

Faster. Stronger. Safer.











#### The fascinating PANTHER.

#### Always on the cutting edge.

When it comes to extinguishing fires on the runway, it's all about speed and firefighting performance. Because when an aircraft is on fire, every second and every liter of extinguishing agent that can be deployed counts. The Rosenbauer PANTHER is at the top of the class in both categories. And that is why it is one of the most successful ARFF vehicles in the world today and used in 100 countries.

#### A success story spanning more than 30 years

Its sprinting qualities are what originally gave the PANTHER its name. Its extinguishing performance has always garnered respect. And its design made it a global icon from the start. For this reason, since the first model in 1991, more than 2,000 PANTHER vehicles have left Rosenbauer's production halls to perform their duties at airports around the world.

#### **Continuous improvement**

The fourth generation of the PANTHER is now being built in Austria and the USA. Because continuous improvement is a fundamental part of Rosenbauer's DNA, the entire series (4x4, 6x6, 6x6 S and 8x8) always impresses with the latest features for maximum performance, safety, and functionality.

#### One name, one promise: Rosenbauer

For over 150 years, Rosenbauer has been a pioneer and a partner for emergency personnel. 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: with its expertise and experience as a system provider, Rosenbauer covers it all. For Rosenbauer, perfection means staying on the front foot. For example, we set new standards in fire and disaster protection with technologically advanced innovations. Through intensive discussions with our customers, we find exactly the right solution and are on location when needed. Worldwide. We leave no stone unturned to make sure you are optimally equipped when it matters.

#### The equipment of the PANTHER models.

#### For optimal safety, operating convenience, and dynamics.

#### Innovative features surpass requirements

Rosenbauer's tremendous innovative capacity has made the PANTHER the world's most successful and best-known ARFF vehicle worldwide. Every PANTHER model is packed with features that make the vehicle faster, stronger, and safer.

The PANTHER's developers have always emphasized maximum driving and vehicle safety, usage and operating convenience, as well as optimal driving performance.

The Birdview system, for example, creates a real image of the entire area around the vehicle and the panoramic cabin, which, in conjunction with the compact dimensions of the operator-optimized dashboard, ensures the best possible view of what is taking place. The cabin is also soundproof, which prevents additional stress on the rescue workers from pump and drive noise.

With special features like these, the PANTHER meets and exceeds the requirements of the current worldwide standards, including EURO 6 and all airport requirements, such as ICAO, NFPA, and FAA.



#### High-quality technology and production

The PANTHER maintains its unique visionary vehicle concept throughout all phases of development. Its innovative features, in particular, make it a state-of-the-art combination of application-oriented functionality and emotive design language.

The production in the world's most modern firefighting vehicle factory ensures a consistently high and tested quality at the ultimate technological level. The chassis, bodywork, and fire fighting equipment are optimally matched.

This is possible because their development and production take place entirely within the Rosenbauer Group with standardized processes, sophisticated production flows, and an experienced production team.

Rosenbauer's engineering principles are marked by a modern development process with computer-aided 3-D design in conjunction with finite element calculations. Not to mention simulations and a fully integrated DNC production process.



#### **Maximum safety**

Achieving the highest possible safety for the vehicle and its occupants is one of the main objectives in the ongoing development of the PANTHER. Special features like the crash-test-proven cab, an optimized all-round view, electronic stability control, and an innovative light design ensure the highest standard of safety for all crew members during the trip and when extinguishing.

#### Unique usage and operating convenience

Professionals know that operations depend on speed and that everything must be just right. In an emergency, convenience is a matter of safety. The PANTHER offers the driver and team in the cockpit much needed freedom of movement. The ergonomically optimized arrangement of the operating elements and the specially designed control handle simplify any operational situation.

indicator



as well as EMEREC DEVS





Optimized service accessibility for cab electronics

#### **Unyielding driving dynamics**

From 0 to 80 km/h in under 28 seconds\* - thanks to its sporty concept with a 750 hp Euro 6 engine and 8-speed gearbox, the PANTHER is at full throttle in seconds. Its low center of gravity ensures excellent driving dynamics in every situation - whether on paved roads or on challenging off-road terrain.

#### **Highest performance**

Rosenbauer develops and manufactures all firefighting equipment in the PANTHER and optimally integrates it into the vehicle body. The result is a guaranteed reliable, powerful extinguishing system in every operational scenario! Components developed in-house, like the turret, proportioning system, and pump, increase the extinguishing performance of the PANTHER model even further.

\*depending on total weight

#### High-tech standard – for series production and custom solutions

The high-tech standard of the new PANTHER is based on many years of experience, creative minds, highly qualified technicians, and industrial fabrication at the highest level. Maximum flexibility in production enables customized solutions.

### **Everything you need for effective and safe operations.**

#### Full service and top competence.

#### Services from a single source

Rosenbauer's high system performance is based on the innovative PANTHER concept and on the extensive guidance provided on detailed solutions throughout the project.

The professional order processing starts with an on-site analysis, which serves as the basis for the requirement profile of the new vehicle. At the same time, the ideal vehicle configuration is determined by your competent partner Rosenbauer. The process is further facilitated by calculating travel times and explaining the concept of the extinguishing vehicle.

The vehicles are also manufactured to the highest standard. Rosenbauer takes advantage of industrial manufacturing methods through special system solutions. The PANTHER must pass many quality tests before it is ready for delivery. Only then is it cleared for use by customers.



Your single-source supplier: from chassis and vehicle body to extinguishing system and other equipment. This is how Rosenbauer customers benefit from integrated, powerful, and highly efficient solutions.





#### **Perfect harmony**

Rosenbauer not only develops and manufactures the PANTHER's chassis and vehicle body, but also the entire extinguishing technology. The vehicle and extinguishing technology are therefore optimally coordinated. This guarantees a reliable, powerful firefighting vehicle for every operational scenario. A high level of user-friendliness and low maintenance requirements are also guaranteed.





#### Impressive concept.

#### Driving performance at the highest level.

The outstanding performance of the PANTHER is in part due to the powerful drive: The available performance package with a Volvo Euro 6 engine and 750 hp in combination with an 8-speed gearbox ensures acceleration from 0 to 80 km/h in under 28 seconds and a top speed of 120 km/h.

Another reason is the well-thought-out chassis concept, which was specially created for the challenges of airport operations: It works equally well both on and off the road, offers maximum safety when cornering, and provides calm stability at high speeds when driving straight ahead as well as when braking rapidly.

#### Single-axle suspension for optimal traction and minimal body roll

Rosenbauer's own chassis comprises a frame with a high level of torsional rigidity and a system of several individually suspended rigid axles. This ensures both consistent ground clearance when the vehicle compresses and even axle load distribution and distribution of the contact pressure of the wheels. All of this leads to improved vehicle traction. The rigid axle system in combination with the extremely low center of gravity is key to low body roll - for maximum directional stability and therefore safety.

The PANTHER 6x6 is available in multiple drive variants: the basic version with a Volvo Euro 5 engine and 6-speed gearbox or a performance package with a Volvo Euro 6 engine and 8-speed gearbox.

#### Tested for the toughest operations

The PANTHER series includes ARFF vehicles on 2-, 3-, and 4-axle chassis with permanent all-wheel drive and engine outputs from 700 to 1,450 hp. All models have already been tested for usa bility and durability during development by undergoing state-of-the-art simulation methods and intensive tests.





#### Maximum safety.

#### Supported by high-tech solutions.

Thanks to its chassis concept, the PANTHER boasts outstanding maneuverability and driving dynamics. In addition, the optimized cab mounting enables the driver to safely monitor the situation at all times. For even better deceleration values, the PANTHER can also be ordered with a high-performance braking system as well as other support systems.



Panther 8x8 driving dynamics test

#### **ESC: Electronic Stability Control**

In addition to the design advantages of the PANTHER, the Electronic Stability Control (ESC) feature ensures additional safety during extreme driving maneuvers. The ESC performs targeted braking interventions and can, depending on the driving situation, stabilize the track or counteract under- or oversteering. In this way, the ESC supports the driver in critical driving situations and can help avert accidents.



ESC ON

#### Speed-dependent rear axle steering

All PANTHERs with more than two axles are also available with rear-axle steering. This reduces the turning circle as well as tire wear. At higher speeds, however, the additional electro-hydraulic steering from Rosenbauer is automatically deactivated. This increases directional stability and prevents aggressive changes of direction for more active safety.

The sum of the features listed make the PANTHER not only an extremely powerful, but, above all, an extremely safe and reliable partner for all airport fire departments.



The combination of a rigid frame, low center of gravity, and the advantages of the rigid axle system are at the heart of the Rosenbauer PANTHER's extremely safe handling.



ESC OFF

#### High-tech firefighting.

#### **Top expertise at Rosenbauer.**







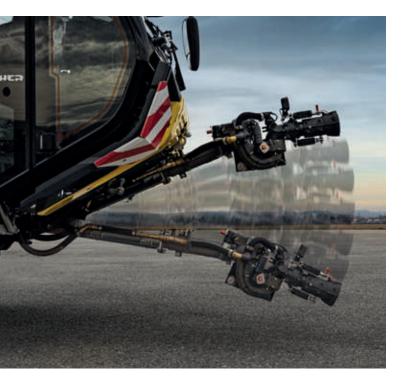
RM65 turret



HVLA bumper boom turret



STINGER HRET with piercing tool.



#### **Expertise for the best performance**

The development and production of firefighting systems and components are two of Rosenbauer's core competences. This is yet another reason why the Rosenbauer PANTHER is the most powerful ARFF vehicle in the world.

The PANTHER is available with:

- Pumps with an output of up to 10,000 I/min with suitable automatic foam proportioning systems
- Water tanks with capacities up to 19,000 liters
- Foam tanks with capacities up to 2,200 liters
- Roof and front turrets for an output quantity of up to 9,000 l/min and a range of up to 100 m
- HRET STINGER 54 / 66
- CAFS compressed air foam systems
- High-pressure systems
- Ultra-high pressure systems (UHPS)



The extinguishing technology installed in the PANTHER is a fully coordinated high-performance system that was specially developed for the specific requirements of airports.

#### **Technical highlights:**

- HVLA bumper boom turret with RM 35 (optional)
- FIXMIX 2.0 proportioning system, either mechanically or electronically controlled
- N110 truck-mounted pump in the PANTHER 8x8
- N80 truck-mounted pump in the PANTHER 6x6 and 4x4
- N65 truck-mounted pump in the PANTHER 6x6 S and 4x4
- H5 high pressure pump

## Optimal use. Maximum convenience.





#### Pioneering components.

#### Protection, convenience, and performance, all rolled into one.



Easy access due to the swivel step

The specially developed, FEM-optimized, and crash-tested driver's cab - certified according to ECE R 29-3 - guarantees the best possible protection for the crew. The modern design gives the crew excellent all-round visibility, and the lighting design also contributes to increased safety. To maximize operating comfort and meet the functional requirements as best as possible, the cockpit was designed especially ergonomically. Special sound insulation lowers the noise level in the cabin, reducing external stresses on the crew during deployments.

#### Cutting-edge technology for maximum safety

The optional tire pressure monitor sets off a warning if a tire is low on air. This allows the driver to react immediately. Also optional are side airbags for the side crew seats as well as belt tensioners for the rear and side crew seats, which increase passive safety in the event of an accident.



Birdview screer



Lighting



Pump room illumination



Crash test



FLEXILIGHT LED

#### **Optimized safety**

#### **Standard solutions:**

- Crash-tested driver's cab
- User-optimized control panel

#### **Optional additions:**

- Birdview (camera-generated real-time view of surroundings)
- ESC (Electronic Stability Control) for PANTHER 6x6, 6x6 S, and 8x8
- Side airbags and belt tensioner for crew
- Tire pressure monitoring
- FLEXILIGHT LED light mast for perfect illumination of the scene of the emergency

#### **User-oriented functionality.**

#### Functionality requires space, overview, and efficiency.

#### Easier to operate - quicker to react

The ergonomically optimized control handle with backlit keys ensures straightforward and easy operation of the turrets. An integrated indicator shows the extinguishing agent level. Even with the electrically darkened roof window\*, which can be dimmed at the push of a button to prevent glare, there is still enough visibility overhead. The folding center console enables quick swapping between the driver and front passenger as well as a direct exit on the opposite side. The optimized loading room allows the rear box to be loaded up to the lower edge of the body. The innovative opening concept ensures fast handling.

External tank indicator

The extra-long full height locker on the left side provides additional loading space. The optimal illumination of all important areas, such as access, pump compartment, rear box, and the full-height lockers provides high operating comfort.

\*optional



Rear box

#### **Excellent maintenance-friendliness and serviceability**

- Optimized maintenance accessibility
- Easier access, especially to components that require more frequent maintenance
- Check the oil level at the press of a button from the driver's cab
- Easily accessible electronics thanks to the hinged dashboard covers
- Quick and easy cleaning of the removable floor mats



Cockpit with roof window (optionally dimmable)





Folding center console

#### Maximum usability and operating convenience

The continuously optimized and innovative features of the PANTHER enable a better overhead view in the cockpit and simpler control of the turret. The functional and high-tech driver's cab boasts a space-optimized design and additional storage compartments and stowage options.

#### **Comfort highlights**

- Intuitive LCS 3.0 operating system with consistently backlit displays, joysticks and control handles, and integrated oil level indicator
- Ergonomic dashboard with application-appropriate switch layout
- New external tank display that is easier to view from all angles, even in daylight

All developments of the PANTHER in terms of usage and operating convenience are geared towards improving ergonomics, visibility, and freedom of movement.

Joysticks

#### The intuitive operating system.

#### Safety as a matter of course.

The operation of a fire-fighting vehicle should not be a mystery - especially when out on a call. Rosenbauer therefore relies on a modern, self-explanatory operating system that is uniform across all vehicles.





10" RBC LCS display: HD resolution, touch function, and automatic color switching adapted to the ambient conditions.

#### Logic Control System: intuitive operation and reliable monitoring

With the RBC LCS, installed devices and integrated systems from pump to generator can be operated intuitively, and operating states can be quickly recorded. All functions are color-coded, the main operating path is highlighted in color and runs from left to right or from top to bottom. This allows each operator to find their way around the control panel immediately. The LCS includes a 10" high-resolution display as well as a smaller 3.5" display, a stepless rotary key with pushbutton function (DIGIPOT), and various key panels.

#### FIRECAN: the standardized interface for electronic systems

Thanks to FIRECAN, all vehicle components can be operated from the displays, and helpful information can be more easily called up during deployments. For the emergency crews this means: more operating convenience with a uniform user interface. FIRECAN also provides support for maintenance and servicing and ensures the integration of the various components independent of the firefighting vehicle through plug-and-play. They can therefore be used in different vehicles for many years.

The new RBC LCS operating system is not just used in the PANTHER, but in all new Rosenbauer vehicles. This enables operators to seamlessly switch between different emergency vehicles.





#### The model range.

#### The optimal PANTHER for every operation.

#### **PANTHER 8x8**

**Top of the class:** With up to 1,450 hp, a maximum speed of 135 km/h, and up to 19,000 liters of extinguishing medium capacity, the PANTHER 8x8 sets the standard for engine power and extinguishing power. In addition, the 10,000 l/min of pump output and acceleration from 0 to 80 km/h in less than 25 seconds put the model in a class of its own.



#### PANTHER 6x6 S

**All-rounder:** The 6x6 S is entirely road-friendly thanks to a 2.5 m superstructure, while also featuring the full off-road capabilities of the PANTHER. High performance: Lighter than its "big brother", the S model accelerates even faster!

Info at a glance: 700 hp engine, maximum speed of 115 km/h, up to 10,300 liters of extinguishing medium capacity, 7,000 l/min pump output, and acceleration from 0 to 80 km/h in less than 28 seconds.

Optional: Sliding rear for easy service access!





#### **PANTHER 6x6**

**Benchmark:** The PANTHER 6x6 features an impressive engine power of 750 hp, maximum speed of 120 km/h, up to 14,000 liters of extinguishing medium capacity, 9,000 l/min pump output, and acceleration from 0 to 80 km/h in less than 28 seconds.

#### **PANTHER 4x4**

thought-out model classifi-

cation system.

**Sprinter:** The PANTHER 4x4 owes its speed to its light weight combined with an engine output of 700 hp.

More info at a glance:
Maximum speed of 115 km/h, up
to 6,950 liters of extinguishing medium capacity, 9,000 l/min pump
output, and maximum acceleration
from 0 to 80 km/h in less than
22 seconds.



# Fast and powerful.





#### Service & support.

#### Our performance promise for your safety.

#### **Committed to customer orientation**

Inspection and maintenance services ensure the uniformly high quality of all Rosenbauer products. The focus is on flawless functionality, a long service life, as well as the safety of vehicles and equipment. This is achieved with a solid foundation of customized services that consistently focus on the customer's needs.

#### A reliable partner

You can expect fairness and customer-orientation throughout your dealings with Rosenbauer. Rosenbauer guarantees the long-term availability of original spare parts. This provides a solid foundation for high operational safety of all vehicles and equipment.



#### **High service quality**

Every fire department has unique requirements. To address this effectively, Rosenbauer structures its services to be modular. Thus, the services for each customer can be optimally tailored to their needs. Within this framework, fleets of vehicles and equipment are maintained and serviced optimally and on time.

#### Full service, around the clock.

In operations, only 100% will suffice. Every piece of technology and equipment must work flawlessly. Every tool ready for action. And when something does fail, fire fighters want it back in operation as quickly as possible. One call to Rosenbauer is all it takes for a technician from the nearest Rosenbauer Service Station to arrive within 24 hours.





