EFFICIENCY EN ROUTE.

Vehicle concepts for short-haul and long-haul transport.

M AN 640



GREATER EFFICIENCY IN TRANSPORT.

MAN concepts matched to their sector, for solo vehicles, semitrailer combinations and articulated trains, face the challenges of our time: they combine maximum operating efficiency with exemplary reliability and safety. Innovative MAN technologies keep your costs to a minimum while boosting your benefits. Experience MAN, experience transport efficiency at its very best.

www.truck.man

Some of the equipment illustrated in this brochure is not included in the series-production scope.



CONTENT

Semitrailer concepts	Page	4
EU dimensions for semitrailer and chassis heights	Page	6
Euro-standard semitrailer	Page	8
High-capacity semitrailer	Page	10
Engineering specialities	Page	12
Articulated-train concepts	Page	14
EU dimensions for articulated trains	Page	16
Maximum volume with fixed body	Page	18
Chassis for swap bodies	Page	20
Specialities à la carte	Page	27
Driver assistance systems	Page	28
MAN cabs	Page	32
MAN driveline	Page	38
Range of vehicles	Page	39

SECURE IN THE SADDLE WITH MAN.

There is a lot in favour of the Euro semitrailer.

The full-length cargo bay in the semitrailer is a major advantage. Semitrailer tractors, moreover, can pick up and drop their semitrailers, increasing flexibility and transport throughput while minimising stoppages. It is worth bearing in mind, too, that semitrailer combinations are also used for relay transport.

So there are many advantages you can now utilise to even better effect. Because in terms of drive dynamics, reliability and cost-effectiveness, MAN semitrailer tractors come complete with everything necessary for success.





LAYING DOWN THE LAW.

Chassis heights for Euro-standard semitrailers and high-capacity semitrailers

Because the dimensions for the semitrailer combination are statutory, the coupling height is the most important starting point for flexible load volume in the semitrailer. In theory, the following is true: the lower the coupling height, the greater the load volume. In practice, two types of semitrailer dominate the highways:

- Euro-standard semitrailer with a coupling height of 1100 mm for up to 95 m³ load volume.
- High-capacity semitrailer with a coupling height of 930 mm for up to 3 m load loading height.

MAN semitrailer tractors for all purposes

With practice-oriented concepts, MAN meets all requirements:

- Long-haul semitrailer tractors as 4x2 or 6x2 for Eurostandard semitrailers, for example semitrailer with box or tarpaulin body (up to 2.80 m loading height) or for ISO container (up to 2.90 m external height).
- Semitrailer tractors for high-capacity semitrailers. With the extremely low semitrailer top edge, the MAN TGX and TGS Ultra have the ideal dimensions many customers want to allow for a loading height of approx. 3 m for 100 m³ load volume in the semitrailer.
- Semitrailer tractors for tank and silo semitrailers. Due to its extremely low weight, the MAN TGS-TS maximises payload.
- Semitrailer tractors for specific requirements of the MAN TGL and TGM series for short-haul and distribution transport.

DIN ISO angle of inclination

Frame overhang is short, so there is ample clearance for the semitrailer. The DIN-ISO values for the front and rear angles of inclination are met.



Overall length of semitrailer tractor + semitrailer



Euro chassis height 1100 mm



Middle of kingpin to end of semitrailer



High-capacity coupling height starting from 930 mm







Derivative dimensions



Angle of inclination of fifth-wheel coupling at 150 mm height and tyres 315/70 R 22.5

CHAMPIONS IN THE EUROPEAN LEAGUE.

Euro-standard semitrailers for 90 m³ to 95 m³ volume.

With the help of different tyre sizes, fifth-wheel couplings and plates, MAN TGX and TGS with air suspension allow for chassis heights ranging from 1047 to 1281 mm.

Chassis heights depending on equipment configuration¹⁾

Tyres		295/60 R 22.5		305/60 R 22.5		315/60 R	315/60 R 22.5		275/70 R 22.5		305/70 R 22.5	
Fifth-wheel	Fifth-wheel	Laden	Unladen	Laden	Unladen	Laden	Unladen	Laden	Unladen	Laden	Unladen	
coupling height	pick-up											
	plate											
150 mm	12 mm	1 055	1 080	1060	1085	1065	1 090	1065	1 0 9 5	1083	1 113	
	40 mm	1083	1 108	1088	1 113	1 0 9 3	1 118	1 0 9 3	1 123	1 111	1 141	
185 mm	12 mm	1 0 9 0	1 115	1 0 9 5	1 120	1 100	1 125	1 100	1 130	1 118	1 148	
	40 mm	1 118	1 143	1 123	1 148	1 128	1 153	1 128	1 158	1 146	1 176	
250 mm	12 mm	1 155	1 180	1 160	1 185	1 165	1 190	1 165	1 195	1 183	1 213	
	40 mm	1 183	1 208	1 188	1 213	1 193	1 218	1 193	1 223	1211	1 241	
162 mm ¹⁾	-	1 0 5 5	1 080	1060	1085	1065	1 090	1065	1 0 9 5	1083	1 113	

1) Weight-optimised fifth-wheel coupling with integrated 22 mm fifth-wheel pick-up plate (weight saving up to 25 kg).

Information on coupling height always refers to loaded vehicle. Attention should be paid, however, to the coupling height of the unladen vehicle, which is determined by tyre rebound. Rebound depends on the tyre's aspect ratio and can vary from manufacturer to manufacturer, so only approximate values are stated here.

60% tyre (e.g. 305/60 R 22.5) 25 mm

70% tyre (e.g. 315/70 R 22.5) 30 mm

80% tyre (e.g. 315/80 R 22.5) 35 mm



Tyres



Easy coupling and uncoupling due to long air-suspension travel of 235 mm



Fifth-wheel coupling



Fifth-wheel pick-up plate

315/70 R 22.5		295/80 R 2	22.5	315/80 R 22.5		
Laden	Unladen	Laden	Unladen	Laden	Unladen	
1088	1 118	1 107	1 142	1 120	1 155	
1 116	1 146	1 135	1 170	1 148	1 183	
1 123	1 153	1 142	1 177	1 155	1 190	
1 151	1 181	1 170	1 205	1 183	1 218	
1 188	1 218	1 207	1 242	1 220	1 255	
1 216	1 246	1 235	1 270	1 248	1 283	
1088	1 118	1 107	1 142	1 120	1 155	

Coupling	n heiahts i	depending	on equinme	nt configuration ¹⁾	
Obupinit	i neignta t	acpending.	on equipme	fill configuration '	

Tyres	295/55 R	22.5	295/60 R 22.5		305/60 R 22.5		315/45 R 22,5		315/60 R 22.5	
Fifth-wheel	Laden	Unladen ²⁾	Laden	Unladen ²⁾	Laden	Unladen ²⁾	Laden	Unladen ²⁾	Laden	Unladen ²⁾
coupling height										
150 mm with 12 mm fifth-wheel	947	967	964	989	971	996	930	960	970	995
pick-up plate										
167 mm elevating semitrailer	952	972	969	994	976	1001	935	965	975	1 000
coupling ³⁾ , normal position										
162 mm fifth-wheel coupling	947	967	964	989	971	996	930	960	970	995
with integrated fifth-wheel plate										

1) Based on tyres which currently have the lowest static radius.

2) Second driving height minus 25 mm during unladen journeys

3) Lifting fifth-wheel coupling has two mounting heights: normal position and stroke 148 mm

4) Lifting fifth-wheel coupling has two mounting heights: normal position and stroke 198 mm can only be obtained through a MAN service outlet. Operation of Euro-standard and high-capacity semitrailers with one vehicle is thus possible.

Tyre aspect ratio/rebound. Information on chassis height always refers to loaded vehicle and the tyre brand with the currently smallest static radius. Attention should be paid, however, to the coupling height of the unladen vehicle, which is determined by tyre rebound:

55% tyre (e.g. 295/55 R 22.5) 20 mm 60% tyre (e.g. 305/60 R 22.5) 25 mm 70% tyre (e.g. 315/70 R 22.5) 30 mm





Adjustable elevating semitrailer coupling



The air suspension travel of 180 mm allows for fast pick-up and disconnection.

MAXIMUM VOLUME. OPTIMUM SOLUTION.

100 m³ volume in semitrailer

With a coupling height of approx. 930 mm, the MAN TGX and TGS allow for a semitrailer load volume of up to 100 m³ with a loading height of approx. 3 m. The low frame concept is made possible due to the narrowed frame at the rear axle.

Low semitrailer top edge, high ride comfort

The air suspension guarantees a conformable ride and safe driving characteristics. The air suspension travel of 180 mm (120 mm raising, 60 mm lowering) allows for fast coupling and uncoupling.

Two driving heights

A switch on the dashboard enables the driver to switch between two driving heights even while the vehicle is in motion. This means that the same driving height can always be maintained – loaded or unloaded with tyres at full rebound. The permissible overall height limit of 4 m can be observed.

Adjustable elevating semitrailer coupling

Elevating semitrailer coupling with two pneumatically adjustable accommodation heights for Euro-standard and high-capacity semitrailers. Of course, MAN also offers conventional fifth-wheel couplings.





MAN SOLUTIONS FOR REAL-LIFE SITUATIONS.

Almost anything is possible

MAN supplies your vehicle just the way you want it, perfectly matched to your requirements. Here are a few examples of the practical equipment we offer: spotlight on the rear right of the cab, manoeuvring light at step unit, ladder on rear wall of driver's cab, extended working platform, different variants for brake and electrical connections, configuration for maximum tank volume with compressed-air tanks at the rear of the frame and compact battery box.

If you have very special requirements, MAN Modification offers you custom solutions. The extensive portfolio of modifications meets virtually all customer requirements. The most important modules are "driver's cab", "chassis" "driveline", "electronics" and "body". The result is a tailor-made concept every time, such as the semitrailer tractors of the MAN TGL and TGM series.



Compressed-air tank at the rear of the frame



Manoeuvring light at the co-driver's step unit



WE BRING YOUR WISHES TO LIFE.

Solo vehicles and articulated trains are key players in long-haul transport. In addition to the vehicles with fixed bodies, swap-body platforms play an important role in today's transport industry due to their logistic advantages and multi-use options. MAN trucks take the lead in this sector. Whether it be the lightweight MAN TGL series, the middleweight MAN TGM series or the big boys of the heavyweight MAN TGX and TGS series: high flexibility, high cost-effectiveness and exemplary reliability are always on board.

A new feature is the variable axle load ratio for vehicles with a leading or trailing axle. This variable ratio means that the drive axle always has optimum traction, regardless of the payload being carried. The variable distribution of the axle load between the driven and non-driven rear axle ensures that, in every payload situation, the drive axle always has sufficient traction, and that the axle load is never below the legally stipulated minimum.

EU dimensions for articulated trains



Total train length



System length



Derivative dimensions for rigid drawbar trailers with an overall loading length of 15.65 m



Derivative dimensions for pivot plate trailers with an overall loading length of 14.90 m

THE MEASURE OF ALL THINGS.

Directive 85/3/EEC defines permissible dimensions for articulated trains. It limits total train length to 18750 mm, and stipulates a maximum system length of 16400 mm and an overall loading length of 15650 mm. In accordance with this regulation and in consequence of the diverse transport tasks, a number of different swap containers are available for freight forwarding. They differ firstly in container length, ranging from 20' container to 7820 mm swap body platform, and secondly in set-down height, ranging from 970 mm to 1320 mm. MAN swap-body platform chassis can transport both (marine) con-tainers and swap containers, which are particularly common in Germany.



ROOM FOR A FULL LOAD.

MAN chassis with fixed body

Today, optimum load volume is essential for competitiveness and success in the haulage industry. A cargo-hold height of three metres is the accepted standard for volume transport. The basis is a chassis with an extremely low top frame edge. After all, each centimetre shaved off chassis height adds additional usable height to the body and increases capacity accordingly. The ex-works MAN chassis for high-capacity transporters are indeed superb – from the two-axle MAN TGL to the three-axle MAN TGX and TGS with lifting trailing axle.





Wheelbase/overhang: 4500 + 1350/2050 mm



Wheelbase/overhang: 4500 + 1350/2050 mm



Wheelbase/overhang: 4500 + 1350/2050 mm



Wheelbase/overhang: 4500 + 1350/2050 mm



Wheelbase/overhang: 4800 + 1350/2150 mm



Wheelbase/overhang: 4800 + 1350/2150 mm for solo operation and operation with trailer



Wheelbase/overhang: 5100 + 1350/1850 mm for permanent operation with trailer

A CLEVER SOLUTION.

MAN chassis for swap bodies

With only three different wheelbases and overhangs, the MAN TGX and TGS chassis cover all swap container sizes and the various articulated train combinations within the 40- to 44-tonne class. The C-745 swap-body platforms are very popular and there are large numbers of these units on the road. The C-782 swap-body platforms have established themselves as the new standard. They all pose a challenge to the versatility of the tractor. MAN stays abreast of this challenge with the help of an adjustable stop. This allows different swap containers to be transported by the same vehicle. Loading and unloading times are minimised while transport throughput is increased. Increased flexibility and effectiveness are the result.



Political and the second secon

Air suspension: the long air suspension travel of 280 mm allows for quick and easy pick-up of very different kinds of standard swap-body containers.





Spotlights for optimum vision when picking up container bodies

Optimised side guard for vehicle for swap bodies

Also available: adjustable stops for swap containers with lengths ranging from 7150 to 7450 mm and from 7450 to 7820 mm.

STRONG STANDARDS FOR SWAP BODIES.

Practical mounts for swap-body platforms

[mm] Tyres	295/60) R 22.5	305/60) R 22.5	315/60 R 22.5	
	Max.	Max.	Max.	Max.	Max.	Max.
	clearance	retraction ¹⁾	clearance	retraction ¹⁾	clearance	retraction ¹⁾
Set-down height: 1120 mm						
Rack height: 160 mm	120	135	115	140	110	145
Set-down height: 1220 mm						
Rack height: 160 mm			215	40	210	45
Set-down height: 1220 mm						
Rack height: 260 mm	120	135	115	140	110	145
Set-down height: 1320 mm						
Rack height: 260 mm	-	-	215	40	210	45

1) Calculation with fully loaded swap container

Additional tyre sizes available ex works on request

275/70 R 22.5		305/70 R 22.5		315/70 R 22.5		295/80 R 22.5		315/80) R 22.5
Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
clearance	earance retraction ¹⁾ clearance retraction ¹⁾		retraction ¹⁾	clearance retraction ¹⁾		clearance retraction ¹⁾		clearance retraction ¹⁾	
105	145	87	163	82	168	_	-	_	-
205	45	187	63	182	68				
105	145	87	163	82	168	58	187	45	200
205	45	187	63	182	68	158	87	145	100



ROOM FOR A GOOD DEAL MORE.

MAN swap body vehicles for maximum volume.

Small tyres plus low top frame edge equals maximum load volume with 3 m loading height inside the swap body container. As a 4x2 with 18 t or a 6x2 with 25 or 26 t and a trailing axle, an MAN TGX or TGS is perfect for swap-body systems for volume transport.

Feeder in volume transport.

With set-down heights of 970 mm and 1020 mm, the swap body platforms C 745 and C 782 are the benchmark. Just like the MAN TGX and TGS chassis with the matching wheelbases and overhangs.

Two driving heights.

A switch on the dashboard enables the driver to switch between two driving heights even while the vehicle is in motion. This means that the same driving height can always be maintained – loaded or unloaded with tyres at full rebound. The permissible overall height limit of 4 m is not exceeded.

Adapters for volume swap body platforms¹⁾

Height-optimised series chassis for volume bodies

Height-optimised series chassis	Tyres	Max. gross weight
TGX/S 18.XXX 4x2 LL	315/70 R 22.5	18000
TGX/S 18.XXX 4x2 LL	295/60 R 22.5	18 000
TGX/S 18.XXX 4x2 LL	315/60 R 22.5	18000
TGX/S 26.XXX 6x2 LL	315/70 R 22.5	26000
TGX/S 26.XXX 6x2 LL	295/60 R 22.5	24900
TGX/S 26.XXX 6x2 LL	315/60 R 22.5	25700

Ultra chassis with lateral rack for volume bodies

	Tyres	Max. gross weight
TGX/S 18.XXX 4x2 .LL-u	295/55 R 22.5	18 000
TGX/S 18.XXX 4x2 .LL-u	295/60 R 22.5	18 000
TGX/S 18.XXX 4x2 .LL-u	315/60 R 22.5	18 000
TGX/S 26.XXX 6x2 .LL-u	295/55 R 22.5	25000
TGX/S 26.XXX 6x2 .LL-u	295/60 R 22.5	25000
TGX/S 26.XXX 6x2 .LL-u	315/60 R 22.5	25000



1st driving height unloaded

2nd driving height unloaded

					Adapters for	r volume swap body platforms [1	mm] ³⁾	
Top frame edge [mm]		Wheelbase/overhang	for body overall length [mm]	Air suspension lowering travel [mm]	Set-down he	eight 970 mm	Set-down height 1020 mm	
_aden	Unladen	7150/7450	7 820		Max. cleara	nce [mm] Max. retraction [mm]	Max. clearance [mm]	Max. retraction [mm]
938	968	5 500/2 400	5900/2400	90	-	-	137	68
875	900	5 500/2 400	5900/2400	60 ²⁾	125	55	80 ⁴⁾	145 ⁴⁾
885	910	5 500/2 400	5900/2400	60²⁾	115	65	704)	155 ⁴⁾
938	968	4 500 + 1 350/2 050	4 800 + 1 350/2 150	90	-	_	137	68
875	900	4500 + 1350/2050	4 800 + 1 350/2 150	60 ²⁾	125	55	804)	145 ⁴⁾
885	910	4500 + 1350/2050	4 800 + 1 350/2 150	60 ²⁾	115	65	704)	155 ⁴⁾

Top frame	op frame edge [mm] Wheelbase/overhang for body overall length [mm]		Air suspension	Set-down h	eight 970 mm	Set-down height 1020 mm		
				lowering travel [mm]				
_aden	Unladen	7150/7450	7820		Max. cleara	nce [mm] Max. retraction [mm]	Max. clearance [mm]	Max. retraction [mm]
844	864	5 300/2 600	5900/2400	50	151	69	-	-
861	886	5 300/2 600	5900/2400	50	129	86	-	-
867	892	5 300/2 600	5900/2400	50	123	92	173	42
844	864	4500 + 1350/2050	4800 + 1350/2150	50	151	69		
861	886	4500 + 1350/2050	4 800 + 1 350/2 150	50	129	86	-	-
867	892	4500 + 1350/2050	4800 + 1350/2150	50	123	92	173	42

¹⁾ All values refer to unloaded swap containers

²⁾ Equipped with 2nd driving height or after reprogramming of driving height in MAN service outlets

³⁾ Possible with lateral bearer frame for swap-body platforms (swap-body platforms sit level with frame edge), mounted by MAN service outlets or body manufacturer, shock absorbers for volume bodies on rear axle. For volume chassis including 5-mm anti-wear protective covering and rack ex works

⁴⁾ Possible with rack for swap body platforms with 100 mm height, mounted by MAN service outlets or body manufacturer, standard shock absorbers on rear axle

Concept for standard swap body platforms



Standard rack with 160 mm or 260 mm

Concept for volume swap body platforms

- Equipment for volume swap body platforms:
- Lateral rack, front locks. Battery box and air tanks located at the rear, space for lateral rack, reduced load on front axle.
- End stop, spotlight at frame level, guide rollers
- Tank located at the rear, space for lateral rack, reduced load on front axle
- 5-mm anti-wear protective covers



Easily operated swing-back under-ride protection with an operating lever at each side with low trailer coupling

SPECIALITIES À LA CARTE.

Preparation for liftgate

MAN offers various options for easy and convenient liftgate attachment:

- Electrical preparation. Purposely restricted to the electrical parts required in the driver's cab, so the body manufacturer has full latitude to respond to different customer requirements. The wiring harness for the liftgate terminates in a generous loop at the end of the frame. The defined interface (seven-pole receptacle) ensures a secure connection.
- Five-chamber tail light unit. It allows for the movement of the hydraulic cylinder of the liftgate.
- Power supply for batteries in trailer with liftgate. Three-pole socket at end of frame, battery charge 24 V.
- Heavy-duty batteries and uprated alternator. For fail-safe operation when liftgate is frequently lifted and lowered on short-run trips with multiple stops.

Switch and wiring for load space lighting for additional spotlights

The preparation consists of a switch in the driver's cab, the electrical installation in the on-board network and a cable harness. Since all electrical elements are pre-mounted on the chassis, the body manufacturer does not have to intervene in the vehicle electrical system. The cable harness only has to be adapted to the body. Maximum consumer power draw: 150 W.



Air suspension with ample raising and lowering travel of 240 mm.



Low coupling mount with trailer coupling. Return 1400 mm (standard) or 1600 mm (volume). Brake and electrical connections to customer specification on driver's or co-driver's side, behind trailing axle.

MAN DRIVER ASSISTANCE EQUIPMENT.



ESP compensatory braking when vehicle is oversteered.



ESP compensatory braking when vehicle is understeered.

Electronic stability program (ESP)

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

MAN BrakeMatic[®] brake system with ABS and ASR

The most important distance is the braking distance. To prevent any nasty surprises, the MAN BrakeMatic[®] with electronic brake system (EBS), including ABS and ASR, ensures reduced braking distances. The coupling force control for optimal balancing of the trailer and/or semitrailer brakes enables perfect brake performance, reduced braking distances and evens brake lining wear along the entire vehicle combination to increase the service life of the linings.

Continuous braking

EVBec®: as a further development of the MAN EVB engine brake (Exhaust Valve Brake), the EVBec® has many advantages, e.g. an improved braking effect by controlling the exhaust gas back pressure, significantly increased brake output especially in the lower engine speed range, overheating protection during long braking operations and constant brake output whether the engine speed is rising or falling. Three brake output stages are available. The retarder is a hydrodynamic continuous brake integrated into the gearbox housing. Its brake output depends on the driving speed, with the best performance achieved in the medium to high speed range. The brake output level does not depend on gearshifts or clutch operation. This increases driving safety during long descents by relieving the load on the service brake system.

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

Brake assistant

The brake assistant registers speed and pressure when the brake pedal is operated and optimises the applied brake pressure through to full brake force. It recognises an emergency stop when it is initiated and immediately develops the largest possible brake pressure.

Emergency Brake Assist (EBA)

As even a brief moment of distraction can lead to an accident, MAN has developed the anticipatory Emergency Brake Assist (EBA). It gives drivers an advance warning of impending collisions, providing them with valuable time to react. The system automatically initiates braking in an emergency. The optimised Emergency Brake Assist (EBA) features a more advanced traffic monitoring system by using two independent sensor systems (radar and video) to detect a potential collision more quickly and to issue a warning signal earlier. EBA complies with the more stringent legal requirements for emergency braking systems starting in 2016/2018.

MAN EasyStart

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

Adaptive Cruise Control (ACC)

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

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



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



LGS for staying in the lane



Vehicle behaviour with CDC



Vehicle behaviour without CDC

Lane Guard System (LGS)

The electronic lane guard system (LGS) constantly monitors the vehicle's position in the lane. If the driver strays from the lane without activating the indicator, an acoustic warning sounds. Depending on the direction in which the driver has strayed, the loudspeaker on the left- or righthand side emits a rumble-strip noise, which the driver intuitively understands. LGS increases the driver's awareness of staying in the lane, thereby preventing certain hazardous situations.

MAN AttentionGuard

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

Active roll stabilisation CDC and high-load roll stabilisation

With active roll stabilisation, dampers are automatically regulated by the CDC (Continuous Damping Control). This prevents the development of rolling or pitching movements, and thus makes driving safer. For vehicles with high centres of gravity, high-load roll stabilisation with an additional X control arm is ideal. This ensures that sideways tilting is effectively reduced.

Automatic low-beam headlights and automatic wiper system with sensors

The automatic low-beam headlights with light sensors activate and deactivate the front, side and rear lights as needed. Dawn and dusk, tunnels and bridges are also detected and the lighting is regulated accordingly. The automatic wipers with rain sensor are activated as soon as visibility is affected by water or dirt. The optimum wiper speed is then set automatically depending on the situation. The control system can detect all kinds of visibility conditions such as rain, splashes, streaks or dirt.

Cornering light

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

LED daytime driving lights

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

New LED rear lights

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

Manoeuvring light

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



Cornering light for a better visibility



LED daytime driving lights



LED rear lights

THE CHOICE IS YOURS.

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

MAN cabs are designed to facilitate fatigue-free, concentrated driving and relaxing recovery. And safety, of course. All cabs meet the crash safety requirements, comply with the ECE-R29 Directive and offer optimum passenger protection.

Many useful details such as washable interior door cladding, easy-care fittings, a compressed-air connection that turns cleaning into such a simple job and an optional headlight washer unit make it clear: nothing has been forgotten. This also includes optimum all around visibility, for example.

Cab	Range of vehicles								
	TGL	TGM	TGS	TGX					
C cab	•	•							
Crew cab	•	•							
M cab			•						
Lcab	•	•	•						
LX cab	•	•	•						
XL cab				•					
XLX cab				•					
XXL cab				•					









GREAT VIEWS. ON EVERY DRIVE.

Starting in 2018, MAN vehicles can expect numerous new equipment highlights to make the interior even more driver-friendly and optimised for vehicle operation.

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

As of 2018, the optional darker "Urban Concrete" colour will be available for the cockpit. It is a resistant colour scheme for all surfaces that may come into contact with dirty hands or work clothing during vehicle deployments in dirty conditions. The look of the cab interior can also be customised with up to three optional variants for the all-round trim strips (brushed aluminium, Net-Black and wood).

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

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

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

"Urban Concrete" colour





Enhanced colour display in the instrumentation



Neat switch layout



Rearranging the TipMatic switch and parking brake creates additional space

EVERYTHING INSIDE, AND ALL AT A GLANCE!

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

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

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

MAN infotainmentsystem

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

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



MAN Media Truck Navigation



Function "Mirror Link"

EFFICIENCY AT FULL THROTTLE.

Vehicles in short-haul and long-haul transport ideally have lots of torque on the one hand and low fuel consumption on the other: MAN engines offer both.

The highly efficient four- and six-cylinder engines with ratings of 118 kW (160 hp) to 471 kW (640 hp) make an impression with their outstanding power delivery even at low engine speeds. The engines of the MAN D20 and MAN D26 series are also designed for service intervals of up to 140 000 kilometres. In order to achieve the extremely low Euro 6 values, MAN has implemented key technologies such as Common Rail injection, exhaust gas recirculation (EGR), SCRT filters and diesel particulate filters (DPF/CRT) for many years. The result? MAN Euro 6 engines raise the bar in terms of fuel consumption and AdBlue[®] consumption. If you want to move things in a big way and at the same time protect the environment, then MAN engines are exactly the drive you need.

Since 2017, MAN will approve the MAN Euro 6 engines for use with paraffin fuels in accordance with EN15940. Fuels that comply with this standard include hydrogenated vegetable oils (HVO), coal to liquids (CTL), gas to liquids (GTL) and biomass to liquids (BTL).

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

Engines Euro 6

	Туре	Capacity	Rated output	Max. torque	Vehicle series
D0834	R4	4.61	118 kW (160 hp)	600 Nm	TGL
	R4	4.61	140 kW (190 hp)	750 Nm	TGL
	R4	4.61	162 kW (220 hp)	850 Nm	TGL
D0836		6.91	184 kW (250 hp)	1 050 Nm	TGL, TGM
		6.91	213 kW (290 hp)	1 150 Nm	TGM
		6.91	235 kW (320 hp)	1 250 Nm	TGM
D2066		10.5 l	235 kW (320 hp)	1 600 Nm	TGS
		10.5 l	265 kW (360 hp)	1 800 Nm	TGS, TGX
D2676		12.4	309 kW (420 hp)	2 100 Nm	TGS, TGX
		12.4	338 kW (460 hp)	2300 Nm	TGS, TGX
		12.4	368 kW (500 hp)	2 500 Nm	TGS, TGX
D3876		15.2	397 kW (540 hp)	2 700 Nm	TGX
	R6	15.2	427 kW (580 hp)	2 900 Nm	TGX
	R6	15.2 l	471 kW (640 hp)	3 000 Nm	TGX

DIVERSE SOLUTIONS FOR WIDE-RANGING NEEDS.

MAN semitrailer tractors for Euro-standard semitrailers

Туре				Wheel base [mm]
TGX/TGS	18.XXX	4x2	BLS	3600
TGX/TGS	18.XXX	4x2	LLS	3600
TGX/TGS	18.XXX	4x2	BLS	3900
TGX/TGS	18.XXX	4x2	LLS	3900
TGX/TGS	24.XXX	6X2/2	BLS	2800, VLA 19,5"
TGX/TGS	26.XXX	6X2/2	BLS	2600
TGX/TGS	26.XXX	6X2/4	BLS	2600

MAN semitrailer tractors for high-capacity semitrailers

Туре				Wheel base [mm]
TGL ¹⁾	8.XXX ²⁾	4x2	BL	3050 ³⁾ , 3600,
				3900
TGL ¹⁾	10.XXX	4x2	BL	3050 ³⁾ , 3600,
				3900
TGL ¹⁾	12.XXX	4x2	BL	3050 ³⁾ , 3600,
				3900
TGM ¹⁾	12.XXX	4x2	BL	2 975 ³⁾ , 3 525
TGM ¹⁾	15.XXX	4x2	BL	2 975 ³⁾ , 3 525
TGM ¹⁾	18.XXX	4x2	BL	3 5 7 5
TGX/TGS	18.XXX	4x2	LLS-u	3600

¹⁾ MAN Modification

²⁾ Can be reduced to 7.49 t

³⁾ Only with C cab

MAN chassis for volume swap bodies

Туре				Wheel base [mm]
TGX/TGS	18.XXX	4x2	LL-u	5300, 5500, 5900
TGX/TGS	24.XXX	6x2-2	LL-u	4500, 4800

MAN chassis for volume fixed bodies

Туре				Wheel base [mm]
TGL	8.XXX ²⁾	4x2	BL	5 200, 5 550
TGL	10.XXX	4x2	BL	5200, 5550
TGL	12.XXX	4x2	BL	5 200, 5 550
TGM	12.XXX	4x2	BL	5 125, 5 475
TGM	15.XXX	4x2	BL	5 125, 5 475, 6 175
TGM	15.XXX	4x2	BL	5 125, 5 475, 6 175
TGM	26.XXX	6x2-4	BL	4 125, 4 425, 4 725, 5 075, 5 425, 5 775
TGX/TGS	18.XXX	4x2	BL, LL	5500, 5900
TGX/TGS	26.XXX	6x2-2	BL, LL	4800, 5100
TGX/TGS	18.XXX	4x2	LL-u	5500, 5900
TGX/TGS	24.XXX	6x2-2	LL-u	4 500, 4 800

MAN chassis for standard fixed bodies

Туре				Wheel base [mm]
TGL	8.XXX ²⁾	4x2	BL	4200, 4500, 4850, 5200, 5550
TGL	10.XXX	4x2	BL	4200, 4500, 4850, 5200, 5550, 6700
TGL	12.XXX	4x2	BL	4200, 4500, 4850, 5200, 5550, 6700
TGM	12.XXX	4x2	BL	4 425, 4 775, 5 125, 5 475
TGM	15.XXX	4x2	BL	4 425, 4 775, 5 125, 5 475, 6 175, 6 575
TGM	18.XXX	4x2	BL	5075, 5425, 5775, 6175, 6575
TGX/TGS	18.XXX	4x2	BL, LL	5500, 5900, 6300, 6700
TGX/TGS	26.XXX	6x2-2	BL, LL	4500, 4800, 5100, 5500, 5900

MAN chassis for standard swap bodies

Туре				Wheel base [mm]
TGX/TGS	18.XXX	4x2	LL	5500, 5900
TGX/TGS	24.XXX	6x2-2	LL	4500, 4800, 5100

MAN Truck & Bus AG

Dachauer Straße 667 80995 München www.truck.man

D111.3564/E · bv 08171 · Printed in Germany Texts and illustrations are non-binding. We reserve the right to make modifications for reasons of technical progress. All specifications in this publication represent the status at the time of going to press.

MAN Truck & Bus – a member of the MAN Group