

THE MANY FACETS OF THE MAN TGX.

Anyone who wants to operate successfully in international long-haul transport today needs to take their transport performance up a gear and put the brakes on costs. The MAN TGX is designed to do just this. With its low-emission engines, it sets very high standards for energy efficiency, reliability and cost-effectiveness – while also delivering the top quality for which MAN trucks are known in the industry.

With its new technologies, it achieves outstanding fuel consumption. This has been proven over and over in independent comparative tests and most importantly by our customers. With new fuel-saving features we have achieved a further reduction in consumption of up to 4%* and even more sustainability.

And the TGX offers high load capacity and perfect body-compatibility. The TGX boasts impressive levels of comfort too: the driver's workspace is streamlined, while the rest and sleep area is the perfect place to relax, ensuring that you are always well rested and highly motivated when it's time to get the job done.

That helps to enhance your safety too – as do our reliable assistance systems. In addition to familiar assistants, highlights include improvement of the sensor systems so that, among other things, pedestrians and cyclists in front of the truck can also be detected and taken into account in the warning and braking strategy. Systems and system improvements such as distance warning system or Front Detection, traffic sign recognition, AttentionGuard and Reversing Motion System help the driver to concentrate on the traffic situation.

We can safely say that the MAN TGX will deliver the goods, helping you to achieve your profit target and taking you to a new level of success with perfectly dovetailed services. We have stepped up our digital offering in particular, creating Connected Truck – a smart and innovative comprehensive network for your vehicle. With numerous DigitalServices such as driver, servicing and fleet management, you can now use your truck in an even more carefully monitored, efficient and cost-effective way.

Get headed for success!

^{*} The efficiency-enhancing product innovations of the new vehicle model mean that the fuel consumption of a standard semitrailer tractor (long-haul transport) with D30 PowerLion driveline (Euro VIe) is reduced compared with a previous model vehicle without the specified equipment features.



EXCELLENT DRIVER FIT

PAGES 06-33



GREAT EFFICIENCY AND ECONOMY

PAGES 34-49



CONNECTED



OPTIMISED UPTIME

PAGES 50-59



STRONG PARTNER

PAGES 60-69







ERGONOMICS START WITH THE VERY FIRST STEP.

The ergonomic entry design of the MAN TGX ensures a pleasant start to the day. As the entrance is positioned in the middle of the door area, the driver can get into the vehicle in an upright position. The access ladder is design-ed as a stair so you have all steps in view. On entering the vehicle, the design ensures extra comfort, and it offers better safety, too. Thanks to entry lighting, the steps and surroundings are visible at any time of day and in any weather conditions as soon as you open the door. For all this, we didn't forget the little things either: an entrance optimised especially for offroad work and that features steps with a non-slip surface and a lattice structure, washable interior door panelling and a compressed air supply. This way sand, mud and gravel can quickly be shown back out the door. In addition to ensuring your truck makes a positive impression visually, breaks feel all that much better, too.

That said, we developed the MAN EasyControl system specifically to help you avoid getting in and out when you don't have to. Within the driver-side door there are four controls that can be easily accessed from outside the vehicle. Depending on your configuration, they come preprogrammed with the key functions or can even be implemented according to individual needs.

Once in the cab, you have a variety of driver's seats to choose from, each ready to welcome your particular build. There is a larger range of backrest adjustment options for drivers of all sizes. The passenger seat as well features highly ergonomic design and its own range of individual adjustment possibilities. The Vario seat is especially space-saving: when it's not needed, thanks to its Cinema function, it can simply be folded away.

Even the steering wheel has been given greater flexibility: for the resting position, the steering wheel can be tilted forward to a horizontal position by the driver, and in action as well, it can be given as steep an angle as that of an average passenger car. The result is a workplace that bends over not only backwards, but forwards and sideways as well, to suit. So the driver doesn't have to.

MAN EasyControl: four control buttons reachable from outside the vehicle for maximum comfort.







WITH MAN YOU CAN TAKE A LOAD OFF.

Everything has to come to rest at some point. A pleasant atmosphere. For the sleeping area of the MAN TGX that's exactly what you'll find. In the extended cab models, a multizone cold-foam mattress ensures comfort for well-deserved shut-eye and peaceful dreams. The accompanying 7-zone slatted base has an adjustable head, enabling a range of ergonomic lying positions. This allows the driver to also use the bed as a sofa for reading or watching television, for example.

All of the important functions can also be operated from here using a special control panel in the rest area: the lights, door locks, heating and windows can all be controlled at the push of a button. The infotainment system can also be conveniently operated via the MAN Driver app. Personal items have their spot too in the many stowage compartments. After all, in the GX cab there are more than 1,100 litres of space at the driver's disposal. The storage concept includes a special feature: a modular storage box which slides completely underneath the bed and can be fitted with either a fridge, a drawer or a storage compartment.

An independent air conditioning system and auxiliary water heater take care of providing for pleasant air and temperature conditions in your environment. The electric air conditioner even works without a cold reservoir, which would have to be charged during vehicle operation, and is thus ready for use at any time. Even in summer it can keep things refreshingly cool for up to 11 hours. While the truck is on the road, MAN Climatronic maintains the chosen temperature fully automatically. Comfortable temperature zones in the cab are assured as well, as the foot area and the head area are controlled separately. Noise and lights are kindly asked to stay away, however.

New Interior Colours

Experience a friendly, feel-good atmosphere with the new color scheme, Desert Beige with Tuscan Red, or go for a timeless modern style, supported by minimalistic elements in the new Dark Moon Grey with Silver color scheme.

Lion emblem on partial leather seats and curtains

With the expressive lion emblem on the partial leather seats and the practical curtains, stays in the cab are even more pleasant. The curtain fabric is hard-wearing and is in the same colour for both interior colour schemes. The crosscab curtain is designed as a single piece. The bunk area can now be made even darker.





- 1 Desert Beige with Tuscan Red
- 2 Dark Moon Grey with Silver

TOP-CLASS DRIVER'S CAB.





- 1 Innovative MAN SmartSelect multimedia control
- 2 Fully digital driver's display with new styling and functions

The driver's cab is the heart of the MAN TGX. Because comfort in the cab means easier workflows and faster completion of your haulage jobs. Ideal conditions for higher driver motivation, and that translates to an investment that pays you daily returns. The controls of the MAN TipMatic® automatic gear shift system situated directly on the steering column stalk is just one example. With this design, there's now all kinds of free space.

And a host of clever storage areas and compartments make great use of the additional room. The overhead lockers above the windscreen, multifunctional compartments and secure, pull-out drawers in the centre part of the instrument panel are particularly practical in a driver's day-to-day. Depending on the cab option, various storage boxes, compartments and an in-set or pull-out fridge are also available. The GX cab, for instance, boasts more than 1,100 litres of stowage space, ensuring that you can neatly fit in everything you need – even for several days on the road.

One feature is the trailblazing MAN SmartSelect system. It was developed together with our customers and makes using the multimedia system a child's play, even in demanding driving conditions. With MAN SmartSelect, functions such as maps, music, cameras and more can be selected via a user-friendly dial with hand rest.

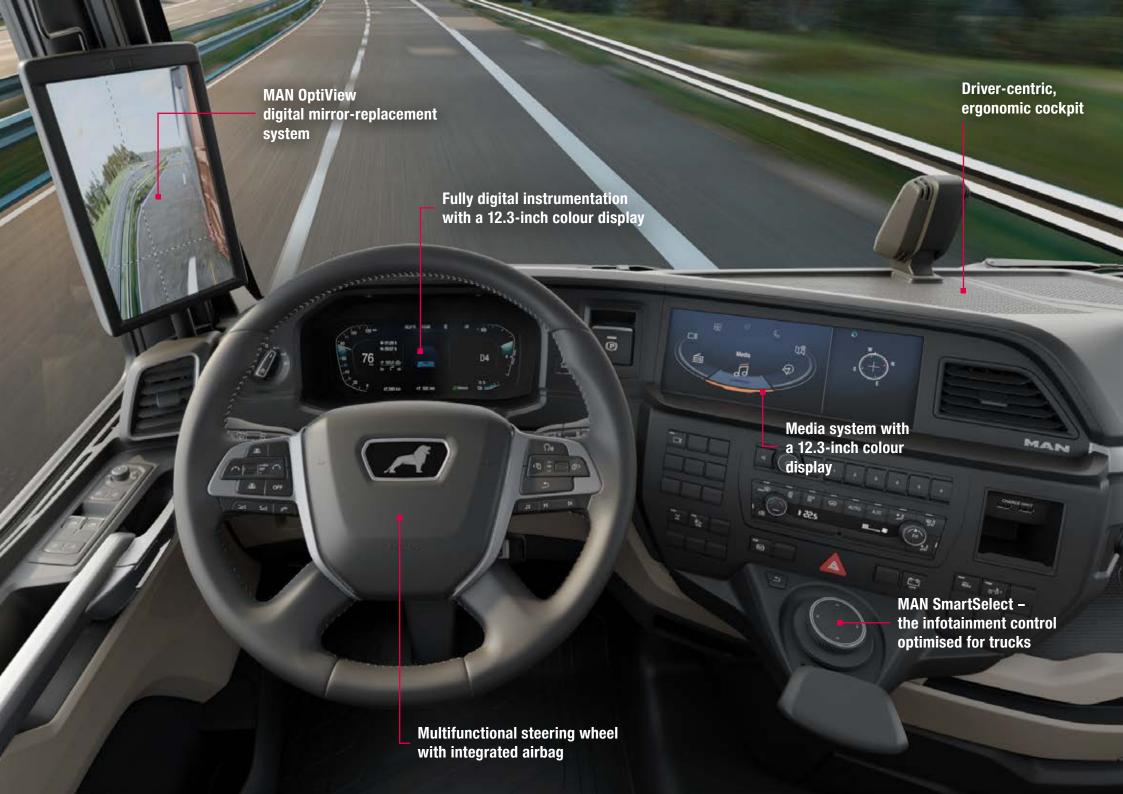
Fully digital driver's display with new styling and functions

An interesting update is the new styling and functions of the fully digital instrumentation. The previously semi-circular scales make way for two sharper curves. This makes it even easier to distinguish between the lower and middle reading ranges. A calm display mode is also an option wherein all secondary information is moved into the background and only essential driving information is displayed. Finally, the digital axle load indicator for vehicles with full air suspension, including gross train weight is available.

Improved Acoustic Insulation*

In addition to the noise-insulating windscreen, the encapsulation of the new D30 PowerLion driveline, reduces the noise radiated from the engine. Naturally, the reduction of noise in the interior results in better driver performance and concentration thanks to deeper sleep.

^{*} Only available in combination with the new D30 engine.



EVERYTHING IN ORDER.

The traffic situation is becoming ever more demanding and complex. And when off-road, you're always facing new challenges that call for a driver's full concentration. It is all the more important to us then to make the cockpit as driver-friendly and organised as possible. Displays and controls are separated from one another spatially. Reading distances and reachability are thus ergonomically optimised: data is set at a farther distance, making it easier to grasp, functions are colour-coded, and buttons and switches are within easy reach. The focus is clearly set on the most important areas. The driver's view can easily go between the road and the instruments, without fear of distraction. Just another MAN contribution to making drivers' lives less complicated and less tiring.

The controls for the MAN media system and MAN SmartSelect are simple to use. All of the displays and controls throughout the vehicle follow a single concept. Symbols, colours, usage, alert and warning sounds as well as design are consistent throughout the cockpit. The quick-selection keys are individually programmable and accelerate workflows. Not to mention notices can be played in any of 30 different languages. For voice command operation, a choice of six languages is offered. All of it intuitive to use. After all, the controls – and especially the cutting-edge digital components – were developed by drivers for drivers. This way the driver can see to the truly important things: the cargo and the transport, whatever the terrain.

Direct call-up of central operating menu for assistance systems

Assistance systems make driving comfortable and the roads safe – but only if they are active and correctly set up for the intended use. With the new button, the central operating menu for all assistance systems is only a push of a button away.

The new button directly opens the central operating menu for configuring the assistance systems available in the vehicle. This simplifies switching on and off as well as configuration of all the available assistance systems – especially with frequently changing drivers. Depending on the equipment, the button for central operation of the assistance systems is located either on the multifunction steering wheel or in the assistance system key panel on the instrument panel (for vehicles without multifunction steering wheel). There is also a button for temporary switching off the acoustic signals of the assistance systems.



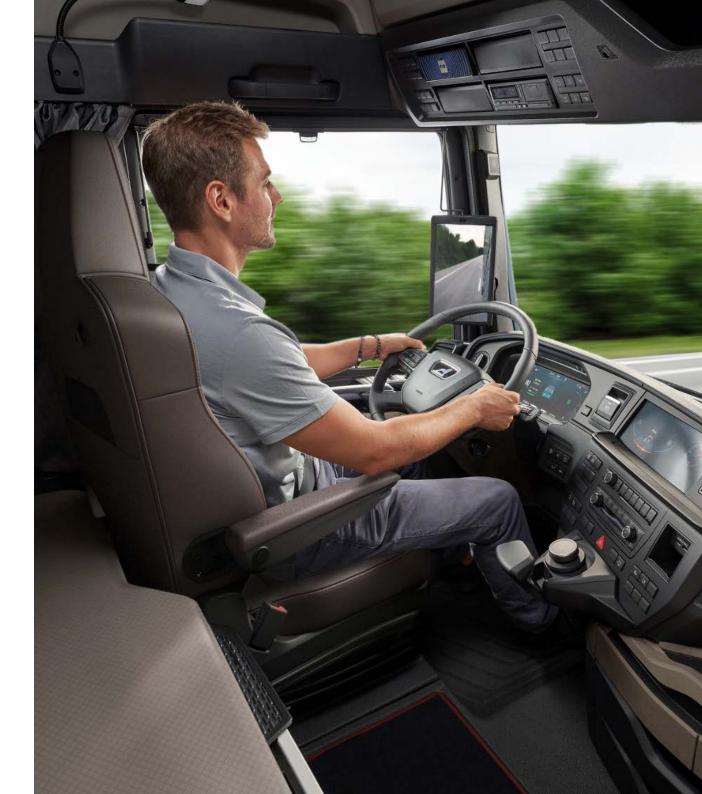


- 1 Assistance systems button for vehicles with multifunction steering wheel
- 2 Assistance systems button for vehicles without multifunction steering wheel
- **3** Button for temporary switching off the acoustic signals of the assistance systems



EVERYTHING UNDER CONTROL.

The controls of the MAN TipMatic® automatic gear shift system have been placed in the right-hand steering column stalk. That not only frees up space between the seats, as the usual console between the seats is no longer needed, but also improves ergonomics and safety. Close at hand as well – to the right of the combi-dashboard – is the control for the electric handbrake. This means it is optimally positioned with respect to gear controls and the ignition. It can be operated at any time but is now also automatically activated when the vehicle is parked and released when it moves off. This is another idea which creates additional room where a lever was previously needed. One more smart solution that adds to the extra space and comfort that MAN is known for. And, in particular, a big relief when all around you it's bumper to bumper and the streets are a mess.



DRIVING SMART.

With navigation, radio (from standard to digital), video, telephone and more tailored to trucks, the infotainment system of the MAN TGX is a communication and multimedia hub. It is available in five different variants, from entry-level to Navigation Professional. The 7-inch or 12.3-inch display – both with brilliant HD resolution - makes for great viewing. Direct access buttons and a USB-C input connection are part of the standard fittings, and from Advanced level on up to two smartphones can be paired. The media system Medium 7" is an entry-level media system version for vehicles that are subject to the new statutory provisions on equipment with a Reversing Motion System.

The infotainment system can be operated either via a classic control system with buttons or via MAN Smart-Select (can be combined from version Advanced 7-inch). Throughout, familiar usage meets innovative comfort. The result is one you can see and feel, too, as high-quality surfaces make every journey with the MAN TGX tangibly special.

Reversing Motion System

Overview to the rear when manoeuvring - ex-works! When reversing a solo vehicle, the camera image of the camera installed ex-works in the rear area supports the driver. People or objects behind the vehicle can be detected, trailers or semitrailers are in full view when connecting or hitching up.

The image from the camera is automatically shown on the MAN media system display when reverse gear is engaged and the vehicle rolls backwards. A button on the instrument panel with a camera symbol enables manual activation of the system.





- 1 Infotainment system with 12-inch display and MAN SmartSelect
- 2 Right: Camera image of the Reversing Motion System when

Left: Camera image of the front camera with MAN OptiView



A NEW PERSPECTIVE.

With the innovative MAN OptiView digital mirror-replacement system, enhanced safety takes to the road. This is not only because MAN does away with mirror arms and depicts the statutorily required fields of vision, but also because in critical driving situations such as manoeuvring, turning off and changing lanes, the extended views provide the driver with the optimal overview of the traffic situation.

MAN OptiView does far more than conventional mirror systems. Besides the statutorily required fields of vision, the digital mirror-replacement system also shows views specifically adapted for various driving situations (e.g. turning off, manoeuvring, driving on motorways). The functional principle and display concept of MAN OptiView are thus optimally matched to natural human perception, enabling the driver to visually grasp the vehicle surroundings and traffic activity quickly, evaluate them reliably and deal with them safely.

Components of the system

- Five cameras: Two cameras (near range and wide-angle) on each side of the vehicle above the door frame replace the external rearview, wide-angle and kerb mirrors. A camera on the A-pillar on the co-driver's side replaces the front mirror.
- Additional displays in the cab on the left and right sides, near the A pillars
- Door control modules for manual settings and changing the views

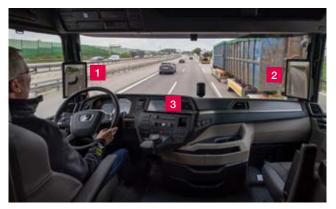
Camera systems

- Manual fold-in arms (side cameras)
- Filtering of glare (e.g. when the sun is low or there is traffic behind the vehicle)
- Protection by guided airflow against splashing water for continuously high image quality, even in the rain
- Automatically heated side cameras (depending on the ambient temperature) for clear pictures even under frosty conditions

Displays

- HD quality (resolution 1,920 x 1,080 pixels)
- Display 1 (driver's side): 12 inches display 2 (co-driver's side): 15 inches
- Brightness and contrast of displays 1 and 2 adjust automatically to the ambient brightness. In addition, the display brightness can be adjusted manually, for example for night trips.
- 12-inch display of the MAN infotainment system (3): automatic display of front-camera image up to a road speed of approx. 10 km/h (split-screen display mode possible)







SAFETY FIRST, EVERY TIME.

MAN has the right cab for every need – and maximum safety, comfort and ergonomics travel with you wherever you go. Our cabs are designed for fatigue-free, focussed driving, relaxing breaks and maximum passenger protection. All of the cabs offer optimum safety thanks to a range of features, including the mirror system comprising main and wide-angle mirror, large kerb mirror and front mirror. Or the innovative MAN OptiView digital mirror-replacement system which provides the driver with the optimal overview of the traffic situation. A heated windscreen ensures an unobstructed view even at the coldest times of the year.

Aerodynamically optimised sun visor for MAN GX and GM cabs

The design sun visor in dark grey adds a touch of class to the front of the GX and GM cabs. It prevents the driver from being dazzled when the sun is at a steep angle. The design has been optimised for aerodynamics, resulting in better airflow around the A-pillar at the roof and preventing separation of the air stream which is unfavourable for fuel consumption. This improvement of the drag coefficient (cd value) reduces fuel consumption.

TREMENDOUS TRIO.







CAB GX: THE MAXIMUM ONE

(wide, long, extra height)

CAB GM:									
THE GENEROUS ONE									

(wide, long, medium height)

 $2,440 \times 2,280$

2

THE ROOMY ONE

CAB GN:

(wide, long, standard height)

W	×	L (m	m)
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SLEEPING FACILITIES

 $2,440 \times 2,280$ 2

2,440 × 2,280

SEGMENT

Long-haul transport

Long-haul transport

Special uses in local transport (e.g. building materials, wood)

- Full standing height
- Spacious interior
- 2nd bed possible

Compact size

- Convenient through access
- Comfortable bed as standard

BENEFITS AT A GLANCE

- One of the most capacious in Europe
- Even more standing height: 2.100 mm
- 2 comfortable beds







GUARDIAN ANGEL INCLUDED.

Safely to your destination and back. This wish has right of way. The extended range of assistance systems facilitate the work of the driver and can increase the safety of other road users. In addition to protecting drivers and other people on the roads, comfort and cost-effectiveness are important aspects, too. A central button for calling up the assistance systems facilitates their operation, and even if in case of an accident the driver and vehicle escape with no serious injuries or damage, something else is lost: the valuable time it takes to record and report the accident. In order for your driver to arrive relaxed and secure, we have made the MAN TGX your personal safety expert.

The MAN TGX offers protection through the reinforced cab. It warns you via turning and lane-change assistants or by the improvement of the sensor systems so that, among other things, pedestrians and cyclists in front of the truck can also be detected and taken into account in the warning and braking strategy. It keeps everything in view when turning or parking thanks to BirdView*. Its emergency braking system and lane return assist even look a few seconds into the future for you. Still, assistants have a supporting role: the final say is always the driver's.

^{*} MAN Individual package









- Language recognition via driver card
 Preparation for Alcohol Interlock
 Sensor system for the fifth-wheel coupling

DRIVING IN COMFORT.

Language recognition via driver card

With automatic language recognition via driver card, activated via MAN Now, the language saved on the card is automatically adopted as the "vehicle language" after inserting the driver card into the tachograph (when the ignition is switched on) and does not have to be set or selected manually via the vehicle menu. Manual language setting via the vehicle menu remains available, so that a language other than the one stored on the driver card can be subsequently selected.

28 languages are available. The languages German and English are available in every vehicle. In countries where RIO is offered, additional languages are also available subsequently free of charge via MAN Now.

Preparation for Alcohol Interlock

Traffic accidents caused by alcohol are particularly annoying because they are absolutely preventable. The driver must react in a fraction of a second even in a sober state, e. g. to avoid an impending accident. Under the influence of alcohol, this is impossible. With the preparation for connecting a device for determining the alcohol content in the breath, the engine can only be started if a maximum permissible alcohol content (may vary from country to country) is measured in the air tested.

The electronic blocking of the engine start by the alcohol tester can be cancelled or bypassed (depending on the version, for example in emergencies) by pressing a secured button. Please note: This is only permissible for certain countries.

Sensor system for the fifth-wheel coupling

The sensor system of the fifth-wheel coupling enables safe and convenient sensor-supported monitoring of the coupling and uncoupling operation from the driver's workplace. This prevents damage due to incorrect coupling processes. For a controlled and guided coupling process between the semitrailer tractor and semitrailer, displays and text messages are shown to the driver on the instrumentation display as a sub-item of the air suspension menu. If a coupling process has been completed correctly, this is also confirmed by an acoustic signal. Please note: The pre-departure check remains mandatory despite the indication of the locking status in the driver's display.

INCREASED SAFETY.

Front Detection

Whether in the delivery zone of a supermarket, when leaving the workshop or in hectic inner-city traffic: people may be located directly in front of the vehicle where they are difficult to see. When moving off and at speeds of up to 10 km/h, Front Detection monitors the close range in front of the vehicle, which is difficult or impossible for the driver to see, and warns the driver in two stages if it has detected particularly vulnerable, "weaker" road users, such as pedestrians or cyclists. Front Detection thus helps to increase safety and prevent accidents. It relieves the strain on the driver, in particular during urban driving.

Front Detection supplements the Emergency Brake Assist EBA Plus, which includes a comparable protective function for particularly vulnerable road users, but only becomes active at speeds above 10 km/h.

Emergency Brake Assist EBA Plus

In an emergency, automatic brake intervention until full braking – this has previously saved lives in the event of an impending collision with other vehicles. But what happens if pedestrians or cyclists suddenly enter the driving area? The enhanced Emergency Brake Assist warns and now reacts to these more vulnerable road users as well. The Emergency Brake Assist EBA Plus warns the driver of an impending collision at road speeds of 10 km/h and above. In the event of an emergency, if a collision hazard is detected, automatic braking intervention takes place even to the point of standstill – also for vulnerable, weaker road users such as pedestrians or cyclists. Available on demand in a version that cannot be switched of.





- 1 Front Detection
- 2 Emergency Brake Assist EBA Plus



FURTHER ASSISTANCE SYSTEMS.

Direct call-up of central operating menu for assistance systems

A new button directly opens the central operating menu for configuring the assistance systems available in the vehicle. This simplifies switching on and off as well as configuration of all the available assistance systems – especially with frequently changing drivers. Depending on the equipment, the button for central operation of the assistance systems is located either on the multifunction steering wheel or in the assistance system key panel on the instrument panel (for vehicles without multifunction steering wheel). There is also a button for temporary switching off the acoustic signals of the assistance systems.

Long-haul transport assistant MAN CruiseAssist

Across the entire permitted speed range on motorways and main roads similar to motorways with structural separation of lanes, the long-haul transport assistant MAN CruiseAssist automatically controls the driveline, brakes and steering, if necessary decelerating to a full stop behind a vehicle that is stopping and, in the case of brief stops, automatically moving off again. MAN CruiseAssist guides the vehicle continuously by means of gentle steering interventions. The system uses the detected lane markings as orientation.

Lane Change Collision Prevention Assist

The MAN Lane Change Collision Prevention Assist uses radar sensors to monitor the areas to the left and right of the vehicle's lane. If the sensors detect that changing lanes would result in a dangerous situation, the driver is warned in good time. If the vehicle nevertheless leaves the given lane – also if the turn indicator has been actuated – the Lane Change Collision Prevention Assist steers it back into the lane by means of a corrective steering torque.

Lane departure warning (LDW)

An acoustic signal warns the driver if they drift out of their lane. Available on demand in a version that cannot be switched off.

Lane change support (LCS)

Lane Change Support LCS monitors the lanes on the right and left next to the vehicle with the aid of radar sensors from a driving speed of 50 km/h – up to approx. 30 m towards the front and up to approx. 80 m towards the rear. If the sensors detect a dangerous situation when the vehicle is changing lanes, the driver is warned in good time so that they can prevent a potential collision with other vehicles.

Lane return assist (LRA)

If the truck departs from its lane, corrective steering guides the vehicle back. The vehicle is automatically steered until it reaches the normal lane position; it is not kept in its lane continuously.

Turn Assist

Turn Assist monitors the difficult-to-see side area next to the vehicle (co-driver's side) with the help of radar sensors at road speeds of up to 30 km/h. If the sensors detect a dangerous situation when the vehicle is turning off, the driver is warned in good time so that they can intervene and prevent a possible collision with other road users.

Traffic jam assist

On motorways or other well-constructed major roads, the traffic jam assist can independently operate the vehicle's drivetrain, brakes and steering. It slows behind a stopping vehicle ahead until coming to a stop and moves the truck forward again by itself.

ACC Stop&Go

The ACC with Stop&Go feature automatically controls speed and the distance from the vehicle in front. The desired speed is maintained without the driver having to operate the accelerator. The truck automatically brakes until it comes to a standstill and moves away again after short stops.

SafeStop Assist

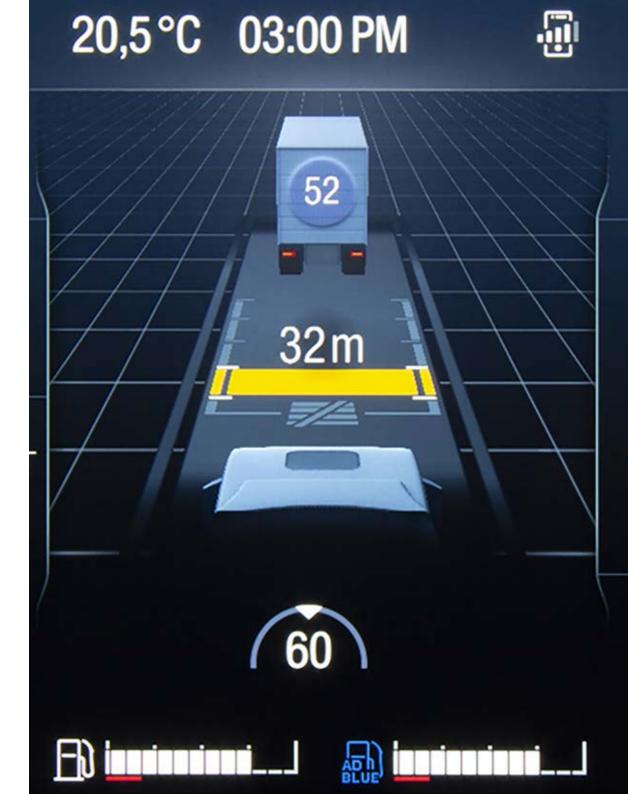
MAN SafeStop Assist detects when a driver suddenly loses consciousness and brakes the truck automatically and in a controlled manner until it comes to a standstill.

Distance warning system

The distance warning system helps to maintain the required, generous safety distance to the next vehicle. After an acoustic or visual warning, the driver can correct the distance so that more reaction time remains for unforeseen situations.

MAN AttentionGuard

MAN AttentionGuard is an attention assistant based on the principle of lane monitoring. Within the limits of the system, starting at a speed of approx. 60 km/h it detects reduced driver alertness in good time. A visual as well as acoustic warning supports the driver in refocusing their concentration on the road – thus we help reduce a possible accident due to lane departure. Compared with the previous version, the enhanced MAN AttentionGuard continuously evaluates the driver's directional accuracy, steering interventions and other parameters. The uniformly specified, scientifically recognised rating scale (Karolinska Sleepiness Scale, KSS) is used to calculate and estimate the driver fatigue level. The driver is warned when a specific stage on this rating scale has been reached.



FURTHER ASSISTANCE SYSTEMS.

Traffic sign recognition system

The traffic sign recognition system uses the new video camera on the windscreen to detect road signs on the route in front of the vehicle and displays the permitted maximum speed on the instrumentation display. This applies to both traffic signs that show a specific speed limit, as well as town boundary or motorway signs. If the permitted maximum speed is exceeded, the system warns the driver visually and, if necessary, also acoustically.

For vehicles with navigation system, the system combines the optically recorded data with stored navigation data. This means that the system can also react accordingly to current changes in signs – which are not shown in the existing navigation data. Other country-specific and vehicle-specific restrictions such as no-overtaking or no-entry restrictions can also be shown on the display.

Tyre pressure monitoring system

The tyre pressure monitoring system (TPM) with display of tyre temperature uses sensors to determine and monitor the air pressure and temperature in the vehicle tyres – including the spare wheel (here only air pressure). If the air pressure is too low/too high in comparison to the nominal pressure or the tyre temperature is too high, the driver is warned by means of a display in the instrumentation. As standard available for the entire range up to and including 4-axle vehicles. The function autolearn/auto-locate automatically learns the sensors and their position so that the wheels no longer have to be fitted in the same position; there is no need for a workshop visit to re-initialise the sensors with the correct position.

Driver's airbag

The airbag integrated into the steering wheel and the seat belt tensioner incorporated into the belt lock on the driver's side are activated in the event of a collision via a joint trigger: if a critical deceleration of the truck is detected, the activators for the airbag and belt tensioner launch in parallel.

High-beam assist

Depending on the driving situation, high-beam assist optimises use of the main beam. It prevents the drivers of oncoming vehicles or vehicles in front from being dazzled by automatically dipping the headlights.

Side camera system (SCS)*

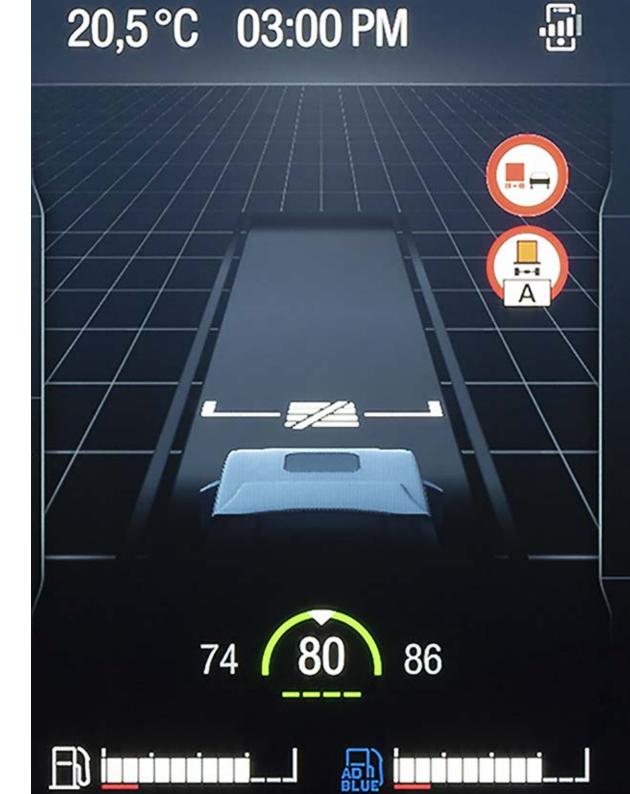
The side camera system is an integrated camera system for assisting in turn-off procedures. It makes it easier for the driver to observe those areas next to the vehicle that are difficult to see (co-driver's side). The video feed is transmitted to an optional additional monitor (only for vehicles with conventional mirrors) on the co-driver A-pillar or to the media display.

Video Turn Assist (VTA)*

Video Turn Assist expands object recognition by comparison with the side camera system (SCS): Objects are detect-ed in an area of $2.5~m\times 6~m$ to the right of the vehicle and the monitor display is supplemented by a warning to the driver in the form of an acoustic signal from the loudspeaker built into the vehicle. The video feed is transmitted to an additional monitor (only for vehicles with conventional mirrors) on the co-driver A-pillar. In addition, an optical display lights up and an acoustic signal is emitted.

360° view assistant BirdView*

The camera system for a 360° live view 'from above' seamlessly displays an area of up to four metres around vehicles with fixed bodies (e.g. fire-fighting, beverage or waste-disposal vehicles). Stitch-and-blend technology combines four camera views (front, rear, left and right, in full-HD qual-ity) to a single image from the bird's-eye perspective. A special feature of the system is − depending on the driving situation − self-adjusting image sections at manoeu-vring speed (≤ 40 km/h), when the turn indicator is set (lane change) and when reversing.



^{*} MAN Individual package







POWER THAT GOES THE DISTANCE.

So that you can get the most out of our high-performance engines at all times, we have a variety of digital tools ready and waiting. As support for every journey, we also offer the MAN EfficientCruise® service, new in combination with PredictiveDrive: The system weighs up possible speed and gearshift strategies against each other like a strategist and ultimately selects the one with the most economical fuel consumption. Just one of the many MAN ideas to help you get your business where it wants to be.

The outstanding efficiency of MAN trucks is reflected in press tests and your experiences. But standing still means going backwards: for this reason, the MAN TGX for example sees new fuel-saving measures for long-haul transport vehicles.

Dynamic torque control

Depending on the torque and engine speed, there are certain ranges in the engine-specific consumption characteristic map in which the engine can be operated most efficiently, i.e. with the lowest fuel consumption per output kilowatt-hour. MAN's intelligent dynamic torque control automatically brings the operating parameters of the engine within these ranges. In this context, the Efficiency Plus driving program dynamically reduces torque. The pre-requisite is that the reduction does not result in a gearshift.

The function can be used with and without MAN Efficient-Cruise® – both in cruise-control operation and when driving freely.

Additional reduction of engine speed by 50 rpm with MAN EfficientRoll gearbox function

The MAN EfficientRoll gearbox function automatically shifts the gearbox to neutral position N on slight downhill gradients, thus helping to reduce fuel consumption. During rolling phases, the engine is disconnected from the gear-box and continues running at only 550 rpm, instead of the usual idling speed of 600 rpm. Fewer revolutions consume less fuel!

Economical driving style - functionality of Perform

The digital service Perform assists drivers in optimising the economy of their driving styles. Perform evaluates all the relevant vehicle data with respect to the economic efficiency of the driving style. The service provides important vehicle data about utilisation of cruise control or the service brake, for example.

THE D30 POWERLION

New D30 Engine

The new D30 engine ensures maximum economy in all 4x2 semitrailer tractors in normal and low design heights thanks to the lowest operating costs. With a maximum efficiency of more than 50% and best-in-class fuel consumption, the engine is one of the most advanced commercial vehicle engines in the world. The D30 engine replaces the previously available D26 and D15 engine series in 4x2 semitrailer tractors in normal and low design.

D30 PowerLion

The D30 engine is always combined with the following drive components:

- MAN TipMatic 14, two-shaft gearbox
- Twin SCR exhaust gas aftertreatment
- New hypoid axle portfolio

The following are optionally available exclusively for the D30 PowerLion drivetrain:

- High-performance engine brake CRB (Compression Release Brake)
- Retarder 47 decouplable
- New PTO range on the engine side
- New PTO range on the gearbox side

With these components and improved vehicle aerodynamics, the new D30 PowerLion driveline achieves the lowest fuel consumption in its class. Compared with a long-haul semitrailer tractor from the previous model year, diesel consumption is reduced by up to 4%.

XPI Injection system

The XPI Common Rail injection system is used exclusively on the D30. Due to its design, the XPI Common Rail injection system offers a high degree of freedom in the design of the injection parameters. This facilitats the optimisation of combustion in all relevant operating states. The result is a high degree of engine reliability.

Optimised turbocharging

Two specific turbocharger geometries are used to optimise turbocharging depending on the power ranges (380 – 440hp and 480 – 560hp). The smooth interaction between the XPI Common Rail Injection and optimised turbocharging plays a major role in achieving a high engine efficiency of over 50%.

New MAN TipMatic 14 gearbox generation

The 14-speed TipMatic gearbox has 14 forward gears and 2 reverse gears. The automated manually operated gearbox independently performs clutch actuation and gearshifts. The MAN TipMatic shift system uses software control functions to determine the potimum moving-off and gearshift strategy in all situations in conjunction with the load and slope detection function. Together with the new D30 engine, the MAN TipMatic is optimised for maximum fuel efficiency. This significantly improves both the economy and the CO₂ footprint of these vehicles.

The MAN TipMatic 14 is only available for 4x2 semitrailer tractors with D30 engine in normal or low-design height.





EFFICIENT DRIVETRAIN.

Especially for high mileage in long-distance transport of 120,000 km per year and more, the efficiency of the drive components is decisive for the economy of the vehicle. Everything fits together in the MAN trucks: Efficient and powerful engines and the new generation of hypoid axles lay the foundation for exceptionally low fuel consumption.

With every stage of development, a high level of engineering skill reduces fuel consumption and increases performance. Recent example: the MAN D26 in Euro VIe. Brings 10 hp and 50 Nm more to the road and still consumes up to 3.3%* less fuel. The D26 engine now also comes with a peak power rating of 540 hp (397kW) and 2,650 Nm maximum torque, offering reliable, economical and particularly powerful propulsion.

The MAN D38 for the MAN TGX is still the power-house among the MAN engines and feels particularly at home on long-haul routes and in off-road use.

The MAN D15 engine series does away with EGR thanks to enhanced SCR technology and the widespread avail-ability of AdBlue®. Exhaust gas aftertreatment by the SCR catalytic converter and the MAN CRT (continuously regenerating trap) system ensure cleanliness and compliance with legislation. Plus, the MAN D15 has slimmed down and is significantly compact. When paired with the optimised axle drive, weight was reduced, thereby increasing load capacity.

Efficiency is always what comes first when it comes to MAN engines. You can count on it. Finally, there was only one component left for us to improve: the driver. And we took that on, too: first via efficiency data displays and assistance systems like the GPS-based speed control system MAN EfficientCruise® with PredictiveDrive. Then we added tailored driver training using the data from your specific MAN truck, continuously digitally recorded and ready for evaluation. Together it's the ideal basis for the perfect interplay of human and MAN.



New generation of hypoid axles

The new generation of hypoid axles enables a driveline configuration that is optimally matched to the respective application: Lighter and more efficient. As single axle or tandem-axle assembly.

^{*} Compared to a previous model of the same vehicle







THE MAN TGX IS PRE-PROGRAMMED FOR EFFICIENCY.

MAN has taken efficiency to the next level with the MAN Tip-Matic®. This system enables the vehicle to auto-matically recognise the load and incline conditions and optimise the gear-changing strategy to match. Whether the truck is unladen or fully loaded, MAN TipMatic® auto-matically selects the ideal gear for pulling away. Moreover, the wide gear spread and software which recognises inclines guarantee outstanding performance when moving off. "SmartShifting" is a further evolution of the well-known "SpeedShifting" and minimises traction interruptions when changing gear while travelling uphill, for instance. "Idle Speed Driving" enables comfortable moving off and driving at idling speed. This feature allows the driver to manoeuvre the truck with precision and sensitivity or "just go with the flow" in slow-moving traffic on the motorway. And should the truck get stuck in snow or in wet, loose ground, the rocking-free function makes it easier to drive off, especially due to the ability of the clutch to rapidly open and closing.

In addition, MAN TipMatic® also contains preprogrammed driving settings for various driving situations, such as the fuel-saving Efficiency program, Manoeuvre mode, programs for heavy loads and Performance mode for a more agile driving style. This ensures that your truck will always perform to the max, anytime, anywhere.

MAN TipMatic® 12 for MAN D26 engine

For our chassis vehicles and some semitrailer tractors in different wheel drives, the MAN TipMatic® shift system is based exclusively on the twelve-speed gearbox. The MAN TipMatic® 12 offers significant added value for applications in which payload and consumption play decisive roles. The twelve-speed TipMatic gearbox has twelve forward and two reverse gears. The automated manual gearbox independently performs clutch actuation and gearshifts. The MAN TipMatic® shift system uses software control functions to determine the optimum moving-off and gearshift strategy in all situations in conjunction with the load and slope detection function. The innovative SmartShifting function permits particularly fast gear changes with minimum interruptions in tractive force as required and thus increases efficiency.

New Brake Generation

The pneumatically actuated disc brakes are equipped with internally ventilated brake discs which, with their optimum heat dissipation, ensure a sustained high brake output. In the version with the brake lining return, the brake linings are automatically pushed away from the brake disc again after releasing the brake, with the aid of spring elements so that no residual torque is generated. This makes it possible to reduced wear, noise and fuel consumption.

THE MAN TGX KNOWS EVERY HILL – AND THE BEST GEAR TO MATCH.

Complex chess game on uphill gradients: the new PredictiveDrive function of the MAN EfficientCruise® GPS cruise control no longer drives blindly and stubbornly up-hill, but weighs up possible speed and gearshift strat-egies against each other like a strategist and ultimately selects the one with the most economical fuel consumption.

By taking into account the selected navigation route, or without navigation the most likely, the cruise control function MAN EfficientCruise® calculates the route with its uphill and downhill gradients up to three kilometres ahead with the aid of three-dimensional map data. The new PredictiveDrive supplements the effect of MAN EfficientCruise®, especially on uphill and downhill gradients. The PredictiveDrive system continuously analyses potential driving and gearshift strategies in these route sections and selects the most efficient one depending on the situation. This makes it possible to prevent unnecessary traction interruptions due to gear hunting and frequent gearshifts. Depending on the topographical conditions, the available torque is enabled or reduced as part of the dynamic torque adjustment. In addition, the characteristics of the selected drving program are also taken into account.

What is new is that a reduced form of dynamic torque adjustment is also used in the Efficiency driving program – with a correspondingly positive effect on the fuel consumption of the entire fleet. Previously, the positive effect of dynamic torque adjustment was reserved for the Efficiency Plus driving program. The aim of the PredictiveDrive function is generally to make the best possible use of the predicted topographical changes on the route in order to be as fuel-efficient as possible by actively varying the speed, gear and available engine torque. With the goal of implementing this at almost average speed neutrality.

For example, it may be advantageous:

- to drive into an uphill gradient with momentum and shift down early,
- to use the full engine torque when on the gradient,
- and to reduce the engine torque again at the end of the incline.

MAN EfficientCruise® and PredictiveDrive are already active from low speeds (approx. 30 km/h). The system works both when driving freely and in cruise control mode. The anticipatory system reactions on uphill gradients ensure significantly better drivability and thus also increase driver acceptance of the dynamic torque adjustment.

Within a tolerance range, adaptation of the vehicle speed to the topography can be higher or lower than the desired speed set by the driver. This maximum deviation from the desired speed can be set in four ECO levels. In this way, the driver is easily able to adjust the potential fuel saving to the road surface, visibility and traffic conditions.



BUILT FOR EFFICIENCY.

Always up to the task

The MAN TGX is available in a standard-height version, with a medium-height body featuring good ground clearance, and as an ultra low version with an extremely low frame upper edge for high-volume transport.

Comfort? A safe bet

All components of the MAN TGX chassis are designed for comfort, safety and optimum cost-effectiveness. The hypoid drive axle boasts a low weight, a high loadbearing capacity, a large performance range and long intervals between oil changes. The engines from the MAN D30, D26 and D38 series are also designed for service intervals of up to 140,000 km. MAN Genuine service products perfectly complement the driveline – engine, gearbox and driven axles – of the MAN Trucks. In addition to the oils previously available, a highperformance final drive oil and the AdBlue® fluid additive are now also available as MAN Genuine service products.

Ideal for long-haul routes - and beyond

With the new combined tanks* for diesel and AdBlue fluid, no installation space is lost on the frame. Despite the long range, room still exists for additional frame attachments. The fuel and AdBlue tanks are combined in a single tank in two separate compartments. A plastic coating is present on the inside of the AdBlue fluid chamber, preventing the AdBlue fluid from corroding the aluminium.

The new combined tanks are only available in combination with the new D30 PowerLion driveline.

IMPROVED AERODYNAMICS.

The better the headwind flows around a vehicle, the less fuel is required for driving. In line with the design of the MAN Trucks, gap widths between the cab and semitrailer are therefore reduced and the formation of turbulence is suppressed for optimum aerodynamics.

The reversible extensions on the side flaps and roof spoiler reduce the free space between the cab and the semitrailer. This achieves a particularly effective aerodynamic airflow around the entire vehicle – even in cross winds. The aerodynamically optimised A-pillar cladding has a specially shaped attachment made of flexible plastic, which improves airflow around the A-pillar and thus – due to lower eddies – reduces drag. Vehicles with the MAN OptiView mirror replacement system benefit to a greater extent from the new aerodynamically optimised A-pillar cladding and the calm airflow in this area. The door gap closing element is a highly flexible plastic element attached to the door extensions, which closes the vertical gap between the front edge of the door extension and the bumper. This further optimises the aerodynamic flow around this area.

New frame skirts on left and right sides*

The new frame skirts for semitrailer tractors enhance the vehicle's appearance even further with its more dynamic styling. The rubber lips at the top and bottom reduce the air gaps and thus minimise turbulence and air resistance. These fuel saving optional frame skirts can even be combined with the large tank cross or semitrailer tractor in a low design (Ultra).

Aerodynamic underbody panelling*

The new aerodynamic underbody panelling improves the ground level air flow around the D30 semitrailer tractors from the TGX series. It absorbs the air flow close to the ground down-stream of the plastic bumper and guides it to the rear. This prevents turbulence in the underbody area between the radiator and engine and thus reduces air resistance.

^{*} Only available in combination with the D30 PowerLion driveline

ADDED CONVINIENCE

International Master Agreement with MAN Customer Service

Within the European MAN service organizations, there are different cost levels for spare parts and working hours, depending on the country. Tailor-made and uniformly valid service solutions simplify the business of our key accounts in international long-haul transport.

The country-specific conditions lead to sever distortions in service costs in the international transport inudstry, The proven, customised and uniformly valid, needs-optimized master agreements help simplify business tremendously by ensuring price harmonisation for greater transparency and planning security.









RELIABILITY IN DETAIL.

Our reliability rests on many components. The first is our continuously growing LED range for the lighting systems of the vehicle. Another is our dedication to the little things. For instance, when it comes to the electricity supply of the MAN TGX we pride ourselves on laying not one wire more than your configuration needs. The wires themselves are now protected by even more flexible and elastic materials, and the number of joints has been cut. We also reduced the wire thickness overall, which in turn means less weight and more available load capacity.

The modular wiring concept offers additional advantages by allowing customer requests to be easily incorporated and enabling quick repairs thanks to prefab sets. Together, the result is shorter downtimes and a vehicle electrical system with higher performance overall.

24V battery management system

Empty batteries and stranded vehicles due to excessive use of electrical devices during rest periods are a thing of the past with the new MAN battery management. The system ensures that the vehicle engine can be started by automatically switching off less important consumers.

Cyber security

The networking of electronic systems and the associated data availability and use are both a curse and a blessing. On the one hand, this enables new helpful functions and applications – on the other hand, it offers potential targets for hackers. MAN consistently safeguards all vehicle systems against misuse.



SUPPORT NON-STOP.

Only a truck that runs is a good truck. Unplanned down-time and the associated loss of time and earnings are something we'd all like to do away with for good. The MAN Truck Generation has got your back there too. Right from day one, it brings the ultimate quality synonymous with MAN to its work. So much so that it's hard to get it to stop. If you need us, however, we're ready and waiting. When you're at a standstill, we will get you back on track as quickly as possible. We will move heaven and earth to keep you mobile. In short, where there's a MAN employee, there's a way.

When it comes to financing, too, you can rely on MAN: MAN Financial Services supports your needs and makes sure you stay mobile. You can even cover bottlenecks and react flexibly to higher demand thanks to truck leasing from MAN Rental.

With our clever solutions, you can make your business noticeably easier and more transparent. We've got it covered, so that your head stays clear for the road infront.

At a glance:

MAN Mobile24

Via the MAN Mobile24 mobility service, you can reach us round the clock europe-wide. The service has been expanded with additional solutions, so that our customers are always on the safe side for every kilometre. As well as the guarantee that the transport business can continue to run smoothly in the event of a breakdown.

- Uptime guarantee
- The MAN uptime guarantee keeps you moving. We are never far away in the event of a breakdown and, even if downtime or repairs are required, we will get you back on the road in no time.
- Service contracts

We help you save time, money and stress. MAN takes care of everything as required, from servicing and invoice management to answering questions relating to guarantees and goodwill.

- MAN Genuine Parts
- With compliance with strict quality standards guaranteed, MAN Genuine Parts are the ideal match for your vehicle. It's the only way for your MAN vehicle to be driven safely, efficiently and with minimum wear.
- Accessories and retro-fit solutions
 Easily tailor your MAN to your needs with our high-quality accessories. Subsequently and simply. With products exactly matching your MAN model. And matching you.

For further offers and details please contact your local dealer or visit our website:

mantruckandbus.com







- 1 Accessory LED door projector
- 2 Accessory door handle with lion





SERVICE AS YOU LIKE IT - PERSONAL AND DIGITAL.

Could your company also benefit from the increasing digitalisation taking place in logistics? We are convinced it can. That's why we would like to give you a brief insight into how you can better master the most pressing challenges of your industry with smart digital solutions.

Above all, the high cost and time pressure make the working environment in the logistics industry particularly challenging. Every vehicle in your fleet must be operated as economically as possible. This requires economical driving behaviour as well as effective and repair manage-ment. With an internet-enabled truck with Over-the-Air Upgrades, an overview of all the key data about the vehicle and its performance appears directly on your desktop, and many other useful features of our digital services give you the freedom to take care of business.

Your benefits:

- more efficiency,
- simplified work processes, with maintenance outsourced to your MAN Service Centre or by keeping drivers and fleet managers digitally connected
- lower costs.

The best part: it's already a reality.

With MAN DigitalServices, you can begin straightaway.

While transport is – and will always be – analogue, fleet management is becoming digitalised. MAN DigitalServices helps you optimise business tasks, bring fuel and admin costs down, plan and manage servicing tasks from the truck, manage time and provide continuous training to drivers.

We would like to give you the opportunity to try out this comprehensive package for three months for free! Our trial offer includes the following paid-for digital services: Geo, Perform, Compliant, MAN ServiceCare M and Timed. MAN ServiceCare S and the MAN Driver app are already free and are not part of this offer.

Take advantage of:

- efficient fleet management with digital services that make your job significantly easier
- our new cost- and risk-free offer: your free trial will automatically end after three months, with no further obligation.

The trial offer* is valid for all the vehicles** in your fleet for your registered trial period. Get started now: with just a few clicks, you can try all the benefits of MAN DigitalServices for your whole fleet. We are sure that you will be impressed. www.man.eu/marketplace

The digital services listed below help you manage your fleet economically and efficiently:

- Vehicle tracking
- Maintenance and repair management
- Tachograph and time management
- Economical driving
- Driver assistance
- Over-the-air upgrades

The latest information on MAN DigitalServices can be found on our website: www.digital.man

Valid for all customers who do not currently pay fo MAN DigitalServices.

^{**} Depending on technical availability.

EASIER WORKDAYS.

MAN ServiceCare

Regular maintenance is a must if you want to reduce unscheduled downtime and repair costs for your fleet. Our free MAN ServiceCare S is there to help – we'll be very happy to take care of your maintenance and repair needs. The service works using vehicle and maintenance data relayed to MAN ServiceCare over the Internet. Your MAN Service Centre uses this to proactively arrange maintenance appointments and combine your maintenance tasks. After all, you've got enough to do already. What's more, your nearest MAN Service Centre can use remote vehicle diagnostics to view targeted vehicle data and give you a more personalised service if you break down. MAN ServiceCare M gives you all the benefits of MAN ServiceCare S but you also get extra tools for even more personalised maintenance and repair management across your whole fleet. We are continually upgrading MAN ServiceCare - with pre-emptive tools that increase the uptime of your vehicles in a more straightforward and comprehensive way.

MAN Driver App

The MAN Driver app ensures that drivers always have important information about their MAN to hand. Not only does our smartphone-based digital assistant make life on the road easier but it also speaks 26 languages, which means that drivers from lots of different countries can use it. Our smart, user-friendly and efficient MAN Driver app helps MAN drivers on every trip, providing important infor-mation and offering a range of features to make their lives easier. For example, if they break down, they just tap on the app and connect to the MAN Mobile24 emergency service. Drivers can also notify fleet managers about any damage and send any documentation quickly and easily through the app. The MAN Driver app is a constant companion – whether you need to carry out a vehicle check before departure, look for a parking place online or check driving and rest times.

The MAN Driver app is free of charge and connects drivers, fleet managers and workshops in a simple and secure way. We're constantly improving our driver app and adding new offers and features that make MAN drivers' jobs even easier.





SMART SOLUTIONS.

MAN Now

With MAN Now, you receive exclusive vehicle functionalities and upgrades, allowing you to modify your truck software to meet your requirements, any time, any place – and all without having to drop into a MAN service outlet. Thanks to the new and convenient over-the-air technology, you can easily enable and expand functions or add new ones. Thanks to these retrofitted modification options you are more flexible in the vehicle configuration. As no visit to the workshop is required, you increase the vehicle uptime and efficiency.

The following features are available for all vehicles with a model year of 2020 or later:

- MAN OnlineTraffic
- MAN MapUpdate

The following features are available for all vehicles with a model year between 2022 and 2024:

- MAN LanguagePackage
- MAN LanguageRecognition
- MAN Idle Shutdown
- MAN EfficientCruise®
- MAN EfficientRoll
- MAN TimeInfo
- MAN TimeControl
- MAN TipMatic[®] driving program

The first usage of MAN OnlineTraffic per vehicle is free.

MAN SimplePay

MAN SimplePay is a platform in which transport and logistics companies can digitally store their fuel cards and assign them to each vehicle. The user-friendly overview on the RIO platform summarises all costs incurred in day-today business.

MAN SimplePay can make everyday work easier: For example by offering the option of authorising the refuelling process via the MAN Driver App or the application in the MAN media system. Drivers can also book transactions for parking spaces and vehicle washes in advance via the MAN Driver App and pay with the stored fuel cards.

MAN SimplePay's services and partner network is constantly being expanded, to grow with the needs of customers and adapt to the market requirements.

Technical requirements for these features are a RIO Box, registration on the RIO platform and activation of your vehicles The range of over-the-air features is being continually expanded.





THE MAN TGX: SOMETHING FOR EVERY BODY.

Outstanding body-compatibility, a tidy frame, a high load capacity and superior handling: the MAN TGX meets even the highest expectations down to the tiniest detail. The portfolio ranges from a 4×2 semitrailer tractor to an 8×4/4 chassis or an 8×4/4 heavy-duty tractor with a total towing weight of up to 250 t. In addition to the standard-height version, a lower model is available for high-volume transport as well as a medium-height body for off-road use. The sturdy, rigid frame made from high-tensile, fine-grained steel ensures ideal body-compatibility. A free frame upper edge, a cleverly designed pattern of mounting holes and many sector-specific fittings make connecting the body and – if necessary – subsequently moving components as easy as possible.

Furthermore, the MAN TGX generation offers additional electronic interfaces for sharing data with the body. In addition to the interface behind the front flap, it is now also possible to position one behind the cab.

The MAN media system allows third-party apps with body features to be integrated. What is more, with the new MAN PAL, Body manufacturers get access to extensive independent programming options for parameters and function logic, quickly and directly via the MAN ABBI body manufacturer portal.

The optional full air suspension with four air bellows set well apart from one another ensures optimum safety on the road and maximum comfort. For bodies with a high centre of gravity, continuous damping control (CDC) offers outstanding driving stability.

The MAN TGX with a MAN D38 engine can handle even the heaviest of traction jobs. With outputs of 397 kW (540 HP) to 471 kW (640 HP), it is ideal for tasks with high total towing weights, such as transporting construction vehicles, heavy tipper bodies and heavy-duty applications.





CUSTOMER-ORIENTED.

New air suspension control

The air sprung rear axle is now standard in long-haul transport. However, the possibilities and advantages of air suspension are also increasingly being used in many other application segments. The new air suspension control with its improved and extended range of functions takes this trend into account. This include for example, a 2nd rear axle relievable, and a manual and automatic suppression of VASC (Vehicle Air Suspension Control) level control. In addition a selection option of 2nd lowered driving height for compensation of tyre rebound on empty runs. This function assists in observing the height limit (e.g. Ultra). And another new feature is the control of the air suspension of the trailer/semitrailer.

The electronically controlled air suspension VASC (Vehicle Air Suspension Control) allows the vehicle frame to be raised and lowered to suit different deployment scenarios.

The control unit for the electronically controlled air suspension (VASC) is installed in a separate holder next to the driver's seat and allows the driver to adjust the height of the vehicle frame quickly and precisely – for example, to adjust the cargo space floor and the loading ramp to the same level. An extended control unit enables the VASC to be operated via the multifunction steering wheel and via a menu in the display of the instrumentation.

System improvements:

- New functions
- Shorter lifting and lowering times (up to 50%)
- Remote control with new ergonomic operating design
- Control via multifunction steering wheel and on-board menu
- Control of the air suspension of the trailer/semitrailer via remote control or multifunction steering wheel



Control unit for electronically controlled air suspension (VASC)





MORE TRACTION.

New electronic brake system EBS

The electronic brake system EBS combines the basic function of the electro-pneumatic brake with the extended functions of antilock braking system (ABS) and anti-slip control (ASR). With the aid of EBS, driving and braking procedures can be optimised in many different ways. It thus makes an important contribution to enhancing driving safety, driving comfort and cost-effectiveness. In the brake system of the MAN Truck Generation, the electronic brake system EBS has been further developed and its range of functions expanded with new functions. Active wheel speed sensors with their own power supply and evaluation electronics now replace the previous passive sensors. Active sensors enable extremely accurate and fast speed measurement from just 0.1 km/h. Off-road moving-off behaviour with tandem-axle units is improved with the use of sensors on the second axle. Also new are halt brake braking function with preparation for reversing restriction and rollback detection, MAN EasyStart Offroad hill holder and the hill-climbing brake in conjunction with manual gearbox. It is now also possible to combine the systems in one vehicle.

Electronic anti-slip control (ASR)

In future, the new electronic anti-slip control will be able to prevent the spinning of driven wheels on all vehicles – including on the driven front axles of vehicles with MAN HydroDrive®.

The anti-slip control (ASR) prevents the drive wheels from spinning when moving off or accelerating. This improves traction, particularly on slippery surfaces such as ice, snow, loose chippings or wet cobbles, and ensures stable driving. The further development of the electronic brake system EBS (use of active wheel speed sensors) means that for example vehicles with MAN HydroDrive® can also be combined with anti-slip control (ASR). This improves traction in this type of drive when a front wheel spins more on one side.

MAN works tipper range

From the MAN factory gate directly and without detours to the construction site – that is the MAN works tipper range. The three-axle chassis with tipper body can be used directly ex-works. This means that everything comes from a single source.

All MAN works tippers are designed as complete vehicles by the MAN engineering departments, have passed the relevant strength calculations and have been validated by the standard MAN driving test processes. The interaction between chassis and body is therefore particularly efficient and reliable.

ENHANCED FLEXIBILITY

Uniform frame components structure*

Sixteen standardised basic layout simplify the configuration of a standard semitrailer tractor while offering guaranteed functional reliability and application suitability. This also simplifies maintenance and repair, refuelling and retrofiting.

The new basic layouts are based on typical use cases of a 4x2 smitrailer tractor in normal-height and low design.

The standardisation includes the arrangement of the following components on the frame:

- Tanks (diesel and AdBlue fluid)
- Exhaust silencer
- Battery box
- Compressed air tank
- Compressed air management
- Fuel pre-filter
- Spare wheel
- Frame clearance for external attachments

Better use of installation space*

With the new combined tanks for diesel and AdBlue fluid, no installation space is lost on the frame. Despite the long range, room still exists for additional frame attachments .

The fuel and AdBlue tanks are combined in a single tank in two separate compartments. A plastic coating is present on the inside of the AdBlue fluid chamber, preventing the AdBlue fluid from corroding the aluminium.

MAN PAL

Great application fit has always been the hallmark of MAN vehicles. MAN PAL simplifies the functional connection of the body to the vehicle systems. MAN PAL offers body manufacturers extensive independent programming options for parameters and function logic, quickly and directly via the MAN ABBI body manufacturer portal.

Connection of additional body camera signals

The vehicle processes up to two camera signals, as standard, which are displayed in the Professional or Advanced media systems. A total of up to five cameras can be connected to a retrofitted camera hub. For a cost-effective overall solution, it is important to select the necessary preparation when configuring the vehicle.

New front underride protection and hinged access step*

Depending on the application and customer requirements, the combination of a normal-height vehicle with a steel bumper can be advantageous. Now, a redesigned front underride protection and the hinged step unit of the lowest access step are available for this configuration. This benefits customers by providing an attractive apperance, damage-resistant design and compliance with legal requirement for road vehicles.

^{*} Only available in combination with the D30 PowerLion driveline.





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