Turret extinguishing systems

Stationary fire protection

Customized extinguishing systems for optimal protection.
Efficient solutions from a single supplier.

Stationary fire protection from Rosenbauer. Faster than fire.

Even before the fire department arrives, stationary extinguishing systems from Rosenbauer rapidly and effectively protect people and facilities. As one of the world’s leading manufacturers of firefighting equipment, Rosenbauer also ensures maximum efficiency and safety in stationary fire protection. Customized extinguishing systems for a variety of industrial applications from a single source provide protection where conventional extinguishing systems fail to do so.

Customized extinguishing systems for optimal protection.

Nearly 150 years of experience in the area of firefighting as well as continuous research and development make Rosenbauer the technology and innovation leader in fire protection. Close customer proximity and orientation to the requirements and needs of each client are the top priority. In order to enable an efficient and customized extinguishing system, the on-site conditions are analyzed together with the customer. Rosenbauer manufactures all core components, including the turrets in house so that all extinguishing components are perfectly matched and function optimally together in operation. As a specialist for extinguishing systems, Rosenbauer maintains its own assembly personnel for the installation and maintenance of the systems. This ensures high quality in the long run and the congruence of all parts.

- Nearly 150 years of experience
- Specialist for complete systems
- Perfectly matched components
Full service package for customized fire extinguishing systems
Quality tested a thousand times over.

To ensure that Rosenbauer turrets provide high performance under every condition, they are subjected to intensive testing that pushes them to their limits during the prototype phase. Rosenbauer turrets are operated at full capacity for hours on end in order to test the drives and ensure functionality of the gearbox. They must also be able to withstand cold tests down to -20 °C without trace heating. Moreover, each turret is subjected to a full mechanical and electronic functional test.
Quality from the global leader.

Maximum extinguishing success with innovative turrets.

**The turret as the core component.**

Whether for protecting airplanes in a hangar or paper bales in storage areas, in every turret extinguishing system application the turrets themselves play a central role. They determine the distances that are covered and the quality with which the source of the fire is hit by the extinguishing agent.

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 turrets. The turrets are produced according to the highest industrial standards at our own factory. Rosenbauer’s quality management system has been ISO 9001-certified since 1993. The close collaboration of highly qualified employees in product management, development, and production as well as the implementation of customer feedback ensure a vast pool of knowledge and experience underlying the quality of our products.

- In-house development and construction
- The most modern fabrication methods
- Highest quality standards
Broad spectrum of application.

Highest safety for people, buildings, and plants.

Many requirements – One solution.

Rosenbauer turret extinguishing systems are used where large spaces require protection and where extinguishing agents must be applied to a potential fire source in a targeted manner. In comparison to conventional sprinkler systems, Rosenbauer turrets can precisely transport extinguishing agent to the exact location of the seat of the fire. As a result, water damage and the associated repair costs are minimized in the event of a fire. The low cost of installation of turret extinguishing systems is also an advantage. Only a single main pipe mounted on the ceiling, wall, or on towers and leading to the turret is needed for supplying the turret.

Planning, implementation, and assembly from a single supplier.

From valves to foam proportioning systems, Rosenbauer plans and installs the entire extinguishing system with all components. The water supply to the turrets occurs either by way of a water tank or directly via a connection to an existing hydrant network. Since extinguishing with foam is more effective, the water is mixed with a foam compound in the event of liquid fires such as kerosene and plastics fires. Because foam reduces the surface tension of the water and can penetrate deep into the burning material. The water in turn helps with cooling, while the foam limits the exposure of the surface to oxygen and thus suffocates the flames.

How the system works.

Applications:
- Recycling plants
- Storage halls
- Waste bunkers
- External storage areas
- Aircraft hangars
- Helicopter landing sites
- Tank farms
- and much more
Turrets Portfolio – Flow rates

- **RM130C**
- **RM80C**
- **RM65C**
- **RM35C**
- **RM24M**
- **RM15C**
- **RM8E**
- **RM8M**

**Innovative technology:**
- Broad spectrum of manual and electronically controlled turrets up to 15,000 l/min
- Light alloy base body
- Compact design and low weight
- O-stream nozzle with flow reduction
- Highest extinguishing performance
- Universal applicable
Prevention also plays an important role in Rosenbauer’s fire protection concepts. Because in the best case scenario, the fire won’t even start in the first place. Together with the specialist Orglmeister Infrarot Systeme, Rosenbauer has developed a system for early hot spot detection and performing automatic cooling before a fire can even break out.

The infrared system PYROsmart scans the area being monitored around the clock and creates a panoramic thermal image. The turret extinguishing system receives a signal if significant changes in temperature are detected. Through an oscillating turret movement, the extinguishing agent is then automatically transported to the hot spot to cool it in a targeted manner. This process is repeated until a measurable cooling effect can be detected.
Perfect interplay.

In comparison to smoke or flame detectors which identify fires only once they have broken out, the infrared system detects temperature changes outside of the specified standard range. The threshold for the alarm can be defined individually. This provides a significant time advantage over other fire alarm systems. The turret can provide targeted cooling of the hot spot in its earliest stage.

Compared to conventional sprinkler systems, the turret extinguishing system not only triggers earlier, but also minimizes potential damage through the targeted output of water.

Always optimally protected.

The combination of the PYROsmart IR system and Rosenbauer turret systems offers protection in risk areas, even outside of operating hours and in the absence of personnel. Of course, manual intervention using joystick controls is possible at any time.
Rosenbauer turrets are optimally adapted to the on-site requirements of customers and set worldwide standards, above all when it comes to throw ranges and foam quality. Regardless of whether protecting airplanes, recycling plants, or storage areas - electronically controlled turrets from Rosenbauer impress with their innovative technical details:

**Intuitive, fully electronic control**
Control of the turret is simple and intuitive by use of a joystick. Sensitive motion sequences allow easy aiming and operating comfort.

**Portable remote control device with joystick**
With portable remote controlled joysticks, all functions can be accessed and up to eight turrets can be controlled.

**Electronic full/spray jet adjustment**
From a targeted full spray to a wide spray jet - the stream pattern can be individually adapted to the protection object.

**Variable output setting**
Full discharge and partial discharge rates can be set using the turret controls.

**Fully automatic oscillating function**
The turret automatically runs the predetermined movement and extinguishing pattern at a defined speed.

**Defined limits**
During the teach-in process, limits and curves are configured for the turret which cannot be exceeded during actual operations. This prevents the extinguishing stream from being unintentionally aimed at sensitive areas.

**Rosenbauer turrets – tried and tested hundredfold.**
Besides the many other turrets available from Rosenbauer with flow rates up to 15,000 l/min, the tried and tested RM15 is used the most for stationary fire protection. It impresses with its excellent foam quality and outstanding throw ranges. Due to its compact design and large radius of action, it is especially suitable for protecting waste bunkers, storage areas, and recycling plants.

A protection unit from which the turret automatically emerges in the event of an emergency was specially developed for areas with extremely high debris and dust exposure. This also protects the turret from mechanical damage, for example, from garbage claws in waste bunkers.
Rosenbauer developed the innovative ChemCore nozzle in order to optimize the output of dry powder already in the turret. As a result, the RM15 turret, for example, can be operated with up to 1,900 l/min of water, whereby the volume adjustment function remains fully available. Independent of this, dry powder is introduced into the water stream at up to 1.5 kg/s, whereby the dry powder is distributed over large throw ranges without any significant drift losses.

The combination of powder and foam is especially used for liquid fires (such as kerosene fires). The dry powder suppresses the flames, while the foam cools and forms a stable foam blanket, thus depriving the burning liquid of oxygen and suffocating the flames.

**Unique: the ChemCore nozzle.**

- High flow rates
- Excellent foam quality
- Outstanding throw ranges
- Large radius of action
# Turret extinguishing systems

## Stationary fire protection

### Technical data for electronically controlled turrets

<table>
<thead>
<tr>
<th></th>
<th>RM15C</th>
<th>RM35C</th>
<th>RM80C</th>
<th>RM130C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow rate</strong></td>
<td>600 – 2,000 l/min</td>
<td>1,500 – 4,750 l/min</td>
<td>3,000 – 9,500 l/min</td>
<td>5,000 – 15,000 l/min</td>
</tr>
<tr>
<td><strong>Rotation range</strong></td>
<td>360°</td>
<td>360°</td>
<td>360°</td>
<td>360°</td>
</tr>
<tr>
<td><strong>Swivel range</strong></td>
<td>-50° / +90°</td>
<td>-90° / +90°</td>
<td>-90° / +90°</td>
<td>-20° / +70°</td>
</tr>
<tr>
<td><strong>Nozzle</strong></td>
<td>O-stream nozzle</td>
<td>O-stream nozzle</td>
<td>O-stream nozzle</td>
<td>O-stream nozzle</td>
</tr>
<tr>
<td><strong>Stream adjustment</strong></td>
<td>Electrical adjustment for full jet/spray jet</td>
<td>Electrical adjustment for full jet/spray jet</td>
<td>Electrical adjustment for full jet/spray jet</td>
<td>Electrical adjustment for full jet/spray jet</td>
</tr>
<tr>
<td><strong>Dry powder nozzle</strong></td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td><strong>Throw ranges</strong></td>
<td>Water: &gt; 65 m Foam: &gt; 47 m (with foam branch pipe)</td>
<td>–</td>
<td>–</td>
<td>Water: 130 m Foam: 90 m (with foam branch pipe)</td>
</tr>
<tr>
<td><strong>ChemCore</strong></td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>-40 °C / +85 °C</td>
<td>-20 °C / +70 °C</td>
<td>-20 °C / +70 °C</td>
<td>-20 °C / +70 °C</td>
</tr>
</tbody>
</table>

### Technical data for manually controlled turrets

<table>
<thead>
<tr>
<th></th>
<th>RM8M</th>
<th>RM24M</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow rate</strong></td>
<td>400 – 1,900 l/min</td>
<td>400 – 3,000 l/min</td>
</tr>
<tr>
<td><strong>Rotation range</strong></td>
<td>360° continuous</td>
<td>360° continuous</td>
</tr>
<tr>
<td><strong>Swivel range</strong></td>
<td>-55° / +80°</td>
<td>-50° / +80°</td>
</tr>
<tr>
<td><strong>Nozzle</strong></td>
<td>O-stream nozzle</td>
<td>O-stream nozzle</td>
</tr>
<tr>
<td><strong>Stream adjustment</strong></td>
<td>Manual, continuous</td>
<td>Manual, continuous</td>
</tr>
<tr>
<td><strong>Output setting</strong></td>
<td>Manual, stepped</td>
<td>Manual, stepped</td>
</tr>
<tr>
<td><strong>Dry powder nozzle</strong></td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td><strong>Throw ranges</strong></td>
<td>Water: 60 m</td>
<td>Water: 80 m, foam: 50 m</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>-20 °C / +70 °C</td>
<td>-20 °C / +70 °C</td>
</tr>
</tbody>
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