

Extremely tough. On and off the road.

The Unimog as a fire service and disaster relief vehicle.



Mercedes-Benz
Trucks you can trust

Reliable without compromise: the Unimog.

In an emergency, every second counts.

Continuing the tradition of getting help to wherever it's needed: The Mercedes-Benz Unimog owes its decades of success largely to its legendary chassis design. Since the 1950s, the Unimog concept has been synonymous with the finest engineering skills delivering maximum robustness and traction in off-road conditions.



Already in operation as a fire engine back in the 50s: the Unimog U 25.

The new Blue Tec 6 vehicle generation. The latest Mercedes-Benz engine technology, tried and tested in volume production, testifies that the Unimog has arrived in the here and now. With it, the new generation Unimog becomes a model of environmental friendliness and efficiency. The engines have extended service intervals, a high-power premium engine brake and driving speeds of up to 90 km/h on surfaced roads.



Even after 30 years, there are still hundreds of Unimog U 1300 L vehicles in operation.

The two Unimog model ranges. The Unimog U 4023 / U 5023 is the vehicle of choice for all applications requiring off-road capability. The Unimog off-roader has proved its worth when working in rough terrain under extremely difficult conditions at locations all over the world. The Unimog U 216 - U 530 comes into its own in places where compact dimensions and versatility are required.



You never know what awaits you at the next emergency. But you know how you'll handle it: with the Unimog.

Devastating forest fires in southern Europe, record floods along the Danube and Elbe rivers in central Europe, frequent hurricanes and autumn storms across the continent as well as catastrophic hail storms and earthquakes: The number of natural disasters is increasing all over the world – and this means more large-scale and specialised operations for fire and rescue services and disaster response teams. For the emergency services – and their vehicles – the key tasks of rescue, fire-fighting, extrication and protection are more challenging than ever before. Thus, rugged, reliable vehicles which are also extremely agile in off-road terrain are of paramount importance today.

Rescue services around the globe put their trust in the Unimog: “Compared with the previous model, which served us faithfully but which is now 30 years old, the U 5023 represents a whole new dimension,” says Joachim Bauer, local manager of the Technisches Hilfswerk (Federal Agency for Technical Relief) in Laaber, Germany. “The increase in load capacity from around two to roughly four tonnes makes us twice as effective because we can bring double the amount of equipment to the incident in just one trip.”



Joachim Bauer, local manager of the THW in Laaber, Germany, values the power and load capacity of the U 5023.

Hubert Clavé, a lieutenant in the fire service of the French department of Landes, adds: “We have been impressed by the Unimog’s excellent ground clearance due to its portal axles, as well as by the vehicle’s long service life and rugged design.” Clavé is well qualified to judge, as Landes is regularly hit by forest fires. These account for up to 500 call-outs for the fire service every year.

Unimog: the advantages at a glance

- + Ruggedness and reliability
- + Outstanding off-road capability
- + High payload and permitted gross vehicle weight
- + Deployment-specific preparations ex factory
- + Standardised interfaces
- + Intense, long-lasting collaborations with renowned equipment manufacturers and bodybuilders
- + Global spare part supply and extensive, compact service network



“The extreme off-road Unimog is the best vehicle for fighting forest fires as it can get to places that are almost entirely inaccessible to other wheeled vehicles.”

Hubert Clavé, fire service lieutenant, Landes, France

Versatile solutions for special areas of application.

The Unimog offers practically unlimited possibilities to the emergency services. Numerous implements are available to fire services and emergency response teams. Thanks to standardised mountings and the variety of hydraulic and mechanical implement drives, the Unimog can be adapted to meet the requirements of a vast range of applications, including as a: water tender, personnel transporter with double cab, equipment and implement carrier for technical support, or even as a special-purpose road-rail vehicle.

One important advantage: A wide range of deployment-specific equipment features are available ex factory – including the round roof hatch and special heat protection package. What's more, the base models of both series – the implement carrier and the extreme off-roader – are already well-equipped to meet the demands of a whole range of different deployments, however specialised these may be. Your Unimog partner will be pleased to advise you.



Coastal defence and sea rescue on the coast of Denmark.
Deployments in difficult terrain: the sea, deep sand, high dunes and steep cliffs. The Unimog is equipped for search-and-rescue missions with thermal imaging camera and radar positioning, ambulance equipment and a lifeboat.



Fighting forest fires in the south-west of France.
Every year 687000 hectares of pine forests are threatened by forest fires. To tackle the flames, the Unimog has 5500 litres of water on board, a self-protection system and a round roof hatch to enable it to fight forest fires on the front line.



Emergency response vehicle with rear-mounted crane and boat trailer.
The rescue workers at the Technisches Hilfswerk rely on vehicles with extreme off-road capabilities. Unimog U 5023 protect a region of Bavaria which is at particularly high risk from flooding.



A compact rescue vehicle in the narrow urban streets of South Tyrol.
The advantages of its systems and chassis combine to make the Unimog U 427 a real workhorse. Here for example as water tender to reach the scene of the fire through the narrow alleys of historic town centres.



Deployment as a police, fire service and emergency response vehicle.
These vehicles are used to prevent and tackle the effects of flooding and extreme weather, deployed as fast-moving tractor units and utility vehicles for tasks including transporting materials and equipment.



Emergency response on road and rail in Istanbul, Turkey.
The versatile road-rail Unimog with hydraulically elevated rail guidance system can reach the site of an incident by road at speeds of up to 90 km/h and then switch to rail drive, for example in tunnel rescue operations.

The Unimog U 4023/U 5023: off-road perfection.

Ruggedness

- + Long service life, safe and reliable for deployment in forests and rough terrain
- + Welded frame, sturdy construction, steel bumper with headlamp guards, wiring harness installed above the frame, full-steel cab construction
- + Torsionally flexible mounting of cab, powertrain and attachments
- + Torque tube concept protects drivetrain

Off-road capability

- + Good angle of approach/departure
- + Portal axles for high ground clearance and better protection of fuel tank, battery case, etc.
- + Coil springs with compact design and long spring travel
- + Transmission with special off-road reduction gear
- + Single tyres for high traction
- + Tirecontrol plus automatic tyre pressure control system ex factory

Weights and payload

- + High permissible axle loads with lightweight chassis construction allow sizeable payloads
- + Great capacity for transporting extinguishing agent or other loads

Body interfaces

- + Parametrisable special module and standardised attachment interfaces ex factory
- + Floor assembly with torsionally flexible mounting or body mount
- + Hydraulics for cable winch operation (60 l/min) ex factory
- + Bracket for self-recovery cable winch integrated in front mounting
- + Front implement mounting plate for snow plough, earth mover or front sweeper for use in disaster relief
- + 600 Nm engine power take-off or gearbox power take-off with fast ratio, for example for operating fire service pumps

Deployment-specific equipment

- + Round roof hatch and folding seat for safely fighting forest fires direct from cab
- + Compact design suitable for low entrances and older fire stations
- + "Pump & roll" tactic possible thanks to engine-driven or transmission-driven power take-off and off-road gear range for driving at low speed
- + Good visibility and ride comfort thanks to cab-behind-engine truck design with seat position behind the front axle
- + Fording capability to depths of 0.8 m, optionally 1.2 m, for use in flood rescue operations
- + Front and reversing cameras





01



02



03

Equipped for extremes.

Technical highlights of the Unimog U 4023 /U 5023.

You need to be a tough cookie to guarantee maximum performance in the harshest of conditions. The Unimog is ready for the challenge thanks to its offset welded frame, torque tube technology for extreme diagonal torsional flexibility up to 600 mm, excellent angle of approach /departure, portal axles giving a high ground clearance, all-wheel drive and differential locks, not to mention high traction and excellent gradient climbing ability.

01 Self-protection system: A special feature for performance that pushes the limits – a self-protection system that damps down the tyres and windscreen if the flames get too close.

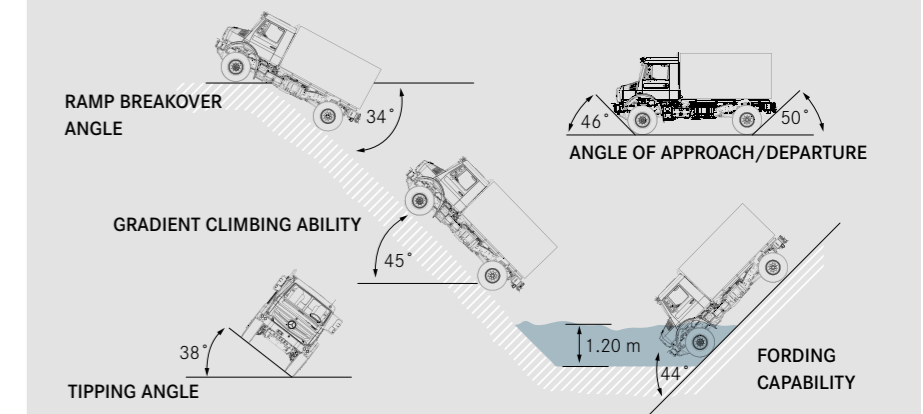
02 Heat protection: The heat protection package available from the factory includes a special covering for all important cables to protect them from extreme heat or other damage. In addition, all of the Unimog’s major assemblies and technical components are mechanically protected.

03 Fording capability to 1.2 m: The drive system is designed to enable the vehicle to ford depths of up to 0.8 m or, on request, 1.2 m.

04 Tirecontrol plus tyre pressure control system with simplified operation: With the push of a button, you can select from the modes “Highway”, “Sand” or “Cross Country” to automatically adjust the settings – this is also possible while the vehicle is in motion.

05 High-performance transmission: The typical Unimog transmission not only takes the load off the driver with practically oriented features like Electronic Quick Reverse, off-road gear reduction and the EAS electronic automated shift system, but it also contributes to improving safety.

Extremely agile off-road capabilities



04

Quick to arrive on the scene. Then safely back to base.

The cab: protection for driver and crew.

When every second counts, comfort and ergonomics acquire a completely different meaning. The interior is therefore designed so that the driver of the Unimog is safely in control of the vehicle at all times. This is down to the comfortable seat position and controls on the instrument cluster which are easy to see and use. These improvements make a significant contribution to greater safety and ease of operation.

Two cab variants available: Thanks to a new gearshift control lever on the steering column, there is now more room in the Unimog for the driver and co-driver, plus stowage space for tools and equipment. The single cab for work crews (1 + 2) offers room for two full-size single seats and a middle seat. With the double cab available ex factory, there is room to transport up to 7 people (1 + 6) to the destination. This cab has an additional rear seat bench with room for four people, or alternatively two single seats.

Seats positioned in low-vibration area: The classic cab-behind-engine layout remains a feature of the new extreme off-roader. This means the occupants sit in the low-vibration area behind the front axle, ensuring a comfortable ride even when going off-road. Thanks to the short bonnet there is excellent visibility of the area immediately in front of the vehicle.

Round roof hatch: Deployment-specific equipment such as the round roof hatch makes it possible to fight fires direct from the vehicle – which is a great advantage when using pump-and-roll techniques.



Fighting fires from the roof hatch, available ex factory.



The centre seat turns into a standing area.



Single crew cab (1 + 2).



Double cab for up to seven people, available ex factory.

Equipment highlights

- + Multifunction steering wheel to control important functions, for example hands-free facility – no need to let go of wheel
- + Easy operation of Tirecontrol plus tyre pressure system
- + Height and tilt adjustable steering column as standard to ensure optimal seating position
- + Steering column lever for easy gearshifting, high-performance engine brake and Electronic Quick Reverse



Unimog U 5023 with double cab as an equipment carrier.

The Unimog U 216 – U 530: fully prepared for action in a compact design.

Compact and manoeuvrable

- + Even more compact dimensions (width: from 2150 mm, height: from 2820 mm) for manoeuvrability in the tightest spaces
- + Short wheelbases: 2800 mm to 3900 mm
- + Small turning circle (from 12.6 m) for outstanding manoeuvrability and agility
- + All-wheel steering

Powerful

- + High-torque engines with 115 to 220 kW (156 to 299 hp) and 650 to 1200 Nm torque
- + High-performance gearbox with practically-oriented gradation
- + Driving speeds of up to 90 km/h on surfaced roads
- + Hydrostatic EasyDrive system: continuously variable speeds up to 50 km/h
- + Dual circuit load-sensing hydraulics for driving and controlling attachments/implements
- + Mechanical front PTO shaft delivering 160 kW, for example for mud and water pumps

Practically-oriented

- + Generous panoramic cab
- + New camera monitoring system with up to three cameras improves visibility of immediate surroundings
- + High payload (10 t – 16.5 t permitted gross vehicle weight)
- + Collaborations with various attachment and implement manufacturers for wide range of applications

User-friendly

- + Modern, ergonomic interior
- + Operating logic conforms to volume series Mercedes-Benz Trucks
- + New multifunction steering wheel
- + Tyre pressure regulation system (Tirecontrol plus)

Example of use, by type

- + U 218 with 3600 mm wheelbase as a TLF 2000 water tender compliant with DIN 14530
- + U 423 possible as road-rail rescue vehicle
- + U 530 with 220 kW (299 hp) and 16.5 t permissible gross weight, EasyDrive hydrostatic drive system, VarioPower® power hydraulics, all-wheel steering and double cab from Plastisol



Rescue operations, fire fighting, extrication and protection are the norm.

The following fire service standards can be met using the Unimog.



The European fire fighting standard EN 1846 can be met with the Mercedes-Benz Unimog. It specifies the general technical features and equipment required for fire service vehicles. The national versions are based on this standard and describe country-specific vehicle categories. Among other things, EN 1846 divides vehicles into three weight categories and three types of application as follows:

Weight classes (permitted gross vehicle weight):
Light (L): 3 to 7.5 t; Medium (M): 7.5 to 16 t; Super (S): over 16 t.

Categories of application:
1 for road use, 2 for rough road use, 3 for off-road use.

The Unimog meets the requirements of the highest standards, as demanded by classes M2 and M3.

	U 5023:	M3:	U 218:	M2:
Angle of approach / departure:	46° / 50°	min. 35°	25° / 37°	min. 23°
Ramp angle:	34°	min. 30°	27°	min. 18°
Ground clearance:	420 mm	min. 300 mm	335 mm	min. 230 mm

These Unimog chassis comply with the requirements of the following categories of DIN 14530 or 14555:

Category	Standard	Unimog type	Power output	Perm. GVW	Main use	Crew	(Min.) tank capacity
TLF 2000 water tender	DIN 14530-18	U 218	130 kW (177 hp)	10.0 t	Fire fighting	1 + 2	2000 l
		U 4023	170 kW (231 hp)	10.3 t			
TLF 3000 water tender	DIN 14530-22	U 5023	170 kW (231 hp)	12.5 t - 14.5 t	Fire fighting	1 + 2	3000 l
TLF 4000 water tender	DIN 14530-21	U 5023	170 kW (231 hp)	14.5 t - 15.0 t*	Fire fighting	1 + 2	≥ 4000 l + foam
Equipment carrier	DIN 14555-3	U 530	220 kW (299 hp)	16.5 t	Technical assistance	1 + 2	-
		U 5023	170 kW (231 hp)	14.5 t			
GW-G equipment carrier	DIN 14555-12	U 5023	170 kW (231 hp)	14.5 t	Hazardous materials	1 + 2	-
GW-L1 equipment carrier	DIN 14555-21	U 5023	170 kW (231 hp)	14.5 t	Logistics	1 + 2	-

* Upholds vehicle centre of gravity incl. body of max. 1450 mm.
The standards described here refer to Germany. Other country-specific fire fighting standards apply elsewhere.



The entire Unimog world.

Services to keep you mobile and flexible.

Mercedes-Benz Service

Wherever you use your Unimog, Mercedes-Benz is on the spot. Worldwide at over 650 Unimog Service Outlets in over 130 countries we are able to take care of your Unimog, if need be immediately. And with the same care, the same experience and the same technical possibilities with which we built it. That is guaranteed by our comprehensive service coverage provided by our competent Unimog Service Partners.

- + First-class service quality at over 650 locations in over 130 countries worldwide
- + Maintenance, diagnosis and repairs
- + Technical support
- + User advice and training
- + Safety and technical training
- + Working relationship based on partnership and fairness

Financing and leasing

Our customised financial services bring flexibility to your accounting.

Jointly with the Mercedes-Benz Bank and our Unimog Dealers we can provide customised service offers such as leasing, financing, full-service-leasing and prolonged guarantees. Contact your Mercedes-Benz Dealer for more information.

- + Daimler Financial Services finances and leases about 40 % of all vehicles produced by Daimler
- + The company is active in almost 40 countries
- + Daimler Financial Services employs around 7000 staff worldwide

Find out more about additional ways of using the Unimog.

The Mercedes-Benz Unimog performs at the highest levels in other industries and segments too, its unique versatility ensuring it can always be used to full capacity.



AGRICULTURE



MUNICIPAL OPERATIONS



ROAD-RAIL



ENERGY



CONSTRUCTION



... AND MANY OTHERS

I want to find out more.

Yes, I would like more to receive more information about the Unimog
You're interested in the Unimog...? (Please give a definite answer)

Private Business/trade

Does your company already use Unimog vehicles?

Yes No

Do you also do jobs involving difficult terrain?

Yes No

Do you use various implements and mounted bodies/equipment?

Yes No

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Daimler AG, Mercedes-Benz Special Trucks, Daimlerstraße 1, 76744 Wörth, Germany 6903.A2180.02-00/0515 Printed in Germany/Imprimé en Allemagne



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