THE MAN TES.

Simply my truck.





M.AN 510

THE MANY FACETS OF THE MAN TGS.

The MAN TGS is uniquely adaptable: whether you use it for heavy local and distribution transport, on construction sites, for municipal services or as an expert for special tasks, the MAN TGS is a versatile truck which is tailored perfectly to industrial use. It sets standards with its powerful drive, unrivalled load capacity and one-of-a-kind ergonomics.

The MAN TGS boasts a number of practical features. The driver's workspace is much more streamlined and the rest area has been optimised further. Meanwhile, the traffic jam assist and the stop-and-go function in ACC help you make your way through traffic congestion with ease. However, our MAN TGS powerhouses don't just lead the way in the analogue domain: they also offer our customers a comprehensive digital package that pairs tried-and-tested MAN quality with fascinating innovations. Take, for example, the electrical/electronic architecture and innovative, digital services with which MAN is opening up a whole new dimension. The MAN TGS – your connected truck – is always connected and fully digital.

From enhanced performance, greater comfort, maximum transport capacity, top quality and service life to exemplary safety and environmental friendliness, and digital connectivity, the MAN TGS ticks all the right boxes. Trucks from MAN never fail to deliver top quality, anywhere and anytime. Prepare to be impressed by a truck that maximises value while minimising costs. It will soon win you over – both on the road and in your accounts department.

Find out more: www.man.eu/mantg

-

EXCELLENT DRIVER FIT.

PAGES 06-21



GREAT EFFICIENCY AND ECONOMY.

PAGES 22–31



CONNECTED



OPTIMISED UPTIME.

PAGES 32-37



PAGES 38-43

Plus: SAFETY AND ASSISTANCE SYSTEMS. PAGES 44–49



THE TIMING MIGHT BE TIGHT ...

111

101100

100

1.1

10.000

... BUT THE CAB DEFINITELY ISN'T.

ERGONOMICS START WITH THE VERY FIRST STEP.

The ergonomic entry design of the MAN TGS 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 designed 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 off-road 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 spacesaving: 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.





The lowest step, which is prone to damage when driving off-road, is now movable. Its mounting brackets are made from flexible plastic, meaning that they can change shape if they come into contact with the ground and return to their original shape again afterwards.

With a very wide door opening angle of 89 degrees and the very low step position, the MAN TGS clears the way for getting in and out ergonomically, whether you are at a parking lot or on a building site.



Innovative MAN SmartSelect multimedia control

TOP-CLASS DRIVER'S CAB.

The driver's cab is the heart of the current generation of MAN trucks. We've reimagined the cab from floor to ceiling – because comfort in the cab means easier work-flows 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 redesign, there's now all kinds of free space, for you to use whichever way suits you. Because our customers' requirements are as diverse as our trucks, we attach great importance to wide-ranging configuration options – such as stowage spaces, pull-out drawers or storage compartments, all sorts of boxes, and built-in cupboards for the back walls of our cabs. One feature is an absolute first: the trailblazing MAN Smart-Select system, which was developed together with our customers, makes using the multimedia system child's play even in demanding driving situations on construction sites. Here, too, comfort was our inspiration for eliminating the touchscreen. With MAN SmartSelect, functions such as maps, music, cameras and more can be selected via a user-friendly dial with hand rest. There's so much more to discover in our driver's cabs, so get in, get comfortable and enjoy all the possibilities.

The MAN TGS offers exactly the support you and your drivers are looking for: MAN CruiseAssist, Lane Change Collision Prevention Assist, Lane return assist (LRA), turn support, lane change support (LCS), the traffic jam assist, ACC Stop&Go, lane departure warning (LDW) and many other safety and assistance systems can prevent or lessen the consequences of accidents, which can in some cases entail expensive repairs and major losses of time. Read more in the chapter SAFETY AND ASSISTANCE SYSTEMS. Fully digital instrumentation with a 12.3-inch colour display

17.12

Driver-centric, ergonomic cockpit

C. C. L.P.

MAN OptiView digital mirror-replacement system

Media system with a 12.3-inch colour display

Multifunctional steering wheel with integrated airbag

MAN SmartSelect – the infotainment control optimised for trucks

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 was all the more important to us then to make the cockpit as driver-friendly and organised as possible. Displays and controls are now 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.

Theory times experience: the controls for the MAN TGS are the result of combining the latest scientific analyses with insights from intensive on-road tests with drivers.



Freely programmable direct access buttons fitted with touch sensors

Centred in the driver's view is the fully digital combi-dashboard that shows driving data, data from assistance systems, warnings, alerts and more. It is flanked by a secondary display for navigation via the infotainment module.

10

0

Manual

N

() unional

24.0

100

1 23 *C

120

0

a . .

Displays placed at ideal reading height and distance

FM Sender

93.3 MHz

22 44

215

ñ3104

Ŭни

D Instrement road

München, Bayers Deutschlant 8.11.2019, 24*C

Controls within perfect reach

EVERYTHING UNDER CONTROL.

Fully redeveloped, 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 TGS 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 input connection are part of the standard fittings, and from Advanced level on up to two smartphones can be paired.

The infotainment system can be operated either via a classic control system with buttons or via MAN SmartSelect (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 TGS tangibly special.



Infotainment system with 12-inch display and MAN SmartSelect



Infotainment system with 7-inch display and MAN SmartSelect



Infotainment system with 12-inch display and control system below the secondary display



WITH MAN YOU CAN TAKE A LOAD OFF.

Everything has to come to rest at some point. A good atmosphere. A cosy environment. In the sleeping area of the MAN TGS that's exactly what you'll find. In the extended cab models TM and TN, a multizone cold-foam mattress and a slatted frame ensure comfort for well-deserved shuteye and peaceful dreams. Personal items have their spot too in the many, customisable stowage compartments.

The bed is so comfy, you might want to stay just where you are. And you can, too, since all important functions can be operated and monitored right from the remote control. Lights, locks, heating, windows – all a simple push of a button away. Just like the radio, music, the perimeter camera and important data on the battery's current status or driving times. The infotainment system can also be conveniently operated via the MAN Driver app. Breaks and sleeping times can therefore be used optimally so that you're well rested and ready to take on upcoming challenges.

In our cabs an auxiliary water heater provides pleasant temperature and air condition. For the TN and TM cabs an electrical auxiliary air-conditioning system (as an option) is ready for use.

The electric air conditioner 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. Perfect for keeping your head cool but your toes toasty. Noise and lights are kindly asked to stay away, however. To create the perfect feel-good environment, the entire interior can be tailored to suit you down to the ground. From the colour scheme (Desert Beige or Moon Grey) to the storage space in the cab and even the interior lighting, everything can be customised to your needs – while maintaining a clear focus on the functionality which will never let you down.

Lion emblem on partial leather seats and new curtains. With the expressive lion emblem on the partial leather seats and the new, practical curtains, stays in the cab are even more pleasant.

The new curtain fabric is more hard-wearing and is in the same colour for both interior colour schemes. The crosscab curtain is designed as a single piece. This makes it easier for handling, cleaning and subsequent new orders. The bunk area can now be made even darker.





 Perfect for independent types: on-board coolbox/fridge
 Lion emblem and new curtains

MAN PUTS 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. The heated windscreen (as an option) ensures an unobstructed view even at the coldest times of the year. There is a choice of three cabs for the MAN TGS. Their compact cab width makes it easier to use the vehicle when space is tight, e.g. on construction sites, in woodland or when making deliveries.

TREMENDOUS TRIO.

	CAB TM: THE COMFY ONE	CAB TN: THE FLEXIBLE ONE	CAB NN: THE PRACTICAL ONE
	(narrow, long, medium height)	(narrow, long, standard height)	(narrow, medium length, standard height)
W × L (mm)	2,240 x 2,280	2,240 x 2,280	2,240 x 1,880
SLEEPING FACILITIES	2	1	-
SEGMENT	Heavy-load special uses in national long-haul transport	Local and distribution transport, off-road transport	Local and distribution transport, off-road transport, municipal services
BENEFITS AT A GLANCE	 2 sleeping spaces Capacious exterior storage compartment Expanded standing space in through access 	 1 sleeping space Capacious exterior storage compartment Expanded standing space in through access 	 Space behind seats for work clothes, etc.

NEW VIEWING ANGLE.

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)



 Display driver's side
 DIsplay co-driver's side
 Automatic display of front-camera image up to a road speed of approx. 10 km/h (split-screen display mode possible)



WHEN THE PERFORMANCE GOES UP ...

... BUT THE CONSUMPTION COMES DOWN.

A

MAN

MoAN 470

POWER FROM START TO FINISH.

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. This GPS-based speed control system analyses the route and automatically determines the most cost-effective driving style and speed. An aspect is the fact that it can now take into consideration the route selected in the navigation system as well as applicable speed limits. Just one of the many MAN ideas to help you get your business where it wants to be.

The outstanding efficiency of the MAN Truck Generation is reflected in press tests and your experiences. But standing still means going backwards: for this reason, the MAN TGS 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 gearbox and continues running at only 550 rpm, instead of the usual idling speed of 600 rpm. Fewer revolutions consume less fuel!

Economical driving style – expanded functionality of Perform

The digital service Perform assists drivers in optimising the economy of their driving styles. There are now more functions and information available for evaluating the efficiency of the vehicle deployment. Perform evaluates all the relevant vehicle data with respect to the economic efficiency of the driving style. The service expands the deployment analysis data of Essentials (e.g. average fuel consumption), additionally providing important vehicle data about utilisation of cruise control or the service brake, for example.







THE MAN TGS IS PRE-PROGRAMMED FOR EFFICIENCY.

MAN has taken efficiency to the next level with the MAN TipMatic[®]. This system enables the vehicle to automatically recognise the load and incline conditions and optimise the gear-changing strategy to match. Whether the truck is unladen or fully loaded, MAN TipMatic[®] automatically 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 pre-programmed 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 26 engine now also available for 4x2 standard semitrailer tractor.

In future, for all standard semitrailer tractors in the heavy series 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. There are two versions of the gearbox: direct drive and overdrive. 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. Due to its three-shaft design, the gearbox has a low weight with high transmission efficiency.

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

Because no road is completely level: the GPS-supported cruise control MAN EfficientCruise[®] detects the characteristics of the road with its upward and downward gradients and now also takes the selected navigation route into account. In this way, the system is able to adapt the selected gear and road speed even better to an economcal driving style. Downshifts are suppressed whenever sensible. This ensures fewer traction interruptions and saves fuel.

In doing so, the MAN EfficientCruise® makes use of dynamic changes in kinetic energy, e.g. to avoid changing down a gear unnecessarily when travelling uphill. If the feature "Include infrastructure" is activated, additional map data relating to transport infrastructure (bends, round-abouts, exits and speed limits) are used to calculate an energy-efficient driving style. Furthermore, if the speed regulation option is activated, the system reduces the drive output to suit the situation – earlier than the majority of drivers would – to slow down as fuel-efficiently as possible, for example when approaching a roundabout.

The MAN EfficientCruise® has even more intelligent, efficiency-enhancing features: On level terrain, dynamic coasting alternates automatically between accelerating and coasting. This way, the most fuel-efficient operating ranges of the engine are used instead of the comparatively inefficient lower partial-load ranges.

There is even more concrete support for the driver too: in "Variable Top Speed" mode, the driver can manually set the speed by pressing the drive pedal – but the MAN EfficientCruise[®] will still work out the most fuelefficient driving modes in the background. Based on this, notifications and small symbols are displayed on the instrument panel which recommend actions the driver should take to perform even more cost-effectively.



MORE TRACTION AT THE TOUCH OF A BUTTON.

You never know what to expect on the job, so it's best to be prepared for anything - like slippery terrain, mud and gravel. MAN was the first manufacturer of utility vehicles to launch the engageable hydrostatic front-wheel drive HydroDrive onto the market and has extensive experience with this system. The MAN HydroDrive[®] easily copes with any situation where traction is crucial – even scenarios where a truck with rear-wheel drive only would have to give up and go home. The system is available with the semiautomatic MAN TipMatic[®] transmission or with a manual transmission, so the choice is always yours. MAN also makes downhill gradients safer by transferring the engine braking torque to the front axle (known as "support"). What is more, the combination of MAN HydroDrive® with a PriTarder extends the life of the service brake. This enhances safety and improves directional stability on unpaved surfaces, even when travelling downhill - the perfect solution for your driving jobs.

You only need to press a button to access considerably better traction. This allows your MAN to tackle a much wider range of jobs. In addition to using less fuel than a conventional all-wheel drive, it reduces the weight by as much as 400 kg. Even if you do almost all of your driving on the road, the additional traction boosts mobility and safety, especially for unladen trips on slippery surfaces. Of course, anyone who makes it up the mountain wants to come back down again, too. That's where the MAN Brake-Matic smart brake with electric braking and ABS comes into play. They make it possible, for example, to maintain a constant speed when going downhill by regulating the sustained-action brakes automatically. In situations where you have to react fast, the MAN braking system is exactly the partner you want at your side, too: based on the strength of pedal movement, the braking assistant recognises when hazard braking is needed and immediately activates full braking power. No matter where the road takes you, the MAN TGS gives you the power and security you need.



Front axle with hydrostatic wheel hub motors



WHEN YOU KEEP YOUR CALM ...

... AND YOUR TRUCK IS ALWAYS IN ACTION.

MAN

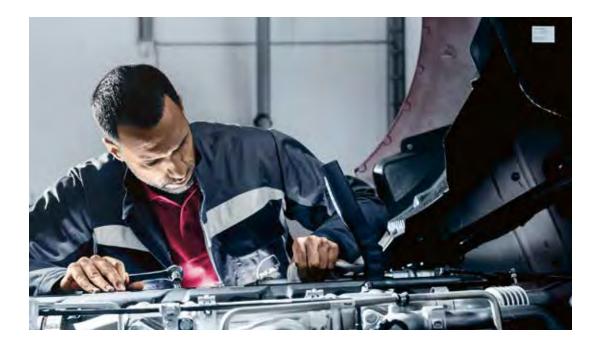
M. AN 510

WORKING NON-STOP.

Only a truck that runs is a good truck. Unplanned downtime 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.

MAN ServiceCare, for instance, impresses with its forward-looking planning and smart bundling of service appointments. Proactive servicing management is part of MAN DigitalServices and informs the workshop ahead of time if vehicle analyses indicate action is needed. You are then contacted by email and can arrange a service appointment even before downtime occurs. 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. We've got it covered, so that your head stays clear for the road in front.





RELIABLE, AGAIN.

This news bears repeating: the TÜV report on utility vehicles has again confirmed that the MAN trucks offer impressively high quality. In particular when it comes to long-term reliability, our fleet of four- and five-year-old trucks occupied top spots. Our previous awards have only served to whet our appetite to do even better. Successfully so, too, as the share of defect-free vehicles in the main inspections rose yet again. 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 Truck Generation 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.

THE FASTEST WAY IS THE INFORMATION HIGHWAY.

Regular servicing is the alpha and the omega. Repairs can be completed faster, and optimally configured vehicle technology even enables fuel consumption to be decreased. We'd be glad to take care of the organisation details for you with MAN ServiceCare. To start with, your vehicles' data is transferred online to the MAN servicing data portal in accordance with the digital services you have booked. Using this as a basis, your service point plans all required maintenance, informs you via telephone of upcoming appointments and coordinates implementation together with you. That way, you can concentrate on your core business and we make sure all your vehicles are ready for anything.

When you're on the move, fast and easy communication is the best way to keep your business running. Here our MAN Driver app is your partner. Thanks to its MAN service point search and its control lamp and switch direct identification function via visual symbol recognition (quick manual), you have a MAN professional in your pocket wherever you go. Before departure, the driver can use the app's checklist to document, sign and save a record of vehicle damage and other defects. The damage noted in the pre-departure check can be viewed on the RIO platform by the fleet manager, downloaded as a PDF and – via MAN Service-Care – sent directly to the correct MAN service point. If the worst comes to the worst, all information and images can be sent directly to the fleet manager and the MAN Mobile24 mobility service can be activated. Via our mobility service, you can communicate your exact location and track arrival of assistance.

For those who would like even more service, MAN also offers service agreements. Depending on your package, we take on maintenance or even additionally repairs for you – at a fixed price you can count on.





OPEN ROADS AHEAD FOR WHATEVER YOU NEED.

The roads have enough congestion as it is. At MAN, your needs have a fast-lane pass. We keep our availability high so that you always have all your options open. Appointments are scheduled quickly and flexibly, your MAN service partner is available from early until late and via the MAN Mobile24 mobility service, you can reach us round the clock in 28 different countries. Your customers don't wait: which is why we're there for you whatever you need, whenever you need us.

80% of all relevant replacement parts are available at all times in our workshops, and 95% at the latest on the following day. Special parts can be supplied within a week. If it's long waits you're looking for, however, we can't help you there.

WHEN ALL YOU WANTED WAS A TRUCK ...

... BUT WHAT YOU GET IS A TRUE PARTNER.

man

NEXT EXIT: MAN.

Wherever the road takes you, our solutions are just around the corner. We're available at 1,700 service points worldwide, from early until late. We are always up to date and know what's driving you: with systematic analysis of vehicle data and customer enquiries as our basis we're always striving to develop new future-oriented digital solutions. Continually transmitted vehicle data and intelligent data analyses are the foundation for the ever expanding range of exclusive and customer-tailored digital solutions: solutions that enable you to get the most out of your new MAN truck no matter whether you're the driver, fleet manager or business partner!

In short, your challenges are our challenges and we're always working on modern and tailored answers to your questions even before you've asked them. Personal, competent and according to your priorities.



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 maintenance management. With a networked truck, an overview of all relevant data directly accessible from your desk and useful digital services, you free up capacity to concentrate fully on your core business. You benefit from:

- more efficiency,
- simplified work processes and
- Iower costs.

The best part: it's already a reality.

With MAN DigitalServices, you can begin straightaway.

Here's how to get started in the digital world: The free Essentials basic package comprises key basic elements from many of our services to get you off to an easy start. Once your fleet vehicles have been set up and are visible in our administration area, you can get going with Essentials. You now have access to the fleet monitor and the deployment analysis with many useful functions such as the current vehicle location on a map, driving history covering the last ten days and a deployment analysis at vehicle level.

All other digital services support you in the economical and efficient management of your fleet in the following areas:

- 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



BUILT TO TAKE YOU THERE.

From axles and suspensions for any set of requirements to a body-compatible frame and a robust chassis, every component of the MAN TGS is built for the utmost reliability, safety and efficiency.

A new frame of reference: the frame construction of MAN tractor units offers far more. More stability, more bodycompatibility, more cost-effectiveness. The completely level upper edge of the frame means that all kinds of bodies can be accommodated with ease. The frame also boasts extra space for the same reason. Whether you choose a two-, three- or four-axle chassis, MAN tractor units are built to take you there, from the low-friction hypoid drive axle to the planetary drive axle, which is great for off-road use and offers good ground clearance and high traction performance on both wheels – perfect for heavy-duty tasks. You can also choose a weight-optimised hypoid axle that weighs 180 kg less than the normal hypoid axle and 280 kg less than the planetary axle. With this option, the ground clearance is similar to that of a planetary axle. Vehicles with leaf springs are available with a lightweight hypoid axle tandem in standard and medium-height versions, while trucks with air suspension come in a standard height. Maintenance-free construction air suspension for the planetary tandem-axle assembly is a MAN speciality. Thanks to the ECAS electronic levelling system, this delivers excellent ride comfort, regardless of the load. An additional advantage is that no axleguidance parts protrude from the wheel track. This makes for especially good ground clearance. MAN offers a large number of chassis options to ensure the right suspension for the task in hand. In the payloadintensive tank and silo segment in particular, the MAN TGS-TS is designed for higher payloads with its weight-optimised and application-oriented equipment concept. The vehicle can be further optimised by means of lightweight options.

What's more, the trucks with a leading axle and trailing axle boast a variable axle load ratio for optimum weight distribution. This ensures that optimum traction is always available to the drive axle, regardless of the load. With this system, the axle load is distributed variably between the driven and non-driven rear axle – whatever the loading status.

WHEN THE TRAFFIC IS UNPREDICTABLE ...

70

40

.

40

... BUT YOUR TRUCK ALWAYS KNOWS WHAT'S GOING TO HAPPEN NEXT.

GUARDIAN ANGEL INCLUDED.

Safely to your destination and back. This wish has right of way. In addition to protecting drivers and other people on the roads, cost-effectiveness is an important aspect, too. For even if 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 to simply head unplanned downtime off at the pass, we have made the MAN TGS your personal safety expert.

The MAN TGS offers protection through the reinforced cab as well as active roll stabilisation. It warns you via turning and lane change assistants. 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. Depending on the vehicle type and application segment, we can make an offer for the exact right systems for your job. Still, assistants have a supporting role: the final say is always the driver's.

* MAN Individual package





AND HERE ARE YOUR ASSISTANTS.

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.

Emergency brake assist (EBA)

The driver is warned of an imminent collision and the vehicle brakes automatically in an emergency. Available on demand in a version that cannot be switched off.

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 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.

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.

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 detected in an area of $2.5 \text{ m} \times 6 \text{ m}$ 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 wastedisposal vehicles). Stitch-and-blend technology combines four camera views (front, rear, left and right, in full-HD quality) 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 manoeuvring speed (\leq 40 km/h), when the turn indicator is set (lane change) and when reversing.



* MAN Individual package

Some of the features illustrated in this brochure are not part of the production series generally described here.

Both the vehicle's air conditioning system and refrigerator contain fluorinated greenhouse gases (R134a / GWP 1430 with up to 1.15 kg; $1.6445 \text{ t} \text{ CO}_2$ accordingly).

MAN Truck & Bus SE

Dachauer Straße 667 80995 München Deutschland www.truck.man.eu/mantg

D111.3650/E · pe 07215 · Printed in Germany The text and illustrations are not binding. We reserve the right to make changes based on technical progress. All the specifications in this publication were correct at the time of going to press.