



BECAUSE, IN AN EMERGENCY, THERE ARE NO SECOND CHANCES.

Efficiency in fire management and disaster response means rescuing people faster, improving the way fires are extinguished, providing more effective protection and ensuring more reliable recovery operations. MAN vehicles are always on hand when things start getting hot. The MAN TGL, MAN TGM and MAN TGS chassis are available ex works with optional special equipment for the fire service and form the dependable basis for both standard and special-purpose vehicles.

Ergonomic cabs, low-consumption common-rail engines, the optimised MAN TipMatic® EMERGENCY gear-boxes with performance-oriented gearshift logic specifically for emergency services vehicles and innovative technologies such as MAN HydroDrive® combine exceptional reliability with exemplary environmental sustainability in accordance with the Euro 5 and Euro 6 emissions standards.

That adds up to MAN efficiency you can rely on.

www.truck.mar

Some of the equipment shown in this brochure is not included as standard.

Both the vehicle's air conditioning system and refrigerator contain fluorinated greenhouse gases (R134a / GWP 1430 with up to 1.15 kg; 1.6445 t CO2 accordingly).



AN EFFICIENCY CLASS OF ITS OWN.

MAN emergency services vehicles in Euro 6

Achieving the extremely low Euro 6 exhaust values means that top-level technical know-how is of the essence. MAN has been successfully implementing key technologies such as common-rail injection, selective catalytic reduction (SCR) and diesel particulate filters (DPF/CRT) for many years now. These sophisticated technologies have been combined for Euro 6 and optimally coordinated with one another. The result? MAN Euro 6 vehicles set the standard in consumption of both fuel and AdBlue®.





The new generation of MAN D08 engines powers the MAN TGL and TGM with even greater force. And the new engine concept also enhances efficiency at the same time: Fuel consumption is reduced by up to 5%. The new, simplified exhaust gas cleaning without exhaust gas recirculation also makes the engine lighter and less complex.

Like all MAN vehicles, Euro 6 versions also win fans through their great body friendliness. The compact exhaust silencer ensures sufficient space for comfortable entry variants for the crew cab. There is also enough space for the equipment room design.

→ Key features in Euro 6 variant:

- Efficient exhaust system with tested key technologies
- No increase in diesel consumption
- The new generation MAN D08 engine for the MAN TGL and TGM reduces fuel consumption
- Maximum operating safety and reliability
- Optimised MAN TipMatic® EMERGENCY with performance-oriented switching logic especially for emergency services vehicles
- High degree of body friendliness, even for crew cabs



OUR SOLUTION WHEN THE HEAT IS ON.

Medium fire-fighting truck and small fire-fighting tank trucks - compact in size, expansive in action.

With an integrated pump and rapid deployment device and/or portable pump, the trucks render valuable service in flexible and effective fire fighting. A little truck amongst the greats: The MAN TGL has the right power and the right ruggedness. And when it comes to size: If required, the MAN crew cab or the MAN team cab can comfortably accommodate up to 9 people with plenty of storage space for the equipment.





TGM 13.290 4x4 BL,HLF 20



TGM 13.209 4x4 BL LF 20

Fire-fighting and rescue vehicles with crew compartment

When you see fire-engine red, it means help is on the way. The crew fire-fighting trucks in the 12- to 18-tonne weight class are vehicles that go through thick and thin. With lots of of extinguishing agent on board and a fixed centrifugal firefighting pump, the MAN TGL and TGM can also successfully tackle big fires.

Rescue unit crew fire-fighting trucks are proven all-rounders with extensive basic fire-fighting equipment, supplemented by loading sets for technical assistance or by equipment to meet the specific needs of the local fire service.

To make sure they get where they're intended to go, the MAN chassis are also available in all-wheel drive versions, both permanent and engageable, with single tires - for maximum mobility

This not only looks good, but also has on-road traction: front axle tyres with a width of 385.

And so that you do not get into trouble in difficult situations, MAN chassis are also available with air suspension.











Fire-fighting tank trucks

When the crew hears "Water on!", they let loose with all they've got. Tank fire trucks are equipped as water carriers for fire fighting, as 2 to 4-axle vehicles where required. For special hazards, special extinguishing agents such as foaming agents, powders or carbon dioxide can also be carried.

As versatile as the range of applications are the chassis of the MAN TGX, TGS and TGM series, which range from 184 kW to 471 kW (250 hp to 640 hp). Of course, we've also got the perfect cab to meet your needs, both for team or crew occupation.

The MAN TipMatic® EMERGENCY offers a particularly performance-oriented switching logic. For maximum traction, you can choose between the drive variants MAN HydroDrive®, engageable or permanent all-wheel drive.

Things can get tight in the field: That's why we offer steered trailing axles for increased manoeuvrability in the smallest of spaces.





EQUIPPED FOR EVERY NEED.

Rescue and equipment vehicles

When a situation starts getting precarious, it often has nothing to do with fire. For technical assistance in accidents involving vehicles, oil and dangerous goods, rescue vehicles are used to save lives and avert harm to the environment as far as possible. Depending on the application, they are equipped with life-saving equipment such as hydraulic cutting apparatus and hydraulic spreader, recovery equipment and winch. The robust frame of MAN vehicles is perfectly suited to operation of winches and cranes. To meet your needs, MAN offers the right chassis from the MAN TGX, TGS, TGM and TGL series with output levels from 118 kW to 471 kW (160 hp to 640 hp).

You have the optimum performance-oriented switching logic with the MAN TipMatic® EMERGENCY. The drive variants MAN HydroDrive®, engageable or permanent all-wheel drive ensure the best traction in all operating conditions.

And when things get tight: Steered trailing axles from MAN are ideally suited for increased manoeuvrability in the tightest of spaces.





LOGISTICS IS THEIR STRENGTH.

Equipment vehicle.

On-road and off-road logistics are their strength. Equipment vehicles are multifunctional logistics vehicles that transport equipment easily and flexibly to the job site.

You can obtain vehicles with an output of 118 kW to 251 kW (160 hp to 340 hp) as MAN TGM and TGL from us for this reason. The MAN crew cab, available ex works, is particularly suitable.

Of course, we also offer the MAN TipMatic® EMERGENCY gearbox with performance-oriented switching logic for this area. In addition to the chassis variety and the appropriate all-wheel drive concept, the chassis are also available with single tyres – for maximum mobility.







RESCUE WHERE THE NEED IS HIGHEST.

Turntable ladders and telescopic rescue platforms

If all escape routes are cut off by fire and smoke, the turntable ladder or aerial rescue platform is the way to safety. Extending to a height of up to 112 metres, they reach to where no other help could be expected. The versatile MAN chassis are at hand in a flash when people need to be rescued from great heights or inaccessible buildings.

Whether it's narrow streets, parked cars or lush greenery in the city, the points of use for turntable ladder vehicles are as varied as the requirements for the chassis. With our optimally equipped vehicles ex works, we always take you to your point of use in a safe and reliable manner.











FLEXIBILITY CLINCHES IT.

Swap-body trucks

These are the all-rounders in the vehicle pool of modern fire-fighters. Swap-body trucks offer maximum telescopic rescue platforms suitable for a whole variety of purposes. In no time at all the basic MAN vehicle can take on swap bodies of every kind – a command centre for controlling an opera-tion, a tender for water or foam, equipment for breathing protective devices, a container for collecting oil, decon-tamination or environmental protection apparatus. These trucks only have one hitch – the one they need to pull on and roll off a container.

Depending on the requirements, we can offer you the right chassis as a MAN TGX or TGS, from 360 kW to 471 kW (360 hp to 640 hp).

MAN TipMatic® EMERGENCY is the optimum transmission for performance-oriented switching logic. For maximum traction, you can choose between the drive variants MAN HydroDrive®, engageable or permanent all-wheel drive.

There are steered trailing axles for increased manoeuvrability in tight spaces.

You can now also obtain the fire-fighting equipment from MAN ex works.



TGS 26.400 6x2-4 BL. WLF crane



TGS 26.440 6x4H-4 BL WLF



TGM 18.340 4x4 BB Stair



TGK 7.180 4x2 BB Fan

IF YOU NEED IT, MAN WILL ALMOST CERTAINLY HAVE IT.

Special-purpose trucks

What is special about a special-purpose truck is the job facing it. Sometimes it's a matter of maximum payload and capacity, sometimes the emphasis is on off-road capability and speed, or it might be a mix of all of them.

Special bodies are often required for transporting special extinguishing agents or rescue equipment. Here, everything has to be tailored to match the individual circumstances in each location. Such requirements are on the rise, both inside and outside Germany.

MAN is also a system partner for extreme solutions such as twin-head trucks with two cabs for operation as a fire fighting and rescue vehicle in tunnels. And don't forget the MAN buses, which are used as command vehicles or medical ambulance buses.





TGM 13.250 4x4 BB. LF 20 KatS



TGS 26.400 6x2-4 BL, SLF



TGM 13.290 4x4 BL, LF 20 KatS

GETTING EMERGENCY SITUATIONS BACK UNDER CONTROL.

Disaster-response and civil-defence vehicles

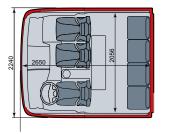
Disaster-response vehicles need to be ready for action when nothing else can cope. They are specialpurpose vehicles used for fire protection, CBRN protection, medical services and personal assistance. They also have to meet civil-defence requirements whilst taking into account new dangers of national

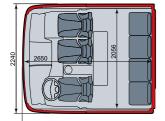
MAN offers a comprehensive product range for tackling such tasks. It offers a range of chassis options from two to four axles, corresponding all-wheel-drive concepts and a diverse range of cab designs, including crew cabs for nine staff.





Optional centre seat with folding backrest





READY, STEADY, GO FOR 7.

The MAN crew cab

In all deployments that require space for a whole crew, it is in a size class of its own: the crew cabs for the MAN TGL and TGM ranges can be delivered ex works and open up top-class spatial dimensions for you. With a comfortable row of four seats in the rear plus the optional second co-driver's seat, it can hold up to seven people (1+6).

The entry to the crew compartment is well thought out, with wide, non-slip and – optionally – illuminated steps. The interior satisfies just about every wish. The well-organized, driver-oriented cockpit features clear, legible, non-dazzle displays and easily operated instruments. In its ergonomics, comfort and convenience the crew cab matches the high standards of the attractive C and L cabs.

An extension to the crew cab is optionally available to accommodate respiratory equipment in the direction of travel.





Crew cab.



Roof lowering C cab

ROOM FOR MORE.

The MAN crew cab

On deployments that require room for a powerful fire-fighting crew (1+8), the MAN crew cab for the MAN TGL and TGM has a lot to offer. It is manufactured by MAN Individual in two designs based on the C cab – as a standard version and as an extended version for a total of seven seats with integrated retaining devices for breathing apparatus.

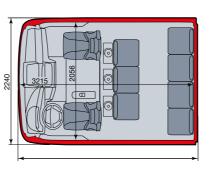
The MAN crew cab is not only comfortable and spacious, but safe as well: it meets the crash test requirements in accordance with ECE R29 and the requirements for safety belt anchorages in accordance with ECE R14.

Cab roof lowerings

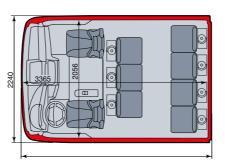
To comply with the legal vehicle height, MAN Individual offers lowered roofs, for example for aerial rescue vehicles or emergency services vehicles with special heights.

The lowering for the C cab is 130 mm and for the L and M cabs 190 mm. Corrosion is not an issue thanks to the use of GRP parts for the new roof.

Crew cab



Crew cab with extension to to provide room for seven respiratory equipment seats in the back



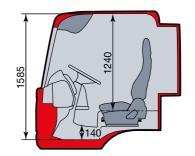
MAN crew cab with extension

The 265-mm extension of the C cab by MAN Individual is a real space winner. It creates additional space for personal protective equipment as well as tools or respiratory equipment integrated in the co-driver's seat.

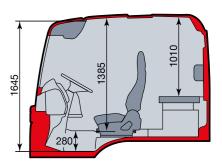
Seating extension

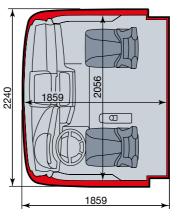
On request, the capacity of the L cab can be increased to six seats (1+5) by installation of a four-seater bench.

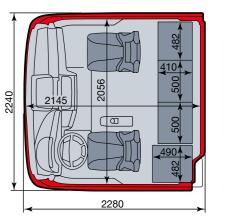
Extension C cab



L cab with four-seater bench







28 Cabs

THE CHOICE IS YOURS.

The right cab for every need - and a maximum level of comfort and ergonomics travels with you wherever you go.

ing and relaxed regeneration. And of course safety. All cabs meet the crash safety requirements, comply with the ECE-R29 directive and offer optimum passenger protection.

Many small thought out details, such as the washable door-interior coverings, the easy to clean fixtures, the compressed air connection for simplified cleaning and the optional headlight washing unit show that nothing has been left to chance in the design process. Take the optimum all-round visibility, for example, which is supported by such features as the mirror concept with the main and wide-angle mirror, large kerb mirror and front mirror. The blind spot has been practically eliminated. The heated windscreen for winter service vehicles ensures an un-

Cab		Vehicle	series	
	TGL	TGM	TGS	TGX
Crew cab		•	*	
C cab	-	•		
M cab			•	
L cab	•	•	•	
LX cab		•	•	
XL cab				
XLX cab				•
XXL cab				•

^{*}available for MAN TGS via MAN Individual

C cab

M cab

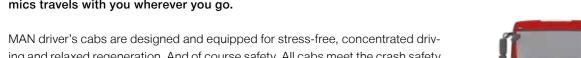
L cab

LX cab

XL cab

XLX cab

XXL cab



obstructed view even at the coldest times of the year.

PART	Plan	MAN
27%	1620	1980



























GREAT VIEWS.

The MAN vehicles can expect numerous equipment highlights to make the interior even more driver-friendly and optimised for vehicle operation.

The warm sand and graphite tones of the interior panelling, grained plastic surfaces, satin-chrome-plated door handles and the seat covers have already been lending the cab a comfortable yet stylish atmosphere.

The optional darker "Urban Concrete" colour will be available for the cockpit. It is a resistant colour scheme for all surfaces that may come into contact with dirty hands or work clothing during vehicle deployments in dirty conditions. The look of the cab interior can also be customised with up to three optional variants for the all-round trim strips (in brushed aluminium, Net-Black and wood).

The multi-function steering wheel forms the perfect interface between vehicle and driver: various functions are integrated in the steering wheel in a clearly laid out and intuitive manner. Without taking your hands off the wheel you can call up vehicle information, receive telephone calls and adjust the radio settings. The driver can freely adjust the height and angle of the multi-function steering wheel, which is also available in leather.

A slimmer centre console and a coolbox/storage box (not available in the C cab), which can be completely stowed under the bed, create a more comfortable sitting and standing experience in the central area. And yet, the coolbox offers more space. The cup holders are more flexible, and the bunk control panel in the longer cabs with beds is more convenient. The lighting in the living space provides a cosier atmosphere thanks to goose-neck lights.

The function-based switch layout and the colour display offer the driver a modern, ergonomic workplace. In the MAN TGX, comfort and working conditions for the driver have been improved thanks to the 1.5 dB reduction in interior noise compared to the previous series.

The new, electric glass elevating roof (not available for C cab) makes the cab even cosier by allowing daylight to stream in. The glass elevating roof makes the interior feel really light and airy and enables an optimal exchange of air without the driver feeling a draught. The roof is controlled electrically, thereby increasing the driver's level of comfort.

"Urban Concrete" colour





EVERYTHING INSIDE, AND ALL AT A GLANCE!

It is the driver who turns efficiency into motion. His performance at the wheel is the key to reliable transport and to a safe, cost-effective driving style. So it's vital that the workplace is well equipped for this.

In the redesigned MAN cockpit, everything is in the right place. The displays are clear, while frequently used switches and switches requiring quick access are close to the driver. To ensure intuitive operation, interrelated functions are grouped into switch groups, which are always in the same position in all vehicles and series. Having this standardised layout simplifies operation for drivers when switching vehicles. The dial switch for the MAN TipMatic® automated gearbox is now in the driver's field of view. The main panel of controls now houses all switches vital to operation and driving, while relevant functions for add-ons can be assigned to a second, optional panel of switches at a later date. Placing the panel of buttons for essential functions, such as interior lighting, above the driver provides easy access even while driving.

The focus will be on the instrumentation with new LCD display in four colours. This four-inch, high-resolution colour display supports legibility and orientation, and highlights features such as activated assistance systems and warning messages to enable quicker recognition. A digital speed display complements the analogue display. In addition, menus and controls boast colours coordinated with the MAN Media Truck infotainment system. The air-conditioning panel features displays with a white background, making them considerably easier to read thanks to the better contrast.

MAN infotainmentsystem

MAN offers some improved features with the new infotainment system. The standard MAN Media Truck variant includes a 5" TFT display with touchscreen and SD card slot. On request, it's also available with a hands-free system, Bluetooth audio streaming, USB/AUX inputs, and DAB+ digital radio. In addition, the MAN Media Truck Advanced version offers a larger 7" display, voice control, a hands-free system for a telephone, video display via USB & SD, traffic information via radio, and a maximum of two camera interfaces. MAN Media Truck Navigation includes a specialist truck navigation system. Also, the versions MAN Media Truck Advanced and Navigation offer the function of "Twin Pairing", which enables two mobile phones to be connected to the system in parallel. Both variants can also be provided with a hook-up for a rear-view camera.

The "Mirror Link" function transfers the user interface of mobile devices to the infotainment system, enabling safe operation via the multi-function steering wheel and the system itself (connection via USB cable). The navigation screen also continuously shows maximum speed limitations (depending on whether the map data includes the respective information). The digital radio (DAB/DAB+) is easy to access and use via voice control.



FASTER THAN THE FIRE BRIGADE.

MAN TipMatic® EMERGENCY for the emergency services vehicles

High performance and maximum convenience: the MAN TipMatic® is a combination of both. The automated gearbox has been specially optimised to meet the requirements of emergency services vehicles and designed for fast acceleration and targeted downshifting during braking.

The driver can thus concentrate fully on steering and has everything under control without taking his or her hands off the steering wheel. The MAN TipMatic® is also available in a special version for off-road applications.

Acceleration is key:

- MAN TipMatic® gearbox software with optimised gearshift strategy and function
- Shorter shift times
- Higher shifting rpm for better acceleration
- Optimal acceleration thanks to special downshifting logic



Automatic gearbox with converter-clutch unit

For special vehicles in the MAN TGM and TGS ranges, an automatic gearbox with converter-clutch unit is available in combination with a retarder.



MAN TipMatic® gearbox



Allison automatic gearbox

DRIVEN BY POWER.

MAN vehicles can be equipped with tailored solutions for applications that require powerful PTOs. MAN offers different variants for fire service applications such as airport or industrial applications.

The non-clutch-dependent, engine-dependent PTO (PTO pre-installed on the engine) is well-suited to high performance requirements in municipal applications. This PTO is specifically designed for manually operated gearboxes from MAN and can emit up to 2,000 Nm in torque – and gears can be switched even under load. The engine-dependent PTO is available with various gear ratios, making it ideal for municipal use.

The OMSI Flywheel PTO (non-clutch-dependent PTO) has been designed specifically for the MAN D26 engine, to provide the highest torques for each gear ratio up to 3,200 Nm of torque. The PTO, with which it is possible to switch gear under load, is available in combination with the MAN TipMatic®, and you can choose the version that is right for your vehicle from the wide selection of possible gear ratios.







EFFICIENCY AT FULL THROTTLE.

MAN common-rail engines

The highly efficient four and six-cylinder engines with ratings of 118 kW (160 hp) to 471 kW (640 hp) present an inspiring picture with their outstanding power delivery even at low engine speeds. With their perfect synthesis of performance and efficiency, all MAN engines stand out from the pack. They set new standards for performance, reliability and economy.

The new generation of MAN D08 engines powers the MAN TGL and TGM with even greater force. And the new engine concept also enhances efficiency at the same time: Fuel consumption is reduced by up to 5%. The new, simplified exhaust gas cleaning without exhaust gas recirculation also makes the engine lighter and less complex.

The statutory provisions for compliance with the Euro 5 and Euro 6 emissions thresholds make certain technical measures necessary, such as reducing the engine torque when the emission control function is no longer guaranteed. MAN's engines for municipal/official deployment are configured to ensure each operation is a success. For longer rescue and recovery scenarios, this guarantees constant vehicle operation.

For many years now MAN engines have met the highest requirements for environmental compatibility. The MAN D08 engine series in the Euro 5 version has unique PURE DIESEL® technology that runs completely without AdBlue®. This makes it easier to maintain the vehicle as no additional service products need to be monitored or topped up. Regardless of the emissions standard that applies, Irrespective of which emission standard applies, MAN offers the choice between Euro 5 and Euro 6 in the MAN D08, MAN D15 and MAN D26 engine series.

MAN approves the MAN D15, MAN D26 and MAN D38 engines for use with paraffin fuels in accordance with EN15940. Fuels that comply with this standard include hydrogenated vegetable oils (HVO), coal to liquids (CTL), gas to liquids (GTL) and biomass to liquids (BTL).

The new MAN D15 engine will be available from the middle of 2019. Like the MAN D20 engine, it has very good dynamic handling thanks to its optimal turbocharger configuration, but offers more payload. The weight of the engine has been reduced by approx. 230 kg as compared with the MAN D20, and fuel efficiency has been increased. Even at low engine speeds, the maximum torque is available. The MAN TurboEVBec in conjunction with the MAN D15 engine enables gradual regulation of engine brake output up to a maximum of 350 kW. In addition, numerous optimisations of the new MAN D26 engine concept result in greater power at the same low fuel consumption and a weight reduction of around 80 kg.

Euro 6 engines

	Type	Capacity	Rated output	Max. torque	
D0834	R4	4.61	118 kW (160 hp)	600 Nm	
	R4	4.61	140 kW (190 hp)	750 Nm	
	R4	4.61	162 kW (220 hp)	850 Nm	
D0836	R6	6.91	184 kW (250 hp)	1 050 Nm	
	R6	6.91	213 kW (290 hp)	1 150 Nm	
	R6	6.91	235 kW (320 hp)	1 250 Nm	
D1556	R6	9.01	243 kW (330 hp)	1 600 Nm	
	R6	9.01	265 kW (360 hp)	1 700 Nm	
	R6	9.01	294 kw (400 hp)	1 800 Nm	
D2676	R6	12.4	316 kW (430 hp)	2 200 Nm	
	R6	12.4	346 kW (470 hp)	2 400 Nm	
	R6	12.4	375 kW (510 hp)	2600 Nm	
D3876	R6	15.2	397 kW (540 hp)	2700 Nm	
	R6	15.2	427 kW (580 hp)	2900 Nm	
	R6	15.2	471 kW (640 hp)	3000 Nm	

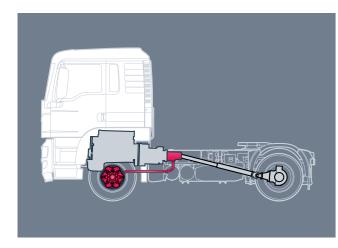
Euro 5 engines

	Type	Capacity	Rated output	Max. torque
D0834	R4	4.61	132 kW (180 hp)	700 Nm
	R4	4.61	162 kW (220 hp)	850 Nm
D0836	R6	6.91	184 kW (250 hp)	1 000 Nm
	R6	6.91	213 kW (290 hp)	1 150 Nm
	R6	6.91	251 kW (341 hp)	1 250 Nm
D2066	R6	10.5	235 kW (320 hp)	1 600 Nm
	R6	10.5	256 kW (360 hp)	1800 Nm
	R6	10.5 l	294 kW (400 hp)	1 900 Nm



40 Engines

WHEN THE CHALLENGE IS MORE TRACTION.



MAN HydroDrive® operating principle

MAN HydroDrive® - more traction as required

MAN, the inventor of MAN HydroDrive®, has in the meantime expanded the range and now offers a unique variety of versions from two-axle to four-axle vehicles with leading or trailing axles. MAN HydroDrive® means more traction and safety when driving into or out of construction sites and dirt roads, on slopes and slippery roads. The engageable hydrostatic front-wheel drive gives you the driving power you need in all these situations, forwards and in reverse. When you're driving downhill and the MAN HydroDrive® is engaged, the continuous brake also acts on the front axle, thus stabilising the vehicle. MAN HydroDrive® can also be engaged while driving and under load by turning the rotary switch. As far as fuel consumption and wear and tear are concerned, it is comparable to a conventional rear-wheel drive and weighs only slightly more. The design height remains unchanged, which means: easy access, low overall height, low centre of gravity and thus optimal driving stability. The MAN HydroDrive® is also available in combination with the automated manually operated MAN TipMatic® gearbox.

All-wheel drive for everyone

Wherever maximum traction is needed, that's where MAN vehicles with permanent or engage-able all-wheel drive go into action. They're available as 4x4, 6x6, 8x6 and 8x8 versions. The power is distributed by two-speed MAN transfer cases with on-road and off-road ratios. Planetary axles with greater ground clearance, differential locks, drum brakes and stabilisers are also fitted in the all-wheel-drive vehicles. A new feature on the MAN TGM is the optional electronic transfer case and lock management. This helps the driver to operate the vehicle on- and off-road as the conditions in terms of traction require and takes some of the load off the driveline. In the MAN TGX and TGS too the engaging and disengaging of differential locks is electronically monitored.



THE LATEST FROM THE MAN RANGE.

Small fire-fighting trucks

Туре	Max. gross weight (kg)	Wheelbase (mm)
TGL 8.150 - 220 4x2 BB, BL	7 4901)	3300/3600

Crew fire-fighting trucks and rescue unit crew fire-fighting trucks

Туре	Max. gross weight (kg)	Wheelbase (mm)
TGL 8.150 - 220 4x2 BB, BL	7 4901)	3300/3600/3900
TGL 10.180 - 250 4x2 BB, BL	10000	3600/3900
TGL 12.180 - 250 4x2 BB, BL	11 990	3600/3900
TGM 13.250 - 290 4x4 BL	13 0002)	3650/3950/4250
TGM 15.250 - 340 4x2 BL	15 000 ³⁾	3 525/3 825/4 125/4 425
TGM 18.250 - 340 4x2 BB, BL	18000	3 875/4 125/4 425
TGM 18.250 - 340 4x4 BB	18 000 ⁷⁾	3600/3900/4200/4500
TGS 18.320 - 500 4x2 BB, BL	18000	3 900/4 200/4 500
TGS 18.320 - 500 4x4 BB, BL	18000	3 900/4 500

Rescue and fire-fighting trucks

Туре	Max. gross weight (kg)	Wheelbase (mm)
TGM 13.250 - 290 4x4 BL	13 000 ²⁾	3650/3950/4250
TGM 15.250 - 340 4x2 BB, BL	15 000 ^{2), 3)}	3 525/3 825/4 125/4 425
TGM 18.250 - 340 4x2 BB, BL	18000	3 875/4 125/4 425
TGM 18.250 - 340 4x4 BB	18 000 ⁷⁾	3600/3900/4200/4500
TGS 18.320 - 500 4x2 BB, BL	18000	3 900/4 200/4 500
TGS 18.320 - 500 4x4 BB, BL	18000	3 900/4 500

Rescue trucks

Туре	Max. gross weight (kg)	Wheelbase (mm)
TGM 13.250 - 290 4x4 BL	13 0002)	3 650/3 950/4 250
TGM 18.250 - 340 4x4 BB	180007)	3600/3900/4200/4500

Fire-fighting equipment trucks

Туре	Max. gross weight (kg)	Wheelbase (mm)
TGL 8.150 - 220 4x2 BB, BL	7 4901)	3300/3600/3900
TGL 10.180 - 250 4x2 BB, BL	10 000	3600/3900/4200/4500
TGL 12.180 - 250 4x2 BB, BL	11 990	3600/3900/4200/4500
TGM 13.250 - 290 4x4 BL	13 0002)	3650/3950/4250
TGM 15.250 - 340 4x2 BB, BL	15 000 ³⁾	3 650/3 825/4 125/4 425
TGM 18.250 - 340 4x2 BB, BL	18000	3 875/4 125/4 425
TGM 18.250 - 340 4x4 BB	180007)	3600/3900/4200/4500
TGS 18.320 - 500 4x2 BB, BL	18000	3600/3900/4200/4500

Turntable ladders

Туре	Max. gross weight (kg)	Wheelbase (mm)
TGM 15.250 - 340 4x2 BB, BL	15 0003),4)	4 125/4 4258)

Telescopic rescue platform

Туре	Max. gross weight (kg)	Wheelbase (mm)
TGM 15.250 - 340 4x2 BB, BL	15 000 ⁴⁾	4 425/4 725/5 1255)
TGM 18.250 - 340 4x2 BB, BL	18000	4 425/4 725
TGS 18.320 - 500 4x2 BB, BL	18000	4500/4800/5100
TGS 26.320 - 500 6x2-2 BL	26000	4200/4500/4800 + 1350
TGS 28.320 - 440 6x2-4 BL ⁶⁾	28000*	4200/4500 + 1350
TGS 26.320 - 500 6x4 BB, BL	26000	4500/5100 + 1400
TGS 35.400 - 500 8x4-4 BL	35 000*	3900/4200 + 1350 +
		1 450

Swap body trucks

Туре	Max. gross weight (kg)	Wheelbase (mm)
TGL 8.150 - 220 4x2 BB	7 4901)	3300/3600/3900
TGM 18.250 - 340 4x2 BB, BL	18000	4 425/4 725
TGM 18.250 - 340 4x4 BB	18 000 ⁷⁾	4500
TGS 18.320 - 480 4x2 BB, BL	18000	4500/4800
TGS 26.320 - 480 6x2-2 BL	26000	4200/4500 + 1350
TGS 28.320 - 440 6x2-4 BL ⁶⁾	28000*	4200/4500 + 1350
TGS 26.320 - 480 6x4 BB, BL	26000	4200/4500 + 1400
TGS 33.320 - 440 8x6 BB	33 000	2980/3200 + 1400
TGS 41.500 8x6 BB	41 000	2980/3200 + 1400

- 1) Also available in load variants 5990 8800 kg
- 2) Also available in load variants 10000 16000 kg
- 3) Also available as load variant 11.99 t

Airport fire fighting trucks

	Туре	Max. gross weight (kg)	Wheelbase (mm)
	TGM 18.290 - 340 4x4 BB	18 000 ⁷⁾	3900/4200/4500 + 1400
	TGS 18.320 - 500 4x4 BB, BL	18000	3600/3900/4200/4500
_	TGS 26.320 - 500 6x4 BB, BL	26000	3600/3900/4200/4500 +
			1 400
_	TGS 26.320 - 500 6x6 BB	26000	3600/3900/4200/4500 +
			1 400
	TGS 33.320 - 500 6x4 BB, BL	33000*	3600/3900/4200/4500 +
			1 400
	TGS 33.320 - 500 6x6 BB	33000*	3600/3900/4200/4500 +
			1 400

- 4) Available as turntable ladder or telescopic rescue platform 16 t
- kg 5) Only available with leaf/air suspension
 - 6) With steered trailing axle 9 t

8) In special cases wheelbase up to 5125 mm

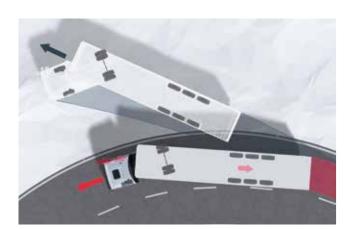
7) Can be loaded up to 18600 kg for fire-fighting use

*Max. gross weight

44 Range of vehicles

Range of vehicles

MAN ASSISTANCE EQUIPMENT.



ESP compensatory braking when vehicle is oversteered



ESP compensatory braking when vehicle is understeered

Electronic stability program (ESP)

ESP protects you from unpleasant surprises. ESP sensors medium to high speed range. The brake output level does constantly monitor the driving dynamics. If there is a risk of imminent skidding or tipping over, the individual wheels are braked accordingly and, where necessary, the engine torque is reduced. In this way ESP stabilises the vehicle and keeps it safely in the lane. MAN offers the electronic stability program for vehicles with leading or trailing axles and even for four-axle vehicles or articulated road trains.

is engaged. Thus you have all the benefits of ESP when driving on the road - a special gain for fire brigades during an alarm situation.

MAN BrakeMatic® brake system with ABS and ASR

The most important distance is the braking distance. To prevent any nasty surprises, the electronic brake system (EBS), including ABS and ASR, ensures reduced braking distances.

Continuous braking

EVBec®: As a further development of the MAN EVB engine using two independent sensor systems (radar and video) brake (Exhaust Valve Brake), the EVBec® has many advantages, e.g. an improved braking effect by controlling the exhaust gas back pressure, significantly increased brake output especially in the lower engine speed range, overhea- in 2016/2018. ting protection during long braking operations and constant brake output whether the engine speed is rising or falling. Three brake output stages are available.

The retarder is a hydrodynamic continuous brake integrated into the gearbox housing. Its brake output depends on the

driving speed, with the best performance achieved in the not depend on gearshifts or clutch operation. This increases driving safety during long descents by relieving the load on the service brake system.

Brake assistant

The brake assistant registers speed and pressure when the brake pedal is operated and optimises the applied brake ESP offers a particular advantage when the all-wheel drive pressure through to full brake force. It recognises an emergency stop when it is initiated and immediately develops the largest possible brake pressure.

Emergency Brake Assist (EBA)

As even a brief moment of distraction can lead to an accident, MAN has developed the anticipatory Emergency Brake Assist (EBA). It gives drivers an advance warning of impending collisions, providing them with valuable time to react. The system automatically initiates braking in an emergency. The optimised Emergency Brake Assist (EBA) features a more advanced traffic monitoring system by to detect a potential collision more quickly and to issue a warning signal earlier. EBA complies with the more stringent legal requirements for emergency braking systems starting

MAN EasyStart

With MAN EasyStart on the MAN TipMatic®, difficulties with hill starts become a thing of the past. The moving-off aid for slopes makes things easy for the driver. When the brake pedal is released, the brake pressure is maintained for one second so that the driver can change to the accel-erator and the vehicle can move off without jolting, with low wear and without rolling back.

Hill-climbing brake

The hill-climbing brake for MAN all-wheel-drive vehicles acts pneumatically on all wheels, holding the truck reliably when stopping and moving off and is controlled by the driver by means of a switch on hills. As opposed to systems rect steering gear ratio is adopted. that use spring reservoirs to brake only the rear axle, an MAN all-wheel-drive truck equipped with the hill-climbing brake can't slip.

Off-road logic for ABS

The terrain logic for ABS (ABS for off-road operation) partially prevents undesired ABS control behaviour at low speeds (15 km/h to 40 km/h) on loose or slippery ground (e. g. gravel, sand, snow). The loose ground is pushed together as a chock in front of the wheel and thus reduces - in comparison to the ABS function for on-road operation - the braking distance.

10-tonne front axle1

Depending on country-specific requirements, particularly powerful body concepts that require a bearing load of 10 tonnes on the front axle can be implemented.

MAN ComfortSteering²

MAN ComfortSteering helps the driver to steer and forms the basis of other assistance systems such as Lane Return Assist (LRA). Because the steering forces are adapted to the road speed, the strain is taken off the driver and there is ease of movement when manoeuvring and ability to stay in a lane at high speed. Irrespective of the axle configuration, a small steering wheel is fitted (Ø 460 mm) and a more di-



Functional principle EBA: advanced traffic monitoring by using two independent sensor systems (radar and video)

46 Assistance equipment Assistance equipment 47

¹ Available for MAN TGS from approximately September 2019. depending on the wheel configuration

² Available from mid-2019, depending on the vehicle type and



Vehicle behaviour with CDC



Vehicle behaviour without CDC

Active roll stabilisation CDC and high-load roll Xenon light for better vision stabilisation

With active roll stabilisation, dampers are automatically regulated by the CDC (Continuous Damping Control). This prevents the development of rolling or pitching movements, and thus makes driving safer. For vehicles with high centres homogeneous without dazzling oncoming traffic. of gravity, high-load roll stabilisation with an additional X control arm is ideal. This ensures that sideways tilting is Automatic low-beam headlights and automatic wiper effectively reduced.

Emergency Stopping Signal (ESS)

Instead of the brake lights simply coming on, the Emergency Stopping Signal (ESS) warns traffic behind of emergency braking using the hazard lights. These flash faster to The automatic wipers with rain sensor are activated as alert traffic behind to the emergency. Once the vehicle is stationary, the hazard lights are automatically activated to prevent rear-end collisions. The ESS therefore helps to enhance road safety.

The combination of Xenon light and free-form reflectors casts a whole new light on the road. The luminance of the long-lasting Xenon lamps results in a wide stretch of road being illuminated. Illumination in this area is bright and

system with sensors

The automatic low-beam headlights with light sensors activate and deactivate the front, side and rear lights as needed. Dawn and dusk, tunnels and bridges are also detected and the lighting is regulated accordingly.

soon as visibility is affected by water or dirt. The optimum wiper speed is then set automatically depending on the situation. The control system can detect all kinds of visibility conditions such as rain, splashes, streaks or dirt.

Cornering light

The cornering light supplements the normal low-beam headlights at speeds of up to 40 km/h. It is activated when the driver operates the indicator or – on vehicles fitted with ESP – when the steering wheel is turned far enough. This lower energy consumption than conventional lightbulbs. improves visibility in the dark and in foggy conditions as well as providing additional lighting on the side of the vehicle to prevent injuring persons or causing damage when cornering.

LED daytime driving lights

Twin headlights with integrated LED daytime driving lights (in compliance with the requirements of Directive ECE R-87) day compared with daytime driving lights with H7 lamps, thereby improving active safety. The lights are turned on and off automatically with the ignition and are dimmed to the maximum permitted luminance if other lights such as This equipment can be ordered ex works. the low-beam headlights or indicators are switched on not however if only the headlight flasher is actuated. The high level of light intensity of the long-lasting LED daytime driving lights gives the vehicle a modern look.

LED rear lights

With tail lights in an LED design, burnt-out lightbulbs and the associated compromised safety and maintenance costs can be avoided. LED lights have a longer service life with

Turning camera

Critical situations when turning or manoeuvring should be recognised early on the difficult-to-view right side of the vehicle. A camera on MAN trucks extends the visible area to the blind spot. The monitor is in the field of vision when looking to the right in the mirror and helps the driver to better view the area next to the vehicle. It recognises whether, for make the MAN TGS and MAN TGX easier to see during the example, cyclists or smaller vehicles are located directly next to the driver's cab and, when manoeuvring, obstacles stand out better. The system is activated automatically whenever the right-hand indicator is switched on.



Cornering light for better visibility



LED daytime driving lights



LED rear lights

Assistance equipment 49



THE VERY BEST MOBILE FIRE PROTECTION.

Reliable support in the event of fire and emergency response – the MAN TGE!

Fire brigade fleets must always be able to react flexibly in the heat of the moment. As a panel van or chassis with body, the MAN TGE with its variable options for bodies and expansion is ready for the most widely differing variants of emergency services vehicle, from individual bodies for extinguishing and rescue purposes to crew transporters with space for up to nine people.

Innovative vehicle technology such as the standard EBA advanced emergency braking system and the optional eightspeed automatic gearbox help you when driving in emergency situations and get you directly and quickly to the site of your next operation.

For use of auxiliary devices for smaller rescue and clean-up operations, we can integrate a PTO (output up to 40 kW) on request.







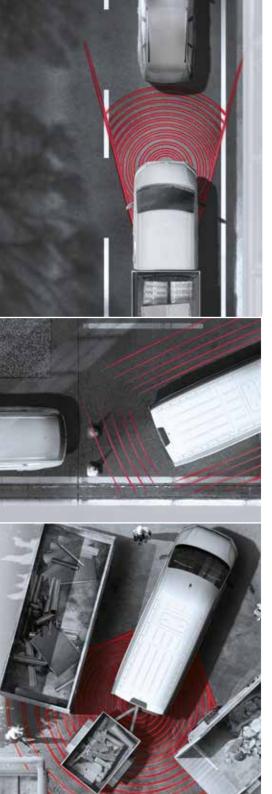
FULL COMMITMENT IN RESCUE SERVICES.

People rely on you 24/7 - and you can rely on the new MAN TGE.

Permanently ready for operation. Whatever the weather, at all times of day, no matter what season of the year. That's what distinguishes reliability – both yours and that of the MAN TGE.

Even under the worst weather conditions, the optional all-wheel drive will always keep you moving ahead safely. You are also supported by the optional eight-speed automatic gearbox and numerous innovative driver assistance systems.

With the new "ergoComfort" air-suspended seat you are ideally seated, even in long shifts, and can relax and concentrate on your work.



INNOVATIONS AND SAFETY.

You are needed - and you need a team that you can rely on.

This is why the new MAN TGE is equipped with a variety of innovative safety systems: within the limits of the respective system, they provide you with the greatest possible assistance in all situations. This enables you to focus fully on your mission, even when things get hectic.

Emergency brake assist (EBA) as standard equipment

If the MAN TGE is approaching an obstacle and the driver doesn't react, as-standard emergency brake assist warns the driver and then activates the brake in case of an emergency. In combination with the automatic transmission, the system automatically brings the vehicle to a complete stop to prevent a collision.

Rear-view camera1

The rear-view camera sends a video image to the media display whenever reverse gear is engaged. In conjunction with static grid lines, one has a complete overview when reversing and is in the best possible position to avoid collisions and damage.

Side wall protection assist¹

360° optical vehicle surveillance with lateral protection. Sixteen ultrasonic sensors monitor the distance to objects on either side of the vehicle and in an emergency warn the driver of objects close to the MAN TGE. At the driver's seat, a convenient display shows objects all around the vehicle and indicates potential collision risks when changing lanes. An acoustic signal also warns the driver of collision risks.

Trailer assist1

This system can be activated when required. When reversing with a trailer, the MAN TGE automatically follows a previously set turning angle. The driver controls the acceleration and braking only, while the steering is automatically controlled by the vehicle.

DRIVE AND ENGINES.

These engines specially developed for the tough demands of commercial vehicle use combine a long service life with impressive power and low fuel consumption.

Any of the available transmissions and engines will deliver outstanding performance, high efficiency and superb reliability even under extreme driving conditions.

2.0 I (75 kW, 300 Nm):

Front-wheel drive

Average consumption: from 7.4 I/100 km

CO₂ emissions¹: from 193 g/km

2.0 I (90 kW, 300 Nm)2:

Rear-wheel drive with dual tyres

2.0 I (103 kW, 340 Nm)3:

Front-wheel drive, rear-wheel drive and all-wheel drive 4×4

Average consumption: from 7.4 I/100 km

CO₂ emissions¹: from 193 g/km

2.0 I (130 kW, 410 Nm):

Front-wheel drive, rear-wheel drive and all-wheel drive 4×4

Average consumption: from 7.5 l/100 km $\,$

CO₂ emissions¹: from 196 g/km



Optional equipment at extra cost¹

¹ For models with standard wheelbase and high roof

² Data not available at the time of printing

³ Not available in conjunction with dual tyres

VEHICLE LINE-UP.

MAN TGE Panel van

	Standard	Long	Extra-long
	Length:	Length:	Length:
	■ Total: 5986 mm	■ Total: 6836 mm	Total: 7391 mm
	Loading compartment:	Loading compartment:	Loading compartment:
	3 450 mm ¹	4 300 mm ²	4 855 mm ³
	Wheelbase: 3640 mm	Wheelbase: 4490 mm	Wheelbase: 4490 mm
Normal roof			
Height: 2355 mm			
Interior height: 1726 mm			
High roof			
Height: 2590 mm			All I
Interior height: 1961 mm			0
Super-high roof			
Height: 2798 mm		400	400
Interior height: 2 189 mm		0	

Dimensions refer to models with front-wheel drive, except for vehicles with extra-long chassis.

56 MAN TGE 57

MAN TGE Chassis

	Standard	Long	Extra-long
	Length: 5996 mm	Length: 6846 mm	Length: 7211 mm
	Wheelbase: 3640 mm	Wheelbase: 4490 mm	Wheelbase: 4490 mm
	Max. body length:	Max. body length:	Max. body length:
	■ Chassis cab: 3 750 mm	Chassis cab: 5570 mm	 Chassis cab²
	Crew cab: 2700 mm	Crew cab: 4300 mm	
Chassis cab	<i></i>	<u>/=</u>	<u>/=</u>
Height: 2305-2327 mm			
Crew cab			
Height: 2321-2352 mm	Annual Control	All III	

¹ Length measured at the vehicle floor incl. subfloor storage compartment extending past the divider wall. Loading length in the upper area of the loading compartment: 3 201 mm.

² Data not available at the time of printing.

OPTIMISING USE DOWN TO A TEE.

Whether in urban distribution transport or interurban deliveries, efficiency and productivity are the key to success in domestic and global competitive markets. For over a century we have been manufacturers of trucks and buses as well as technological leaders in the transport business.

Digitalisation also offers this sector great new opportunities. With MAN DigitalServices we simplify your fleet business, making it more efficient and more reliable so that you have more time to concentrate on your core business.

To this end, we work closely with our partner RIO, the open, manufacturer-independent and cloud-based digital platform from TB Digital Services GmbH, a company of the TRATON GROUP. This makes it especially easy to start using digital services for fleet management. The prerequisite for using digital services is that vehicles are equipped with the RIO Box. This is simple to retrofit in trucks from all manufacturers.

MAN DigitalServices assists you in optimising your vehicle analysis and performance, maintenance management and driver performance. After registration for using the services and registration of the vehicle, the basic service MAN Essentials is automatically activated free of charge. This service already includes reliable information on trip history as well as vehicle-specific deployment analysis. For efficient and reliable maintenance management you can simply book MAN ServiceCare as well – straightforward and free of charge.

Via the Marketplace, which is the RIO platform online portal, you can access numerous tailor-made, vehicle-specific digital services from MAN exclusively for MAN vehicles. For information, go to: www.digital.man

Fleet management	Maintenance management	Driver deployment	Driver assistance	
 MAN Essentials 	 MAN Maintenance 	MAN Perform	MAN Driver App	
MAN Advance	MAN ServiceCare	 MAN Compliant 		
MAN Bridge		 MAN Connected CoDriver 		

The MAN Driver app:

Make your everyday work as a driver easy and networked with a wide variety of functions such as scanning the switches and check lamps in the truck and getting an explanation of their functions sent directly to your smartphone. You can also document digital damage reports and send them to the fleet manager. Using MAN ServiceCare you can send damage reports to your MAN service outlet, if required.

Find out more: www.digital.man/driverapp





YOUR TRUCK IN THE BEST HANDS.

Maximum quality over the maximum possible vehicle service life and excellent availability - this is our promise to you.

With a wide-ranging portfolio of services, we offer 360° support that is both efficient and reliable. You can rest assured at all times: your MAN truck is in the best hands with us. MAN services offer everything your coach needs, meaning that your MAN trucks are always operated in the best possible conditions and that you can get the most out of your vehicles for even longer. With MAN ServiceContracts or MAN Mobile24, your mobility is our concern. That is true of our additional services too. MAN services, for instance, have tailored solutions on hand to optimise operating your vehicles, increase profitability and enhance efficiency. Whatever service you choose, you're always on the right road with MAN.

The quickest way to find out more: www.truck.man

All information on our products, services and other service topics such as MAN ServiceContracts, MAN Card, MAN ProfiDrive®, MAN Financial Services and MAN Mobile24, etc. can be found on our website www.truck.man – discover the MAN brand interactive and up close.



^{*} The services offered as part of the joint business relationship "MAN Financial Services" (financing, leasing and insurance products) vary from country to country. They are provided or brokered by various subsidiaries of Volkswagen Financial Services AG.

MAN ProfiDrive®.

The MAN ProfiDrive® driver training programmes and Higher quality, more time: new two-year warranty on MAN corporate coaching modules bring you up to speed, making day-to-day driving safe. The support and training programmes on offer give you additional opportunities to optimise your commercial environment.

MAN | Financial Services

MAN Financial Services*

help you to stay financially mobile. Moreover, our truck rental service makes it possible to be more flexible in responding to shortages or increased demand.

- MAN Card Europe-wide non-cash payments
- Financing Acquisition of property through flexible financing solutions
- Insurance Insurance solutions for commercial vehicles
- Leasing Budget-friendly leasing models
- Rental Vehicle rental with a flexible contract term

MAN | Service



service and parts.

- MAN Genuine Parts: top quality, long service life and availability ensured
- MAN Genuine Parts ecoline: enjoy more savings and protect the environment in the process with reconditioned MAN Genuine Parts from MAN, the manufacturer or external service providers
- MAN Genuine Accessories
- MAN Genuine coolant & lubricant:

MAN Genuine coolants and lubricants provide proven protection against wear and thus contribute to a longer service life and to a reduction in the total cost of ownership (TCO)

- MAN Mobile24: Europe-wide breakdown service for trucks
- MAN ServiceContracts: service agreements covering service and inspection

tasks on the maintenance schedule. Depending on the add-on option, different modules such as contract management, driveline guarantee and wear-and-tear repairs can be included.

MAN guarantee extensions: guarantee extension for driveline and complete vehicle

MAN | TopUsed

- Top used vehicles: large selection of high-quality used vehicles of all truck types
- As a reliable partner we represent top quality, top advisory service, top selection, top financing, top
- MAN TopUsed extended warranty: Driveline guarantee with 0% customer contribution, MAN driveline guarantee PLUS, complete vehicle warranty with 20% customer contribution
- MAN TopUsed Seal of Quality: Whether one, two or three stars: thanks to our Seal of Quality, you can identify the most important features of our MAN TopUsed vehicles at a glance.
- MAN TopUsed used trucks, buses/coaches, vans and trailers: To find the used vehicles of all brands and types that we have on offer, go to www.mantopused.com

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