



# The Unimog for airport applications.

Versatility unrivalled by any vehicle in the world.

**Mercedes-Benz**

Trucks you can trust



# One Unimog – many bases covered

Ensuring that flights can operate safely entails a wide variety of different jobs around the airport site. The Mercedes-Benz Unimog is a highly versatile implement carrier, performing a range of important tasks essential to airport maintenance – such as winter service with the snow plough or cutter-blower or removing rubber from the touchdown zone on the runway. Equally important are mowing the grass areas and de-icing access routes. Sweeping operational areas or being deployed as a tractor unit are also common tasks for the vehicle. The Unimog takes just about every situation in its stride: working on the apron, taxiways or runways, on deep carpets of snow, in slush or among metre-high piles of snow.

## Winter service with snow plough and sweepers

Clearing snow from airports is an extremely challenging task. Accumulations of snow need to be removed from the runways, taxiways and areas around the airport terminal rapidly and thoroughly. Around the airport, it is essential to keep access roads and parking spaces for public transport free. With its compact design, the Unimog is ideally suited for working in confined spaces, whilst still being able to clear wide areas. A short wheelbase makes it extremely manoeuvrable and the panoramic windscreen ensures that the driver always has the best possible view of the working area. In addition to the factory-fitted working hydraulics for operating the snow plough, power hydraulics are also available, with two open circuits and a delivery volume of up to 125 l/min at 280 bar, e.g. for towed sweepers. The Unimog is also equipped for the most extreme of winter conditions: a cold climate package is available on request; it includes auxiliary heating with engine pre-heater, heated windscreen, seat heating and high-output batteries.



## Snow clearing with rotating snow clearing machines

The job of clearing snow drifts and piled-up snow on the sides of the runway requires something more specialised than the usual snow ploughs. This is where the Unimog comes in, with rotating implements such as snow cutter-blowers capable of clearing up to 2000 tonnes of snow an hour and either dispersing it to distances of up to 60 metres or loading it onto trucks. The cutter-blowers are driven by the Unimog's front PTO, which is available from the factory and has a power output of up to 160 kW. With the EasyDrive hydrostatic traction drive system, the working speed for snow cutting can be smoothly adjusted from 0–50 km/h as required. It is possible to switch from fully hydrostatic drive to the efficient driving mode at any time.





## De-icing

Ice can have the same catastrophic effect on the smooth running of an airport as snow. Effective implements such as wet salt spreaders and de-icing liquid sprayers are needed to completely clear the ice and keep runways open by means of preventative de-icing. The Unimog can apply liquid salt to a working width of up to 15 m without the need for an extensive spray bar system. The Unimog's compact design and manoeuvrability make it ideal for use on the apron. With permanent all-wheel drive, ABS and easy-to-fit snow chains, the Unimog stays on track even in icy conditions.



## Vegetation management

Grassed areas often occupy the largest proportion of the airport's overall site, and require regular mowing. Close to the runways and taxiways the grass cuttings have to be removed immediately to prevent any of the material being blown about or sucked into the aircraft turbines. The Unimog therefore has a variety of mowers at its disposal for use at the airport, including a front-mounted sickle mower with vacuum and grass container and various towed wide-area mowers. Drive can be provided via mechanical front or rear PTOs or from the Unimog's power hydraulics.



## Rubber removal on runways

Removing the rubber left by aircraft tyres is a challenging task, especially in the touchdown zone of the runway. Here the Unimog can apply a special implement, which can be quickly attached and uses a form of water jet technology to ensure optimum friction without causing damage to the runway surface. The front-mounted module applies a cleaning pressure of up to 2500 bar, and the small amount of water used is immediately sucked up again as part of the process, leaving the runway ready for use again immediately. The Unimog is ideally suited for this task, with a high-performance power take-off, hydrostatic drive for constant low working speeds at full engine power and its mechanical interfaces.



## Cleaning

Designed as a multifunctional implement carrier, the Unimog is of course also well suited for deployment on a range of cleaning tasks – for example, when fitted with a rear-mounted sweeper with a capacity of up to 5 m<sup>3</sup>, or a tunnel washer for cleaning underground roadways. It can also be equipped with a sweeper attachment for cleaning the taxiways and apron, or a permanent magnet for removing metal objects. A high-pressure cleaner makes it capable of removing coarse dirt from operational areas, or there's even an attachment for efficiently removing road markings on the airport site. Whatever the job, the Unimog will keep the area completely clean and safe for use. And the attachments can be swapped quickly and easily, so the Unimog can soon be readied for its next task and thus used to full capacity – making it an efficient investment.



## Logistics/tractor unit

In addition to all the various maintenance tasks the Unimog can carry out around the airport infrastructure, it can also be deployed very effectively as a tractor unit – for example, for logistics work such as transporting freight or materials, or towing aircraft on small to medium-sized civilian or military airports. The torque converter clutch available ex factory permits a 2.5-fold increase in starting torque, which makes it possible to pull away and tow heavy loads smoothly. And the Unimog's panoramic cab guarantees optimum visibility.





# The unique Unimog concept

Since its inception as the 'Universal-Motor-Gerät' the Unimog concept is still setting new standards today. Providing the basis for this are its modern drive technology, rugged design and amazing versatility resulting from its compact dimensions. These give it a small turning circle and a short distance from the front of the implement to the centre of the axle, which is a great advantage when working in confined areas. Here, too, the Unimog is also able to demonstrate its outstanding advanced system solutions: thanks to intensive cooperation with body-builders and implement manufacturers, the Unimog is the specialist for a wide range of jobs. This great diversity ensures it can be used to full capacity all year round. Other advantages become apparent during journeys covering longer distances: the Unimog can reach speeds of up to 90 km/h (56 mph) and is licensed for motorway use.

- **No compromise on the chassis**

Permanent all-wheel drive, differential locks, coil spring suspension, rugged frame design

- **Euro 6 engines**

Low-maintenance, environmentally-friendly BlueTec 6 technology

- **High-performance gearbox**

Electro-pneumatic manual gearbox with synchronised reversing gear

- **AutomaticShift**

Just drive and work, no need to declutch

- **EasyDrive hydrostatic traction drive**

Smooth acceleration and deceleration between 0 and 50 km/h

- **Panoramic cab**

Reliable view of traffic and working areas

- **Working and operating comfort**

Ergonomic, safe workplace with intuitive operating concept

- **Four attachment and mounting areas**

Highly versatile thanks to quick-change system

- **Front power take-off**

Power shift for power requirements up to 160 kW

- **Integrated drives**

Up to four hydraulic circuits for all output ranges



## Technical data

Model	U 318	U 423		U 427   U 430		U 527   U 530	
Wheelbase (mm)	3000	3000	3600	3150	3600	3350	3900
Perm. GVW (t) (max. with relevant optional extras)	11.0	13.8	14.0	14.0	14.0	16.5	16.5
Vehicle width (mm)	2200	2200	2200	2200	2200	2300	2300
Turning circle (m)	13.7	13.7	16.5	14.3	16.5	15.1	16.9
Engine (Euro VI)	OM 934	OM 934	OM 934	OM 936	OM 936	OM 936	OM 936
Max. power (kW)	130	170	170	200   220	200   220	200   220	200   220
(hp)	177	231	231	272   299	272   299	272   299	272   299
Max. torque (Nm)	750	900	900	1100   1200	1100   1200	1100   1200	1100   1200

**Find out more about the Mercedes-Benz Unimog at: [www.mercedes-benz.com/specialtrucks](http://www.mercedes-benz.com/specialtrucks)**

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