

# FOGMAKER

AUTOMATIC FIRE SUPPRESSION SYSTEM  
PROTECTING FORESTRY EQUIPMENT

## TRIPLE ACTION<sup>3</sup>

AUTOMATIC FIRE SUPPRESSION SYSTEM  
WITH HIGH-PRESSURE WATER MIST



## THE CHALLENGE

Due to the nature of the working environment, forestry machines are at a high risk of fire.

Accumulated flammable organic debris in hot areas within the engine compartment is by far the most common cause of fires in forestry equipment, followed by electrical faults.

An engine fire can be devastating, as every minute of the operation counts and forestry operations are extremely sensitive to unscheduled downtime. Due to the typically large quantities of diesel and hydraulic oil, often operating under high pressure in the immediate area, an ignited engine fire could lead to a rapid and disastrous series of events. The financial and operational consequences have the potential to affect everyone, from the operator to the contractor to the insurer, as well as the land owner.



## A PROVEN FIRE SUPPRESSION SOLUTION

FOGMAKER is the holder of several global certificates and approvals.



ISO 9001 and 14001



UL 1384



AS-5062 (Australia)



SBF-127 /128 (Scandinavia)



SPCR 197



FIA



IATF



FM 5970 (pending)

## 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>**.

1  
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.

2  
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.

3  
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.

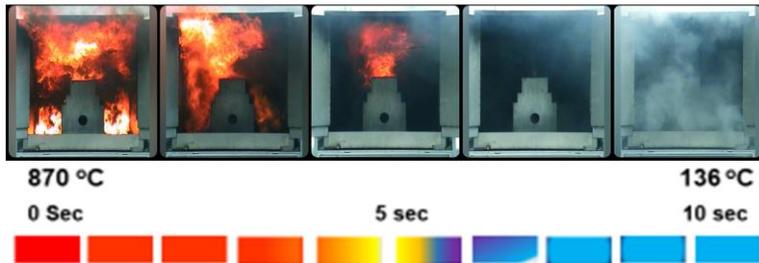
# ASSET PROTECTION

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**.

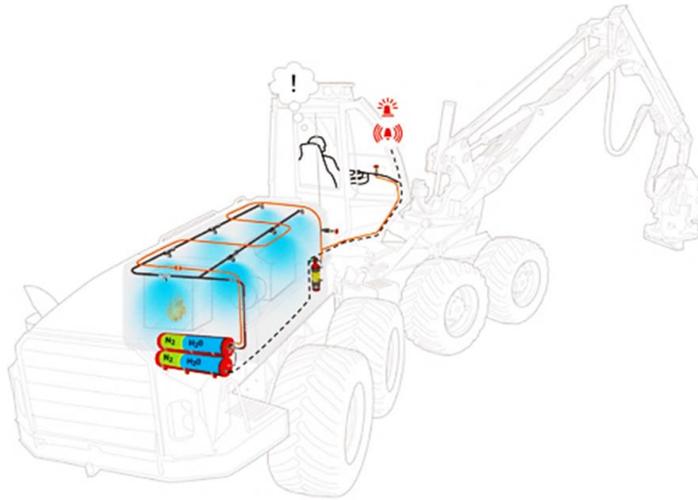
**FOGMAKER** is fast becoming the **fire protection solution** of choice, and is trusted by many owners of heavy **vehicles** and **mobile industrial machinery** to safeguard their machines, save operator lives and protect the environment in which they are working.

The **FOGMAKER** 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.

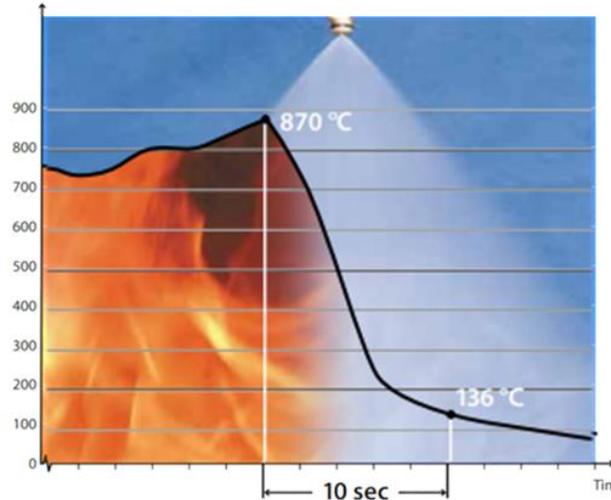
**“From 870 °C to 136 °C in 10 seconds!”**



*Fire suppression test in a simulated engine compartment with a volume of 2.5 m<sup>3</sup>. The fire source consists of 4 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 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 shut down** - optional.
- **Easy clean-up and quick recharge** once system has been triggered.



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## OUR AFRICAN AND GLOBAL 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.

*"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

*"The fact that the Fogmaker system requires such low maintenance is very important to us, as we operate in remote and diverse areas and the cost of systems requiring frequent servicing is prohibitive."* Leon van Eerden, Owner of Iningi Harvesting



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

