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ROSENBAUER POLY CAFS on Quad (Diesel)

The smallest four-wheel fire-fighting vehicle in the world is now also available in a diesel variant. The product range has now been expanded to fulfil a frequently expressed customer request.



Convincing overall concept

Where other multi-track fire-fighting vehicles fail, the POLY CAFS Quad goes straight to the thick of the action. Especially away from asphalted streets, on difficult terrain - on unsurfaced roads and impassable ground, but also in narrow alleys and on waterside promenades - the unique features of the Quad with POLY CAFS show themselves to their fullest advantage:

The advantages of a Quad or an ATV (all-terrain vehicle) like

- outstanding (best-in-class) ground clearance (25.4 cm) for optimum cross-country mobility
- independent wheel suspension for maximum mobility and best grip
- best suspension (spring deflection 20.3 cm) for more stability – this also means more ground contact of the wheels and hence more driving comfort
- 4WD (all-wheel drive) and front axle differential lock for max. traction – to be able to negotiate even the most difficult terrain without difficulty
- problem-free transport on a trailer, in a container etc., owing to its compact size (length: 250 cm, width: 121 cm, height: 200 cm) and low weight (total weight: 575 kg)

combined with the most efficient foam extinguishing

- CAFS (Compressed Air Foam System)

make this total concept unique and extraordinary.

The possibility of being able to transport the emergency controlled starting thanks to automatic gear box and an oil bath-immersed centrifugal force clutch vehicles by helicopter to the respective destination – a requirement that often exists in disasters and other special operations - extends the spectrum of applications by yet another aspect.



Advantages of diesel power

The introduction of the first homologated diesel ATV in the world offers numerous advantages:

- powerful 2-cylinder, 4-stroke diesel engine: 12.9 kW at 3,400 min⁻¹, approx. 70 km/h, water cooling
- high torque for tough tasks
- low operating costs owing to low fuel consumption (about 30% to 50% less consumption than comparable vehicles with petrol engines)
- environment-friendly owing to EGR (exhaust gas recirculation)
- apart from normal service stations, filling up from common diesel canisters is also possible
- high reliability and long life

Max. comfort and safety

- simple and fast switching from two-wheel drive to four-wheel drive by electronic switchover (2WD/4WD)

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- controlled starting thanks to automatic gear box and an oil bath-immersed centrifugal force clutch
- multifunctional digital display: tachometer, odometer, high-beam indicator, warning light (engine oil temperature), gear indicator (reverse/neutral, 2/4WD), tank indicator; a total of 15 important items of information are shown in the display



- wheels suitable for the ground quality are to be selected

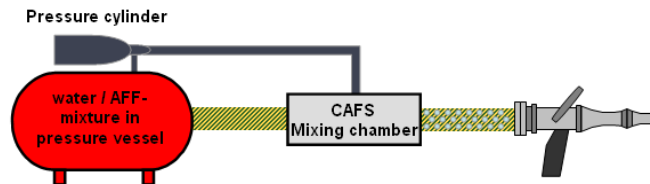


- equipped with blue beacons and a siren, this fire-fighting vehicle becomes a full-fledged emergency vehicle when things get serious.
- in addition, a rollover bar, the hydraulic disc brakes that are part of the standard equipment, as well as the mechanical parking brake ensure maximum safety

Multifunctional all-rounder

But the fire-fighting quads are not used for fire-fighting alone. Especially in a factory environment, in which there are numerous additional requirements and applications, the POLY CAFS Quad unveils itself as a multi-functional all-rounder:

- standard cable winch
- optionally available snow plough set
- a trailer coupling rounds off the complete package



ROSENBAUER POLY CAFS = fully autonomous!

ROSENBAUER POLY CAFS systems are independent of all energy sources. There is no need to start a power supply unit or a motor. This reduces the starting effort tremendously and guarantees highest system reliability. The core of a ROSENBAUER POLY CAFS system is the CAFS mixing chamber. The premix (water-SM-mixture) is "pushed" into the mixing chamber by compressed air and (actively) foamed there using compressed air.

Combined with the ROSENBAUER rapid intervention reel and the kink-free, super-light FORMTEX 50m/Ø25 or 80m/Ø19 special hose, the result is an extinguishing system of maximum efficiency.

CAFS – the most efficient foam extinguishing technology

- combined extinguishing action through **smothering** and **cooling**
- **extinguishing flammable fluids** (foam is lighter than all other fluids)
- very **low damage from extinguishing agent** as compared to water
- **less fire damage** owing to shorter extinguishing time
- a **large area can be covered** within a short time
- thanks to the **high kinetic energy**, the extinguishing agent can reliably reach the burning material
- **sustained cooling** of the burning object (foams gradually release the extinguishing water)
- surfactants in the foam result in **better wetting** and thus have a re-ignition suppression action
- **protection of fire-endangered objects** – the viscosity of the foam allows it to stick to vertical and inclined surfaces
- **insulating action** against radiant heat
- **max. operating radius** and **safe operation from a distance thanks to a high throwing range**
- **simple handling** owing to light hoses
- foam as **indicator**

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Applications

Owing to the versatility and flexibility – which are firstly the result of the outstanding driving properties (on-road and off-road) and secondly, of the extensive accessories program - POLY CAFS Quads are used in the most varied operations:

- Factory fire departments
- Agriculture and forestry
- Wildlife parks and zoos
- Tourism and recreation
- Communities and public authorities
- Safety

The diesel variant of the fire-fighting Quad has already proven itself outstandingly

- as a **“Safety Car”** – in the unofficial, biggest Indoor Cart race in the world – the “Art of Cart Trophy 2009”



„Art of Cart Trophy 2009“

- as a **“multifunctional emergency vehicle”** at the “Airpower 09” in Zeltweg as well as the “Welser Airshow 2009”



„Welser Airshow 2009“