



Vehicle Fire Suppression Systems

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Protecting People & Property

WORMALD



The professional choice

Specialists in fire protection since 1889

Wormald is a leading provider of fire protection solutions and has been protecting people and property for over 120 years.

Our expertise spans the design, manufacture, installation and service of fire products and equipment backed up with a comprehensive range of services from engineering advice to fire safety and training.

Our range of Vehicle Fire Suppression Systems has been developed for fires occurring in the engine and transmission compartments, brakes and hydraulic areas of heavy vehicles, plant and equipment used in industries such as mining, quarrying, construction, waste disposal and forestry.

Specialising in fire detection and protection systems since 1889 and operating in over 45 locations regionally, you can rely on Wormald to help you protect your people and machinery.

Protect your people and business from vehicle fires

When you combine heat, flammable liquids, turbo chargers, exhaust fumes, electrical components and brakes in the enclosed space of the engine compartment, the potential risk of a fast and furious fire is high.

If you add a burst hydraulic hose, faulty fittings or a collision then the consequences can be devastating. Wormald's comprehensive range of Vehicle Fire Suppression Systems is your best defence against the threat of vehicle fire.

Whether foam water spray systems or dry chemical agents, our proven end-to-end solutions are designed to rapidly suppress fires in all kinds of vehicles from huge mining and quarrying plant and equipment to small forklifts and 4WDs.

A leader in new Standard compliance

Wormald has become one of the first companies in Australia with a vehicle fire suppression system to comply with Australian Standard AS 5062-2006: Fire protection for mobile and transportable equipment.

Australian Standard AS 5062 is the first of its kind and it was key industries, such as mining and forestry as well as Occupational Health & Safety bodies and the Fire Protection Association of Australia (FPAA), that were the driving force behind its introduction by Standards Australia. Failure of some vehicle fire suppression systems to perform due to a lack of fire industry standardisation had become a major concern.

Although AS 5062 is not mandatory at the moment, we hope our compliance sets an industry-leading benchmark for our competitors to follow and that this is the first step towards ensuring all vehicles are equipped with vehicle fire suppression systems of the very highest quality.

Should a fire break out, Wormald's systems can provide operators with the additional time necessary to safely evacuate. Importantly, Wormald's systems also protect against business interruption by minimising damage to the vehicle or equipment through the suppression of the fire.

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Vehicle Fire Suppression Systems

Every day, Wormald's Vehicle Fire Suppression Systems protect thousands of vehicles across all types of industry including mining, quarrying, construction and forestry. Proven and flexible, they suit a huge range of mobile plant, equipment and vehicles.

Using Wormald's fire risk assessment processes which are based on Australian Standard AS 5062-2006, we will work with you to determine the appropriate Vehicle Fire Suppression System for your needs.

Foam Water Spray Vehicle Fire Suppression System

Wormald's Foam Water Spray Suppression System has been developed for the suppression of fires in the engine and transmission compartments, brakes and hydraulic areas of mining, quarrying, construction, waste disposal, and forestry vehicles.

Our foam water spray system discharges a continuous stream of foam water spray for approximately 60 seconds to rapidly suppress flames and dramatically cool hot surfaces to help prevent re-flash. At the same time the foam additive, Aqueous Film Forming Foam (AFFF), smothers fuel and oil-spill fires, to help prevent re-ignition.

Wormald's foam water spray system consists of water and 6% foam concentrate (Ansul ICAO-B 6% AFFF). The nozzles target risk areas such as the turbo charger, manifold and starter motor in the engine compartment, the transmission compartments and the pumps and valves.

To ensure safe and efficient operations, it features high-quality stainless steel foam storage containers, stainless steel and brass discharge valves, steel-braided hydraulic hose, protective stainless

steel nozzle caps, an overpressure safety device and reusable or crimped fittings. Depending on your requirements we offer a range of manual actuation or automatic system release with manual actuation.

Designed and manufactured in Australia to suit harsh Australian conditions, the system can be easily recharged in situ. This is critical in remote regions where specialised support is not immediately available. The systems also feature automatic detection and actuation – pneumatic or electrical – so you're protected whether or not there is an operator present.

By undergoing a series of rigorous fire tests and system component stress tests, Wormald has passed the system approval for its Foam Water Spray Vehicle Fire Suppression System to be compliant with AS 5062 and it is also CSIRO ActivFire™ listed.



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Dry Chemical and Dual Agent Systems

Wormald's Dry Chemical System is a pre-engineered system designed for protection of industrial equipment in areas such as mining, waste handling, forestry and construction.

Dry Chemical System

The Standard ANSUL A-101 mobile equipment fire suppression system discharges ANSUL FORAY® multipurpose dry chemical agent to quickly knock down flames. The fixed-nozzle system can be designed to "flood" entire areas with dry chemical agent, or can be aimed at specific high-hazard areas and is offered in a range of container sizes from 30lb, 50lb, 125lb and 250lb with optional extended discharge available for high risk applications.

Base ANSUL A-101 systems utilise automatic detection and actuation controls, backed up by remote actuators.

- > LT-A-101 expands the capabilities of the original A-101 system for use in temperature extremes, from -54° to 99°C.
- > LP-LT-A-101 low profile system provides protection in underground mining environments.

Ansul A-101™ dry chemical vehicle systems and Ansul A-101/LVST™ twin agent systems are now compliant with AS 5062, and both are CSIRO ActivFire™ listed.

Dual Agent System

The Dual Agent System integrates the Dry Chemical System with a Wet Chemical System called the ANSUL LVS Liquid Agent Fire Suppression System. Stored in tanks and discharged by pressurised nitrogen, LVS agent dramatically cools surrounding areas, helping to contain fires and prevent reflash. Because it is a liquid,

LVS agent flows along the same path as burning fuels to reach and suppress fires in areas dry chemical agent cannot. The Dual Agent System has the major advantage of combining the fast knock down that dry chemical powder provides, plus the rapid cooling effect of a wet chemical liquid.

The Dual Agent System is available with pressure operated (cartridge) actuation and include an ASC-N CHECKFIRE indicator panel which features a key isolate switch, magnetic reset tool, history buffer, battery back-up, engine shutdown time delay and remote operation to maximise safety, convenience and effectiveness.



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VEHICLE FIRE SUPPRESSION SYSTEMS



Would you know what to do if an emergency occurred?

Fire can destroy large vehicles with frightening speed. A burst hydraulic hose creates a spray of burning fuel, while combustible liquids inside engines can ignite in a split second. Would you know what to do if any of these emergencies occurred in the next 10 seconds?

The best way to minimise irrational behaviour is to have well-trained staff who can respond confidently in these situations.

Wormald training solutions are designed to help employers, site owners and managers meet their legal obligations. We offer courses that provide the right training and material for employees who work with industrial vehicles, to help promote a safer working environment.

Wormald's emergency response courses gives your staff the skills and confidence to make the right decisions and act quickly in the event of a work place emergency.

Available Training Courses

Fire Extinguisher Training

Wormald offers both a non accredited and RTO accredited sessions of the Fire Extinguisher Training.

Both courses are a combination of theory and practical training, educating participants about the relevance of state fire safety regulations and providing the opportunity to develop operational techniques when using fire equipment in the workplace.

The differentiator between the two course options is that the Nationally Recognised Training (RTO) version is ideal for any employee who may need a nationally accredited qualification in this area.

Breathing Apparatus (BA) Course

This BA course provides participants with the skills and knowledge to use Self Contained Breathing Apparatus (SCBA) in the work place (MSAPMOHS2 16A - Operate breathing apparatus).

This nationally accredited course covers the competency associated with the operation and maintenance of BA equipment in an irrespirable atmosphere. Topics include: conduct pre-donning checks and test BA, check and operate BA, maintain, test and identify BA components, describe the physiology of respiration and respond to incidents requiring BA to be worn and use safe working practices

Confined Space Entry Course

The Confined Space Entry program equips authorised employees with the knowledge and skills to safely enter and operate in confined spaces, avoiding exposure to hazardous substances, flammable or explosive conditions, engulfment, asphyxiation by unsafe oxygen levels or other safety or health issues (MSAPMPER200B - Enter confined space; MSAPMPER200B - Work in accordance with issued permit).

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SAPPHIRE™ Engine Strangler System

When a diesel fuelled engine needs to be shut down in an emergency situation, you need to move fast to protect your people and property from harm. But in some cases the solution can be just as damaging as the fire.

Wormald's SAPPHIRE™ Engine Strangler System uses a unique inert gas fire suppressant made of natural gases to powerfully fight fire and rapidly shut down a diesel engine without causing damage to mechanics, electronics and, more importantly, people.

SAPPHIRE™ looks like water but leaves no water damage or messy residue. The result is lower repair bills and less impact on business due to minimal repair times. Unlike some chemical agents, which last in the atmosphere for more than 33 years,

SAPPHIRE™ lasts for just five days, so it is also environmentally friendly.

The system works by rendering the inducted air/fuel mixture non-combustible, it effectively shuts down the vehicle's engine, averting disaster. Light and compact, installation is a simple matter of fixing a bracket in a suitable position and connecting it to the engine's inlet manifold. And operating the system couldn't be easier – simply withdraw the safety pin from the valve assembly and squeeze down fully on the operating lever.

Fact: Australian standard AS 2089 requires that all flammable liquid filled tankers which use the vehicle propulsion engine to drive a pump, to have a manually operated strangler fitted to the air intake.



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Protecting your people as well as your property

Fact: A potentially fatal fire can often be stopped before it really starts if the right fire equipment is close at hand.

ELSA - Escape Breathing Apparatus

Designed for escape from hazardous atmospheres, Wormald's breathing apparatus, ELSA, can assist operators escaping from a burning vehicle and compliments the Vehicle Fire Suppression Systems. Fast and simple to put on in an emergency situation and providing powerful protection from harmful gases, ELSA, has helped thousands of people escape safely from hazardous atmospheres such as in a fire.

ELSA is the third generation of the original Emergency Life Support Apparatus pioneered under the proven Sabre brand and it complies fully with the latest SOLAS marine regulations.

- > Very simple to operate – starts automatically upon opening of bag
- > Provides clean breathable air
- > Easily rechargeable and reusable
- > 10 and 15 minute versions available
- > Limited training required
- > Easy to follow illustrated user instructions



Fire Extinguishers

A vital part of Wormald's business is 'first-aid' fire fighting equipment – appliances such as portable fire extinguishers, fire hose reels and fire blankets, that form the first line of defence against fire.

Portable fire equipment needs to be identifiable, easy to get hold of and appropriate for the property it is intended to protect. Wormald offers a range of portable fire extinguishers to suit all classes of fire and fire risk. Each extinguisher type is distinguished by a coloured band around the top of the cylinder, except for the water type extinguisher which is all red with no coloured band, making identification quick and simple.

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We provide emergency service 24 hours a day

Services

24/7 emergency support & end-to-end maintenance

Wormald doesn't just provide the equipment to minimise fire damage. With 24/7 emergency support and full maintenance services, we provide valuable peace of mind that your people are safe and that your business can continue in the event of fire to your vehicles.

If you have an incident, simply call our 24/7 service centre and we will take immediate action to ensure that your fire-protection equipment gets the attention it needs as quickly as possible, whatever the hour.

A major component to AS 5062 compliance is the regular inspection, testing, preventative maintenance and survey procedures for the vehicle fire suppression systems to ensure that a system is fully functional and will perform as designed if

a fire occurs. Wormald offers such measures under our Quality Assurance approach to testing and maintenance. Our technicians can visit your site to check, test and refill your fire protection solutions.

All Wormald technicians involved with these systems are required to have completed our Vehicle Fire Suppression Systems accreditation program. To further enhance the skill levels of our technicians, we will be rolling out a full Registered Training Organisation competency-based system for Certificate II and III in Fire Protection Equipment – Vehicle Fire Systems that is recognised under the Australian Qualifications Framework.

Wormald also offers a valuable range of comprehensive services including risk assessment, system design, technical drawings and operator training.

At Wormald, our priority is your protection.

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 **WORMALD**

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