

Engineered for the Future.





Concept Fire Truck - CFT

**20 x higher
than conventional
systems**

Scene Lighting

- › Integrated high performance and shadowless LED surround illumination
- › Extreme light intensity
- › Shadowless illumination
- › No lightmast required, but optionally available
- › Curve lights
- › Integrated warning lights



Electric drive

- › 350 kW/475 hp electrical power
- › 30 min electrical operation
- › Range Extender for unlimited operation
- › Zero/Low Emissions
- › Reduced Noise Levels

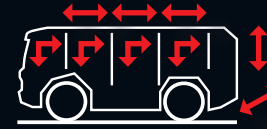
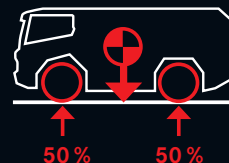
Fully connected

- › WLAN access point
- › Wireless command operation panel
- › EMEREC Data Center
- › Background Assistance
- › Operational Support via Drone



Driving dynamics

- › Fast Acceleration
- › All-Wheel Drive
- › Low center of gravity
- › Optimal load distribution



Flexible Design

- › Flexible vehicle architecture with customization of all modules
- › More compartment space (+1 m³) and higher payload (+1 t)
- › Various water and foam tank sizes
- › Various pump and foam mixing configurations
- › Variable rear compartment options
- › Multi-purpose crew cab



**Lifting Capacity
up to 2 t**

Manipulation system

- › Lifting platform at the rear end
- › Containers with heavy tools to be transported to the scene of the emergency
- › Simple manipulations system for roof equipment (roof ladder and roof box)

Driving Safety

- › Safety cell
- › Electronic mirror system
- › Rear cameras
- › ESP in 4x4 drive mode
- › Rollover protection
- › Driver warning system
- › Force feedback system in driver seat



- Blind Spot Detection
- Object Detection/Identification
- Less impeded field of vision

Simple Operation

- › Intuitive Touch Screens
- › Focus on Main Functions
- › One Button Operation
- › Driver Control Panel
- › Commander Control Panel
- › Main Control Panel serves as Crew Info Screen
- › Individualization





**Designed and
developed for the
fire departments of
tomorrow!**

Innovative CFT technology
in response to fire fighting
megatrends.

Safety, ergonomics, and easy operation - created for the toughest jobs.





Cockpit

- › Turnable driver and commander seat
- › Conference seat configuration for improved communication
- › Main screen as central info point

Grip heights in accordance with EN 1846



Outstanding Ergonomics

- › Expected development of grip heights
- › All equipment can be reached from the ground
- › First attack equipment in the crew cab

Adjustable ground clearance

- › On-road mode 250 mm
- › Vehicle can be lowered down to 150 mm ground clearance
- › Comfortable access for driver and crew
- › Increased off-road ground clearance 350 mm



ON-ROAD Mode

Ground clearance
250 mm



OPERATION Mode

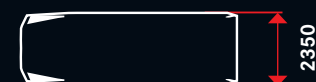
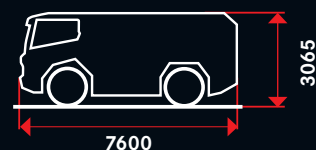
Ground clearance
150 mm



OFF-ROAD Mode

Ground clearance
350 mm

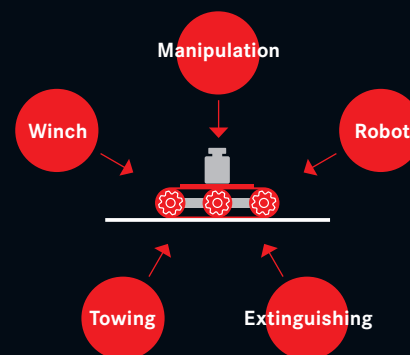
Narrow Dimensions (mm)



Narrow sliding doors
150 mm

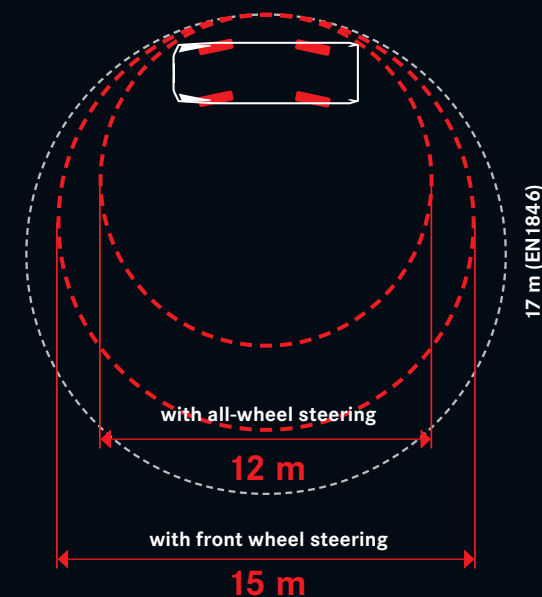
Tracked manipulator

- › Remote controlled
- › Payload 750 kg
- › Easy manipulations of containers
- › Multifunctional



Agility

- › Small turning circle
- › All-wheel steering
- › Crab steering



Rosenbauer Extinguishing Systems

- › 1200 l water tank
- › NH35 Rosenbauer pump
- › Optional Rosenbauer Foam proportioning systems



The uniqueness of the Concept Fire Truck (CFT).

Ergonomics

- › Optimized Ergonomics
- › Low removal heights
- › Low entry heights
- › Headroom
- › Lowerable chassis
- › Ladder and roof box lowering device

Driving Performance

- › Permanent All-Wheel Drive
- › Dynamic acceleration
- › Low center of gravity
- › Optimal weight distribution (50/50)
- › High curve velocity
- › ESP with all-wheel drive
- › Hight adjustable chassis

Operation

- › Special emergency driver workspace
- › Commander & Driver Cockpits
- › Large central screen
- › Simple Operation (ONE Button Operation)
- › Remote control of vehicle functions
- › Tablet with integrated EMEREC application
- › Assistance function (integrated Service4Fire)

Agility

- › Compact Dimensions
- › 2.35 m width
- › Steered Rear Axle
- › Small turning circle (<12 m)
- › Sliding doors

Safety

- › Safety cell
- › Seat arrangement in the cabin
- › Electronic rear view mirror with increased field of vision
- › Driving assistance systems
- › Force Feedback System in the driver's seat
- › Rear cameras
- › Object recognition

Communication

- › Team Cockpit – enhances optimal (non-verbal) communication
- › Good noise insulation in the cabin
- › Side indication – external graphic displays
- › Networked vehicle (WLAN Access Point)

Light

- › Integrated scene lighting
- › High light intensity
- › Cornering light

Operational Suitability

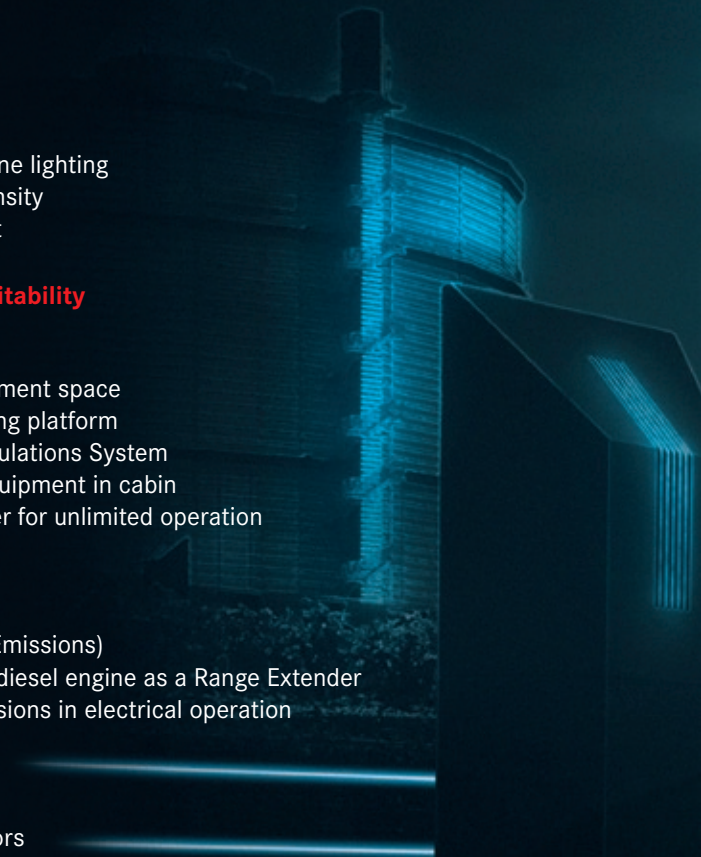
- › High payload
- › More compartment space
- › Integrated lifting platform
- › Flexible Manipulations System
- › First attack equipment in cabin
- › Range Extender for unlimited operation

Emissions

- › E-Drive (Zero Emissions)
- › Low emission diesel engine as a Range Extender
- › No noise emissions in electrical operation

Service

- › Status indicators
- › Remote diagnostics
- › Integrated operation manual
- › Integrated service manual
- › Guided operation
- › Digital operation report



The electric drive enables
a unique vehicle architecture
and supports a clean environment.



Rosenbauer conceives the future - today.



New Work

Fire departments are also caught up in the uncertain transition from an industrial to a knowledge society.

The number of professionals is decreasing, and scheduling and availability needs to be re-thought.

As a result of the decline in skilled crafts, technical skills are also lost.

Social networks and teamwork become more important.

The new type of cooperation and more intensive networking of capacity will also characterize the work of fire departments in the future.

Silver Society

The increasing life expectancy of our society involves great potential for future fire departments.

Emergency crews, that have been active for a long period can pass on relevant practical experience to the next generation – which increases fire departments' efficiency tremendously.

This also means creating appropriate working conditions for those emergency crews and supporting natural physical strength with new technologies.

Knowledge Culture

We are transitioning from an industrial society to a knowledge society.

Learning and education are changing in the age of knowledge explosion, exponential learning, virtuality, and crowd-based knowledge.

Digital media facilitates access to an ever-increasing amount of information.

Through online and live video training, knowledge can also be conveyed over long distances in real time. Simulator training becomes more and more important due to ever-increasing demands.

Connectivity

Connectivity is the term used for the new organization of people within networks. Added to this are new forms of communication.

Via the "Internet of Things", people communicate with machines, and machines with each other. Intelligent systems integrated into vehicles, buildings, and operational clothing are in demand, and change the way that fire departments work.

Globalization

The world's community is being redefined.

On the one side nationality is increasingly losing importance, and on the other nearby regions are becoming more important.

Herein lie new challenges for fire departments in terms of regionalization and in the merging of fire departments – especially in regard to capacity balancing, funds, and the exchange of knowledge.

Health

Health and safety are basic needs that are increasingly important in times of global change.

In firefighting and everyday life, emphasis is increasingly placed upon reducing physical and psychological stress, and checking vital parameters.

Safety before, during, and after emergency operations is key to reducing any kind of health risks for members of fire brigades.

Neo Ecology

In times of climate change, a new environmental consciousness and rethink are needed.

Accordingly, the expectation is that efficient, clean drive systems for fire engines and fire extinguishers are to be used, which have little or no impact upon the environment.

Migration

Locations in which there are large concentrations of migrants require new operational tactics and a rethink of fundamental operational procedures.

It is necessary to overcome language and cultural barriers.

One extreme expression of this trend can be that migrants sometimes react to the uniform itself, due to their prior experiences with uniformed people. As a result of cultural differences, there is only limited interest in voluntary firefighting.

The flow of refugees caused by unrest, war, and climate change will only spur this trend. This poses a major challenge for the fire departments of the future.

Individualization

Individualization is currently the greatest trend in society and economy alike.

Technical systems are expected to adapt flexibly to individual requirements.

In this society, which provides us with more and more liberties but likewise more and more pressure, fire departments are still an important pillar, in which values such as team spirit and cooperation matter.

Mobility

Mobility has become a basic requirement in our lives.

Hence an increasing mobility diversity (e-mobility, intelligent vehicles, autonomous driving, etc.) creates new challenges for emergency crews.

At the same time, this offers new possibilities for firefighting vehicles with regard to duration of use and type, approach tactics, and one-man operation.

Safety & Security

Increasing global prosperity and imbalanced economical, political and ecological situations lead to a growing need for safety.

As emergency crews and fire departments are perceived to be a major pillar of safety and security, this will also lead to additional challenges.

Rescue operations are supported by intelligent operating systems, ensuring faster decisions and fewer errors.

Gender Shift

The "gender shift" trend relates to a fundamental change to the classic gender roles in our world.

Equal rights has become a major keyword – and this is also the case in firefighting circles.

More and more women are interested in firefighting. As a result, new and supplementary competences are acquired.

As part of this trend, it is necessary to develop equipment and vehicle properties that ensure smooth operations.

Urbanization

For the first time in human history, more people live in cities than in the countryside.

By 2050, it is predicted that 74% of the world's population will live in cities.

Urbanization implies a potential threat of a decrease in volunteerism and unsalaried work in an increasingly anonymous world.

Due to an exodus of young people, operational availability in rural areas will also be jeopardized in the future.

The Challenges of Our Time.