Preventive fire protection

Turnkey solutions from a single source.

Fast. Automatic. Reliable.



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Product portfolio

- Sprinkler systems
- Deluge systems
- Water mist extinguishing systems

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- Foam extinguishing systems
- Turret extinguishing systems and infrared detection
- Gas extinguishing systems
- Kitchen protection systems
- Mastercontrol Automated system inspection
- Pipes

Fire protection has a name:

Rosenbauer - more safety for your company.

Fire protection is safety. Safety for companies, people, and expensive machinery. Rosenbauer provides safety, so you can focus on what matters most: your company, your staff, your production. Protected systems provide reliability. This ensures that employees and customers can depend on you in the future. Rosenbauer is THE partner for fire protection. The customers' trust in Rosenbauer systems is a daily motivation to make the world a safer place.

We are committed to your safety

Whether fire extinguishing systems that conform to regulations or unconventional fire protection solutions: Rosenbauer's specialists do everything they can to ensure optimum fire protection. The product range covers all major fire fighting technologies. These consist of innovative in-house developments and licensed products. Due to the wide ranging product portfolio the optimal extinguishing concept can be developed on the basis of the customer requirements.

A single contact partner

From A to Z. Rosenbauer supports its customers across the entire process of protecting operations against fire. An experienced technical team plans the entire extinguishing system, taking into account applicable standards and guidelines. The fire protection solutions are tailor-made and individually adapted to the site-specific requirements and conditions. This ensures the greatest possible level of safety for each and every asset to be protected.

The design and manufacturing of key components of the extinguishing system are undertaken in-house. Installation and maintenance is also carried out by Rosenbauer's assembly staff. As a result, Rosenbauer delivers an overall concept in which all components of the extinguishing system are optimally matched.

One name, one promise: Rosenbauer

For over 150 years, Rosenbauer has been a pioneer and a partner for emergency services. We are the only company to specialize in providing practical solutions for all decisive moments in fire and disaster protection.

From preventive fire protection to vehicles for every scenario, from digital applications to personal and technical equipment: Rosenbauer is constantly setting new standards with technically leading innovations. Through in-depth conversations with our customers, we find exactly the right solution. Worldwide. We leave no stone unturned to ensure that you are optimally equipped when it matters.



Water extinguishing systems.

RPE Sprinkler systems

Simple principle - Used millions of times.

A network of pipes runs through the entire protected area. Along these pipes closed sprinkler nozzles are fixed. If a defined temperature threshold is exceeded due to a fire in the room, the sprinkler opens and extinguishing water is released in a parabolic spray pattern.

Targeted extinguishing

In the event of a fire, only the sprinklers that are in the immediate vicinity of the seat of the fire open. This way, the water is targeted directly at the fire. This saves water and minimizes potential water damage. Foam compound can be added in special cases.

Benefits

- Cost-efficient
- Effective & reliable
- Environmentally friendly



Reliable protection for rooms and high-rack storage areas.

Wet, dry, and pre-action systems

With **wet systems**, the pipes in the protected area are already filled with water. These systems are installed in areas not at risk of frost or overheating. When the sprinkler opens, the extinguishing water is released without delay. **Dry systems** are installed in areas at risk of frost, or in high-temperature areas. In the ready state, the pipe network from the sprinklers to the alarm valve is only filled with compressed air or nitrogen. If a sprinkler opens due to the effects of heat, the pressure in the pipe network drops, the alarm valve opens, and the pipe network is deluged. **Pre-action dry systems** combine conventional sprinkler systems with fire alarm technology to prevent water from accidentally escaping if a sprinkler head is damaged.

Areas of application

- Shopping centers
- Hotels
- Offices
- Hospitals and nursing homes
- Car parks
- High-rack warehouses
- Industrial plants
- Warehouses and logistics centers
- Airports



Rosenbauer has VdS installer approval for sprinkler systems.

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Water extinguishing systems.

RPE Deluge systems

Rapid protection against specific risks

In case of highly flammable substances, a fire can spread very fast. Deluge systems release water quickly and over a large area in order to fight and preventively cool a fire. In the case of object-specific protection systems, the extinguishing nozzle scan be targeted directly at the object. As with sprinkler systems, the addition of foam compound is also possible here.

The combination works

Deluge systems are a combination of a fire alarm system and a water extinguishing system. In contrast to sprinkler systems, the system nozzles are open and are triggered via a fire alarm system.

- Fast and intensive release of water
- Reduces environmentally harmful smoke and pollutants
- · Water is inexpensive and available in unlimited quantities



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RPE Water Mist extinguishing systems

Optimal protection for staff and equipment.

Water mist extinguishing systems distribute water at the seat of the fire via special nozzles. The water is turned into a fine mist. Despite the reduced amount of water, such a system proves particularly effective in fighting fires.

Highly efficient and easy to retrofit

Water mist extinguishing systems consume much less water compared to sprinkler systems. As a result, the size of the extinguishing water storage tanks and the space required for them is much smaller. Due to small pipe diameters, the system is particularly suitable for retrofitting (for example in historic buildings). As a result of lower water consumption, there is also less damage resulting from activation of the system.

- Highly efficient fire fighting technology
- Lower water consumption
- Small space requirements
- Easy to retrofit



Rosenbauer has VdS installer approval for EconAqua[™] water mist extinguishing systems.

Highest extinguishing performance through compressed air foam.

Areas of application

- Recycling plants
- Indoor and outdoor storage areas
- Forges
- Transformers
- Machine halls
- Conveyor belts
- Painting booths

Compressed air foam also adheres to horizontal surfaces

Highly efficient CAFS compressed air foam

Compressed air foam (CAF) is a particularly efficient way of extinguishing. With conventional foam the foaming takes place when the water/foam mixture is released at the nozzle and mixes with the surrounding air. Compressed air foam, on the other hand is actively generated in a mixing chamber. This mixing chamber is protected from environmental influences and patented by Rosenbauer.

Energy self-sufficient RPC POLY extinguishing systems

The RPC POLY system is a purely mechanical extinguishing system which works without pumps, engines, and motors. It is driven by compressed air and can be implemented completely without external energy. The extinguishing agent is distributed via nozzles or branch pipes at the seat of the fire. It is also possible to connect to a fire alarm system.

Foam extinguishing systems.

Broad extinguishing effect for special fires.

Foam extinguishing systems are used where extinguishing with water alone is no longer effective, e.g., for plastics, solvents, in the petrochemical industry, or for wood and paper fires.

Separation and suffocation

A foam blanket separates the flammable material from the surrounding atmosphere. Hence, the fire no longer has access to oxygen and suffocates.

Cooling

When the foam disintegrates, tiny water droplets are created which absorb heat and evaporate. This deprives the fire of energy and cooling occurs. In addition, the surfactants in the foam reduce the surface tension of the water. Therefore, the water contained in the foam can penetrate deeper into the flammable material.



Conveyor belt protection



Energy-self-sufficient RPC POLY extingushing system

- Consistently stable foam quality
- Long throw ranges
- Foam sticks to hot, horizontal surfaces
- Sustainable cooling through slow foam disintegration
- Increase of the foam quantity due to very small air bubbles

Turret extinguishing systems and infrared

Targeted hotspot localization and fire fighting.

Turret extinguishing systems are used where large areas need to be protected and extinguishing agent is to be applied in a targeted manner to the seat of the fire. Thus water damage and disposal costs can be reduced in comparison to deluge systems. Turret extinguishing systems are easy to install. Just a single Rosenbauer turret can protect areas of several thousand square metres due to its long throw ranges.

Detection of dangerous hotspots and automatic cooling.

Areas of application

- Recycling plants
- Storage facilities and external warehouses
- Waste bunkers
- Airplane hangars and helicopter landing pads
- Storage tanks

detection.

RPA Infrared Detection Ignis3D

Fully automatic and targeted cooling

RPA Infrared Detection Ignis3D, the Rosenbauer infrared system for temperature surveillance, detects fires as early as the formation phase. In combination with a turret, fires can be cooled at an early stage. Ignis3D scans the monitored area around the clock and analyzes the measured temperatures. When a hotspot is localized, the laser distance measurement sends its 3D coordinates to the extinguishing turret. A specially developed software calculates the optimal trajectory of the water jet on the basis of the measured hotspot coordinates. Then the cooling procedure is started. All of this takes place fully automatically and with the highest precision.

Benefits

- The only IR system on the market with genuine distance measurement
- Easy analysis of the surveillance area via visual camera
- Independent positioning of camera system and turret
- Intelligent vehicle detection to reduce false alarms



Turret production according to highest technological standards



RPA Infrared Detection Ignis3D

Quality from the global market leader.

Decades of experience in the development of turret mechanics and electronics as well as the highest demands on functionality, technology, and design are reflected in the quality and durability of Rosenbauer turret products. The turrets are produced to the highest industrial standards in our own plant. The close cooperation of highly qualified employees in product management, development, and production, as well as the implementation of customer feedback ensure that a wide variety of knowledge and experience is incorporated into the quality product.



Rosenbauer has VdS installer approval for RPA Infrared Detection Ignis3D (IR camera unit for temperature surveillance in fire protection).

Gas extinguishing systems.

Optimum protection for valuable assets.

Inert gas extinguishing systems work by displacing the oxygen present in the room. They are used in instances where extinguishing with water, foam, or powder would lead to considerable damage to the objects to be protected. The most common areas of application are IT, server, and electrical control rooms. They can also be used to protect unique cultural assets in museums or libraries.



Technical cabinet with gas cylinder

Residue-free extinguishing

Gas is the cleanest extinguishing agent, since many gas extinguishing systems are able to put out fires without leaving any residue. Extinguishing gases like CO₂ or nitrogen have no influence on the function of the protected assets. Even after such gases have been deployed, systems like IT infrastructure, for instance, remain fully functional. Various gases with a range of different properties are available for extinguishing. The selection of the right gas depends on the application for which it is required.

Extinguish without residue by displacing oxygen in the room.

Inert gas extinguishing systems

Carbon dioxide, nitrogen, and argon are used in most gas extinguishing systems. These gases are colorless, electrically non-conductive, and completely free of residues. Inert gases are characterized above all by their inertness, which means that they generally do not form chemical compounds with the flammable material or other substances. These gases are already present in our natural atmosphere. For their application in gas extinguishing systems they are largely extracted from the air we breathe and, after being released, have no effect upon the environment. For procurement, they have the advantage of being manufacturer independent and are readily available worldwide.

- Residue-free extinguishing without causing damage
- Very good extinguishing effect, even in areas with hidden fire loads
- Non-electrically conductive extinguishing agent
- The system is quickly ready for use again after operation
- Climate neutral extinguishing agent





Standardized property protection

Carbon dioxide (CO₂)

- Cost-effective gas
- Particularly suitable for fires of fire classes B (liquids) and C (gases)

Ideal for personnel protection

Nitrogen (N₂)

- Best tolerance by humans of all inert gases (non-toxic)
- Suitable for the protection of highly frequented areas

Reliable even with metal and electrical fires

Argon (Ar)

- Argon is significantly heavier than air and is therefore an ideal extinguishing agent for raised floors.
- Due to its high inertia it is also highly suited to metal fires.

Protection of sensitive IT systems

Novec[™] 1230

RPE Gas Novec[™] compact extinguishing system extinguishes particularly reliably even in areas with hidden fire loads. The chemically acting extinguishing agent is environmentally friendly and not corrosive or electrically conductive. Short flooding times and fast operational readiness after the system has been activated are what make this system stand out. Extinguishing agent reserves, the control system, and possibly also an extinguishing nozzle can be installed in a single pre-assembled system cabinet.



Rosenbauer has VdS installer approval for carbon dioxide, nitrogen, and argon extinguishing systems.

Kitchen protection systems.

Reliable protection for restaurants.

The fire fighting system RPE Kitchen ANSUL has been specifically developed for the protection of kitchen equipment, e.g., grills and fryers. Boiling greases and oils are highly flammable in open devices (e.g., if the overheating protection fails) and can pose a high risk to personnel and equipment alike. The quick and safe extinguishing effect is based on a reaction of the extinguishing agent with the burning grease. It is completely hygienically harmless and guarantees the quick continuation of operations.

Quick activation in case of fire alarm

- All assigned kitchen appliances are switched off.
- Extinguishing agent is sprayed via special nozzles onto the seat of the fire and the adjacent exhaust hoods and ducts.
- When the extinguishing agent hits a burning grease surface, a reaction is triggered which leads to foam formation. The oxygen supply is thereby cut off.
- Prevention of the development of flammable vapors that spread uncontrollably through ventilation.

In order to prevent flammable residues from remaining in the inaccessible ducts, the fans can remain switched on with this extinguishing system. This transports atomized extinguishing agent to the fire sources.



Planning of a kitchen protection system

Quick continuation of kitchen operation after extinguishing system activation.



Rosenbauer has VdS installer approval for extinguishing systems for the protection of kitchen equipment.

On autopilot with RPC Mastercontrol.

Automated test runs and documentation.



Central control unit provides convenient operation and monitoring

Component testing according to regulations

Regular inspections of sprinkler systems are mandatory according to the guidelines of VdS and FM. The inspection work is to be documented in the operating log and is divided into daily, weekly, monthly, and annual sections.Checking the alarm pressure switches, flow detectors, and pumps in particular requires a lot of time. The RPC Mastercontrol automation system replaces these manual component tests with fully automated routines. The operating personnel then only need to operate and monitor the central control unit.





RPC Mastercontrol control unit

Test runs and documentation

RPC Mastercontrol manages the inspection routines fully automatically. All test results are documented immediately after the test phases have been completed. A built-in printer and the graphic representation of the sprinkler system on the visualization system facilitate this. The documents can thus be permanently archived in accordance with the guidelines.

- Automated compliance with all checks according to VdS and FM
- Automatic documentation and visualization of the test results
- Documentation prepared for archiving
- Significant relief for staff
- Significant reduction in operating costs



Robots for welding and laser cutting

Modern pipe prefabrication.

Faster. More flexible. More customizable.

At its Mogendorf site in Germany, Rosenbauer operates its own state-of-the-art pipe prefabrication facility. The system is fully automated and combines robotics with cutting and welding technology. It is extremely flexible, efficient, and environmentally friendly. Rosenbauer's customers benefit from this in particular: ordered extinguishing systems can be manufactured more quickly and customers can be served with even greater flexibility.

How it works

The raw material is first blasted with a bright metallic finish and then circumferentially welded using the MAG (metall active gas) welding process. Subsequently, the pipes are cut to the required length. This means that there is almost no waste or scrap, which is very resource and environmentally friendly. In order to connect the pipes with couplings, the grooves are rolled at their ends. A plasma cutter cuts holes into the pipes. The sleeves for the sprinkler heads are then welded onto these using a VdS-approved sleeve welding process.

After processing in the plant, the pipes are powder-coated by hand and packaged according to the assembly sequence. As a result, assembly times and the space required on the construction site can be reduced.



- High quality due to automatic series production
- Fast delivery
- Reduced assembly times
- Less space required at the construction site
- Environmentally friendly use of resources
- High degree of flexibility
- Everything from a single source

Maintenance and repair





Reliability through high-quality service

Fire protection systems only fulfill their purpose optimally if their operational readiness is guaranteed for many years, so that they are fully functional when needed. Alongside the planning and installation of the extinguishing systems, Rosenbauer ensures the operational safety of the systems by providing a comprehensive range of maintenance and service works. Regardless of whether the extinguishing system has been newly installed or has already existed for some time, regular upkeep and maintenance are an indispensable part of effective fire protection measures.

Long-term protection

To ensure that the extinguishing system functions perfectly and complies with statutory regulations, Rosenbauer develops maintenance concepts individually tailored to the customer's system. The focus is also on the optimization of the system components, whereby the economic aspect is of primary importance to the customer.

More service through maintenance contracts

Maintenance contracts are used to automatically remind system operators of upcoming service dates. This ensures that the statutory inspection and maintenance intervals are observed. In addition, costs over the entire service life of the system can be calculated better.

Benefits

- Ensuring functional readiness
- Increasing the service life
- Improving operational safety
- Value retention of equipment and systems
- Predictable costs

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