



ARFF



COUNT ON IT.



SCHMITZ FEUERWEHRTECHNIK

Fire-fighting technology geared to customers' needs.

At Schmitz, we are committed to delivering the very best in fire-fighting technology – fully compliant with all relevant standards and precisely tailored to our customers' require-

ments. We achieve this through close collaboration: from the initial needs analysis and planning stage through to production and beyond.



As an owner-managed German family business, we act independently – free from corporate group structures, political influence and external investors. This freedom enables us to make swift decisions and focus consistently on what matters most: our customers' needs.

Our industry specialists work closely together across five sites in Germany and Croatia. Behind every one of our fire-fighting vehicles is a dedicated, professional team that continually

strives for improvement, optimises processes and expands its expertise.

We do not rest on our achievements. Our vehicles are built precisely in line with individually agreed loading plans – ensuring maximum functionality in operation. The result: Vehicles that fit the brief exactly.

Made in Germany.

Built with responsibility. For those who carry responsibility.

Count on it.





ARFF

Aircraft rescue and firefighting vehicle

Our vehicles are manufactured with top-quality workmanship in accordance with customer requirements. They are available in a range of configurations, including:

- ARFF 4x4 with roof turret
- ARFF 6x6 with roof turret
- ARFF 6x6 with high-reach extendable turret (HRET)
- ARFF 8x8 with roof turret
- ARFF 8x8 with high-reach extendable turret (HRET)

The vehicles offer outstanding levels of safety for the driver and crew, combined with intuitive operation. They comply with the applicable international standards and regulations, including ICAO, EASA, NFPA, ADV and EC requirements.

further information
on the vehicle





CHASSIS

The airfield fire-fighting vehicles are built on chassis specially developed to meet the operational requirements of airports and are available in various axle configurations: 4x4, 6x6 and 8x8.

Their permissible gross vehicle weight allows for the largest possible quantities of extinguishing agents to be carried. At the same time, maximum driving stability and safety are ensured.

Permanent all-wheel drive provides outstanding traction and manoeuvrability on airport premises, even under demanding operational conditions.

Powertrain

Depending on the vehicle type and configuration, powerful diesel engines are available, delivering up to 566 kW in the single-engine version and up to 1,132 kW in the twin-engine version.

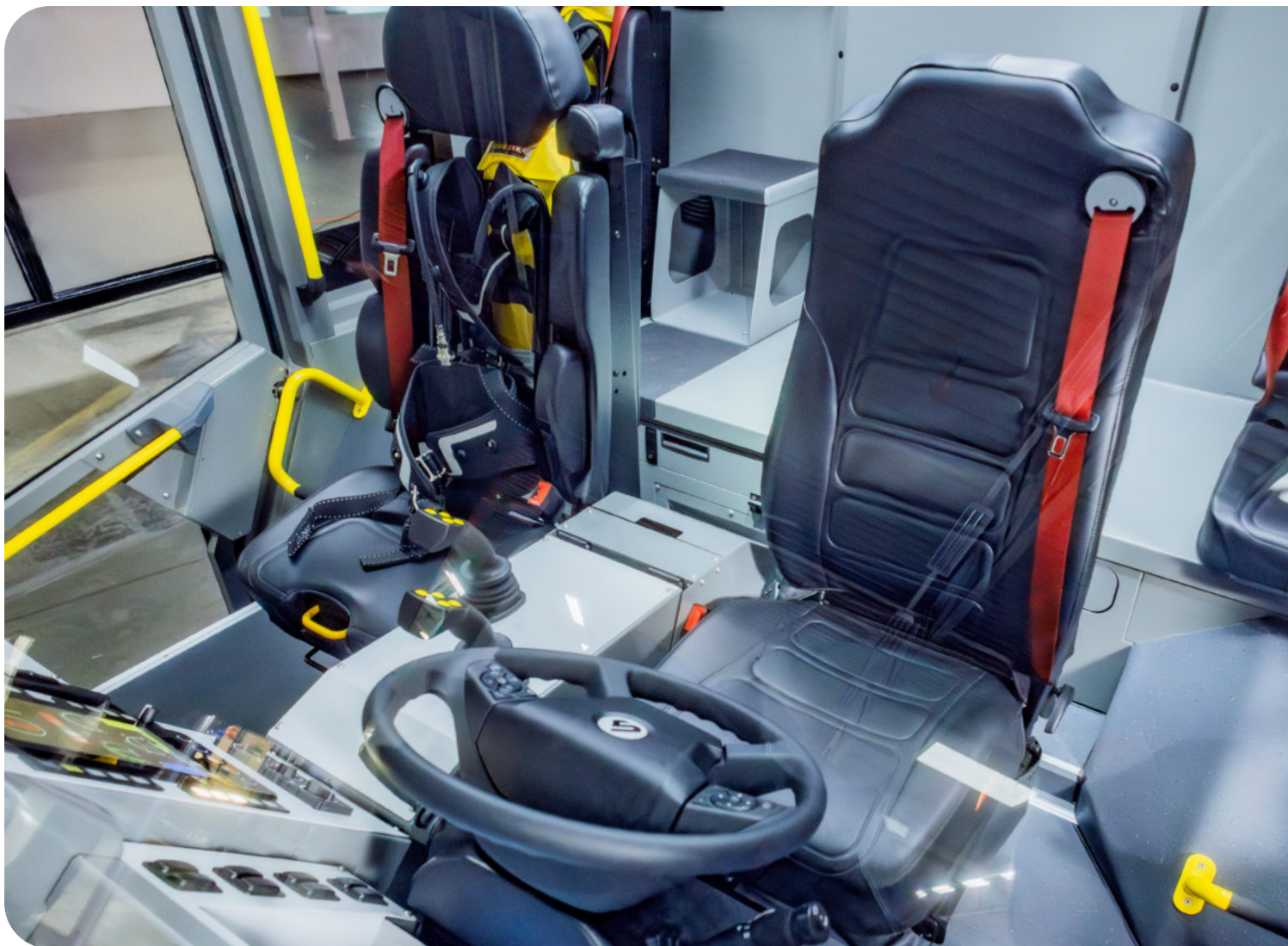
All vehicles are equipped with a fully automatic transmission; in the 4x4 and 6x6 versions, this is also continuously variable.

These engine/transmission combinations deliver extremely rapid acceleration and high top speeds despite the vehicles' substantial weight.

The tyres — always in a single-tyre configuration — are designed and approved for these high speeds.

The vehicles' electronic braking system (EBS) is a dual-circuit brake system with ABS (anti-lock braking system), delivering excellent braking performance even at high weights and high speeds. It is certified in accordance with ECE R13





CABIN

The cab has been specially developed and manufactured for use at airports.

Built using a proven aluminium profile design, the welded aluminium profile structure provides outstanding stability and strength. This helps protect the crew during high-speed emergency responses involving demanding and potentially hazardous manoeuvres.

Weather-resistant GRP design panels mounted on the aluminium frame give the cab its distinctive appearance. As standard, the cab is configured with a 1+1 layout in the front row, with air-suspended seats

and three-point seat belts. As an option, up to four additional seats for further crew members can be fitted in the rear row. Like the front seats, these seats are designed to accommodate compressed air breathing apparatuses.

A large roof hatch serves as both an emergency exit and access point to the roof.

The cab is specifically designed for ARFF operations in accordance with the applicable standards and regulations. It is certified to ECE R29-3 and is therefore fully approved for road use.



Control system

The controls for the fire-fighting equipment are located in the cab on the centre console. Thanks to the central control unit and the optimised joystick position, they are equally accessible to both the driver and co-driver. An additional control panel is located in the pump compartment, allowing the fire-fighting systems to be operated and controlled from there as well.

Clear plain-text labelling in the required language, or pictograms, is provided as standard on all controls.

Water and foam levels are shown on the control panel by means of easy-to-read analogue gauges.

The systems are controlled via CAN bus technology using push-buttons and switches. The controls are grouped by function.

All relevant information is shown on the large display. The display controls are also designed as push-buttons. Rotary controls are surrounded by an illuminated ring.





BODY

The vehicle consists of modular body components that are mounted on the chassis independently of one another:

- Driver's cab
- Pump module with integrated equipment compartments and controls for the fire-fighting equipment
- Water and foam tank with equipment compartments beneath
- Engine module housing the drive engine, diesel and AdBlue tanks, batteries and vehicle electrics; stowage space for equipment and other load items can also be provided here as an option



All body modules are made from a load-bearing, high-strength aluminium/GRP system with lightweight structural and composite panels. Once the respective connections have been released, each module can be removed separately.

This makes the system highly flexible within the individual modules, allowing customer-specific modifications to be implemented with minimal effort.

Access to the roof is provided by a folding access ladder at the rear. The ladder is secured by a monitoring system; when the ladder is folded down, a warning is displayed in the cab. The air filter is accessible from the roof.

The exhaust system is routed upwards and can optionally be modified for connection to building-mounted exhaust extraction systems.

The roof area can be illuminated by optional LED lighting, which is activated when the ladder is folded down.

The pump module and the equipment compartments beneath the tank module are closed by roller shutters. The water- and dust-tight roller shutters are made from aluminium and protect the interior of the equipment compartments.

In its lower section, the engine module has fold-out steps providing access to the compartments inside the module. The compartments are closed by flaps. The right-hand compartment contains parts of the vehicle's electrical system, the fuel tank and the AdBlue tank. Inside the left-hand compartment are the vehicle starter batteries, as well as storage space for various accessories and equipment.





EXTINGUISHING TECHNOLOGY

The use of proven components in the fire-fighting equipment ensures reliable fire-fighting performance. The values required by the relevant standards for pump and turret output, foam proportioning rates and throw ranges are all exceeded.

Pump

The centrifugal fire pump, compliant with EN 1028, is driven via a gearbox power take-off or by the drive engine with variable power distribution. It is available in performance classes from FPN 10-6000 to FPN 10-10000. It can be operated in the following modes:

- Static pump operation
- Pump-and-roll, which can be engaged and disengaged while the vehicle is moving
- FPN drive power: 180 kW for FPN 10-8000
- FPN rated speed: 1,650 rpm for FPN 10-8000

The pump consists of a pump housing, impeller and pump cover made from high-grade light-alloy materials. All aluminium surfaces are protected by cathodic dip coating. The pipework is made from corrosion-resistant materials: stainless steel, rubber hoses or dimensionally stable plastic hoses. The foam and water lines are connected by non-return valves, preventing water from entering the foam tank when the foam line is flushed.



Turrets

The turrets are designed for high flow rates and discharge rates, precise controllability and minimal friction loss. Depending on the vehicle type, roof turrets, front turrets and, optionally, integrated turrets on the high-reach extendable turret (HRET) are used.

The output of the roof turret on the 4x4 and 6x6 variants ranges from 4,000 l/min to 6,000 l/min, while the 8x8 variant achieves an output of up to 8,000 l/min. This enables maximum throw ranges to be achieved. The roof turrets allow the discharge rate to be adjusted between 100% and 50%.

Front turrets complement the system with outputs of 1,500 to 3,000 l/min and feature adjustable fog nozzles for targeted fire-fighting at close range.

On vehicles equipped with a high-reach extendable turret, an integrated main turret with an output of up to 6,000 l/min allows the extinguishing agent to be applied from an elevated and highly flexible position.

Depending on the vehicle type, the turrets can optionally also be equipped for powder discharge and fitted with floodlights and camera systems.



Water & foam tanks

Depending on the configuration, the water tank holds between 6,000 and 17,000 litres. The foam tank generally has a capacity equivalent to 12% of the water volume. The exact extinguishing-agent capacity depends on the operator's specific requirements and the final vehicle configuration.

Foam proportioning

The electrically controlled foam proportioning unit automatically maintains the selected foam proportioning rate at a constant level. The foam proportioning rates are continuously adjustable; in addition, a preset default proportioning rate is available. Foam can be drawn from either an internal or an external source.

Additional extinguishing agent

The tank for additional extinguishing agent has a standard capacity of 250 kg of dry chemical powder, optionally 500 kg, and is located in the front equipment compartment.



Quick intervention

As standard, the vehicle is equipped with a quick intervention hose reel with 40 m of dimensionally stable DN 32 hose and a branchpipe with STORZ coupling, housed in the left-hand underbody compartment. The hose is rewound electrically via a safety switch. As an option, the quick intervention unit can also be designed as a lay-flat hose housed in a hose bay. A second quick intervention unit on the opposite side of the vehicle is also available.



LIGHTING CONCEPT

Safety in every situation

As standard, the vehicles are equipped with a comprehensive lighting system that meets all relevant statutory requirements and helps fire-fighters work safely and effectively after dark or in poor visibility.

The standard equipment includes blue flashing lights on the front grille, cab roof and rear module/engine module; amber flashing lights on the vehicle roof; LED headlights with dipped beam, side lights, main beam and indicators; and LED fog lights.

A wide range of further lighting variants and additional options is also available, including a pneumatic light mast, scene lighting and additional work lights.

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