

MAN Truck & Bus AG

Dachauer Straße 667

80995 München

www.truck.man

D111.3563/E - ot 08171 - Printed in Germany
Texts and illustrations are non-binding. We reserve the right to make
modifications for reasons of technical progress. All specifications in this
publication represent the status at the time of going to press.

MAN Truck & Bus – a member of the MAN Group

TANK AND SILO VEHICLES.

Efficiency on board.



EFFICIENCY - STANDARD IN EVERY MAN VEHICLE.

MAN vehicles guarantee fluidity - also with bulk goods. MAN trucks are the perfect choice for transporting fluids, as well as silo transport. Reliable deliveries just in time, high payloads with low fuel consumption, maximum efficiency in operation and maintenance: these are the focal demands on vehicles. Our trucks from the MAN TGL, TGM, TGS and TGX series combine dynamic driving performance with excellent handling and exemplary comfort, not forgetting high levels of safety.

Irrespective of whether in local, distribution or long distance transportation: our highly efficient trucks guarantee the decisive advantage for your company.

www.truck.man





CONTENT

MAN TGL/MAN TGM	Page 4
MAN TGS	Page 6
MAN TGS-TS	Page 8
Transport of dangerous goods	Page 10
ADR equipment for dangerous goods transports	Page 12
MAN Modification	Page 14
Cabs	Page 16
Assistance systems	Page 22
Driveline	Page 26
Engines	Page 30
Range of vehicles	Page 31

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



WHEN COMPACT PERFORMANCE IS THE ACE IN THE HAND.

Irrespective of whether for liquid foodstuff or for heating oil and fuel, MAN has the right vehicle for local and distribution transport.

Sometimes the roads in cities, towns or villages are very tight, narrow and winding. The demand then is for highly manoeuvrable vehicles. Vehicles such as the MAN TGL and TGM - trucks that pack a payload and are top in their weight class from 7.49 to 26 tonnes. Fitted with the compact C driver's cab or the larger L driver's cab, they provide the driver with a working environment that is as comfortable and ergonomic as you could want.



A robust model is the MAN TGM with a powerful six-cylinder engine of up to 251 kW (340 hp) – perfect for solo and light trailer operation. Optionally available with steered, liftable trailing axle. It results in a longer technical wheelbase which increases the front-axle load and optimises the good steering qualities of the vehicle, whatever the load.

→ This results in:

- C and L cabs perfectly matched to vehicle deployment
- High payloads from the two-axle MAN TGL and TGM on the road.
- MAN TGM 26-tonne vehicle in a three-axle version with steered and liftable trailing axle for high payloads and optimum manoeuvrability.





TOP CLASS IS STANDARD.

A class of its own with regard to payload and manoeuvrability: the MAN TGS in a 26-tonne version with steered trailing axle.

If you couple a tank to the MAN TGS, then you have combined optimum volume with excellent manoeuvrability - ideal for larger deliveries. Fitted out with the optional, eight-tonne steered trailing axle, it allows an increased payload with a greatly reduced turning circle. MAN supplies the perfect 4x2 or 6x2 chassis with a completely free right-hand side for the customer's fittings cabinet. The engageable hydraulic front-axle drive, MAN HydroDrive®, ensures impressive dynamic and application-related traction. It is designed for operations with occasional off-road sections and for situations where additional traction is required on the front axle.



Clearance on the right with relocated exhaust silencer

Battery box in the frame overhang
(on short wheelbase models with maximum tank and free right-hand side)



6 MAN TGS

→ **The MAN TGS offers many benefits:**

- MAN TGS three-axle vehicle with trailing axle for optimum manoeuvrability.
- Excellent vehicle steering characteristics at all load levels
- MAN TGS chassis available with leading axle or tandem-axle assembly
- Ergonomic M and L cabs with more room to move around
- Installation flexibility for the fittings cabinet on the right-hand side. Free right-hand side with exhaust system on the left-hand side. On short wheelbase models, the battery box shifts into the frame overhang.



MAXIMUM PAYLOAD. MAXIMUM EFFICIENCY.

If one weighs less, one can carry more. Because every additional kilo of payload counts, the MAN TGS makes it easy for you to load a lot more.

The perfect mixture of payload and efficiency makes the MAN TGS-TS unrivalled by its competitors. It provides maximum efficiency with "ease", even on difficult mountain roads. With equipment suitable for the segment, the 4x2 tractor weighs* less than 6600 kilograms. A weighty benefit which is especially important for tank and silo transport, and for all types of transport where every additional kilogram of payload counts.

Amazingly economical dead weight, combined with high comfort and safety standards: the MAN TGS-TS is a semitrailer tractor that leaves nothing out. Except for excess pounds. Even the equipment and fittings in the comfortable M, L and LX driver's cabs are top notch. To reduce the weight even more, there is a basic, static co-driver's seat, which is approximately 20 kg lighter than a basic, air-sprung seat. The co-driver's seat can also be omitted if desired. Thus you can save still more weight and gain more space.

* with driver, tools and fuel, fitted with the lightest tyres.





Only from MAN: silo compressors ex works.

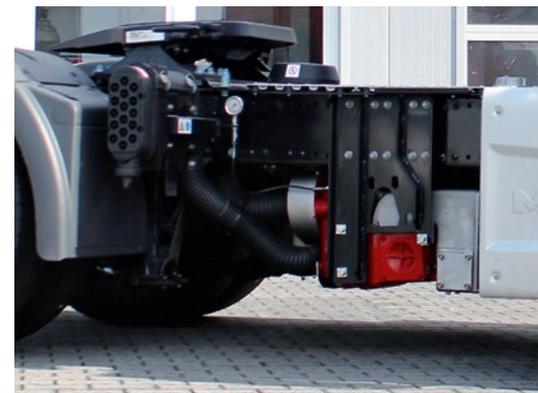
So you never run out of air when you are unloading, MAN is now the first commercial vehicle manufacturer to provide silo compressors ex works. We can offer compressor units from GHH Rand. Fine-grained materials such as cement, gypsum and others should utilise the CG600 and CG580 light versions. If large-grained materials are involved, the CS700, CS1050 units or CS750 and CS1200 light versions are recommended. These units are also available with intercooler (IC) for temperature-sensitive materials. The compressor unit installation on the vehicle allows many different combinations of tank volumes, compressor and loading volume. A special extra: MAN service outlets also carry out work on the GHH Rand compressors.

→ Benefits as standard:

- MAN TGS-TS 4x2 semitrailer tractors with extremely low dead weights
- Payload optimised segment-related equipment package
- High safety standard
- Comfortable M, L, and LX driver's cabs
- Silo compressors dependent on requirements ex works



Silo compressors ex-works





SAFETY FIRST IN THE TRANSPORT OF DANGEROUS GOODS.

Irrespective of whether it's heavy or light oil, toxic chemicals, flammable acids or explosive gas: MAN trucks for transporting dangerous goods comply with all ADR provisions - and set the standards for the highest safety.



There are a lot of hazardous materials which are transported every day on our roads. Dangerous goods transport is classified as the transport of materials that are hazardous for the public and the environment. It is a good thing then that an international set of regulations, ADR, specifies hazard classification, labelling and transportation regulations for these goods in detail – this contributes greatly towards keeping us all safe. From the compact MAN TGL to its big brother MAN TGX, MAN can on request deliver every vehicle with the requisite ADR classification for the transport of fuel, heating oil, gas and all other fluid or gaseous substances. Suitable PTOs are optionally available for all types of application.



→ **Safe on the road:**

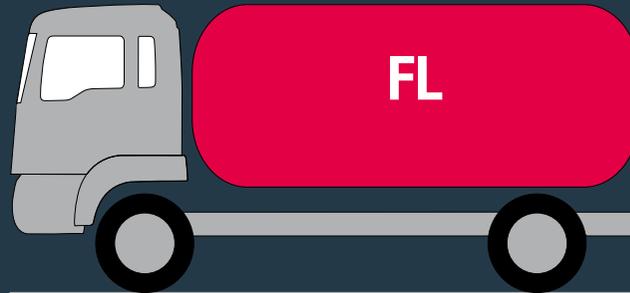
- A chassis for every body - with two to four axles
- Three-axle MAN TGM and TGS with steered trailing axle with optional weight distribution and high manoeuvrability
- ADR equipment for the transport of dangerous goods
- Suitable PTO for high torque and power transmission of the engine-dependent PTO as a gearbox-independent PTO for maximum performance



AT → Non-explosive materials, excluding EXIII, FL or OX.



EX/III → Explosive materials (class 1), incl. equipment for classes EX/II, FL, AT.



FL → Fluid or gas-based materials in tanks and demountable tanks, incl. AT class equipment.



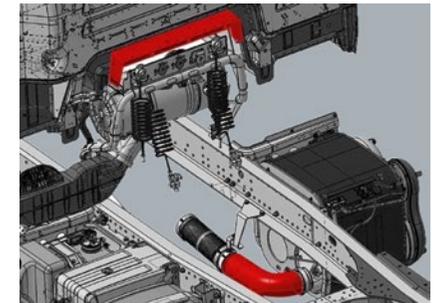
OX → Hydrogen peroxide, stabilised or in aqueous solutions, incl. AT class equipment.



EX/II → Explosive materials (class 1), incl. AT class equipment.



Digital tachograph



Fire skirt for tankers



Tanker socket at frame end

ADR EQUIPMENT FOR DANGEROUS GOODS TRANSPORTERS EX WORKS.

Digital tachograph

The digital tachograph is a control unit corresponding to current Regulation (EC) No.1360/2002, suitable for two-driver operation. The TW (TW = tanker, explosion-protected) version can be used for ADR classes FL and EXII/EXIII. It works in a 30-second cycle and offers an improved display of driving time and rest periods as well as a manipulation-proof driving signal sensor. As it is fully installed ex works, reliability and cost effectiveness are increased thanks to the guaranteed functional reliability of the digital tachograph and the speed sensor. Remote download makes the recording and archiving of data from the driver card and mass storage unit easier and safer for the operator. Thanks to its suitability for two-driver operation and for dangerous goods equipment in accordance with ADR, plus additional availability of engine speeds and further status signals for the operation of additional equipment, the vehicle can be used in several sectors.

Fire skirt for tankers

The fire skirt for tankers is a piece of dangerous goods equipment in accordance with the ADR regulation. It comprises covers for parts of the exhaust system for ADR-type tankers EX/II and EX/III that serve as heat protection (heat shield). These covers prevent heat from causing a hazard during loading and prevent the temperature within the interior wall surfaces of the load space from heating up to more than 80°C. No retrofitting is required, as the ex-works dangerous goods equipment meets the ADR regulation.

Tanker socket at frame end

A 15-pin, 24-V tanker socket can be provided at the frame end for the dangerous goods/ADR equipment.

Battery emergency cut-off switch

The battery emergency cut-off switches allow the batteries to be disconnected from the vehicle electrical system quickly and enable the engine and all units to be switched off in the event of danger (escape of ignitable gas-air mixtures). Switching off is possible both outside and inside the cab. The equipment includes a battery emergency cut-off switch on the mudguard (driver's side) and on the centre console in the cab. The cabling conforms to ADR regulations and the operating temperature range is between -40°C and +80°C. The battery emergency cut-off switch complies with GGVSEB and ADR regulations.



AS INDIVIDUAL AS YOUR REQUIREMENTS.

Special requirements require special solutions. MAN Modification delivers customers' special requests that cannot be implemented in series production.

MAN Modification takes individual customer requests and implements them in a professional manner with technical perfection. The range of potential vehicle modifications is almost unlimited. Whether in terms of the cab, chassis, driveline, electronics or the body, tailored solutions are implemented not only for specific individual requirements but also for the entire vehicle. Solutions include those for milk tankers and tanks on which the right-hand frame side either partially features attachments or omits them completely.

We offer MAN Modification at several locations across Germany. Conversion work is carried out at specially qualified facilities in accordance with MAN standards.



Roof lowering

→ Modifications for tank and silo applications:

- Right-hand side of frame free for side loader mounting
- On short wheelbase models, the battery box shifts into the frame overhang.

THE CHOICE IS YOURS.

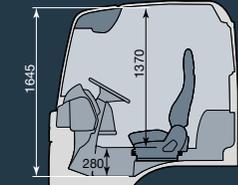
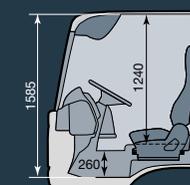
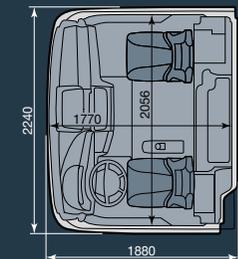
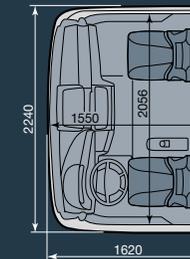
The right cab for every need – and a maximum level of comfort and ergonomics travels with you wherever you go.

MAN cabs are designed to facilitate fatigue-free, concentrated driving and relaxing recovery. And safety, of course. All cabs meet the crash safety requirements, comply with the ECE-R29 Directive and offer optimum passenger protection. The many useful details such as the washable door interior cladding, the easy-care fittings, the compressed-air connection that turns cleaning into such a simple job and the optional headlight washer unit make it clear: nothing has been forgotten. This includes, for example, optimum all-round visibility.

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

C cab

M cab



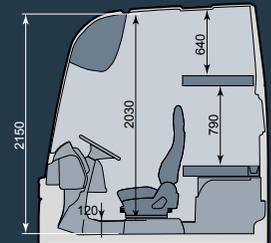
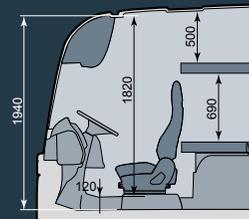
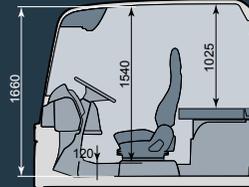
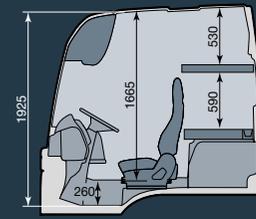
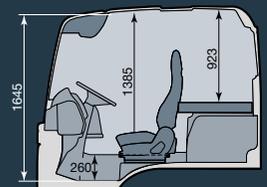
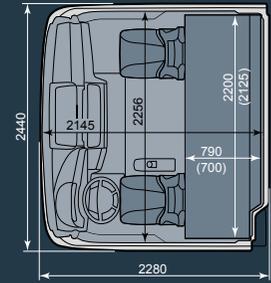
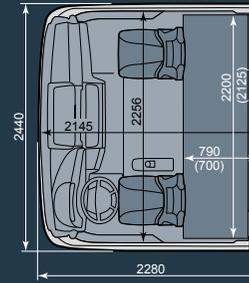
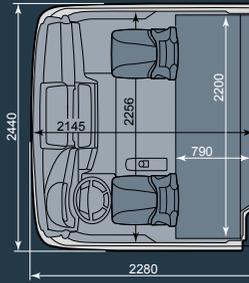
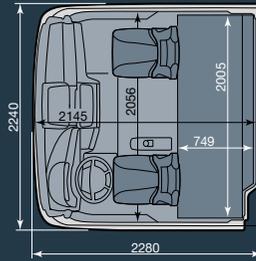
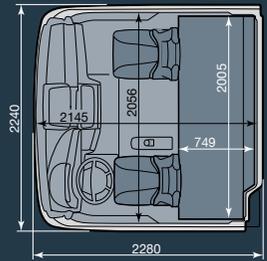
L cab

LX cab

XL cab

XLX cab

XXL cab





GREAT VIEWS. ON EVERY DRIVE.

Starting in 2018, MAN vehicles can expect numerous new 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 new seat covers have already been lending the cab a comfortable yet stylish atmosphere.

As of 2018, 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 (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 new 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 new function-based switch layout and the colour display offer the driver a modern, ergonomic work place. In the MAN TGX, comfort and working conditions for the driver have been improved thanks to the reduction in interior noise by 1.5 dB compared to the previous series.



“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.



Enhanced colour display in the instrumentation



Neat switch layout



Rearranging the TipMatic switch and parking brake creates additional space

MAN infotainment system

MAN offers some improved features with the new infotainment system. The standard MAN Media Truck variant includes a 5" TFT display with touch-screen 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 new "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.

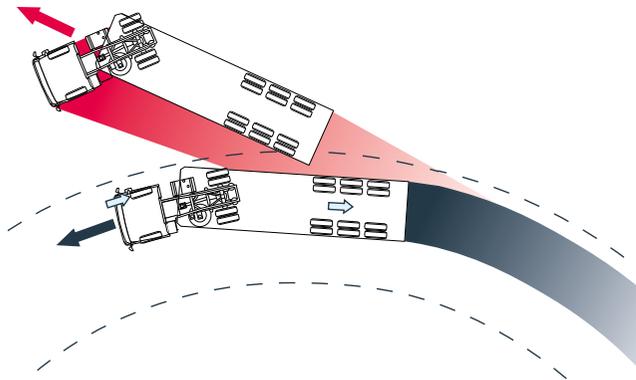


MAN Media Truck Navigation

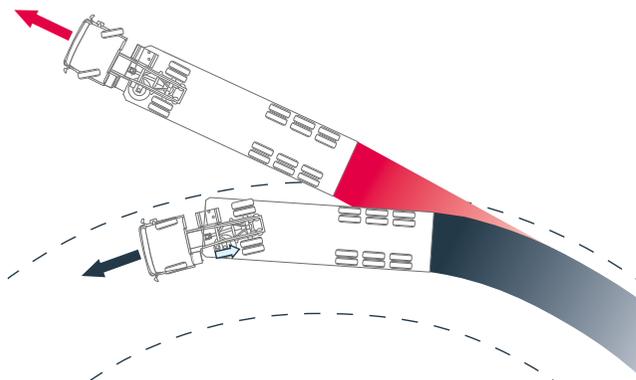


Function "Mirror Link"

MAN DRIVER 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 constantly monitor the driving dynamics. If there is a risk of imminent skidding or tipping over, the separate 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. ESP offers a particular advantage when the all-wheel drive 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.

Brake assistant

The brake assistant registers speed and pressure when the brake pedal is operated and optimises the applied brake 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 using two independent sensor systems (radar and video) 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 in 2016/2018.

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 accelerator and the vehicle can move off without jolting, with low wear and without rolling back.

Lane guard system LGS

The electronic lane guard system permanently monitors the lane ahead of the vehicle. If drivers stray from the lane without activating a flasher, they are warned by an acoustic signal. Depending on the direction in which the driver has strayed, the loudspeaker on the left- or right-hand side emits rumble-strip noise, which the driver intuitively understands correctly. LGS increases the driver's awareness of staying in the lane, thus preventing many a dangerous situation.

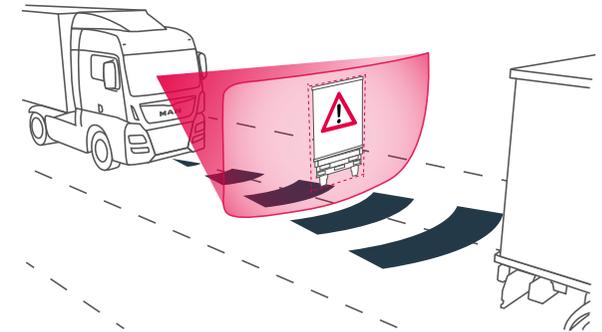
MAN AttentionGuard

MAN AttentionGuard detects signs of reduced driver alertness at an early stage, and warns the driver accordingly. A second-generation (or higher) Lane Guard System is required for this system to work. The MAN AttentionGuard is a key factor in preventing the driver from accidentally leaving the lane on monotonous stretches of road – one of the typical causes of accidents. The MAN AttentionGuard also works when driving at night.

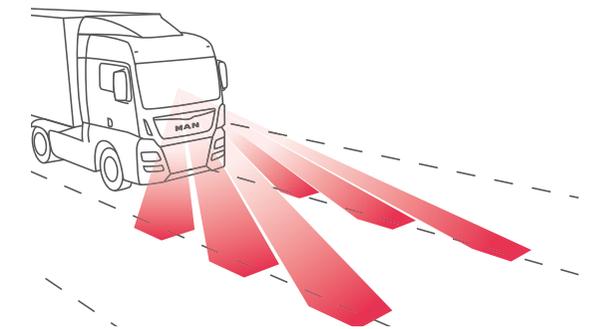
Adaptive Cruise Control (ACC)

Adaptive cruise control automatically evaluates the distance and differential speed of the vehicle in front and ensures a safe distance through electronic intervention in the accelerator or brake pedal. ACC can be used at driving speeds from 25 km/h and helps the driver to stay relaxed while driving.

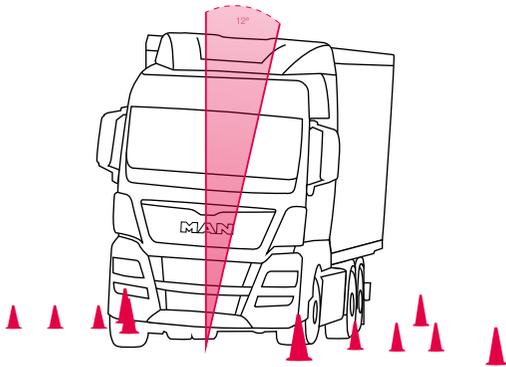
A new feature is the stop-and-go function in conjunction with the MAN TipMatic® 12+2 gearbox. In slow-moving traffic, congestion or when driving in city traffic, the truck automatically brakes to a stop behind the vehicle in front, and either moves off again independently (when the truck is stopped for fewer than two seconds) or when the driver depresses the accelerator or presses the button on the multi-function steering wheel.



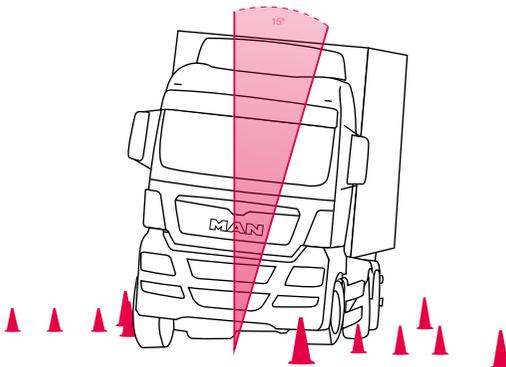
Functional principle EBA: advanced traffic monitoring by using two independent sensor systems (radar and video)



LGS for staying in the lane



Vehicle behaviour with CDC



Vehicle behaviour without CDC

Active roll stabilisation CDC and high-load roll 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 of gravity, high-load roll stabilisation with an additional X control arm is ideal. This ensures that sideways tilting is 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 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.

Xenon light for better vision

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 homogeneous without dazzling oncoming traffic.

Automatic low-beam headlights and automatic wiper 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. The automatic wipers with rain sensor are activated as 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 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

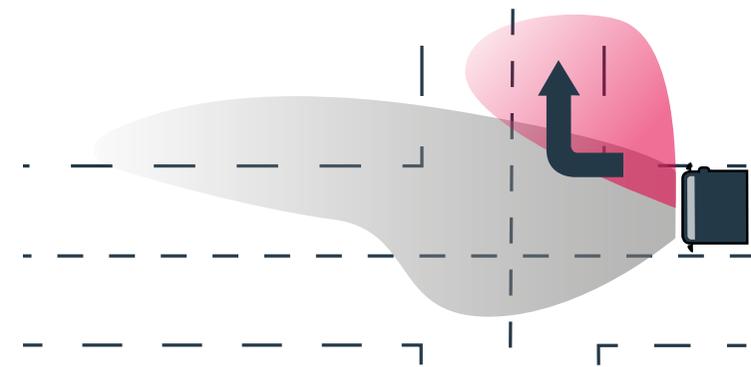
Twin headlights with integrated LED daytime driving lights (in compliance with the requirements of Directive ECE R-87) make the MAN TGS and TGX easier to see during the day compared with daytime driving lights with H7 lamps, thereby improving active safety. The lights are turned on and off automatically with the ignition and are dimmed to the maximum permitted luminance if other lights such as 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.

New 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 lower energy consumption than conventional lightbulbs.

Manoeuvring light

A manoeuvring light is available as an option to assist night-time manoeuvring and cornering. The illuminated area coincides with the field of vision of the ramp mirror. This enables the driver to safely establish the condition and edge of the road and any obstacles in the dark. Active safety during manoeuvring is improved.



Cornering light for a better visibility



LED daytime driving lights



LED rear lights



THE MAN DRIVELINE.

Continuous braking

EVBec®: as a further development of the MAN EVB engine 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, overheating protection during long braking operations and constant brake output whether the engine speed is rising or falling. Three brake output stages are available.

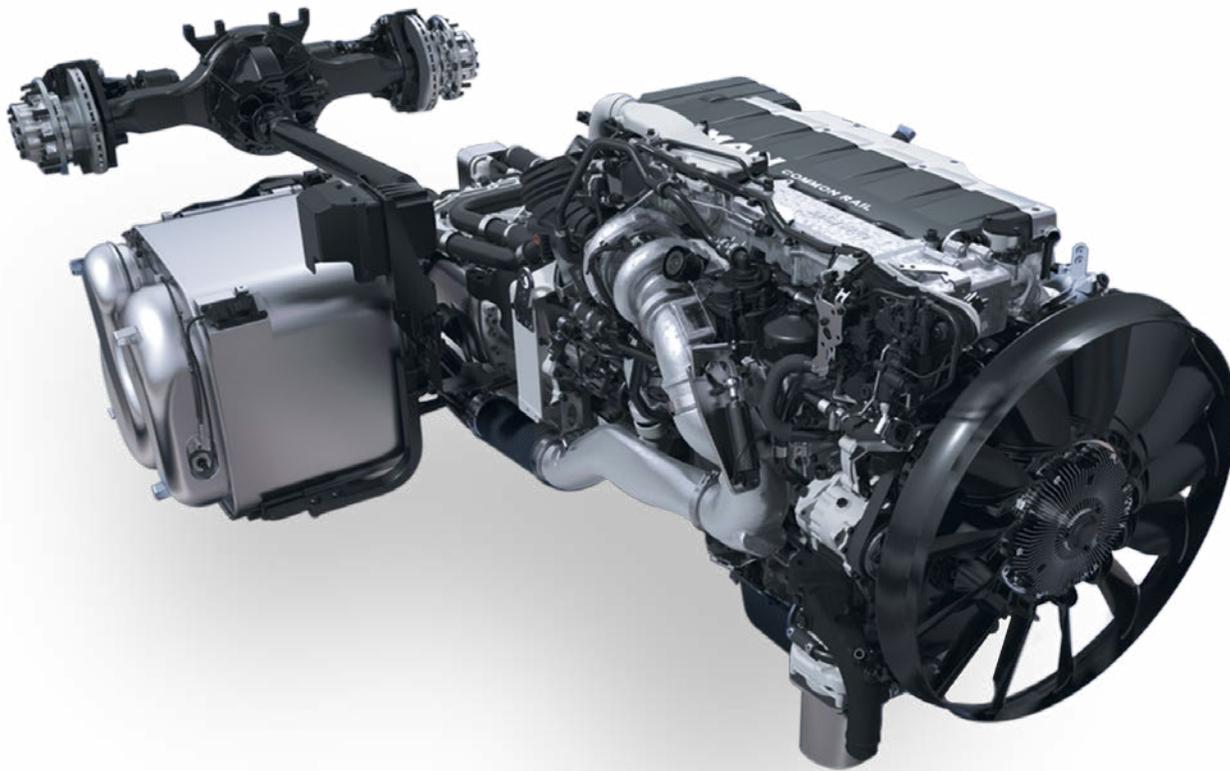
The retarder is a hydrodynamic continuous brake integrated into the gearbox housing. Its brake output depends on the driving speed, with the best performance achieved in the medium to high speed range.

The brake output level does not depend on gearshifts or clutch operation. This increases driving safety during long descents by relieving the load on the service brake system.

With the innovative MAN PriTarder®, the MAN TGS comes with a highly efficient primary brake system that is one of a kind. The combination of EVBec® engine brake and MAN PriTarder® means that an enormous brake output of up to 620 kW is already produced at low driving speeds. The MAN PriTarder® really demonstrates its strengths in distribution or traction: the completely maintenance-free system increases the payload by up to 64 kg while doubling the brake lining service life of the service brake. The MAN PriTarder® is integrated into the MAN BrakeMatic® electronic continuous brake management and is easy to operate via the stalk switch.



MAN PriTarder®.



MAN TipMatic®

It is extremely easy to change gear correctly with the automated MAN TipMatic®, because it can be operated in automatic mode as well as manually using the tilt lever. There is a six-gear version for the four-cylinder engines and a 12-gear version for the six-cylinder engines. The MAN TipMatic®, which is specially tailored for construction site deployment, permits the convenient use of automatic mode even in off-road environments. Simply set the selector switch to „Dx“ and you'll find that the gear shifts are noticeably faster, while the engine speed range in each gear is more fully utilised. The new generation MAN TipMatic® adds new functions to the convenient and efficient automatic gearbox.

SmartShifting increases the shifting speed intelligently by adapting it to the respective driving situation and depending on the driver's request, the mass of the vehicle and the driving resistance. The advantages are an extremely fast and convenient gearshift process. SmartShifting works even faster when skipping multiple gears and on steep uphill gradients with upshift assistance (HSU). Here, the engine speed drops faster when the clutch is disengaged, due to the closing of the exhaust throttle valve. This realises a shorter interruption of the tractive force on uphill gradients because the frictional connection can be restored quickly. The truck loses less momentum. In this way, SmartShifting supports fuelsaving operation with lower engine speeds in the higher gears. In the traction segment, shorter interruptions of tractive force are noticeable on inclines.

MAN EfficientCruise® + EfficientRoll

Both systems can now be combined.

MAN EfficientCruise® uses 3D map data and the vehicle's GPS position to calculate the topography of the route and determine the required fuel injection. That means independent and proactive speed regulation before and on inclines and slopes. The driver can choose speed tolerances for optimal consumption values from four field-tested levels, of course making it easy to use for maximum driving comfort.

EfficientRoll is designed for gently sloping motorways and principal roads.

The MAN TipMatic® then automatically shifts into neutral and lets the vehicle roll, without the engine braking effect reducing the speed of the vehicle.

The truck carries the momentum from gentle downhill sections into a following flat stretch or slight incline.

Idle speed driving driving enables comfortable moving off and driving at idling speed. After driving off, the vehicle pulls away with the clutch engaged and continues moving at a low idling speed of approx. 600 rpm until the brake is applied or the gradient to steep. The driver can therefore manoeuvre the truck very precisely and sensitively forward and backward and get through stop-and-go traffic without any issues. That means reduced wear and tear on the clutch as well as gentle torque build-up during start-up.

New moving-off and gearshift strategy for MAN TGL and TGM

In addition, MAN TipMatic® with Idle Speed Driving, Speed Shifting¹⁾ and EfficientRoll¹⁾ functions is now also available for MAN TGL and TGM. These moving-off and gearshift strategies improve driving comfort and reduce fuel consumption.

Variable axle load ratio

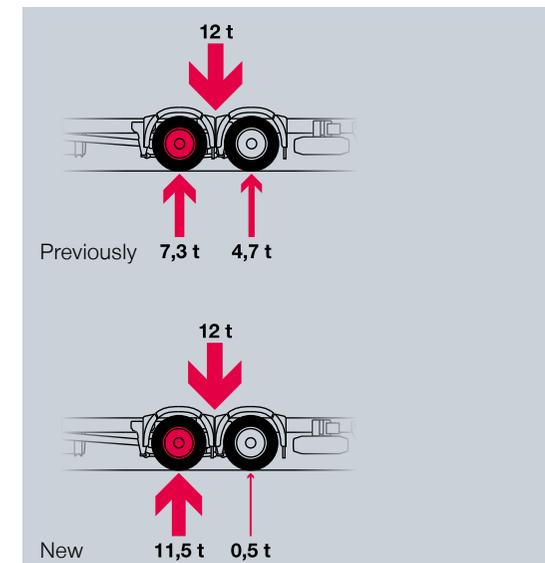
A new feature is the variable axle load ratio for vehicles with a leading or trailing axle. This variable ratio means that the drive axle always has optimum traction, regardless of the payload being carried.

The variable distribution of the axle load between the driven and non-driven rear axle ensures that, in every payload situation, the drive axle always has sufficient traction, and that the axle load is never below the legally stipulated minimum.

¹⁾ Speed Shifting and EfficientRoll only available with 12-speed version



Rotary switch for MAN TipMatic®.



Variable axle load ratio

EFFICIENCY AT FULL THROTTLE.

Everything is included: the driveline, with a powerful six-cylinder engine and easy to use MAN TipMatic® gearbox, provides high-level efficiency on the road.

The highly efficient four- and six-cylinder engines with ratings of 118 kW (160 hp) to 471 kW (640 hp) make an impression with their outstanding power delivery even at low engine speeds. The engines of the MAN D20 and MAN D26 series are also designed for service intervals of up to 140 000 kilometres. In order to achieve the extremely low Euro 6 values, MAN has implemented key technologies such as Common Rail injection, exhaust gas recirculation (EGR), SCRT filters and diesel particulate filters (DPF/CRT) for many years.

The result? MAN Euro 6 engines raise the bar in terms of fuel consumption and AdBlue® consumption. If you want to move things in a big way and at the same time protect the environment, then MAN engines are exactly the drive you need.

Since 2017, MAN will approve the MAN Euro 6 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 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.

Coming in from the end of 2018, vehicles with ADR equipment FL, EXII and EXIII will also feature the new D08 engines.

Engines Euro 6

	Type	Capacity	Rated power	Max. torque
D0834	R4	4.6 l	118 kW (160 hp)	600 Nm
	R4	4.6 l	140 kW (190 hp)	750 Nm
	R4	4.6 l	162 kW (220 hp)	850 Nm
D0836	R6	4.6 l	184 kW (250 hp)	1 050 Nm
	R6	4.6 l	213 kW (290 hp)	1 150 Nm
	R6	4.6 l	235 kW (320 hp)	1 250 Nm
D2066	R6	10,5 l	235 kW (320 PS)	1 600 Nm
	R6	10,5 l	265 kW (360 PS)	1 800 Nm
D2676	R6	12,4 l	309 kW (420 PS)	2 100 Nm
	R6	12,4 l	338 kW (460 PS)	2 300 Nm
	R6	12,4 l	368 kW (500 PS)	2 500 Nm
D3876	R6	15,2 l	397 kW (540 PS)	2 700 Nm
	R6	15,2 l	427 kW (580 PS)	2 900 Nm
	R6	15,2 l	471 kW (640 PS)	3 000 Nm

DIVERSE SOLUTIONS FOR WIDE-RANGING NEEDS.

There is nothing in the complete range of tasks that our vehicles cannot manage. No matter where reliable transport performance is needed, MAN is always there.

The comprehensive MAN vehicle range, which includes the MAN TGL, TGM, TGS and TGX series, ranges from 7.49 to 44 tonnes. Thanks to our wealth of experience and close cooperation with body manufacturers, we are able to provide you with the ideal vehicle solution for each and every task.



MAN semitrailer tractors for tank and silo semitrailers

Type				Wheelbases [mm]
TGS	18.xxx	4x2	BLS-TS	3600, 3900

MAN chassis for tanker bodies

Type				Wheelbases [mm]
TGL	8.xxx	4x2	BB, BL	3050, 3300
TGL	12.xxx	4x2	BB, BL	3600, 3900
TGM	15.xxx	4x2	BL	3825, 4125
TGM	15.xxx	4x2	LL	4125
TGM	18.xxx	4x2	BB, BL	3575, 3875, 4125
TGM	18.xxx	4x2	LL	4425
TGS	18.xxx	4x2	BB, BL, LL,	3600, 3900, 4200
TGS	26.xxx	6x2-2	LL, BL	3900, 4200, 4500, 4800
TGS	26.xxx	8x4	LL, BL	3900, 4200, 4500, 4800
TGS	35.420	8x4-4	BL	3300, 3600, 3900, 4200
TGS	35.360	8x4H-6	BL	2980, 3505, 4105
TGX	18.xxx	4x2	LL, BL	3900, 4200