



The new Unimog with outstanding off-road mobility.

Speaker: Wulf Aurich | Product Manager Unimog
Mercedes-Benz Special Trucks



Mercedes-Benz



The new Unimog integrates leading truck technology tested in large-scale production



Mercedes-Benz Wörth Plant: The Mercedes-Benz Unimog is designed and produced in the world's largest truck assembly plant. The engines are manufactured in the Mercedes-Benz engine factory in Mannheim.



The new Unimog series

The off-road professionals U 4023/U 5023	The implement carriers U 216 to U 530
170 kW (231 hp)	115 kW (156 hp) – 220 kW (299 hp)
7.5 t – 15.0 t GVW	7.5 t – 16.5 t GVW
3.85 m wheelbase	2.8 m – 3.9 m wheelbase

The new U 4023 / U 5023

Off-road mobility. Sturdy. Efficient.

Off-road design

Drivetrain

Interior

Variety of uses



The new U 4023 / U 5023

Off-road mobility. Sturdy. Efficient.

Off-road design

Drivetrain

Interior

Variety of uses

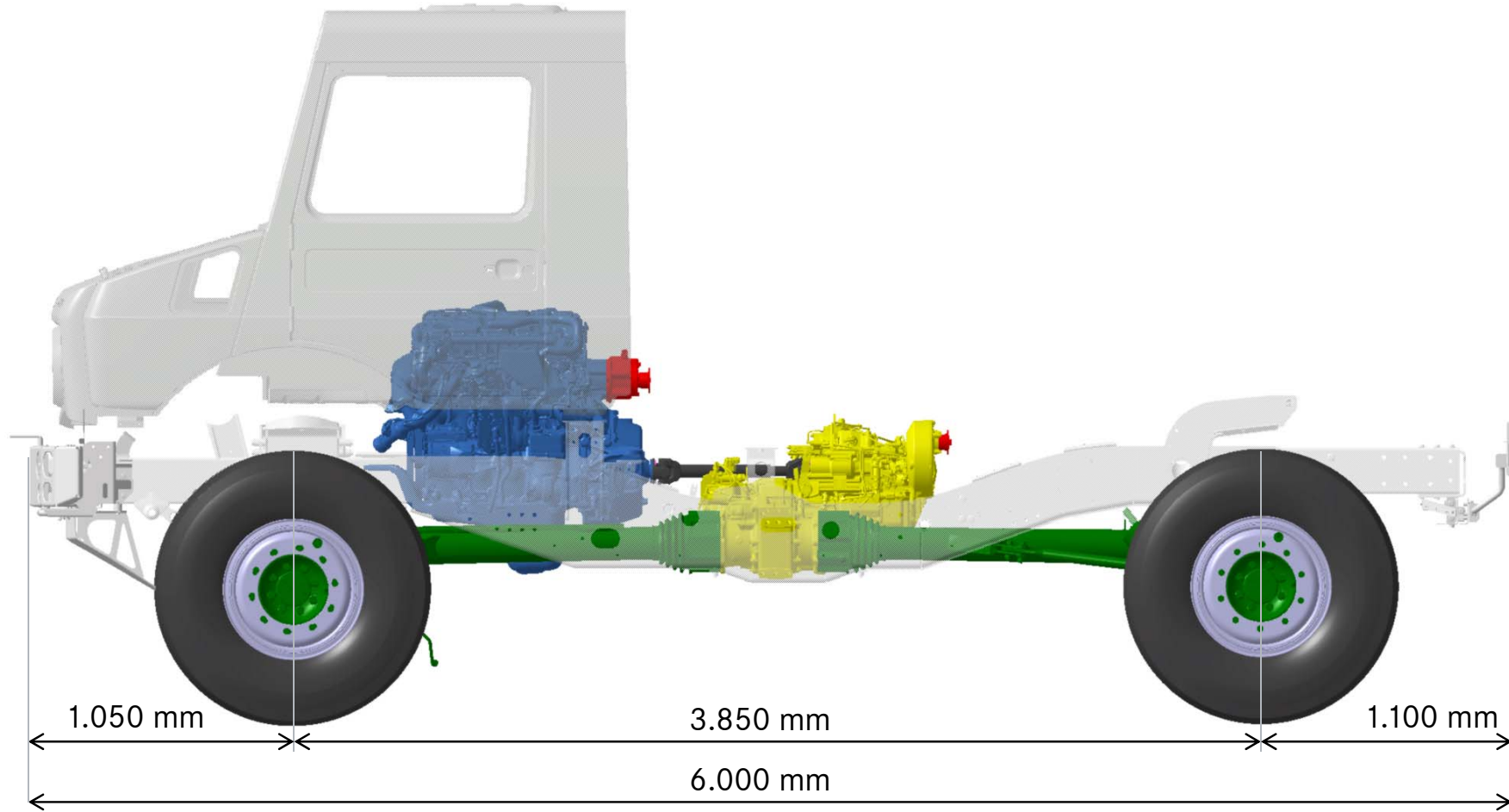


Perfection in rough terrain: the Unimog concept

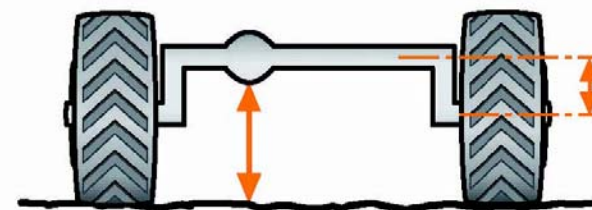
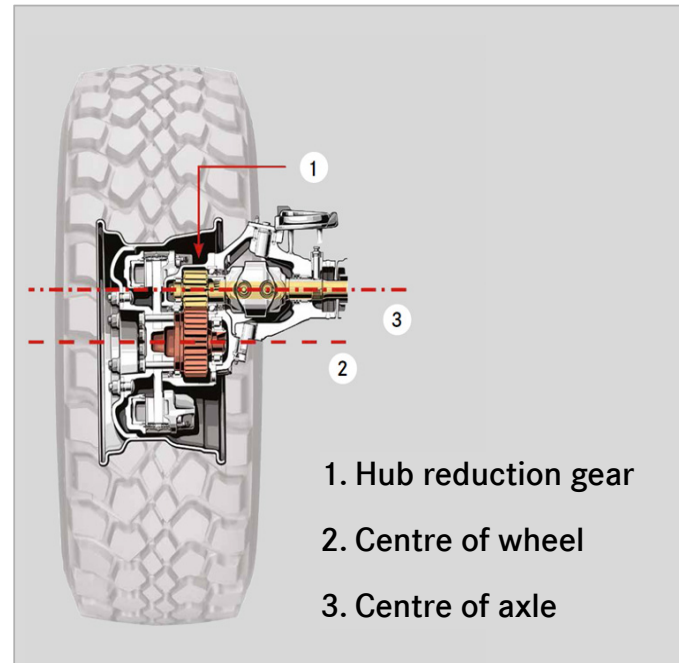


- Torsionally flexible frame with three-point suspension mounting for cab, engine and transmission
- Axle suspension with torque tube technology
- Axle articulation up to 30°
- All-wheel drive and single tyres for top traction
- Central tyre inflation system ex works
- Differential locks
- Portal axles to provide high ground clearance
- Short frame overhang provides wide angle of approach and departure
- Low off-road gear ratios for climbing ability up to 100 %
- Fording ability up to 1.20 m

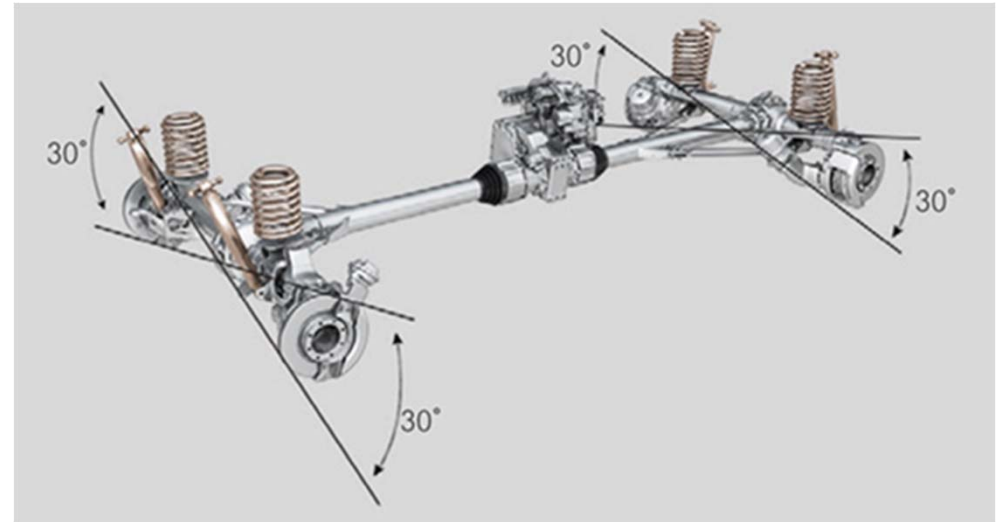
Traditional short bonnet cab designed with a mid-mounted engine



Portal axles



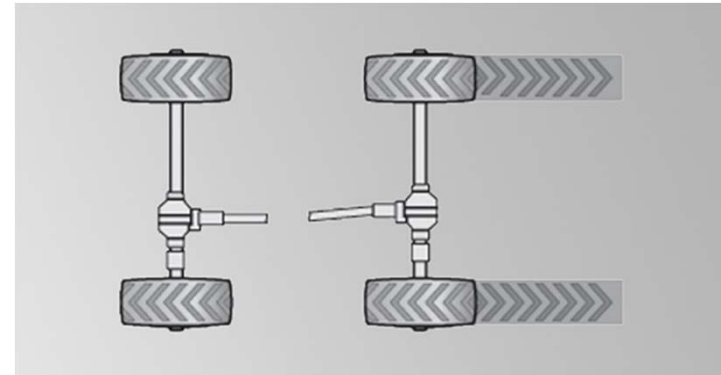
Axle articulation



Chassis expertise

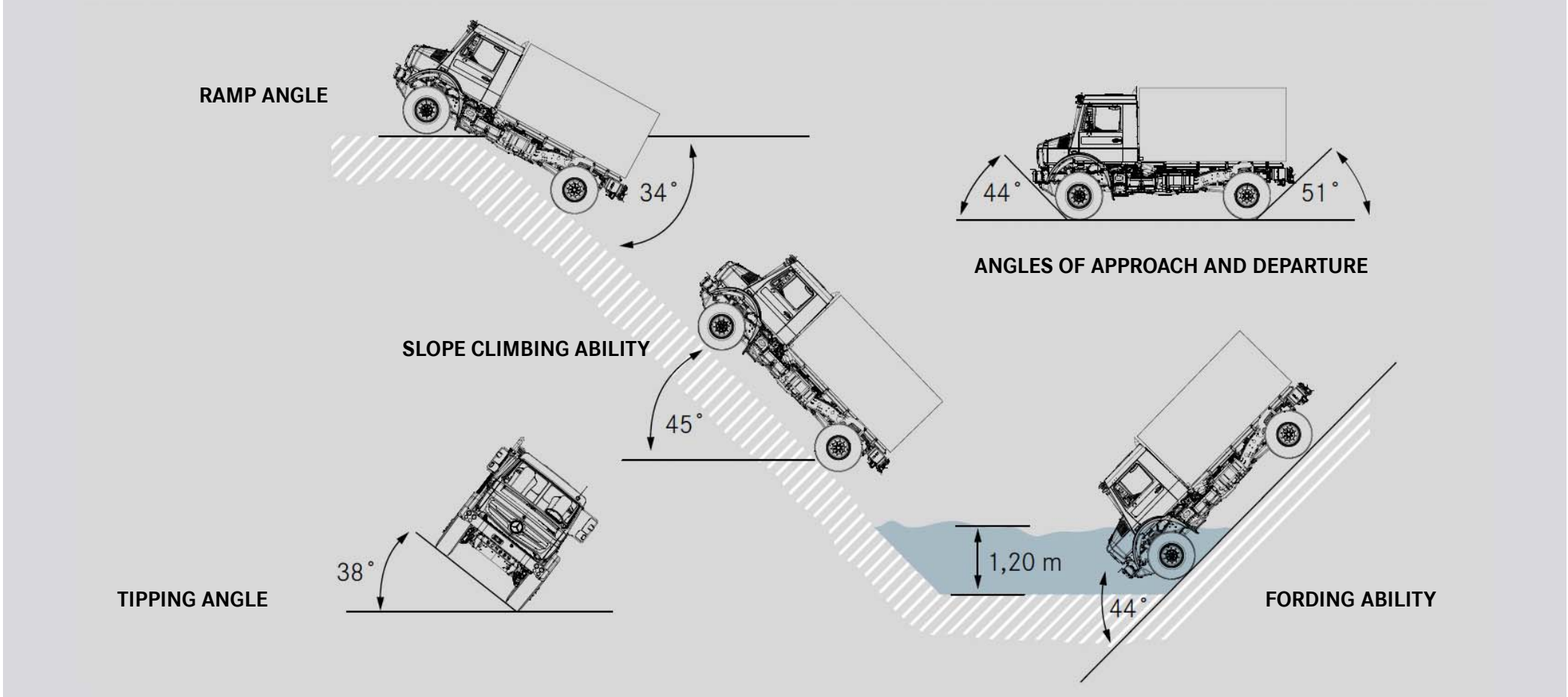


Central tyre inflation system *tirecontrol plus*

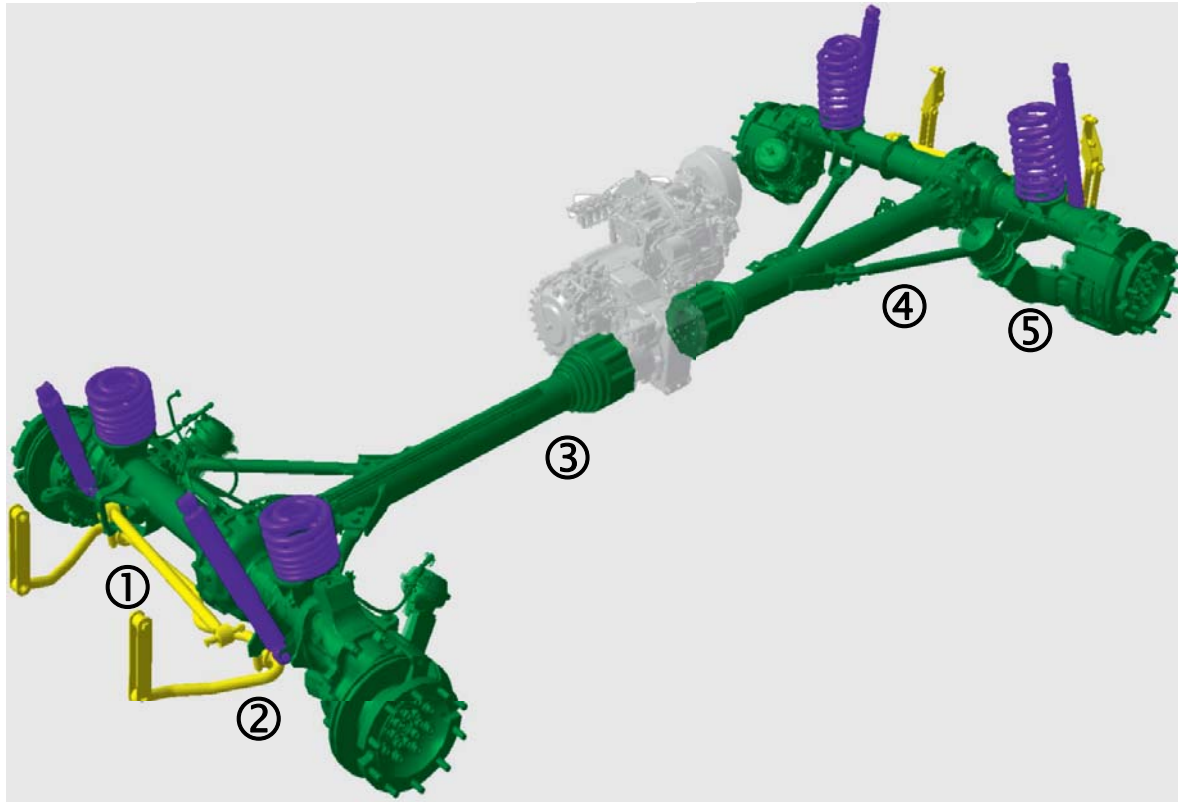


All-wheel drive and single tyres

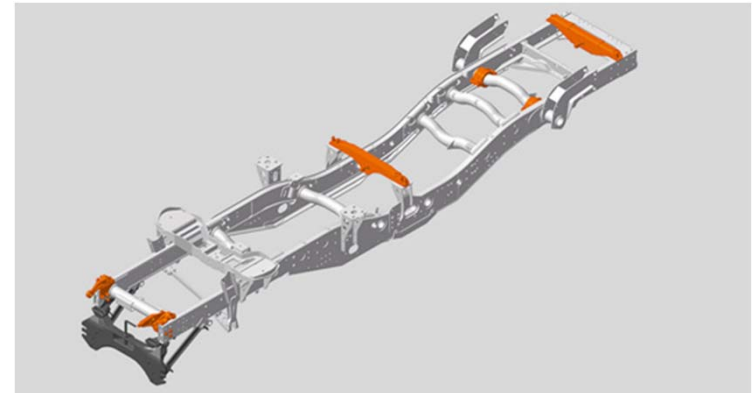
High ground clearance, great angles of approach and departure



Frame concept



1. Wishbones
2. Stabilizers
3. Torque tube
4. Axle strut
5. Spring controlled parking brake



Fully welded curved frame

The new U 4023 / U 5023

Off-road mobility. Sturdy. Efficient.

Off-road design

Drivetrain

Interior

Variety of uses



A sought-after place to work



New interior with improved controls



Height and tilt-adjustable steering column



Instrument cluster with large and light display



Steering column control stalk for gear-changing, premium engine brake and EQR



Intuitively-arranged controls with simplified functions

The new U 4023 / U 5023

Off-road mobility. Sturdy. Efficient.

Off-road design

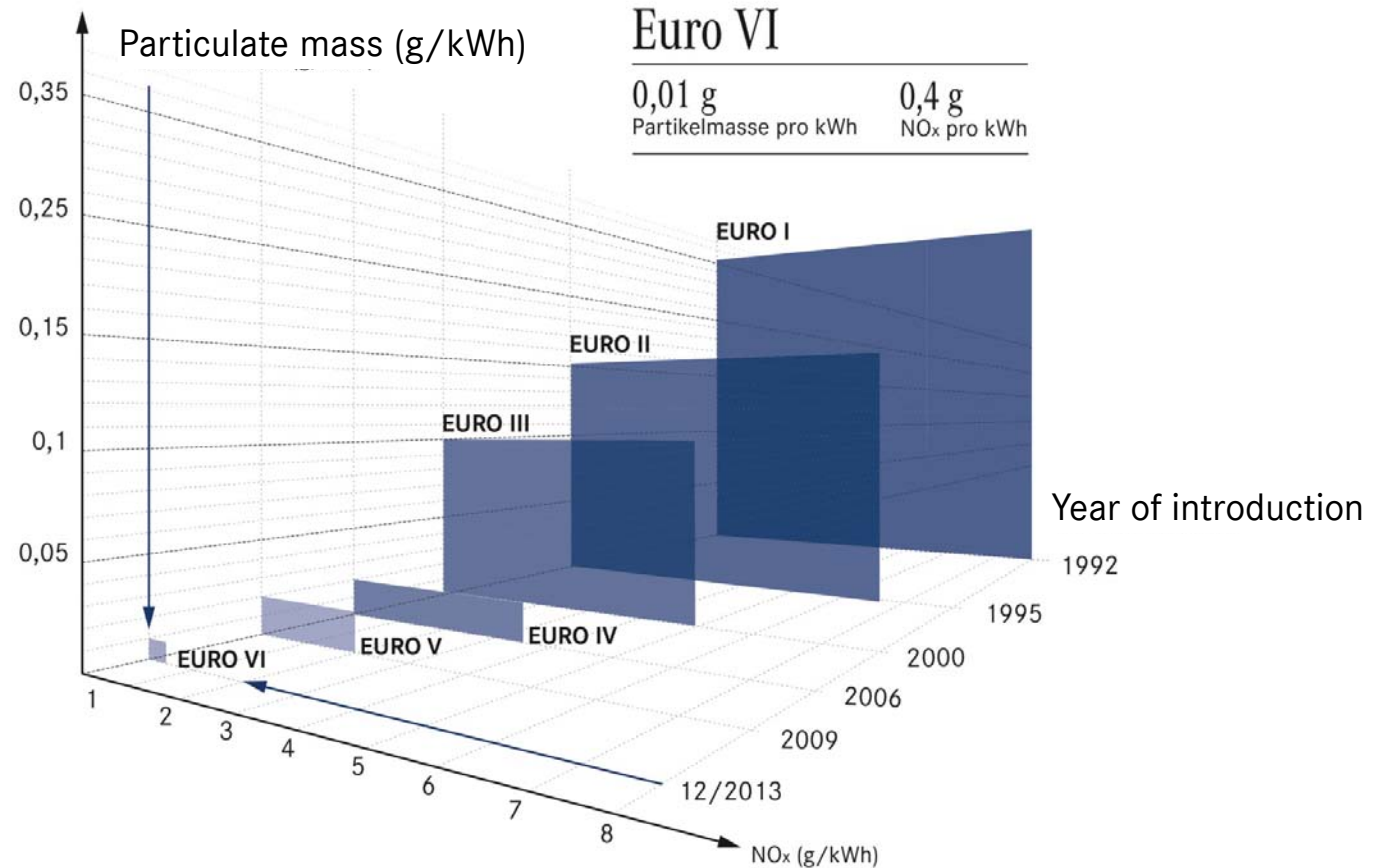
Drivetrain

Interior

Variety of uses

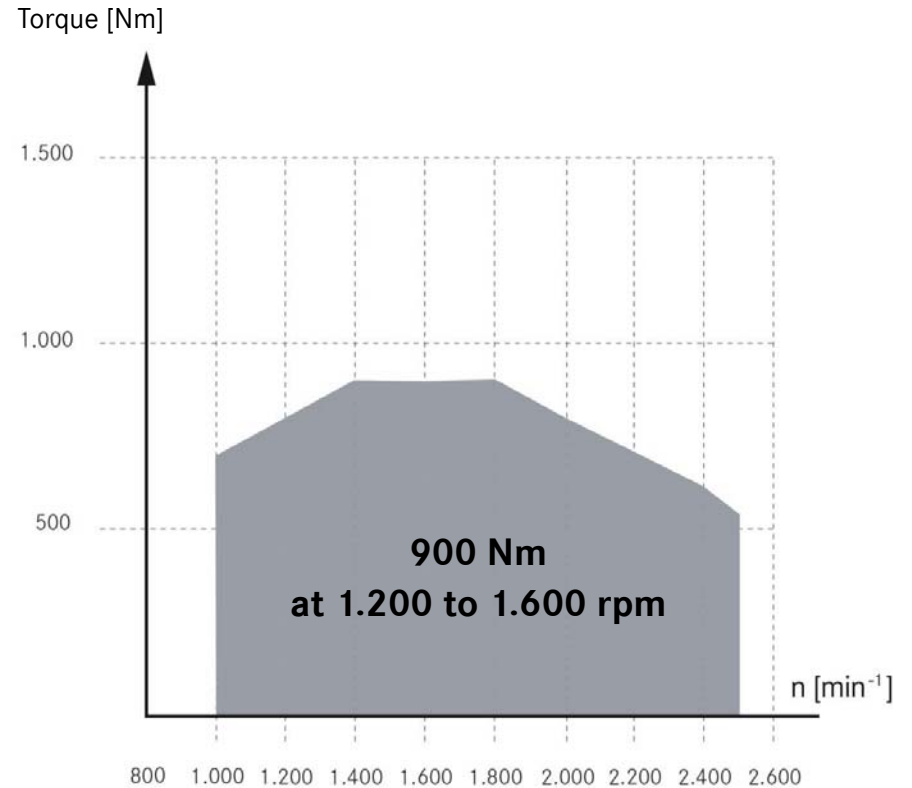


90 % reduction in emissions with better performance

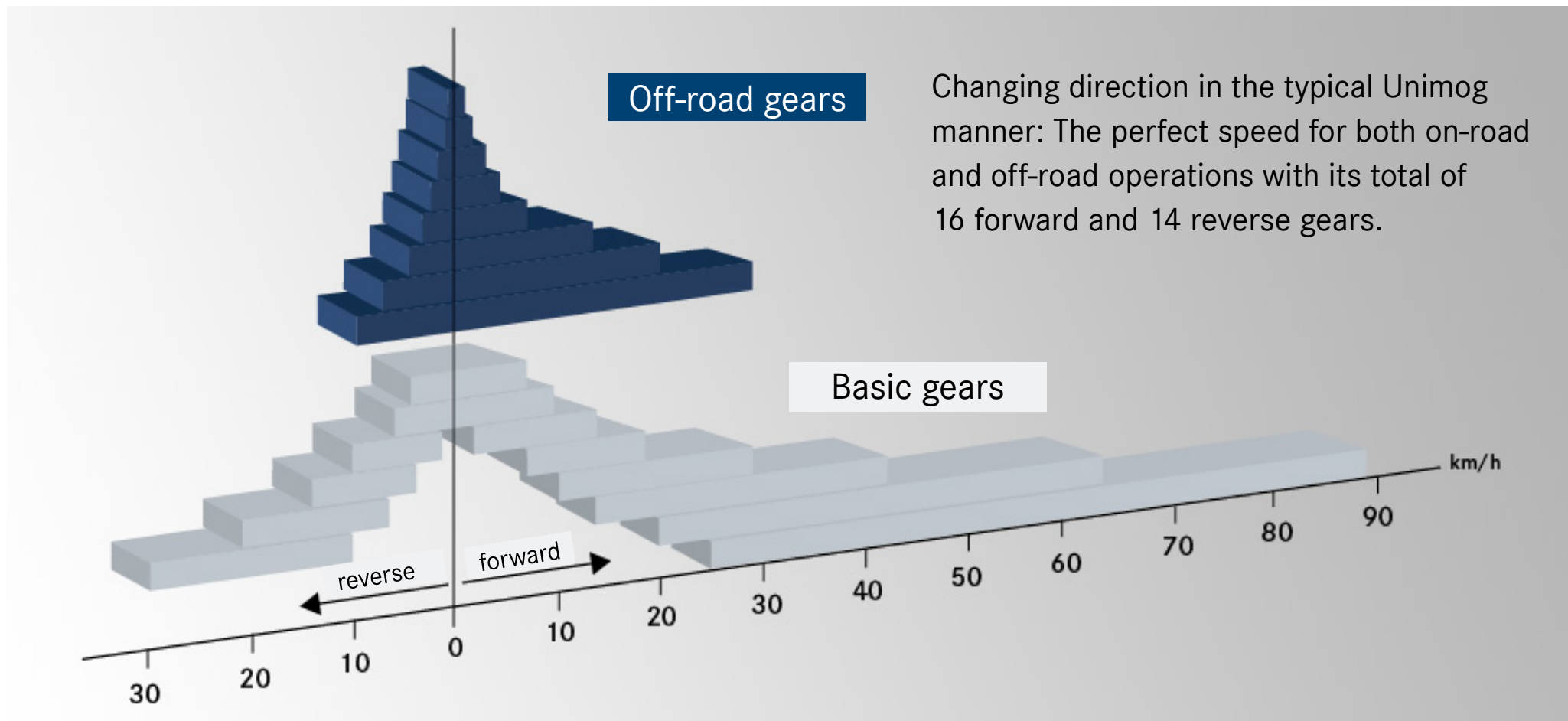


Lower fuel consumption. Greater efficiency

4-cylinder inline 5.1 litre engine (OM 934)



New and very efficient advanced transmission design



Off-road gears

Changing direction in the typical Unimog manner: The perfect speed for both on-road and off-road operations with its total of 16 forward and 14 reverse gears.

Basic gears

km/h

reverse

forward

30

20

10

0

10

20

30

40

50

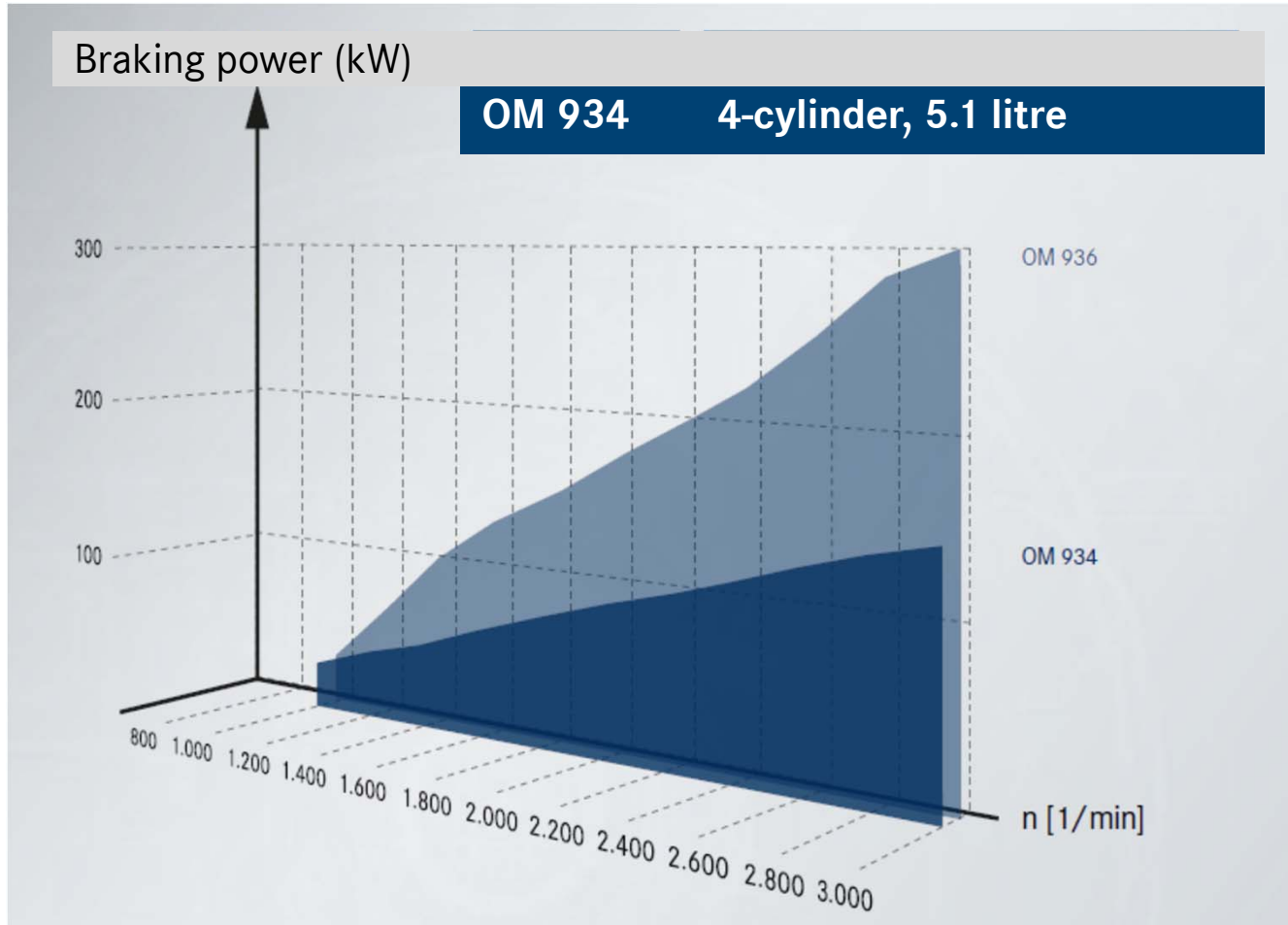
60

70

80

90

The strong premium engine brake



- Double cycle decompression brake
- Powerful braking performance up to 70 kW
- Each cylinder in the engine is fitted with its own engine-brake unit
- Reduction in mechanical wear on the brakes
- Contributes to economic efficiency

The new U 4023 / U 5023

Off-road mobility. Sturdy. Efficient.

Off-road design

Drivetrain

Interior

Variety of uses



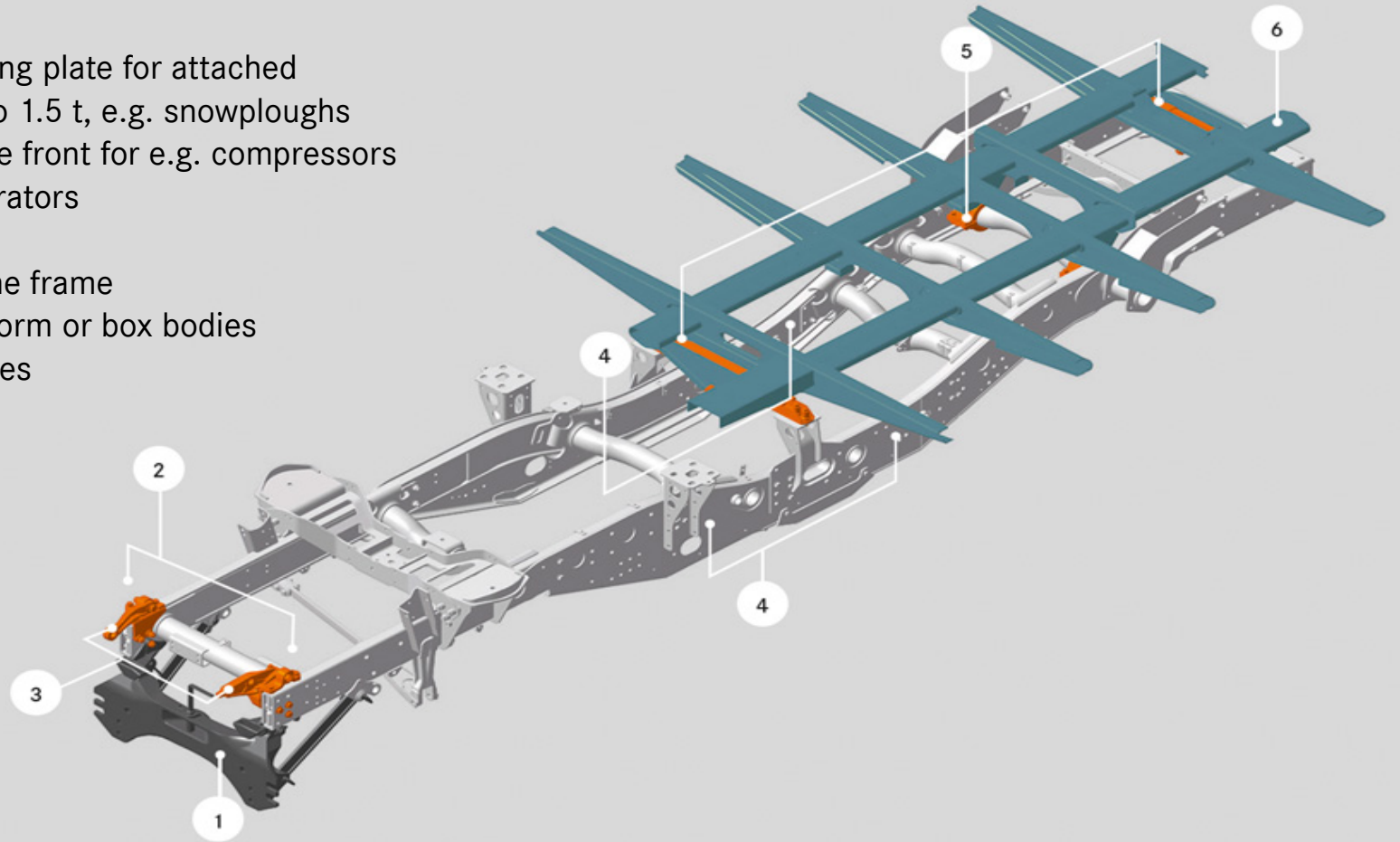
A great variety of uses in places other vehicles never reach



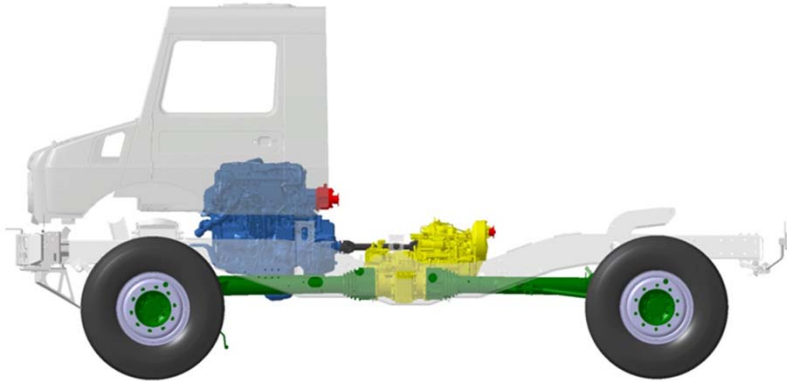
- Fighting forest fires
- Disaster control
- Energy industry
- Expeditions
- Agriculture

Attachment and mounting points

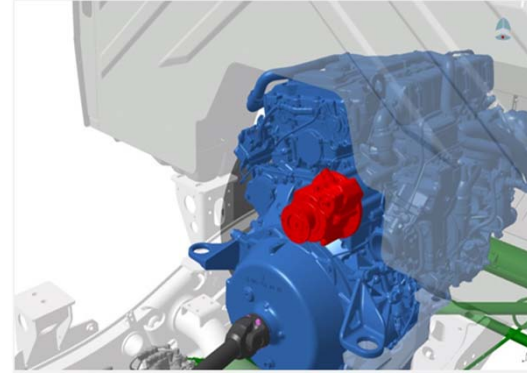
1. Standardised front mounting plate for attached implements weighing up to 1.5 t, e.g. snowploughs
2. Attachment brackets at the front for e.g. compressors or emergency power generators
3. Cable winch bracket
4. Attachment brackets on the frame
5. Mounting fixtures for platform or box bodies
6. Sub frame for special bodies



Powerful implement power take-offs (PTOs)



New engine-run power take-off



Transmission-run power take-offs



Single circuit hydraulics 240 bar, 60 l/min



Standardised electric sockets





Thank you very much for your kind attention!

Speaker: Wulf Aurich | Product Manager Unimog
Mercedes-Benz Special Trucks



Mercedes-Benz