

# REACTON

FIRE SUPPRESSION



PROTECTING  
**YOUR FUTURE**  
TODAY

[reactonfire.com](http://reactonfire.com)

# A STORY WORTH TELLING

Founded in 1968 with the sole purpose of protecting racing cars from fire, two young engineers created the first Reacton® Fire Suppression system using what is now known as 'burst tube' technology.

Fast forward 50 years and Reacton® is a leading global manufacturer of critical fire suppression systems. At the heart of Reacton® is a world-class team with a genuine passion to raise the level of safety within the industries we serve to protect people and assets from the life changing effects of fire.

Our third-party accreditations give our customers the confidence in our systems that we have always had. At Reacton® we take pride in having the most reliable systems in the world with the service and support to back them up.







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**R**  
REACTON

**R**  
REACT

Our systems are manufactured to exceed the requirements of the most robust and demanding certification standards around the world



# RESEARCH & DEVELOPMENT LIKE NO OTHER

Research and development is in our DNA, it drives everything we do and means our customers have complete trust that our fire suppression systems protect their assets without fail.

Outstanding performance is not an option, it is a guarantee. Our systems activate 100% of the time and we don't settle for anything less.

It is our obsession with fire safety that drives us to innovate, ensuring we bring new products to market that provide exceptional fire protection for people, assets and infrastructure all over the world.

## **Reacton's research and development team lead the way in:**

- ✓ Product innovation and development
- ✓ Achieving international fire safety accreditations and standards
- ✓ Custom fire suppression design solutions
- ✓ Expansion of product range to better serve our customers and also provide a wider range of protection
- ✓ In-house product data and lifecycle research
- ✓ System drawings, assemblies and simulations to offer the best possible support for our customers



Reacton's systems are designed and tested for each application. Backed by our industry leading warranty, you can count on our automatic fire suppression systems to protect your assets first time, every time.





ITEM NO.	DESCRIPTION	Material	Weight	QTY
1	Novac Agent Nozzle 3/8 Female, used with Novac Agent, 3kg Cylinder size	Stainless Steel, Alloy 303	Approx 0.1 kgs	1

ZONE	REV	DESCRIPTION	REASON	DATE	APPROVED
F13	A	Original Version	Original Release	19/01/2018	V.N.T.A
	B	Undercut added.	Model to fit Rev.B	19/03/2018	V.N.T.A

**REACTION**  
FIRE SUPPRESSION

Reaction Fire Suppression Ltd.  
14 Evers Place  
Wainflete Business Park  
Chalfont St Giles  
CH41 2HX  
Registered Number: 50386300

Drawn Date: 19/03/2018  
Released Date: 19/03/2018  
REVISION: B

Dwg No. DRW-NZL0010

Description: Novac Agent Nozzle, 3/8 Female, used with Novac Agent, 3kg Cylinder size

Scale: 1:1 DON'T SCALE DRAWING

Size: A1 SHEET 1 OF 3

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# REACTON VEHICLE SYSTEMS



## Dry Chemical Systems

Dry Chemical fire suppression systems from 1kg - 18kg with up to 12 nozzles per cylinder. All systems offer superior and rapid fire knock down.



## Dual Agent Systems

Dual Agent fire suppression systems from 8kg - 108kg. These systems offer the highest level of performance and protection against fire knock down and re-ignition.



## Wet Chemical Systems

Wet Chemical fire suppression systems from 1kg - 18kg with up to 12 nozzles per cylinder. Wet Chemical systems offer protection against a vast array of vehicle applications.

Designed to be independent from any outside power source for either monitoring or activation, Reacton® systems consist of a pressurised cylinder available with a range of extinguishing agents, dependant on the application it is protecting.



## **A+ Certified Systems**

### **High performance vehicle fire suppression systems.**

Reacton's vehicle fire suppression systems deliver the highest performance while ensuring the ultimate durability and longevity. We believe that all systems should carry a third party certification. This ensures it has been independently inspected to meet the demands of the application the system is protecting.

Our vehicle fire suppression systems are certified to P-Mark SPCR183 & P-Mark SPCR199 proving they are designed and tested to meet the most demanding conditions. P-Mark SPCR183 and SPCR199 shows system performance as a score from A+ to E. All Reacton® P-Mark systems are certified to A+.

## **No Power, No Fuss**

### **Vehicle fire suppression systems that don't run out of battery!**

Reacton's primary detection and activation method does not require integrations with any electrical system. This ensures that whatever the condition of electrical components on the vehicle, the systems will react to a fire when one occurs. With just one monitored moving part they are the most reliable systems in the world.



# VEHICLE PROTECTION

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Vehicles are an essential part of our everyday lives. From the buses we take to the lorries that move our goods and the cars we drive, we rely on transport to keep our home and working worlds turning. But our reliance on transport presents an increased risk of exposure to fire.

According to the National Fire Protection Association (NFPA), vehicles account for 20% of all reported fires. In the UK alone, over 21,000 vehicle fires were recorded in 2018/19. Detailed investigations from leading transport authorities and fire protection agencies promote the installation of automatic fire suppression, particularly in buses and coaches, where 61% of fires start in the engine bay and 15% result in the vehicles being completely destroyed.



Reacton's range of bus and coach systems are certified to P-Mark 183 and UNECE R107 global standards, meaning our systems perform to the highest level in the most stringent and challenging conditions.





# INDUSTRIAL EQUIPMENT

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Heavy plant equipment are in use around the clock in some of the most gruelling conditions. High temperatures, rapid air flows and flammable fluids in engine bays combine to create a near perfect environment for fires to start.

Reacton Fire Suppression's P-Mark SPCR 199 fire suppression system is certified to automatically detect and extinguish engine bay fires. This means that our system will withstand the extreme vibration, ageing and corrosion that would cause other systems to fail. Operating day and night with no need for power, Reacton's systems automatically detect and knock down a fire before it has an opportunity to take hold.



Reacton's mobile plant automatic fire suppression system ensures minimal downtime, disruption and cost in the event of a fire.



**REACTON**  
FIRE SUPPRESSION  
AFFF WET CHEMICAL  
AUTOMATIC FIRE SUPPRESSION

**REACTON**  
FIRE SUPPRESSION  
ABC DRY POWDER  
AUTOMATIC FIRE SUPPRESSION



# EXTINGUISHING AGENTS

Reacton Fire Suppression systems are available in a range of Extinguishing Agents

## 3M™ Novec™ 1230 Fire Protection Fluid

3M™ Novec™ 1230 is a fluorinated ketone that is stored as a liquid and discharged as a gas. It is electrically non-conductive and leaves no residue after discharge. It distributes uniformly throughout the hazard zone and suppresses fire primarily by heat absorption from the flame.

With a zero Ozone Depletion Potential (ODP), a Global Warming Potential (GWP) of just one, and an Atmospheric Lifetime (ALT) of only five days, 3M™ Novec™ 1230 Fire Protection Fluid offers an environmentally responsible option for fire suppression.



## Chemours™ FM-200™

FM-200™ sometimes referred to as (HFC-227ea) is the most tested liquifiable clean agent of all time. It is an electrically non-conductive odourless and colourless gas. FM-200™ offers minimal downtime due to no clean-up post discharge. It is stored as a liquid and introduced into the protected hazard as a clear colourless vapour. FM-200™ leaves no residue and

is suitable for occupied spaces. FM-200™ has zero Ozone Depletion Potential.

FM-200™ has been thoroughly evaluated and approved for use in occupied areas as specified by the Environmental Protection Agency (EPA) & Significant New Alternative Program (SNAP).



## FUREX ABC 770 DRY POWDER

FUREX 770 ABC Dry Powder is a Mono Ammonium Phosphate (NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub>). Reacton® selects this high-grade variant of the ABC Dry Powder that has a high Mono Ammonium Phosphate (MAP) content and is silicone coated for its water repellency and fluidised flow properties.

It is stable at extremely high and low temperatures and ideally suited for vehicle fire suppression.

ABC Dry Powder is an extremely effective firefighting medium and is utilised in areas where the introduction of water-based protection is not ideal.



## PURPLE K DRY CHEMICAL

Purple K Powder is a potassium bicarbonate based powder and is one of the most recognisable extinguishing agents by its famous violet colour. Purple K is extremely effective on flammable liquid and gas fires (Class B & C) but also electrical fires. It is non-toxic, non-abrasive, free-flowing and water repellent. Purple K is also 4-5 times more effective

than Carbon Dioxide on Class B fires.

Purple K is the agent of choice for your petroleum industry where flammable liquids are stored and used. It is recognised by leading fire codes and standards for use at airports on Ground Support Equipment (GSE)

# PURPLE-K

## FREEFOR 15 FLUORINE FREE WET CHEMICAL

FREEFOR 15 Fluorine Free Wet Chemical has durable film forming and blanketing properties separating oxygen from the fuel source. Being a liquid, it will flow into the same locations as flammable liquids providing protection in essential areas.

superior cooling along with a continuous longer application rate than that of other agents offering an extremely high level of re-ignition protection. Reacton's Wet Chemical is the extinguishing agent of choice for preventing re-ignition from super-heated surfaces.

The Reacton® Wet Chemical solution features

# 3F

## CLASS F WET CHEMICAL

This Class F extinguishing additive is specially designed to tackle Class F hazards (cooking oils or fats). The Class F Wet Chemical has special materials that react with the hot burning oil to create a thick soapy heat resistant crust on top of the cooking oil surface, preventing the flammable vapours reacting with oxygen. It has the same quick flame knockdown

as Dry Powder or Foam but Class F Wet Chemical has the advantage of the high heat resistant fire blanket. Not only does this extinguishing agent offer a Class F rating it also provides Class A & Class B fire protection, while meeting EN3 European standard as a Class A-B-F water additive.

# 3F

## FUREX MAGNA D CLASS D POWDER

Specially designed to tackle combustible metal fires or Class D hazards. The Class D powder contains specialist extinguishing agents, comprised of alkali chlorides and silicons. Class D agents smother the fire with a non-reactive agent that forms a crust and excludes exposure to the atmosphere.

Class D fires pose a real threat as there is only one recommended way to extinguish them and using the incorrect extinguishing agent can be extremely dangerous.



# furex®

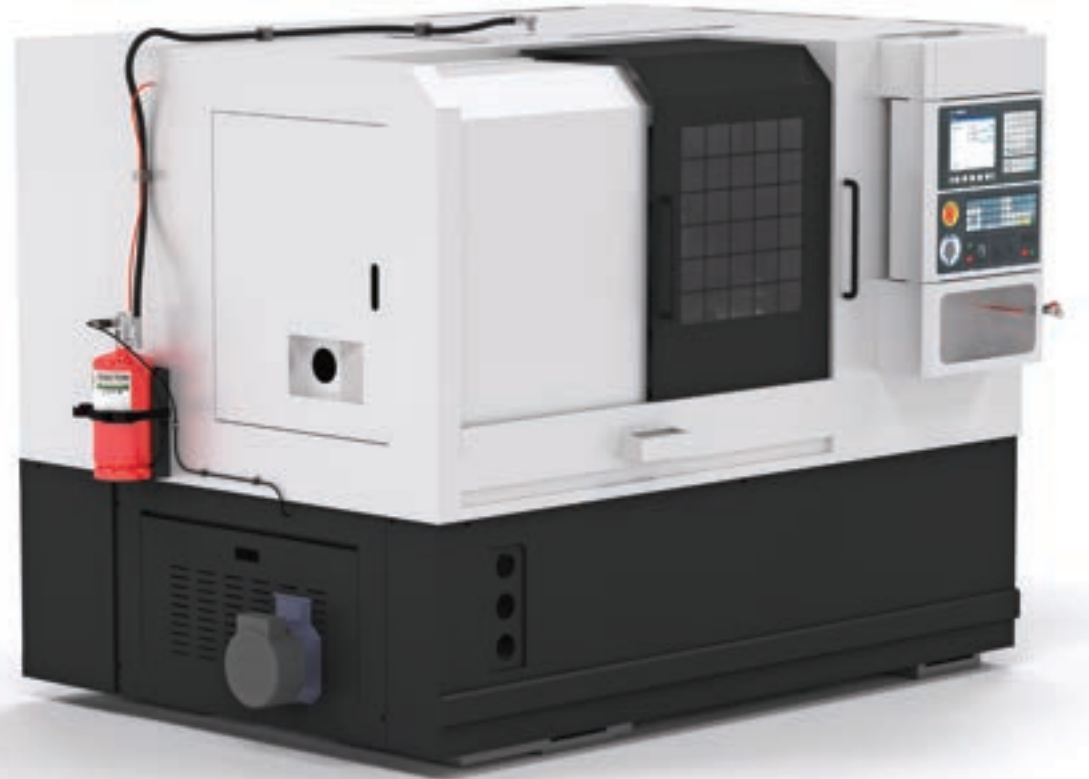
# MANUFACTURING & MACHINING

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Fires in CNC machines are common and can occur in an instant, without warning. These fires can destroy a machine and spread quickly throughout a shop causing extensive damage and high potential for injury. With CNC machines often operating unattended, a small spark can have devastating consequences.

When Reacton Fire Suppression's system detects fire it automatically activates, rapidly discharging the UL approved suppression agent directly to the source of the fire inside the CNC machine. Our systems use 3M™ Novec™ 1230 Fire Protection Fluid or FM-200™ Fire Suppressant clean extinguishing agents to suppress fire, ensuring no damage, no mess and complete total flood protection.

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Reacton's CNC fire protection systems can be fitted to all CNC machines, including high precision machines and swiss type lathes, and are recognised by major insurance underwriters.





# ELECTRICAL EQUIPMENT

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Electrical fires are incredibly challenging to predict and once started, if left to burn undetected, their effects can destroy equipment beyond repair and spread quickly to nearby technology or structures. Outdated infrastructure, faulty wires, poor maintenance and overloaded circuits are all risk factors and, if fire strikes, it can bring a business crashing down.

Reacton Fire Suppression's electrical equipment systems are designed for use in small enclosures limiting the impact of the fire to the source cabinet, and often the initiating component, using 3M™ Novec™ 1230 Fire Protection Fluid or FM-200™ Fire Suppressant clean agent extinguishants. Our automatic fire suppression systems can be seamlessly integrated into building fire control systems.

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Reacton's high performance clean agent automatic fire suppression systems can protect a range of electrical and data equipment.





# RESIDENTIAL KITCHENS

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Kitchen appliances are one of the most common causes of residential fires. If these kitchens are located in high density accommodation blocks, the smallest fire can be devastating. Cooking oils pose the highest risk, especially if they are left unattended or forgotten. More than half of non-fatal injuries occur when people try to control a fire themselves.

Unlike traditional smoke alarm and sprinkler systems, Reacton's kitchen automatic fire suppression system is engineered to tackle fires that are started when cooking oil and fat ignites. When our system detects fire it automatically activates, discharging the suppression agent to knock down flames within seconds. Quick fire suppression ensures minimal damage to the kitchen area, allowing for a simple clean-up process.

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Easily fitted to new or existing appliances, Reacton's compact and lightweight kitchen automatic fire suppression systems detect and suppress fire quickly and effectively.



# CUSTOM SYSTEMS

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Reacton® works with global organisations to protect risks that others simply can't. Our engineers are innovators in the design of automatic fire suppression systems that protect assets working around the clock in some of the world's most dangerous and demanding environments.

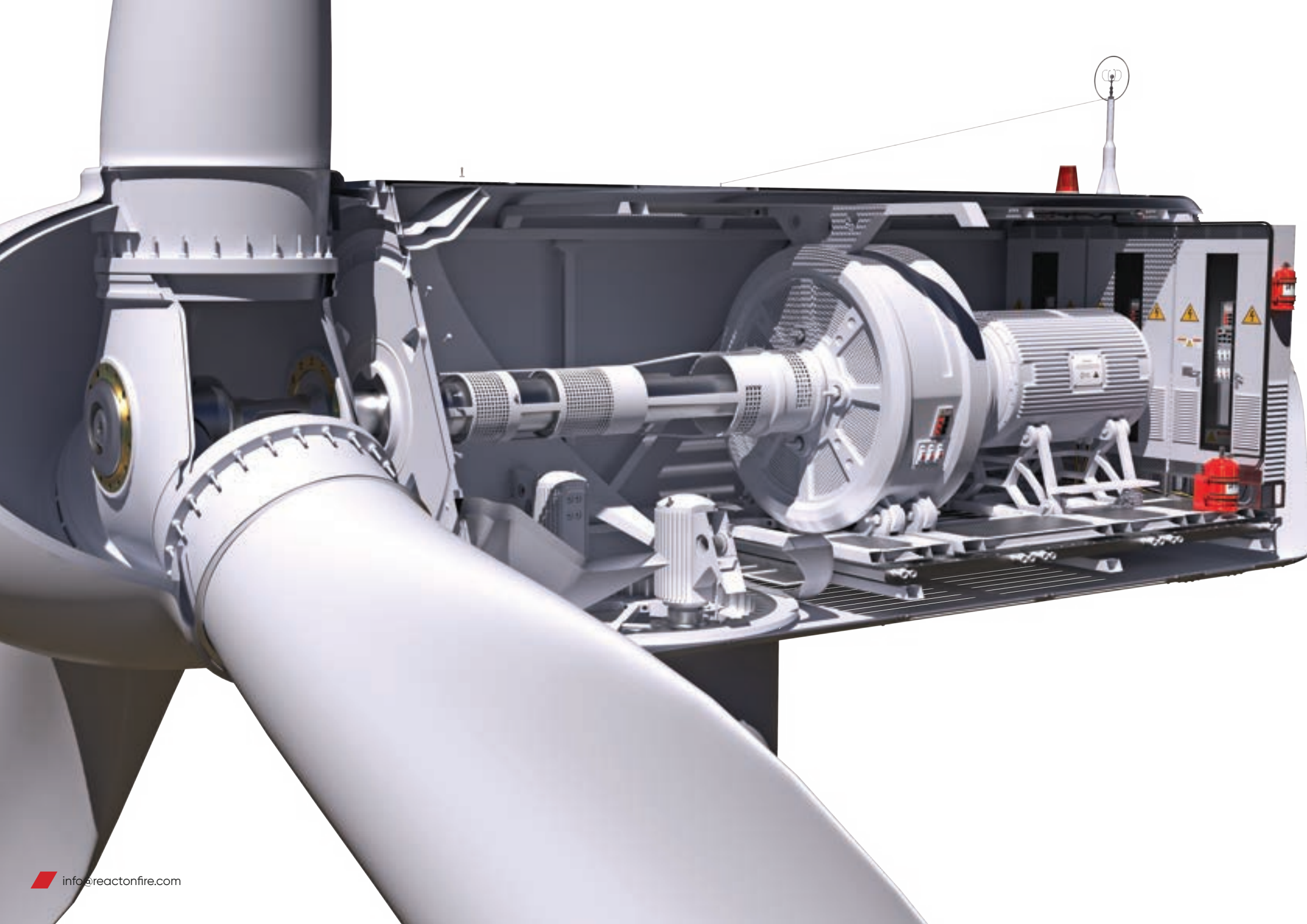
Our promise to our customers is a fire suppression solution that is unique to the needs of the asset. Unlike other companies, we have Dry Chemical, Wet Chemical and clean agents such as 3M™ Novec™ 1230 Fire Protection Fluid at our disposal, ensuring a truly customised product to protect the most important assets. Our custom systems can be specified with a range of extinguishing agents found on pages 12 & 13.

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Some of the world's largest organisations rely on Reacton's automatic fire suppression systems to protect their most critical assets.





# CERTIFIED SYSTEMS

## P-Mark SPCR 183

P-Mark according to SPCR 183 has been developed for fire suppression systems in engine compartments of buses and coaches. With this global leading approval it ensures that Reacton's systems perform at the highest level in the most stringent and challenging conditions. Realistic, repeatable fire tests are performed and components are put through industry leading mechanical testing including vibration, impact, corrosion and temperature cycling.



## P-Mark SPCR 199

P-Mark according to SPCR 199 has been developed for fire suppression systems in engine compartments of heavy vehicles. This relatively new approval has already been quickly adopted and referenced as the benchmark for heavy vehicles. All of the testing parameters shown in the P-Mark according to SPCR 183 are followed, with the addition of a much more demanding pass criteria and extra tests for demonstrating the flexibility and performance of systems.



## CE

For products being sold within the EU, Reacton holds certificate number CE 670083. This means our high performance automatic fire suppression systems have been examined and certified under the requirements of the Council Directive 2014/68/EU of the Pressure Equipment Directive (PED)



## UNECE R107

The UNECE Regulation 107 was developed to increase the safety of buses and coaches. It is a set of legislative documents that provide the framework through technical prescriptions and guidance documents for any contracting parties. This specifically looks at the installation and testing of fire suppression systems in engine compartments of all single-deck, double-deck, rigid or articulated M2 or M3 vehicles.



## DOT

The global sales of our products require us to conform to Department of Transportation (DOT) specifications when sold in the USA and any other territories following their regulations. The Reacton range of cylinders will be made to the strict compliance of the DOT-4BW specifications found with the 49 CFR parts 178.61.



## ISO 9001:2015

Reacton take quality seriously and are focused on continuous improvement, that is why we ensure that we have BS EN ISO 9001:2015. Full reassurance that all our manufacturing and company operating procedures are covered with the strict quality management system certification from the BSI.





**REACTON SYSTEM IN P-MARK  
TEST ENVIRONMENT**

**SYSTEM ACTIVATES &  
SUPPRESSES FIRE FULLY WITHIN  
4 SECONDS**

# CERTIFIED TRAINING

Reacton's training programme has been designed to educate and train engineers and key personnel working within the fire suppression industry. Our online training platform offers users a flexible learning format with round-the-clock access, ensuring minimal disruption to work schedules or routine.

Our comprehensive training courses deliver application based modules covering key areas including system design, equipment selection, agent application, installation and maintenance. Each course carries supporting sales and technical documentation to ensure participants have the tools to effectively deliver Reacton systems to all customers.

- ✓ Complete support provided by the Reacton® team
- ✓ 24/7 access for desktop, mobile or tablet use
- ✓ Flexible online training format
- ✓ Real-time updates and notifications once enrolled
- ✓ Prompt notifications sent for incomplete courses
- ✓ Training solutions including classroom and field based training
- ✓ Personalised and automatic certification

Our systems are designed and tested to meet the requirements of the most rigorous standards in the world, so our customers can be confident that they have the best fire protection systems for putting out fires.



Distributor classroom  
and field based training  
in Mongolia



# SERVICE & SUPPORT



At Reacton®, we take pride in creating an environment of trust with all our customers worldwide. From placing an order to discussing bespoke solutions, our team ensures consistent communication from start to finish.

From concept to creation, we work closely with our customers to understand their requirements and apply our expertise to provide solutions. Our focus on customers' processes, specifications and challenges inspires us to develop solutions that help them protect their assets and provide peace of mind.

With our global network of partners, you can rely on our team and our fire suppression systems 24/7.

# OUR GLOBAL OFFICES



**Our global locations are strategically placed to support our local and international distributors and partners. If you are interested in supplying our product please contact [info@reactonfire.com](mailto:info@reactonfire.com)**



**Contact our global offices below.**

**REACTON UK**

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please contact us [info@reactonfire.com](mailto:info@reactonfire.com)

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