



RT

Revolutionary Technology

**Electric municipal vehicle
up to 18 tons.**

Revolutionary in every way.

 **rosenbauer**

Rosenbauer has redesigned the RT from the ground up as a genuine fire-fighting vehicle. This enabled the groundbreaking innovations that make it the most modern emergency vehicle in the world.





Revolutionary Technology

Pioneering spirit. 100 percent.

For many manufacturers, a new product is just the sum of its new individual parts: In most cases, this means the renewing of components and further development of existing ideas. Not so with Rosenbauer. For the RT, its developers not only improved what was already there, but they also reconceived the entire firefighting vehicle concept. The requirement was clear: This model had to represent the future of firefighting vehicles.

The RT – a milestone

Yes, the RT is electric. But that is not its only revolutionary feature. The electric drive is just the starting point of a long series of unique design features that offer important advantages: for the operational process, the operational management system, the operational environment – and above all for the emergency crews.

The RT was not just designed to be state-of-the-art in terms of technology. The goal was to meet the future requirements of fire services already today. This makes the RT not just a milestone for Rosenbauer, but also for the entire firefighting industry.

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. Rosenbauer covers it all with its expertise and experience as a system provider.

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 ensure that you are optimally equipped when it matters.

Revolutionary.

In every way.

Versatile
Extinguishing

Simple
Operation

Crew
cockpit

Compact
dimensions

High degree
of driving safety

Electric
drive





Flexible design

Innovative safety features

Fully networked

Powerful LED lighting

Extreme maneuverability

Low entry height

Excellent driving dynamics

Low removal heights

Additional rear compartment

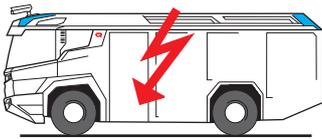
Revolutionary agility.

Unprecedented driving dynamics and driving safety.

In the RT product line, the combustion engine has not just been replaced by an electric one. Instead, a completely new drive concept is revolutionizing the architecture of the tank firefighting vehicle, with numerous positive effects.

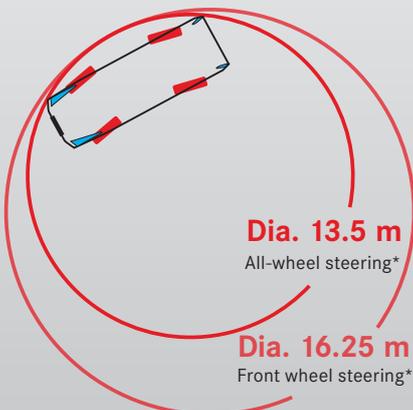
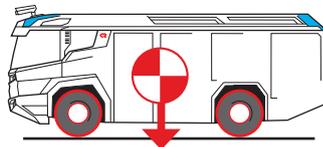
High torque right from the start

The two electric motors, totaling 360 kW (490 hp), ensure unparalleled longitudinal dynamics in a firefighting vehicle. This enables rapid merging, especially in heavy city traffic.



Low center of gravity, even axle load distribution

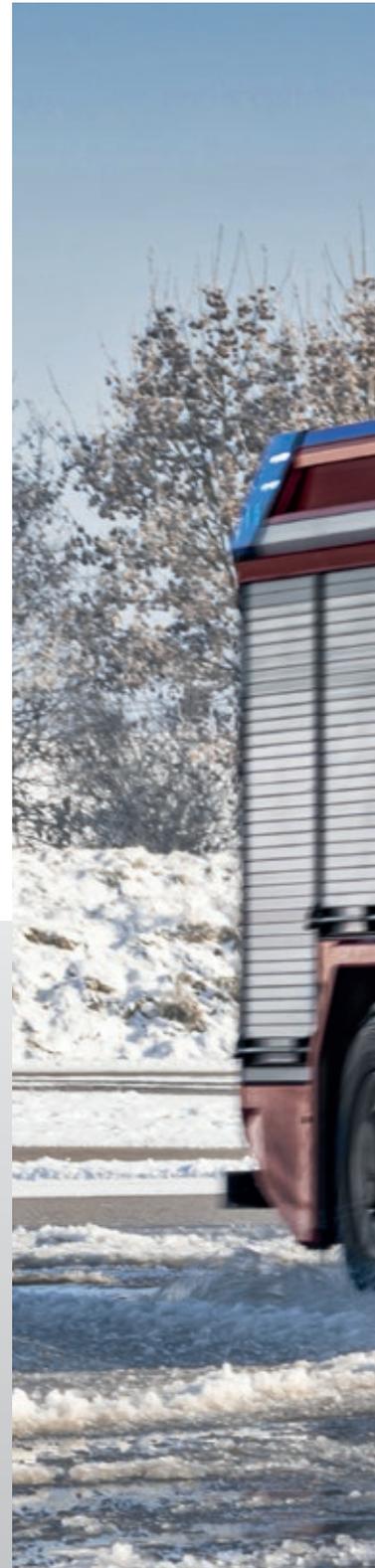
The drive concept enables a lower center of gravity and more balanced axle load distribution. This gives unprecedented cornering stability and thus reduces the risk of accidents.



* Turning circle diameter +/- 0.5 m
- with 4,100 mm wheelbase

Significantly improved turning radius

The wheel suspension developed by Rosenbauer enables a significantly wider steering angle - even with all-wheel drive. The turning radius of the RT is thus significantly smaller than that of conventional vehicles of the same size. Thanks to all-wheel steering, maneuverability is increased dramatically.



Never before has a tank firefighting vehicle with comparable performance been as maneuverable, agile, and safe as the Rosenbauer RT.



Revolutionary ergonomics.

Functionality that puts emergency crews first.

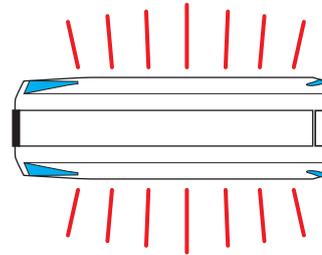
The revolutionary vehicle concept of the RT offers both ergonomic and tactical advantages - for less physical strain on the emergency crews and improved operational success.



For the RT product line, it was possible to significantly reduce the removal height. This reduces the physical strain on the emergency crews.

Outstanding ambient lighting

The integrated high-performance LED strips with their powerful luminosity ensure shadowless illumination of the operating environment and, in many scenarios, even make a lightmast superfluous.



Communicative cabin structure

The cockpit and crew cabin were also redesigned to ensure the greatest possible interaction between the crew members:

- The cockpit has a rotatable driver and commander seat.
- The crew cab is not spatially isolated from the cockpit.
- Both features enable an oval seating arrangement for improved communication.



Entry height only 260 mm

Convenient entry and reduced hoisting strain

The cardan shaft-free vehicle concept allows the equipment compartment to be extended downwards. With level regulation, in deployment mode the body can also be lowered to an entry height of just 260 mm. This enables easy step-free access to the crew cabin, and also reduces the removal height. This significantly reduces the long-term strain on the emergency crews, which brings about a noticeable improvement in working conditions, especially for professional fire departments.

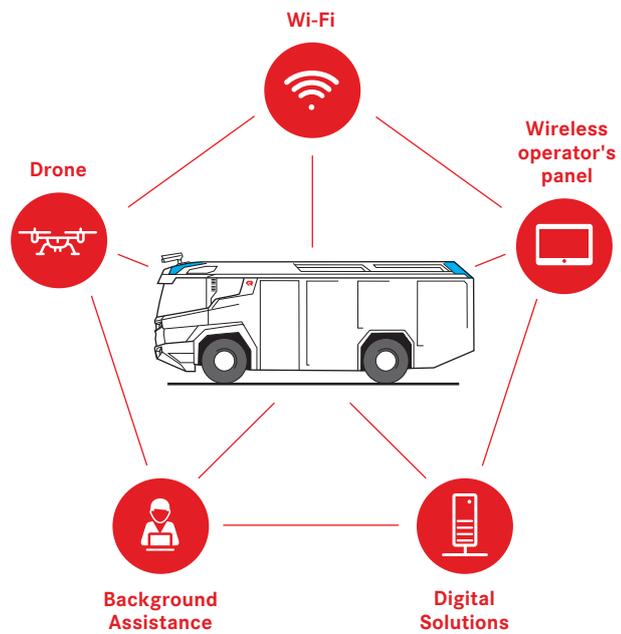
Revolutionary operation.

Intuitive. Digital. Networked.

Not only are the equipment and performance of a tank firefighting vehicle decisive for the success of an operation, but also its operability. With the RT, Rosenbauer is breaking completely new ground in order to make the vehicle's controls and firefighting equipment even safer and easier to use as well as to improve the coordination of the emergency crews.

The operating concept of the RT is based on simplification and redundancy, so that errors can be avoided in the event of an emergency.



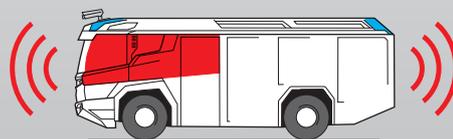


Fully networked

The RT is at the center of its own communication system. This includes an autonomous Wi-Fi network, permanent connection to the operations control center and the EMEREC data center, and even the integration of drones for aerial photo-based analysis of an incident.

Advanced sensor technology

The driver of the RT is supported by an electronic mirror system, including a blind spot warning and rear view cameras. Distance warning sensors that detect obstacles can also be optionally installed.



Easiest operation

The RT features intuitive, easy-to-use touchscreens. In addition to conventional switches, a customizable actuation button ensures maximum simplification.



Reduced emissions.

Minimal emission of pollutants. Less noise.

An emergency vehicle that aims to meet the highest requirements must also be able to impress when it comes to climate, noise and health protection. Thanks to its innovative drive concept and the choice of materials used, the RT masters this with ease.

Low noise and exhaust emissions

The RT's electric motors are virtually silent. In addition, when the vehicle is stationary, the engine is automatically shut down. That is because the lighting and equipment are powered directly from the batteries. This greatly reduces the noise level at the scene of the emergency, making work easier for rescue workers, reducing stress, and benefiting nearby residents. Furthermore, no exhaust gases are emitted when extended pumping operations are not required. This greatly improves the air quality in the vehicle's immediate surroundings.

Emission-free driving

The RT's electric drive is not only powerful, but also emission-free. The batteries ensure that no fuel has to be burned while driving. In addition, recuperation via the electric motors reduces brake wear and thus the creation of fine dust particles. This is of significant benefit to people and the environment, especially in urban areas with many emergency journeys, high traffic volumes, and a high building density.

Quiet and emission-free - this not only describes the RT's driving, but also most of its job performance at the scene of the emergency. This is good for both people and the environment.

Zero glass fiber reinforced plastic

For reasons of sustainability, glass fiber reinforced plastic (GFRP) was completely dispensed with for the first time in a municipal tank firefighting vehicle. The glass fiber particles contained in GFRP can be inadvertently inhaled, which could result in health issues. In addition, the plastics used in the RT are easier to recycle.



New urban legend.





Safety first.

Safe drive. Safe operation.

The safety of the rescue crews and all those involved in an operation takes top priority. And the RT uses an unprecedented set of measures to guarantee this.

Extremely high driving stability

Due to the drive concept, which incorporates an extremely low center of gravity, the RT is much more stable than conventional firefighting vehicles when cornering at high speeds. This ensures a high degree of driving safety.



The electronic rearview mirror.

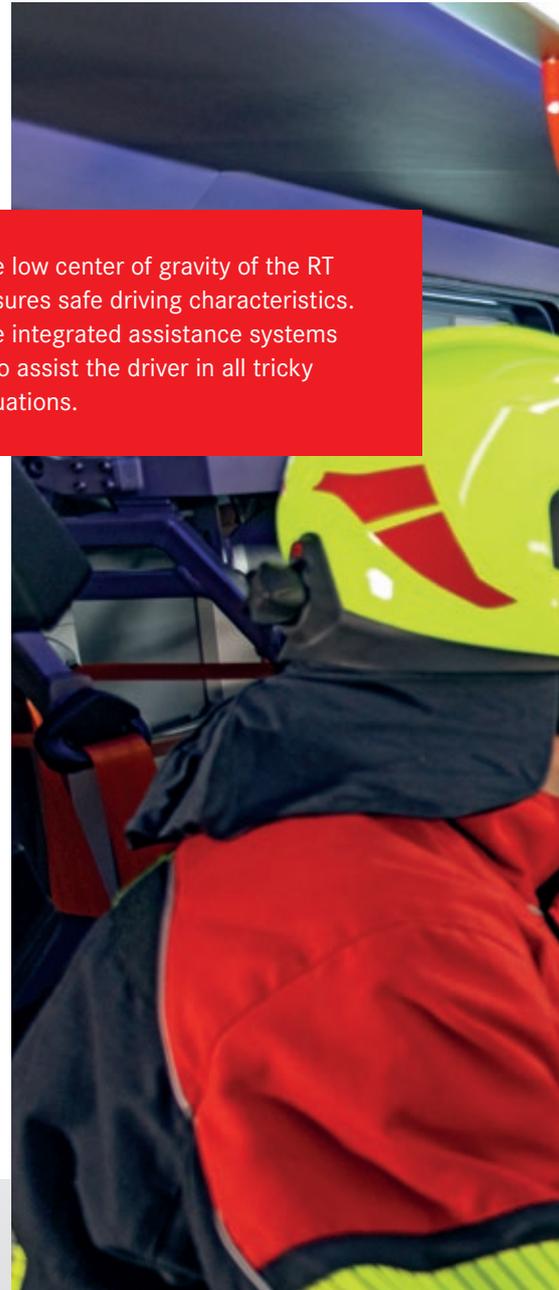
Active safety - the assistance systems

The drivers of Rosenbauer's RT vehicles are supported by a large number of assistance systems that help avoid accidents in difficult situations.

These include:

- Electronic rearview mirrors with a significantly increased field of vision to eliminate blind spots
- Full rear view, thanks to an integrated rear camera
- Automatic object recognition to avoid collisions with people and objects when maneuvering and in tight situations

The low center of gravity of the RT ensures safe driving characteristics. The integrated assistance systems also assist the driver in all tricky situations.



Passive safety - the crew cab

A completely new type of crew cab with a rugged design ensures a high level of passive safety in the event of an accident.



Reduced risk of injury and health hazards

Due to the basic ergonomic specifications of the RT with its generous headroom, its low entry, and the easily accessible equipment compartments - especially when constantly used by a professional fire brigade - the risk of injury to emergency crews is significantly reduced. In addition, the vehicle's emissions are reduced to a minimum, as no exhaust gases are emitted during battery-powered operation.

Perfect illumination

A clear view around the firefighting vehicle on deployment is a basic requirement for successful and safe operation. The RT's integrated LED lighting system ensures a level of brightness that could previously only be achieved through the use of powerful light masts. In addition, the cornering lights improve the identification of passers-by while driving.

Unparalleled maneuverability.

Superior maneuverability. Minimal turning radius.

Maneuverability is of the utmost importance for municipal emergency vehicles. This is especially true in urban areas. With the RT, Rosenbauer engineers have pushed the limits of what is possible. No other vehicle with comparable extinguishing and transport capabilities has such compact dimensions or an equally small turning radius.



Parallel positioning of the wheels on both axles for maneuvers in narrow spaces.

Narrow superstructure

Despite its spaciousness, the RT is only 2.35 m wide. This ensures that the destination is reached quickly and reliably, even when traveling on narrow streets and through tight passages.

Rear axle steering

If desired, the RT can be configured with switchable rear axle steering. This both reduces the turning radius even more and optimizes maneuverability through so-called 'crab steering'.



Minimal turning radius

Ordinary combustion engine municipal tank firefighting vehicles have a defined turning clearance radius due to their design, which simply cannot be further reduced. This is due to the positioning of the chassis components and frame geometry. Thanks to its electric drive, the RT is not restricted by this. Its increased steering angle allows the vehicle to maneuver even in the tightest of spaces and get closer than comparable emergency vehicles in extremely tight spaces.



Electrical. And enduring.

The Rosenbauer drive system.

The RT has a charging capacity of up to 150 kW, which means that the built-in batteries can be recharged quickly. This means that purely electric and therefore emission-free short-range operation is not a problem, even when used very frequently in big cities. Thanks to the built-in energy backup system, the RT can also be operated with diesel without restrictions if necessary.

Flexible charging

The RT batteries can be charged without a special charging device using three-phase alternating current (AC: 11 or 22 kW) from a high-voltage industrial socket. For back-to-back deployments, direct current (DC) charging stations ensure minimal charging times.

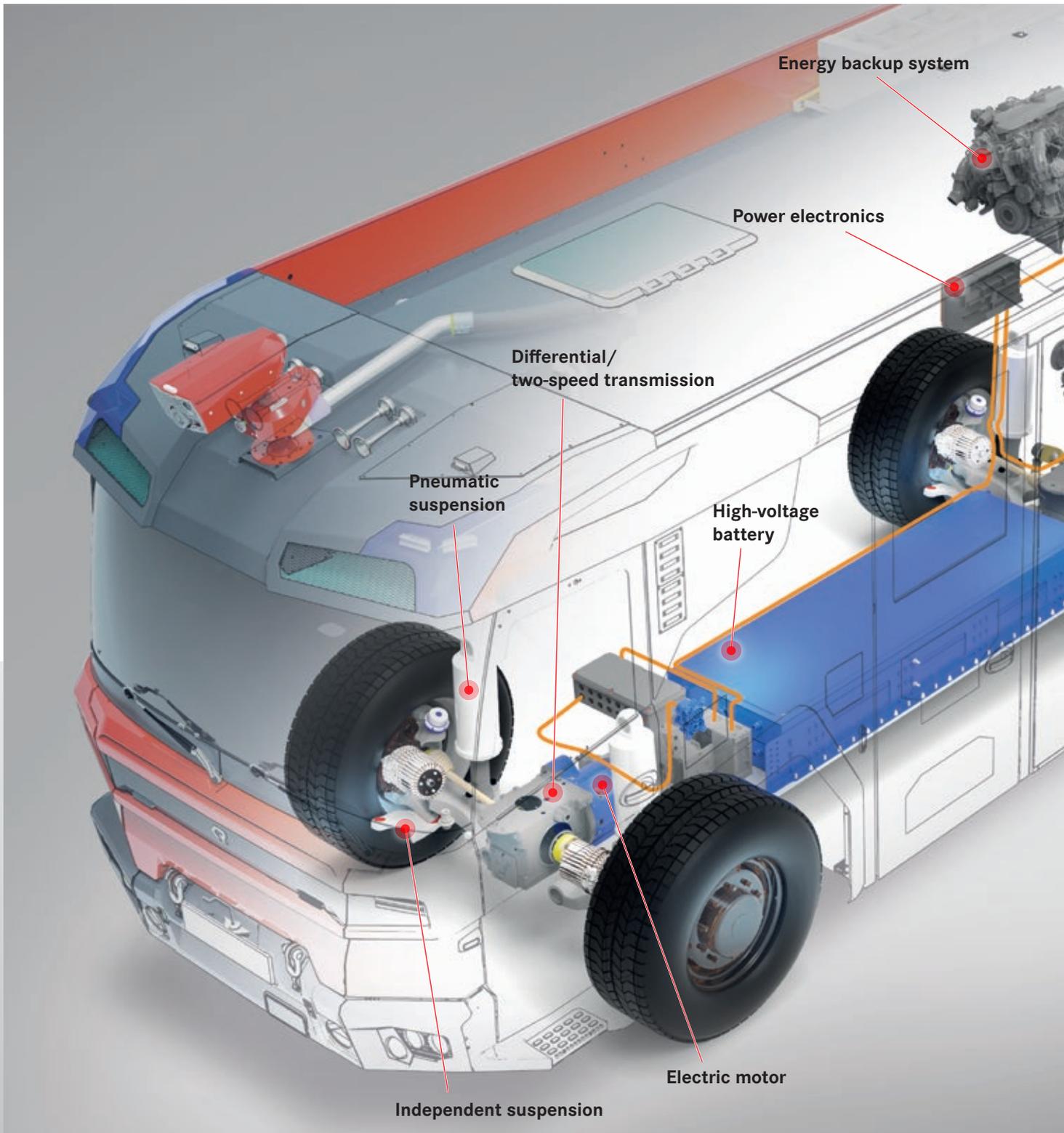
At full power consumption of 150 kW, just a quarter of an hour is enough to increase the charge level of the 132 kWh energy storage system from 50 % to 80 %.



Most operations do not involve an extinguishing operation. They can easily be managed purely electrically with the RT. However, shorter extinguishing operations are also possible without the support of the energy backup system.

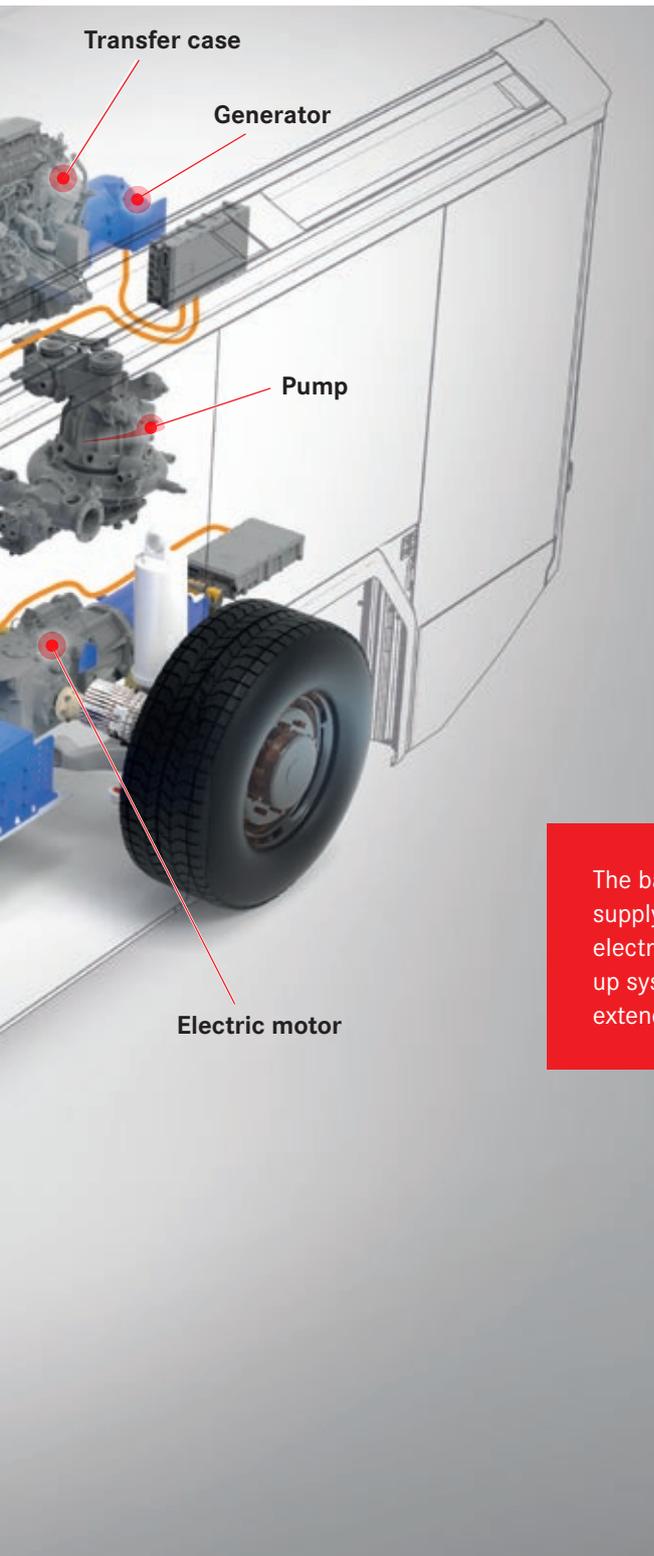


The Rosenbauer RT has two electric motors and, depending on the variant, one or two batteries, each with a capacity of 66 kWh. Each vehicle also has a modern diesel engine installed as an energy backup system.



The integrated power plant.

Energy in every operational scenario.



Thanks to its rechargeable batteries, the RT functions as its own power generator for equipment and auxiliary devices. And all of this without any local emissions. To ensure an uninterrupted supply of power even during extended deployments, the vehicle has a second power plant: the energy backup system.

The power reserve: the energy backup system

An energy backup system is installed on board the RT. This consists of a state-of-the-art six-cylinder diesel engine and an electric generator. If more energy is consumed during use than is stored in the batteries, the energy backup system automatically recharges them. The operating times of the RT thus far exceed the requirements of Fire Service standard EN1846.

The batteries of the RT can also supply external devices with electrical energy. An energy backup system ensures continuity for extended operations.

Function as emergency power generator

The high-performance high voltage batteries of the RT also provide sufficient output for external consumers. Several external devices with a combined power consumption of up to 18 kW can be operated simultaneously via the power outlet.

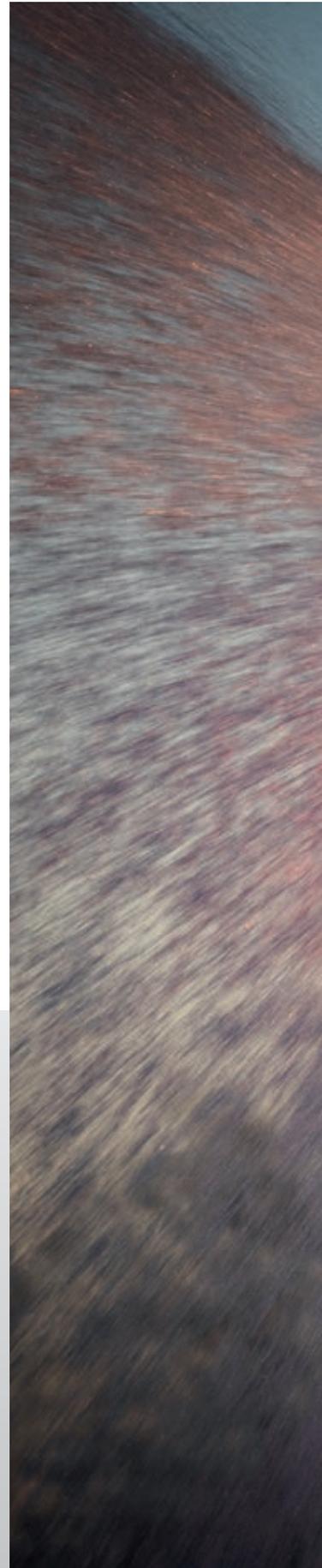
Enormous variety.

Extinguishing technology in many variants.

The RT offers many configuration options, especially when it comes to extinguishing technology, so each vehicle can be tailored to the operational environment. The volumes of the water tanks range from 1,000 l to 2,500 l, and the foam tanks from 50 l to 400 l. A wide range of foam proportioning systems and turrets are also available.

Purely electric pump operation possible

All available pumps can also be operated either purely with battery power via an electric motor or, especially for longer operations, with diesel fuel via the energy backup system.





Both normal and combined normal/high-pressure pumps are available for the RT. They can also operate in battery-only mode.

Spatial revolution.

Optimized ergonomics and efficiency.

Emergency crews are exposed to high levels of physical strain. Much of this stems from the transportation of equipment. An emergency vehicle designed with this in mind from the outset can provide noticeable relief. The Rosenbauer RT was designed with precisely this in mind.



Step-in instead of step-up

With a distance of just 260 mm between the road surface and the cabin floor in operational mode, it has never been easier to enter or exit a tank firefighting vehicle. The RT eliminates the need for fold-down steps, ladders and stairs. This reduces the risk of injury and long-term stresses on the emergency crew.

Minimized removal heights

Since the RT has storage space at a very low vehicle height, which can be lowered even further while the vehicle is stationary, the maximum removal height that emergency crews have to deal with is a little over 2 meters. For this reason, fold-out steps can be dispensed with entirely. This minimizes the risk of injury from missteps.

Electrical ladder lowering device

The ladder is an important work tool for every municipal fire department. An optional manual or electric lowering device is available, in addition to the conventional roof access via the rear of the RT, to facilitate its deployment. This reduces peak loads and thus avoids injuries and accidents.

Variable rear loading space and large equipment compartment depth

The position of the pump room has been moved forward in the RT, creating additional equipment space with a low loading edge in the rear of the vehicle. With a depth of up to 669 mm, the loading compartments of the RT are particularly generously sized. This results in even more storage space positioned as low as possible, with heavy equipment having to be lifted less often.



Additional loading space at the rear thanks to the pump unit being moved forward.

Embedded and networked.

The center point of the operational environment.



Everything on the screen: The central deployment display provides the entire crew with relevant information, but also serves as a navigation device, for example.

The coordination of operations is a complex undertaking. The RT is where all threads come together. State-of-the-art hardware and revolutionary software tools make sure of this. As a result, the emergency crews are optimally informed and equipped for tasks unrelated to firefighting.



Digital solutions

This is what information technology is for: Thanks to the Rosenbauer EMEREC system, the emergency crews are continuously fed the necessary data, such as incident reports, building plans, camera images, and much more. In addition, the emergency crews can communicate both with one another and with the operations center.

Constant updates

Rosenbauer customers benefit from constant innovations, even for existing vehicles. The RT will get even better with every software update.

IT security

For Rosenbauer, safety is a top priority - in every area. Therefore, special attention was paid to ensuring that, as a fully networked vehicle, the RT also functions reliably in digital terms.



Embedded in the Rosenbauer Digital Solutions environment.

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 the high operational safety of all vehicles and equipment.

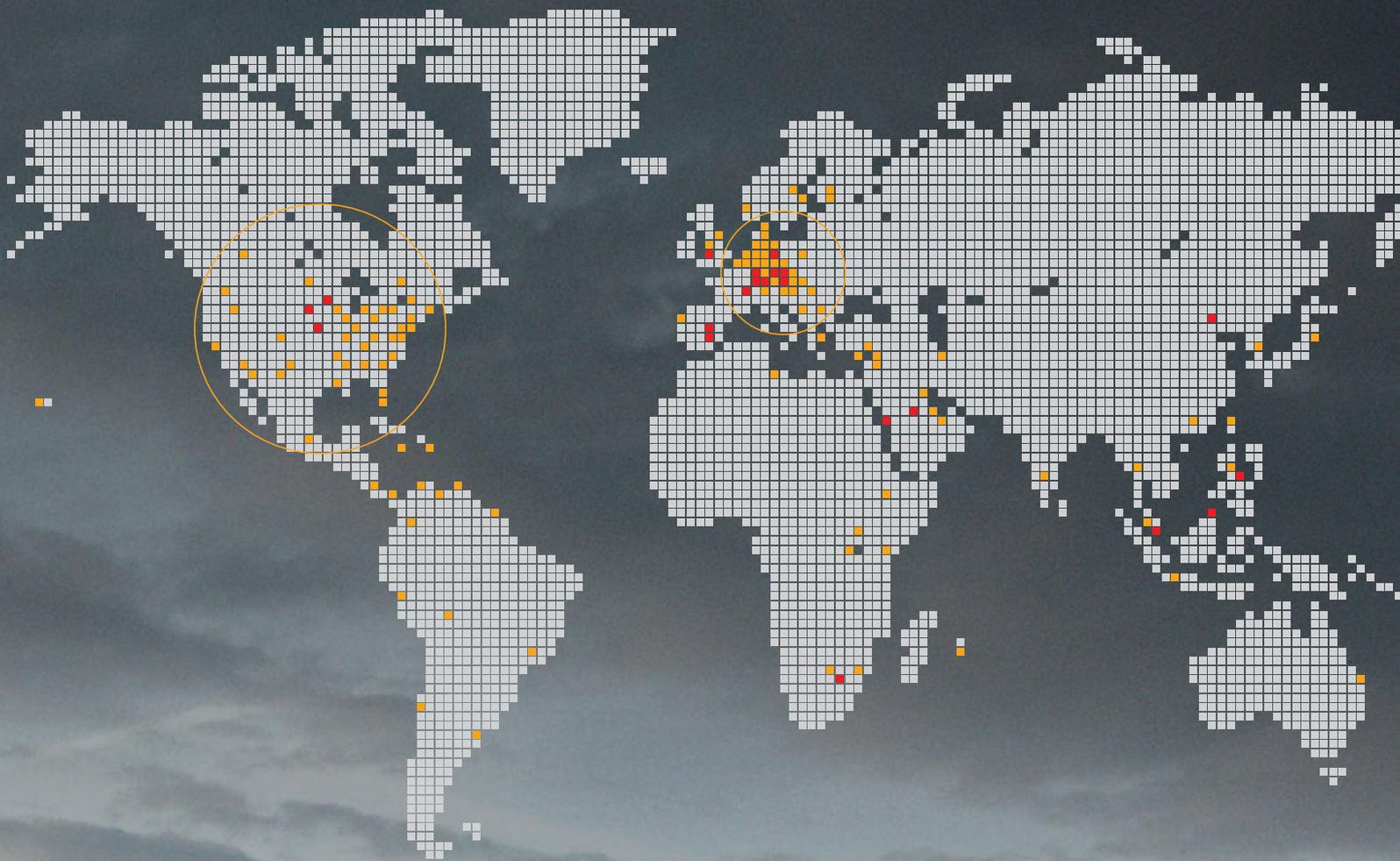


High service quality

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.



■ Service Center ■ Service Partner ○ more than 50 Service Partners

Rosenbauer ensures that emergency crews can depend 100% on their vehicles and equipment. To this end, the company provides its customers with maintenance, customer service, and refurbishment through a service network consisting of our own branches and international service partners, with a presence in more than 100 countries around the world.



