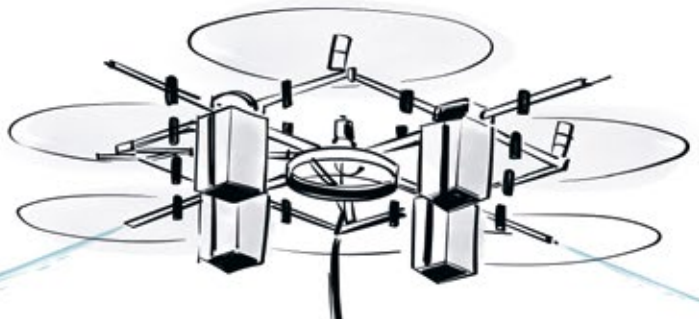
rosenbauer

Annual Report
2019

Everything for this moment



Key figures

1,149.5

ORDER BACKLOG
(AS OF DEC. 31, IN € MILLION)

978.1

GROUP REVENUES
(IN € MILLION)

51.9

EBIT
(IN € MILLION)

Rosenbauer is the world's leading manufacturer of firefighting and disaster protection technology. The company develops and produces vehicles, fire extinguishing systems, equipment, telematics solutions and systems for preventive fire-fighting for customers on all continents. All the main standards are covered by products manufactured in Europe, the US, and Asia.

Today, Rosenbauer has a sales and service network covering over 100 countries. We want to further our successful growth on this basis in the years to come – as a quality leader and with our claim of offering the best value for money.

Contents

some

15 million

firefighters around the world*

*International Association of Fire and Rescue Services (CTIF)/ Center of Fire Statistics: World Fire Statistics, Report No. 24, 2019. Based on the latest data from the years 2001 to 2017 from 58 countries.

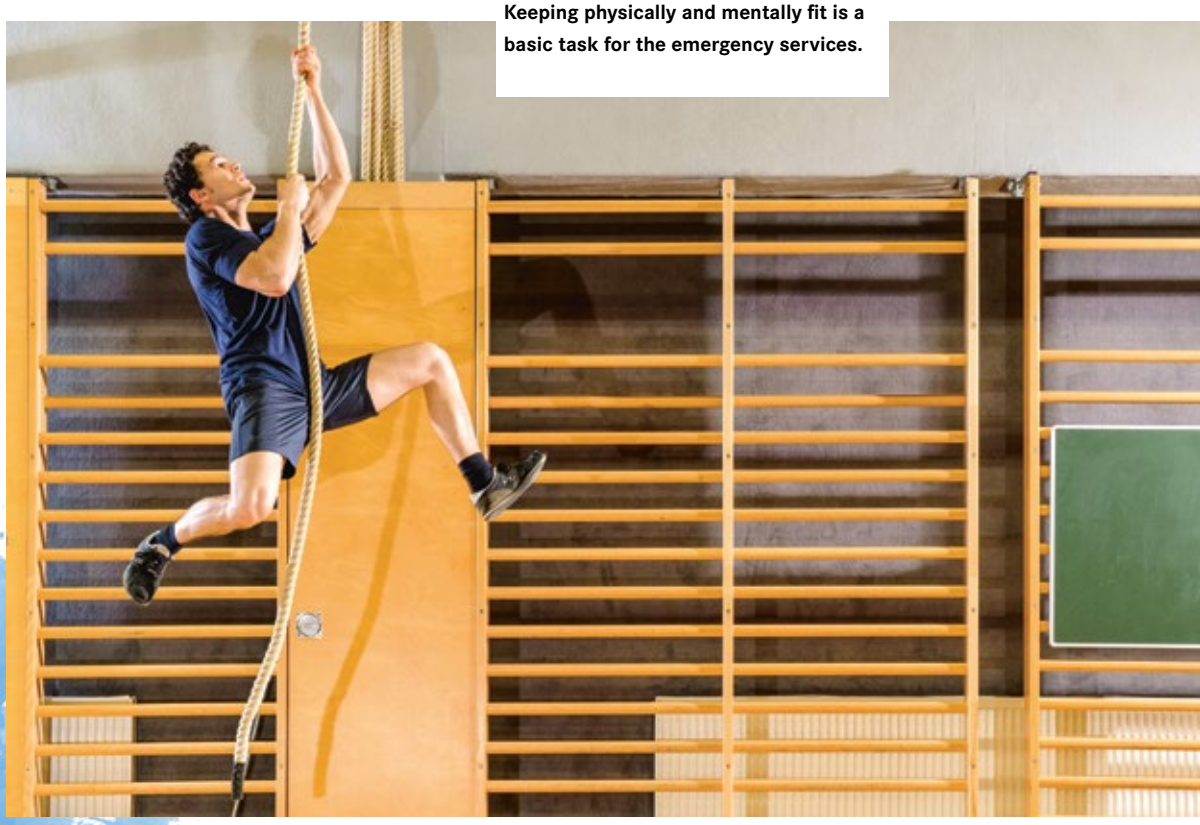
Everything for this moment

Simulations

There is no room to try out something new in a dangerous situation. Simulations prepare emergency services to make the right decisions in an emergency.

Training

Keeping physically and mentally fit is a basic task for the emergency services.



Maintenance

Functional equipment is vital to both parties: the emergency services and those whose lives need saving.

Learning

An increasing amount of knowledge is required in deployment. As a result, training is becoming part of the routine.

Equipment

It is vital to be ready to move out at any time. This is why vehicles are made ready for use again as soon as possible after deployment.

Calculations

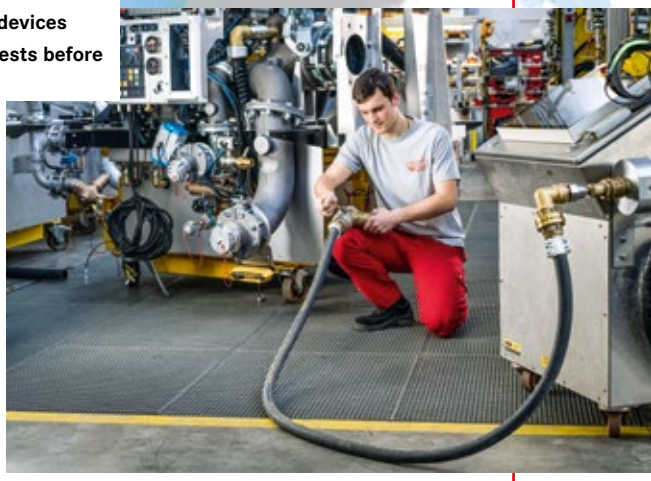
Quality still has to be affordable for municipalities and organizations. Economic efficiency calculations help to justify spending on vehicles and equipment.

Refinement

Every vehicle order presents its own particular challenges. Rosenbauer devotes itself to each and every one of these tasks and finds the right solutions.

Testing

Where firefighting is concerned, there is virtually no room for error in terms of technology. That is why devices undergo thorough quality tests before deployment.



Development

For every good solution you can find today, you might be able to implement a better one tomorrow. Rosenbauer's aim is to be able to offer its customers all available options at all times.

Analysis

The best points of reference for making improvements come from everyday work. This is why Rosenbauer leaves plenty of room for analysis.

3,828

Rosenbauer employees worldwide

SEBASTIAN WOLF
CFO

DIETER SIEGEL
CEO

DANIEL TOMASCHKO
CTO

ANDREAS ZELLER
CSO

2nd row from left: Alexander Ronacher, Gundel Labak, Helena Haim, Roland Weber, Johannes Wampl, Matthias Kaser, Leonie Jell, Max Eschlböck-Bauer

We are doing everything we can for this moment

We want to offer our customers the best solutions for every deployment. That is why we always keep an eye on the overall picture and consider processes in context. We use this level of understanding to constantly develop our solutions – and thereby specifically fill the gaps that others in our field of expertise have yet to address properly. This makes us not only a driver of innovation on the market, but also a reliable expert at the side of our customers.

This is because we want everything to be truly perfect for when the moment comes.

Next-Level CFT: First Customers

One of the largest development projects in the company's history is gathering speed. The Concept Fire Truck (CFT) provides mature answers to the markets' important questions and is being rewarded with an increasingly positive response.

A

Amsterdam, Berlin, Dubai, Los Angeles, Oslo, Portland – it is no coincidence that these cities and their firefighting organizations are among the first to purchase the CFT. They are all members of the C40 Cities Climate Leadership Group, an association of now almost a hundred cities across the world that have made an especially ambitious commitment to climate protection. Almost all C40 cities have recently passed laws and set deadlines for achieving climate-neutrality. For instance, according to its "Clean Air" action plan Amsterdam has passed a law that will ban trucks, buses and taxis with combustion engines from entering the municipal area from 2025. A similar ban on private cars with combustion engines will also come into effect in 2030. "This new fire truck might make us fit for the future", said Tijs van Lieshout,

commander of the Fire Department of Amsterdam-Amstelland. “The new possibilities of this range-extended electrical vehicle are appealing. We not only will have state of the art technology and real time information at our disposal. We also contribute to a better environment, since an electrical fire truck is a first step towards an emission-free fire department, our collective goal for 2030.”

PERFECTLY POSITIONED

Technology partnerships aimed at promoting the development of a suitable CFT-based series vehicle have been launched with eight large rescue organizations – three in Europe, three in North America and one each in the Arab world and Southeast Asia. This takes one of the firefighting industry’s key flagship projects to the next level: trialling the electric firefighting vehicle in challenging, day-to-day operations.

With the electric firefighting and rescue vehicle project starting 2021, the Berlin fire service will be the first to trial the vehicle, with pilot projects following in Amsterdam and Oslo. The concept vehicle will then be shipped to Australia a year later to be put through its paces by the fire service in Canberra and the Australian Capital Territory. These technology partnerships usually last for two years and help determine whether the vehicle concept is suitable for everyday deployment by municipal fire services and whether it could be a potential candidate for upcoming replacements. If this is the case, Rosenbauer is perfectly positioned: No other firefighting technology provider or vehicle manufacturer has so far unveiled a technologically comparable concept, nor will any be bringing an electric firefighting vehicle to market in the foreseeable future.

NO SUREFIRE SUCCESS, BUT ...

Fire services are understandably somewhat skeptical of an electric emergency vehicle based on a brand-new basic concept. Innovations always have to first prove themselves against tried-and-tested technology, which can take a lot of persuasive effort. “Range anxiety” is a widespread concern that many people have with electric drive systems. On top of that are the challenges specific to fire services, such as the huge amount of energy required to operate firefighting pumps. Rosenbauer has been aware of these issues from the beginning, which is why it took the CFT on tour across Europe and overseas with the specific aim of giving fire services the opportunity to experience the benefits of the vehicle for themselves.

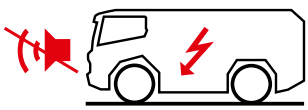
... IMPRESSIVE FEATURES

Their eyes lit up as soon as they sat in the CFT, where the firefighters could experience the technology up close and try out the myriad features that could

“This new fire truck might make the fire department of Amsterdam-Amstelland fit for the future.”

TIJS VAN LIESHOUT
COMMANDANT BRANDWEER AMSTERDAM-AMSTELLAND

350
kW
electric drive



Based on the electric drive and vehicle architecture:

- **Lower maintenance costs**
- **Lower energy costs**
- **Higher load capacity, larger loading volumes** – fleet optimization
- **Everything from a single source –** fewer interfaces, risks and administrative costs

potentially make their everyday work easier. When this revolutionary vehicle concept was showcased for the benefit of fire services in British Columbia at the end of January, “glowing reviews” were reported all over the Vancouver press. The fire service in Portland, Oregon, was also highly impressed, especially after seeing the vehicle in action at the Portland International Raceway. The acceleration alone of this 350 kW (475 hp) vehicle eclipses anything that firefighting vehicles have achieved in the past.

UNLIMITED ENERGY

Any concerns over range were also laid to rest when the fire services gained a more in-depth understanding of the technology behind the CFT. The vehicle is designed to manage most urban deployments purely electrically. In addition, the scene of deployment can be brightly illuminated with the CFT because it uses new, integrated and highly powerful LED headlamps to generate 300,000-lumen scene lighting that is around 20 times stronger than conventional systems. A range extender in the rear reliably and safely eliminates the risk of the electricity running out during a deployment. The six-cylinder diesel engine can, if necessary, ensure unlimited reserves of energy.

Based on the outstanding ergonomics and excellent functionality:

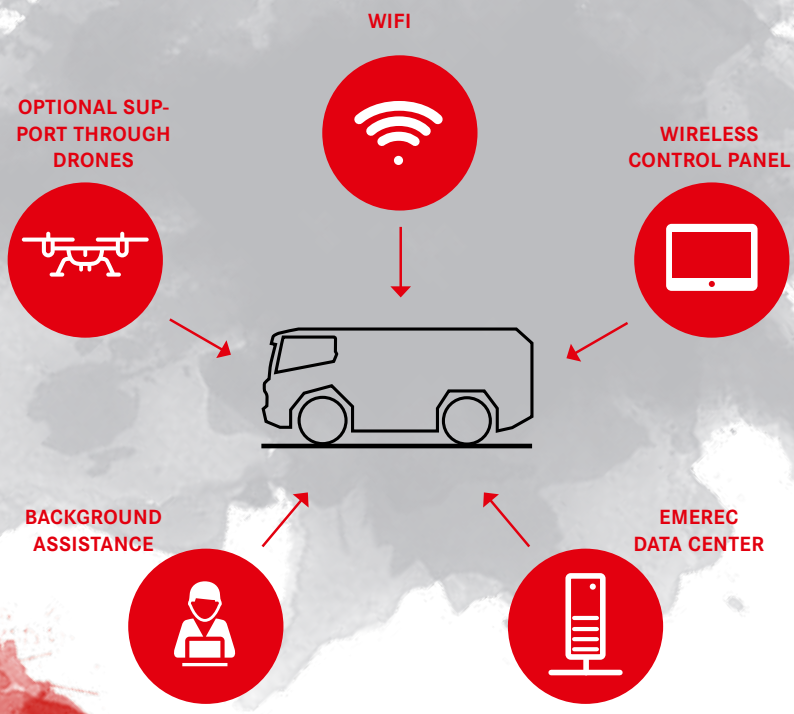
- **Fewer injuries**
- **Highly efficient deployment teams**
- **Extended operational availability –** reduced training costs
- **Optimal technology –** efficient and highly motivated emergency services

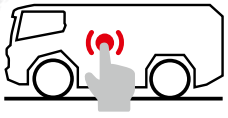
IMPROVED DRIVING DYNAMICS

It is not just the electric drive that constitutes the key difference with respect to conventional firefighting vehicles, but also the new vehicle architecture, which was made possible in the first place only by the alternative drive system concept. So thanks to its low center of gravity and even load distribution (50:50 over the front and rear axle), the driving dynamics of the CFT are superior to those of conventional firefighting vehicles (chassis with mounted body). The maximum permissible axle loads can also be utilized more effectively, which optimizes vehicle loading (up to one cubic meter of extra space) – a real boon for fire services.

HIGHLY MANEUVERABLE AND ERGONOMIC

The turning radius of the CFT is two meters smaller – and a full five meters (!) smaller with the all-wheel version – than stipulated by the EN1846 vehicle standard, which is a crucial benefit in densely built-up areas. The ground clearance can be adjusted for normal or off-road operation; at the scene of deployment, the entire vehicle can be lowered so that the entrance to the crew cabin is just 150 mm above ground level and personnel can access the harnessed equipment safely while standing on the ground. At the rear is a lifting platform designed to accommodate a remotely





SINGLE-BUTTON OPERATION
Several functions are interconnected and can be activated together.

WINTER TESTS
In Fagernes, Norway, tests were carried out to ascertain the handling of the CFT in snow and ice.

“There is nothing else like it in the world right now.”

RALPH M. TERRAZAS
FIRE CHIEF OF THE LOS ANGELES FIRE DEPARTMENT

controllable crawler, which, with a load capacity of up to 750 kg, makes it easier to handle heavy equipment.

STATE-OF-THE-ART COMMAND CENTER

In the CFT, the cockpit and crew cabin – which are normally separated by a partition wall – form one continuous cabin that can be used as a command center. The driver’s and commander’s seats can be turned around for mini-meetings and discussions during a deployment, while all the information required by the crew can be displayed on the central main control station. This is operated via touchscreens, with multiple functions combined to enhance user-friendliness. An already familiar example is the deployment scene button, which activates the hazard warning lights, front lights, scene lighting and truck-mounted pump at a predefined speed. The CFT is also fully connected and acts as a secure Wi-Fi access point.

CONCEPT FOR ALL MARKETS

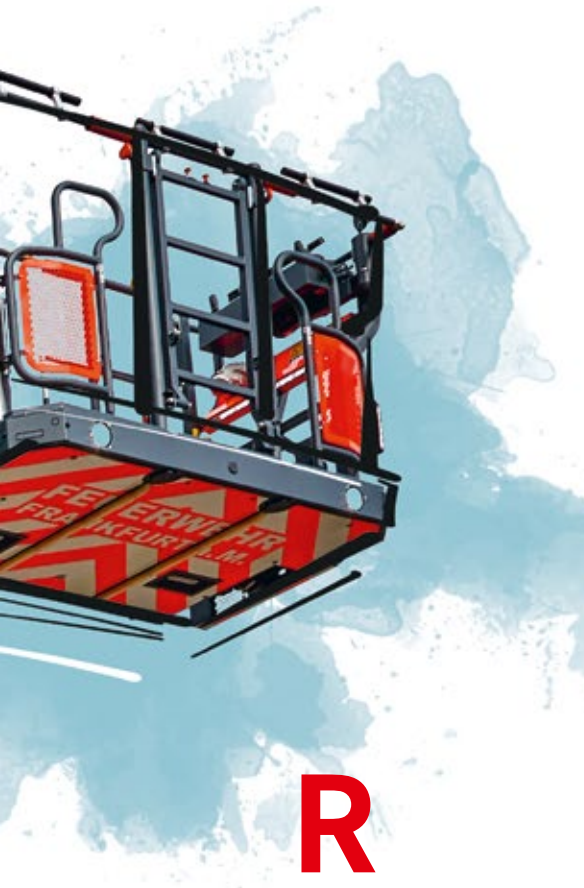
Also important is that the CFT technology improves the cost-effectiveness of the firefighting vehicle. This is due to lower maintenance costs, as a third less parts are installed in comparison with conventional vehicles, as well as to lower energy costs. Based on 90% electric operation, several thousands of euros can be saved with a performance of 10,000 km per year.

The CFT is capturing the imagination of rescue organizations around the world, inspiring them to think about what the firefighting vehicle of tomorrow should look like and how it should perform. Its technological basis covers all major global standards and legal conditions. And what’s more, the CFT is the first firefighting vehicle to secure the same amount of interest on both sides of the Atlantic, opening up the possibility of harmonizing European and American firefighting traditions. This is also confirmed by Ralph Terrazas, Fire Chief in Los Angeles: “I was able to experience the benefits of the Rosenbauer Concept Fire Truck for myself. It was a real joy. There is nothing else like it in the world right now. This vehicle has outstanding acceleration and brake performance – with zero emissions. It is equipped with a diesel engine that acts as a range extender for prolonged operations. We are looking forward to putting the new fire engine into operation at the Los Angeles Fire Department.”

Emergency Training

The teams prepare for deployment as best as they can, both physically and mentally. We help them to perform their tasks to the best of their ability with our ergonomic product design.

SAFE TECHNOLOGY
Each product development aims to make it possible to operate the technology without errors.



R

Relative to the time spent attending emergencies, firefighters actually spend most of their time training and practicing. Professional firefighters conduct drills several times a day, while volunteer firefighters conduct drills or undergo some sort of training every couple of weeks. Exercises address all manner of areas – from equipment expertise at the station through to “hot drills” in the fire container. Drills and exercises are conducted to help firefighters acquire new skills, while special training sessions and courses are provided for aerial ladder operators, high-altitude rescue workers and emergency divers. Cooperation among multiple fire services is also regularly put to the test, as is organization and operational command in the event of large-scale damage situations, covering everything from regional community drills through to national disaster prevention drills such as “Lentia MMXIX,” which was conducted in Linz and the surrounding area in October 2019.

COMPULSORY SERVICE

“Firefighters learn and train throughout their entire career”, says Robert Mayer, regional fire service commander for Upper Austria. “Training begins as soon as they join the fire service and continues until they leave. The goal of drills is clear: The ability to provide effective assistance in exceptional circumstances requires perfectly coordinated teams whose members can rely on each other without question, for whom every action is automatic and who can perform their duties smoothly and correctly at all times, no matter how tired they might be.”

An astonishing amount of creativity is required of fire services to make the drills as realistic and exciting as possible: A stairwell in an elementary school was used for rappelling drills, while the town hall was once filled with theatrical smoke so that firefighters could practice rescuing people while using breathing protection. Other exercises that are regular fixtures on the agenda for volunteer firefighters include learning how to ensure the supply of extinguishing water over long distances; use foam concentrates correctly and in the correct quantities; and cut open wrecked vehicles using hydraulic rescue equipment.

SIMULATOR-BASED TRAINING

Special exercises such as driving safety training on cordoned-off test sites or virtual deployment drills on driving or tactical simulators are welcome additions to the regular training program. Rosenbauer makes an important contribution here, too, by developing high-quality simulators (PANTHER Tactical Simulator, Emergency Response Driving Simulator, Aerial Ladder Tactical Simulator) that can be rented or sold to fire departments for training purposes.

The Fraport Aviation Academy in Ljubljana also uses simulator training, as Director Uihlein can confirm: “We purchased a PANTHER 6x6 and PANTHER Tactical Simulator to ensure that we can offer optimal training opportunities to the members of our airport fire department. The major benefits of virtual training

“The ability to provide effective assistance in exceptional circumstances requires perfectly coordinated teams.”

ROBERT MAYER
REGIONAL FIRE SERVICE COMMANDER FOR UPPER AUSTRIA

VIRTUAL TRAINING
On the simulator, errors do not have consequences. Instead, they present opportunities to learn.

PANTHER & SIMULATOR
The Fraport airport fire department trains on both a real vehicle and a simulator.

systems are that they entail no risk of an accident; they do not require any additional resources; they have zero environmental impact; and there are no consequences if someone makes a mistake. In addition, simulator-based deployments can be repeated as many times as necessary, recorded and discussed in debriefing sessions." With driving4fire, Rosenbauer also offers a package of real-life and simulator-based driver training exercises.

LENTIA MMXIX

Things becomes really exciting for firefighters when they get to take part in large-scale drills like the one that took place in the Upper Austrian central region back in October 2019. The background to the "Lentia MMXIX" national disaster prevention drill was that after a long spell of hot weather, the wider area of Linz was plagued with terrible weather conditions including hail, heavy rain and hurricane-force winds. Large areas were flooded, road links were disrupted by fallen trees and an entire village was almost completely washed away. Lightning also triggered a forest fire and a number of hikers were reported missing. And at a hazardous material warehouse at the port of Linz, pollutants escaped and containers were washed into the Danube.

"Lentia MMXIX" saw around 1,000 firefighters from across Austria – including pollutant specialists from Lower Austria, Burgenland and Vienna, forest firefighting departments from Carinthia and Styria, special forces from Salzburg with their high-power pumps, Tyrol's disaster prevention department supported by the Landeck fire service, Linz's second firefighting and disaster prevention department as well as more than 30 fire divers from various federal states – take part in a mass training session. Together with the Perg water services department, they had to perform the most delicate of tasks: rescue a helicopter from a harbor basin.

"On the simulator, the benefits are that there is no risk of an accident and no additional resources are required."

THOMAS UIHLEIN
DIRECTOR OF FRAPORT AVIATION ACADEMY

USER-FRIENDLY TECHNOLOGY

When developing its products, Rosenbauer is careful to ensure that they can be operated safely and without errors both in deployment and training. The COMFORT stowage system, for example, is designed to make life easier for firefighters. The name says it all: Sliding trays and lowering devices make it easy for firefighters to remove heavy and unwieldy equipment from the vehicle. A tensioned spring system with a one-finger bar bracket allows firefighters to remove and securely lock away equipment with just one hand. In addition, all elements in the vehicle that can be operated or grabbed (handles, lashing straps, locking and unlocking devices) are all colored bright orange.

MORE SAFETY, MORE FUN

The Logic Control System (LCS) is a standard user interface for Rosenbauer vehicles and products. It presents all functions in a series of standardized pictograms and color codes and, thanks to its defined logic, prevents buttons and functions being activated that, in certain situations, are not possible or not allowed. The input media are ergonomically optimized and can be safely operated even when protective gloves are worn.

More and more firefighting technology functions are being automated and/or combined in logical clusters to make life easier for emergency service teams and allow them to operate systems intuitively, correctly and safely. This brings us full circle back to the drills, which are much safer thanks to state-of-the-art, user-friendly technology. And of course, that also makes training more fun!

TRAINING4FIRE

Fire services learn how to properly handle Rosenbauer products as soon as they take delivery of them. Not a single vehicle leaves the company without its future operators receiving comprehensive training, sometimes over several days. Training is also provided every time we deliver a portable pump or generator.

And Rosenbauer's training4fire training program offers firefighters numerous ways to enhance their expertise, learn new things or take part in practical training. Training takes place either at the Rosenbauer training centers in Leonding and Karlsruhe or, upon request, directly on the fire service's premises and is provided by experienced employees, many of whom have worked in production or customer service. Training sessions encompass practical training and state-of-the-art e-learning modules. Rosenbauer offers not only ongoing operator training – including refresher training and train-the-trainer courses – but also technical training by professionals for professionals, real-life tactical and deployment training and bespoke special training for customers purchasing industrial and ARFF vehicles. All participants in the Rosenbauer training program not only are guaranteed first-hand information, but also benefit from the in-depth knowledge and many years of experience of the firefighting industry's technology leader.

LENTIA MMXIX
Helicopter rescue from the Linz harbor basin.

MAX ESCHLBÖCK-BAUER
Service engineer at Rosenbauer and member of the Mistelbach volunteer fire service.

Ready for that critical moment

The teams ensure they are always ready for operation by maintaining their devices. Rosenbauer is always at their side thanks to the 24/7 service.

W

When one deployment is finished, you have to prepare for the next one – this is the other, more mundane aspect of the everyday life of a firefighter. A deployment is over only once the vehicles, devices and personal protective equipment used are ready for use again – and the same goes for drills. Even after an exhausting nighttime deployment lasting several hours, firefighters have a lot to do when they return to the station. They have to clean the vehicles inside and out; clean their tools and devices so that they are ready for use again; replace missing or faulty equipment; refuel the vehicles and top up the necessary fluids; remove waste materials; drain the pumps (if they were used); rinse and vacuum-dry equipment if foam was used; replace used breathing protection devices and see if their personal protective equipment also needs replacing. Only after "fatigue duty" do firefighters have a chance to recover from the stress of a deployment – provided, that is, they don't have to jump straight back into their vehicles to attend another emergency.

The duty to make all equipment ready again for immediate use or replace it with performance-tested equipment ensures that fire services can do their job. Only when vehicles and devices are safe to operate and in full working order can they provide effective support.

~25

service locations worldwide

GUARDIANS OF TECHNOLOGY

While the vehicle and loading checks following deployments/drills are performed by the vehicle crews, all the other checks as well as all maintenance and servicing activities are performed by the vehicle and equipment managers. These are trained specialists who, as well as commander and machine operator training, have undergone additional training and are also authorized to perform/arrange for and monitor the tests on firefighting systems and equipment. They are usually firefighters with experience working as, for example, car mechanics, locksmiths or electricians.

Lifting devices (cranes, winches, lift pads, etc.), safety devices such as firefighting ropes, retaining straps, slings, ladders, rescue cushions as well as breathing protection and measuring devices, for example, undergo regular visual and functional tests. Fire service vehicles are required to undergo technical inspections at defined intervals. Truck-mounted pumps, portable fire pumps, generators and hydraulic/electric rescue equipment also have to be tested in accordance with official regulations.

Rosenbauer supports fire services as a skilled and responsible manufacturer and provider. On the one hand, the company acts as a certified testing institute for firefighting centrifugal pumps – whether from Rosenbauer or third parties – in accordance with EN 1028 or DIN 14420; on the other, it offers the Safety CHECK service for safety-relevant devices of all kinds, where specially authorized Rosenbauer service technicians perform all the necessary and legally required safety inspections and confirm these with a test report and test badge.

"Rosenbauer grants an up time for the fleet above 90% and facilitates all necessary maintenance and service procedures."

ADEL ALI JASSIM
DIRECTOR OF FIRE FIGHTING AND RESCUE DEPARTMENT, QATAR CIVIL AVIATION AUTHORITY, DOHA

DISTRIBUTED SKILLS

In many fire departments, especially smaller ones, the servicing technician is something of a “Jack of all trades”. They are as much responsible for changing an old light bulb in the fire station as they are for ensuring adherence to inspection dates for portable pumps and preparing emergency vehicles for winter service.

Once a fire department reaches a certain size, these tasks have to be distributed among several people. So, for example, an in-house radio technician is responsible for all radio equipment and can carry out any necessary repairs in their own workshop without anybody else’s help. Specially trained technicians are responsible for all breathing protection equipment, diving equipment and hazmat suits test and clean them in purpose-built workshops. Clothing technicians manage the closet and, for example, arrange for dirty or contaminated personal protective equipment to be cleaned.

PROFESSIONAL SUPPORT

Rosenbauer supports servicing technicians by offering machinery and equipment for use in the fire station and designed to make fatigue duty in workshops easier, more efficient and, in many cases, more cost-effective. These include stand-alone devices for cleaning boots, helmets and masks as well as complete processing lines for breathing protection equipment comprising washing machines, disinfection systems and drying cabinets.

A complete hose workshop can also be set up with products from the Rosenbauer catalog – from reel test benches and single/double-hose washing machines through to vacuum hose dryers and reels. Together with a contractual partner, Rosenbauer offers a professional and environmentally friendly washing and impregnation service (including chemical protection to DIN 32763) for personal protective equipment involving washing processes and agents specially tailored to the materials used for firefighting clothing.

A DEPENDABLE PROVIDER

Rosenbauer is also a highly dependable service partner to fire departments all over the world. The service offer encompasses everything from value-retaining inspections – i.e. status and functional tests for individual devices – through to fleet management. This service is especially valuable for large firefighting organizations, who are increasingly outsourcing all fleet servicing tasks. Rosenbauer has concluded multi-year service contracts with several airport and industrial park operators and ensures the operational readiness of the ARFF vehicles stationed at the airport, for example, in Doha. Adel Ali Jassim, Director of Fire Fighting and Rescue Department, Qatar Civil Aviation Authority, Doha: “A service crew from Rosenbauer ensures operational readiness for our firefighting fleet at Hamad International Airport in Doha. The technical crew is available at site during normal working hours and beyond that 24/7, 365 days a year, taking care of the complete fleet, which includes several PANTHERs, escape stairs and municipal firefighting trucks. Rosenbauer grants an up time for the fleet above 90% and facilitates all necessary maintenance and service procedures. This allows us to focus on our core duty ‘Safe Lives and Protect Assets‘.

PRODUCT QUALITY

There is a focus on the subsequent service-friendliness of products as early as the design stage.

RELIABLE PARTNER
Rosenbauer remains at its customers' sides throughout the entire product lifecycle.

"The regular technical training of maintenance personnel is important to us."

MARTIN BICHSEL
HEAD OF VEHICLES AT GENEVA AIRPORT

The expansion of the service business is part of Rosenbauer's growth strategy. From vehicle supplier to system provider – this is the path that the company is systematically pursuing. This also includes an increasing number of digital solutions such as the service4fire vehicle management and diagnostics tool and the EMEREC deployment management system. And with more than 25 service locations and around 150 service technicians worldwide, Rosenbauer also has by far the biggest service organization in the firefighting industry. In addition to this, there are another 150 service partners with their own workshop infrastructure.

ROBUST PRODUCTS

The robustness of firefighting products in challenging, day-to-day operations and the ease with which they can be maintained and serviced are determined as early as the product development and design stages. Rosenbauer's lightweight superstructure is constructed from high-strength aluminum profiles, which feature in nearly all of our vehicle series and have a service life of up to 25 years (depending on the level of use). The vehicles are also designed so that faulty components can be quickly identified and replaced after accidents or if they are damaged. Only high-quality components such as lubricant and maintenance-free mechanical shaft seals are used for the construction of Rosenbauer firefighting pumps. We also ensure that the engine and pump are easy to access. The high quality and service-friendliness of the products are ensured by industrial technology in engineering (3D CAD construction, FEM calculations, computer simulations) and production (CNC machines, the robot-supported production of ladder sets, extinguishing agent tanks and sprinkler pipes, in-process and networked quality control).

Firefighting technology has to function under the most extreme and challenging of conditions, and firefighters have to be able to rely completely on their protective equipment throughout the entire deployment. Rosenbauer not only puts in place the optimal foundations for this, but can also provide – if the customer so wishes – lifetime product support, as confirmed by Martin Bichsel from Geneva Airport: "We have been using Rosenbauer vehicles for years and always have access to the latest technology. The very first PANTHER vehicle came to us in Geneva, as did the first low-floor escape ladder. In addition to the thorough training of operational teams, as an early adopter the regular technical training of maintenance personnel is important to us. This is particularly the case when it comes to electronics. In Rosenbauer we have a reliable and competent partner."

Equipment for this moment

“My equipment keeps me safe during deployment.”

JOHANNES WAMPL
MEMBER OF THE GSCHWANDT VOLUNTEER FIRE SERVICE AND SALES PRODUCT DIVISION, FIRE & SAFETY EQUIPMENT AT ROSENBAUER