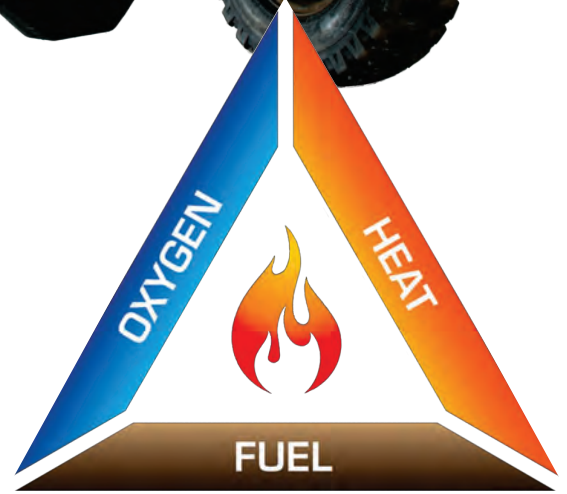


PURE PERFORMANCE WITH TRIPLE ACTION<sup>3</sup>



**FOGMAKER**  
 South Africa

Automatic Fire Suppression System Protecting  
 Specialized Purpose - Built Vehicles (SPBV)

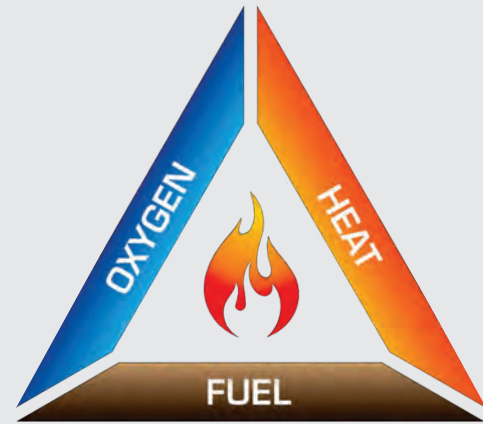


**TRIPLE ACTION<sup>3</sup>**

With high-pressure water mist.



## THE FIRE TRIANGLE



FOGMAKER's fire suppression system effectively attacks all three sides of the fire triangle. We call this unique performance **Triple Action<sup>3</sup>**.

OXYGEN

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.

HEAT

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.

FUEL

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.

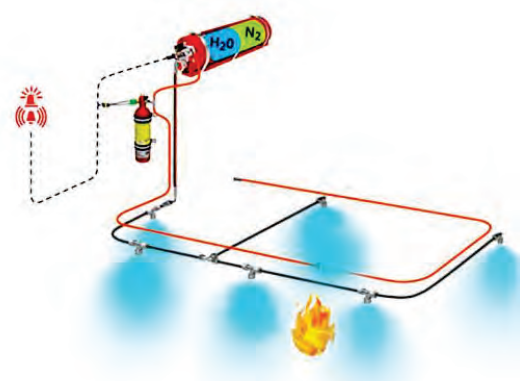
## THE CHALLENGE

### SPECIALIZED PURPOSE-BUILT VEHICLES (SPBV)

SPBV's are designed and equipped to operate in rugged, high risk and often explosive or volatile environments. Although these vehicles are structurally designed to protect their occupants from external threats, the danger of an external or internal fire could result in the vehicle being stranded, the occupants being trapped inside or them having to vacate the vehicle and expose them to the situation in which they operate. Remove the element of surprise with **FOGMAKER's** automatic fire detection and suppression system. Protect your fleet and your employees by installing our reliable fire suppression system to cover your vehicle's engine compartment, tyres and internal operator cabin.















Since these vehicles engine compartments are often enclosed and encapsulated with bullet proof steel to protect them from explosive devices, the engine temperatures compartment operates at higher increasing the risk of an engine fire. A Molotov petrol grenade or Molotov cocktail thrown to target the vehicle's tyres needs to be quickly neutralised before the fire develops to a point where a tyre fire is almost impossible to extinguish. An ignited engine or tyre fire could strand the vehicle or spread to the internal operator cabin and rapidly lead to a disastrous series of events.

**FOGMAKER's** automatic fire suppression system with several manual activation options ensures that the operators and occupants of SPBV's have the peace of mind to focus on their critical mission.



## A PROVEN FIRE SUPPRESSION SOLUTION

**FOGMAKER is the holder of several global and local certificates and approvals.**

-  **FPASA**  
(Fire Protection Association of Southern Africa)
-  **ISO 9001 and 14001**  
(Quality and Environmental Management System )
-  **AS-5062**  
(Australian Standards)
-  **IATF**  
(International Standard for Automotive Quality Management Systems)
-  **UL listed 1384**  
(UL Standard: Water-Based Automatic Extinguisher Units)
-  **UNECE**  
(UN R-107 Vehicle Regulation)
-  **SBF 127**  
(Certified for Logging and Construction)
-  **SBF 128**  
(Certified for Buses and Coaches)
-  **SPCR 197 /183**  
(Swedish Fire Protection Association)
-  **SAM SA**  
(South Africa Maritime Safety Authority)
-  **BV**  
(Bureau Veritas- Marine and Offshore)
-  **RINA**  
(Certification for Ship's Components and Accessories)
-  **SMA**  
(Swedish Maritime Administration)
-  **FM**  
(Worldwide Standards for Manufacturers- pending)



## 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 .

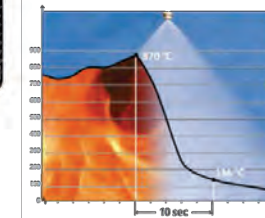
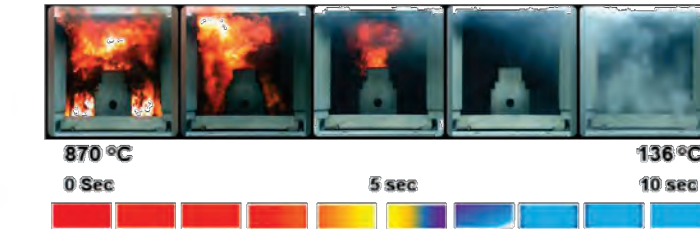
FOGMAKER is fast becoming the fire protection solution of choice, and is trusted by many owners of heavy vehicles and mobile industrial machinery to safeguard their machines, save operator lives and protect the environment in which they are working.

The fire suppression system is developed and manufactured in Sweden. FOGMAKER has a successful global track record in Europe, Australia, North and South America, Middle East and Africa - with over 200,000 units installed worldwide since 1995.

Fire suppression test in a simulated engine compartment with a volume of 2.5 m<sup>3</sup>. 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.

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.

**"From 870 °C to 136 °C in 10 seconds!"**



In 10 seconds the temperature of the burnt gases decreases to approximately 136 °C. In addition to the rapid extinguishing the risk re-ignition is minimized.

This means reduced repairs and downtime.

## WHY FOGMAKER ?

-  **Extremely effective**  
- Triple Action<sup>3</sup> 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 shutdown**  
- optional
-  **Easy clean-up and quick recharge** once system has been triggered.

