

CONSISTENTLY EFFICIENT 



MAN heavy-duty tractor units and crane vehicles.

Strong. Powerful. Reliable.

MAN


The way to maximum efficiency in transport.

When the load is that bit wider, longer, higher or heavier, you need the people who think big. Perfectly trimmed for the purpose, MAN heavy-haul trucks and trailers can tackle any job no matter where it goes.

Whenever a heavy load has to be moved, there's always a stationary or mobile crane somewhere close at hand. After all it's always needed to shift the cargo on and off a low loader or wagon-carrying trailer. Today cranes are indispensable helpers, making for convenience and efficiency in many sectors of industry and commerce. Trucks with front- or rear-mounted cranes transport whole tree-trunks to sawmills, carry building materials to sites, and generally make light of weighty matters as crane tippers or platforms for heavy-duty cranes.

But today a show of strength isn't only called for in the operation of mobile loading cranes and for really heavy-duty transport. The operators behind all this have to produce it too, in a different way. Because more than ever there's a demand for better performance at lower cost. In a nutshell: more efficiency for better business.

Whether heavy-haul tractors to transport up to 250 tonnes or trucks with a crane. MAN trucks lead the field in efficiency. Innovative MAN technologies are at the back of enhanced efficiency. Torquey common-rail engines give you more power for less fuel for instance. The MAN TipMatic® gear change reduces the pressure on the driver, eases the load on the drive train, and naturally saves diesel. Intelligent assistants and safety systems add to the advantages: more transport safety, lower fuel consumption, less wear and tear. Last but not least, the many special-to-segment solutions and customized details of MAN vehicles contribute to achieving maximum economies and reliability. MAN efficiency in transport ex works: experience it for yourself.



The MAN heavy-duty tractor units.



All MAN tractor units for heavy-duty transport come straight off our series-production assembly lines: no post-assembly add-ons or modifications, no patchwork, no half-way measures. Instead, perfect solutions directly ex-works, precision-matched to your requirements. No matter whether you order a TGX or a TGS, your truck is configured exactly the way you need it – ready for use. As well as that, every MAN tractor unit is thoroughly checked out by our Technical Testing specialists to make sure it is sound and healthy – absolutely free of risks and side-effects. Our heavy-duty tractor units are fully documented and comply with the standard-series service conditions for the complete vehicle with all components. So take it easy on the heavy side of life: let MAN take the load.



Gross weight up to 250 tonnes.

Exactly the right truck for pulling up to 250 tonnes gross weight: The 8x4/4 truck-tractor with its 500 kW (680 hp) common-rail diesel V8 engine is a powerhouse with impressive 2,700 Nm torque, with enough left over to shift the heaviest loads. Just as sensational is the combination of the automated 12-speed MAN TipMatic® gearbox with a torque converter clutch and integral primary retarder. A configuration that allows virtually wear-free, smooth pulling away and precise manoeuvring even in difficult conditions. Depending on preference and the particular situation, the driver can also work the MAN TipMatic® manually with the toggle lever on the steering column.

Tremendous power, tremendous gear.

The most striking feature is the equipment rack mounted behind the cab. It carries the powerful additional radiator designed to make sure that water and oil never lose their cool. Also there is the fuel tank, which on these trucks has a capacity of 960 litres to put more range into heavy-duty transport. There are other options too, including a very powerful, engine-driven 3-stage hydraulic system (20 l/min, 40 l/min or 100 l/min) with load-sensing technology.





Gross weight up to 160 tonnes.

One of MAN's major strengths in the gross-weight class up to 160 tonnes is the enormous diversity of models available. The range goes from 6x4 and 8x4 through to the all-wheel 6x6, 8x6 and 8x8 versions for optimum traction. Power comes from the innovative common-rail diesel engines with 353 kW (480 hp), 397 kW (540 hp) and 500 kW (680 hp), the same power plants that demonstrate their tremendous pulling power and reliability again and again in the class up to 90 tonnes. The large-capacity radiator is sized for 160 tonnes and retarder operation. The powertrain incorporates the 16-speed manual gearbox in combination with 2-plate clutch and Intarder.

Gross weight up to 90 tonnes.

In the weight category up to 90 tonnes, MAN offers a choice of first-class options. Outstanding 3- and 4-axle configurations with twin-axle unit as 6x4 and 8x4, high-traction all-wheel-drive versions as 4x4 and 6x6, with either permanent or driver-engaged all-wheel drive, and the 2-axle and 3-axle units with leading or trailing axle, often the first choice in the weight category up to 50 tonnes. Allowing for limited climbing ability, they can occasionally be used with a gross combination weight of up to 90 tonnes. Whichever TGX or TGS model you choose: high-tech like MAN BrakeMatic with sustained-action-brake management is available, along with the automated 12-speed MAN TipMatic® transmission as an option.

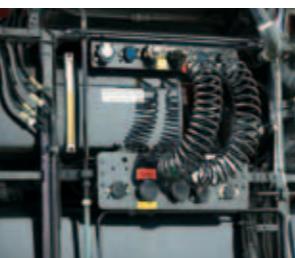
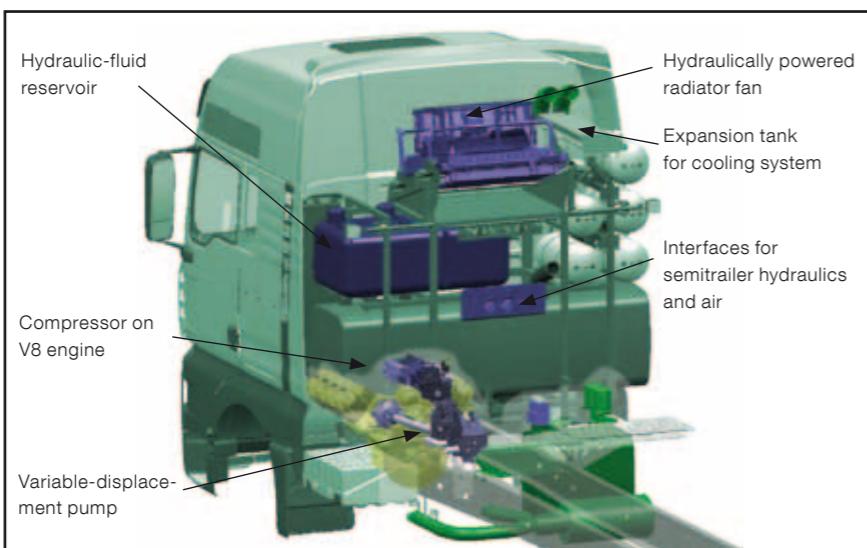




Equipment for heavy-duty transport.

The list of practical equipment for ordering ex-works includes everything that is good and useful.

The extras for heavy-duty transport underscore MAN's well-founded expertise in this sector.



Vehicle equipment

- Common-rail diesels with 353 kW (480 hp), 397 (540 hp) and 500 kW (680 hp)
- 16-speed manual gearbox, 12-speed MAN TipMatic® optional
- Attachment plate in combination with steel bumper for mounting a register coupling
- Register coupling with 3 coupling heights for manoeuvring
- Fifth-wheel coupling with sliding device
- Reinforced rear cross-member for trailer coupling, normal height and extra-low
- Equipment rack with additional radiator (water/air, oil/air) and fuel tank behind the cab
- Interfaces for pneumatics, hydraulics and electrics
- Engine-driven 3-stage hydraulic system with load-sensing technology
- Illuminated aluminium toolbox
- Ladder to work platform
- Halogen priority light
- Worklights
- Reinforced rear cross-member for trailer coupling, normal height and extra-low
- WSK440 torque converter clutch with retarder and MAN TipMatic® transmission

The MAN trucks for logging.



Roof recess for loading crane.0

A tough job.

Hauling logs from forest to sawmill is hard work, made harder by difficult routes and the sheer weight of the load. Unsurfaced forest paths, gravel tracks and narrow, winding bends are the norm, but when they clear the forest these trucks have to join the normal traffic on main roads and motorways too. Climbing ability is crucial, so too is pulling power on the flat. And there's the load itself: depending on the type of wood, the length, diameter and moisture content of the logs, the differences in weight can be considerable. And of course there is always the centre of gravity – inevitably high in a load of this nature – and the high front-axle load imposed when the loading crane swings over the cab. All in all: exacting requirements, dealt with by perfect solutions from MAN.

Application: full-length logs.

Logs fresh from the forest can be up to 23 metres in length. That means manoeuvring a tractor-trailer combination with a total length of 27 metres along narrow forest tracks and twisting roads. The solution: MAN TGX and TGS chassis, teamed up with self-steering dollies. The tractor units have the front-axle ratings to cope with heavy cranes and the sheer strength and robust design needed for this job. The alternative to a chassis are the MAN semi-trailer tractors with trailer or interchangeable unit for swivel bogey. Powerful engines, high-convenience transmissions and rear-axle drive, all-wheel drive or MAN HydroDrive®, the driver-engaged hydraulic front-axle drive, provide compelling dynamism and traction to cope with the challenges of logging.





Vehicle configuration for logging

- Common-rail diesels with 235 kW (320 hp) to 500 kW (680 hp)
- 16-speed manual gearbox, 12-speed MAN TipMatic® optional, also available with off-road mode
- MAN HydroDrive® for added traction
- Robust 3-part steel bumper with centre towing eye
- Preparation for external engine start/stop
- Normal height, medium height and all-wheel drive height
- Roof recess for loading crane
- Digital axle load display in cab for air-sprung axles
- ECAS control for safe propping for crane work off vehicles with air suspension
- Two off-gearbox PTOs for high hydraulic power and speedy crane work
- KSM interface for external data interchange
- Halogen priority light
- Worklights

Application: cut-length logs.

For handling logs up to 8 metres in length, an articulated train with rear loading crane is built for the job. This is where the 3-axle TGXs and TGSs really come into their own. They come in a 6x6 all-wheel-drive version, a 6x4 with tandem-axle unit, and with steered leading or trailing axle for lower tyre wear and high manoeuvrability. And of course chassis units with front-mounted loading crane are also hard at work in transporting cut-length logs. 2- and 3-axle semi-trailer tractors round off the MAN range. If the customer needs extra traction, the MAN HydroDrive® driver-engaged front-axle drive is a compelling choice.



The MAN trucks for transporting construction materials.



A great way to see the sites.

The MAN chassis and tractor units combine dynamic pulling power with superb driving characteristics and exemplary safety. As solo trucks, articulated trains, tippers, platform trucks or tractor-semitrailers: an MAN with front- or rear-mounted crane easily handles the A to Z of construction materials, from abutment sections and aluminium strip through to zinc-phosphate cement and Z-section steel, even when the boundary conditions are far from easy. The specific weight and volume of the various materials vary widely, and pallet sizes and stacking heights also differ. As far as the truck is concerned, that means: in terms of payload and body dimensions, everything has to be optimised to suit load weight and the space required by the construction materials. With MAN you can rest assured: the solution is right.



MAN vehicles for heavy-duty cranes.



Front legs in front of the cab.



High-tech can be highly profitable.

You might need telescopic-jib cranes with lifting heights of 56 metres and load capacities up to 60 tonnes, or articulated-jib cranes for lifting heights of 36 metres and load capacities up to 40 tonnes – but MAN has the ideal vehicles, whatever the terms of reference. The range includes dependable 2-, 3- and 4-axle models that combine highly economical operation with practical sturdiness and reliability. The TGX and TGS chassis come ex-works with the spaces for the outriggers, so the crane can easily be mated to the frame. That simplifies installation and reduces costs. The pendulum movement of the axles can be restricted for mobile cranes to ensure that the tyres do not come into contact with the superstructure. And for articulated-jib cranes MAN offers front crane supports and reinforced frames ex-works. Equipped in this way, the truck makes for even more versatility for the crane to operate though its entire slewing range. The cab can also be ordered with a special lowered roof.



MAN crane tippers.

Just go ahead and load.

MAN chassis and tractor units are perfect for the quick and inexpensive installation of front-mounted loading cranes. Not surprising really, because MAN actually builds a type of truck known as a crane tipper. Trucks with tipper bodies are supplied ex-works with extended auxiliary frame and the spaces for crane, outriggers and shackle attachment. The front-axle loads are optimised within the weight aggregate for the various truck weight categories and crane sizes. MAN has 2- and 3-axle

trucks for rear-mounted loading cranes with the wheelbase, overhang and rear-axle load specifics that meet customer requirements. The ECAS air suspension can be deactivated for crane work. This increases the stability of the vehicle when it is braced by the outriggers. Two-part grab, shovel, fork or gripper system: loading cranes are always a worthwhile investment. You gain more flexibility and efficiency by significantly cutting down on loading and unloading times and on manpower.



Vehicle configuration as crane tipper

- Common-rail diesels with 110kW (150hp) to 500kW (680hp)
- MAN HydroDrive® for added traction
- KSM interface for external data interchange
- ECAS control for propping for crane work off vehicles with air suspension
- Lowered roof for crane
- Preparation for external engine start/stop
- Three-way tipper bodies ex works for crane tippers
- Outriggers in front of the cab and frame reinforcements
- Digital axle load display in cab for air-sprung axles
- Worklights
- Crane tipper with optimised space for outriggers etc.



The MAN cockpit.



Manoeuvring lights in the co-driver's entry.



Compressed air connection for cleaning the cab.

Top comfort for top performance.

MAN driver's cabs always focus on the needs of the driver. Drivers who take their place here are not just extremely comfortable but can also immediately find their way around. All the controls are clearly arranged and easy to reach. The height and inclination of the steering wheel are variably adjustable, and the steering wheel itself swings up to provide more space for getting into, out of or across the cab. The many useful details such as the washable interior door panelling, the easy-care fittings, the compressed-air connection that turns cleaning into such a simple job and the headlight washer unit (special equipment) make it clear: nothing has been forgotten.

The mirror concept with main and wide-angle mirrors, big ramp mirror and front mirror is designed for optimum vision and safety. The driver now has a view of the areas right in front of the vehicle and the potentially dangerous area when turning off to the nearside. Now there is practically no longer any blind spot. The rear window (with curtain) also contributes to the best visibility all round the vehicle, ideal for manoeuvring.



Washable interior door panelling.

The MAN traction solutions.



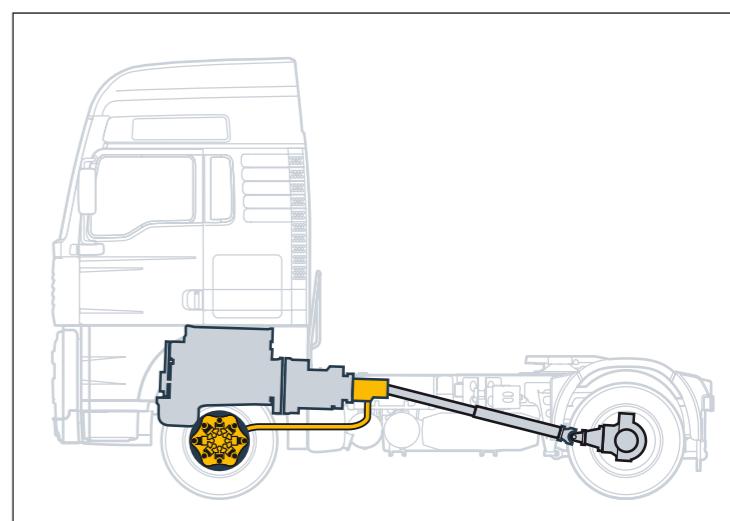
All-wheel drive for everyone.

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



MAN HydroDrive® – more traction as required.

The alternative to classic all-wheel drive and only from MAN: MAN HydroDrive® for more traction and safety when driving into or out of unsurfaced forest tracks and dirt roads, on slopes and slippery surfaces. The selectable hydraulic front-wheel drive gives you the driving power you need in all these situations, forwards and in reverse. When you're driving downhill and the HydroDrive® is engaged, the sustained-action brake also acts on the front axle, thus stabilising the vehicle. HydroDrive® can also be engaged during driving and under load by turning the rotary switch. It weighs only slightly more than the conventional rear-wheel drive. The vehicle's design height remains unchanged, which means easy access, low overall height, low centre of gravity and thus optimum driving stability.



The MAN chassis.

Axle and suspension systems.

Whether planetary or hypoid – both axle systems are available with various ratios and parabolic or air suspension. The planetary axles are also available with trapezoidal suspension. Parabolic suspension makes driving the laden or the empty vehicle a very comfortable matter and is second only to air suspension.

Construction air suspension.

One of MAN's specialities is construction air suspension on the rear planetary axles – available for construction vehicles of medium-high build and all-wheel-drive build. With lifting and lowering equipment fitted as standard, it has a load-carrying capacity of up to 13 tonnes per rear axle. This is ideal for tough work (margin for overload) and in difficult terrain. Advantages: a smooth ride in any load condition thanks to the electronic levelling system ECAS, easier on the vehicle, the body, the load and the road.

Steel bumper.

The striking three-part steel bumper with centred towing eye and hinged front step is not only robust but also integrates itself elegantly into the TGS/TGX design. A modified version of this bumper is available too with preparation for fitting an attachment plate for a snowplough or shackle. Robust steel bumpers are also available for the TGL and TGM ranges as special equipment.

Vehicle build heights.

MAN delivers vehicles in normal, medium-high and all-wheel-drive builds to suit requirements for higher ground clearance and larger angles of approach.

Steering brake.

Take the sharpest bends. With the steering brake function activated, the rear wheels on the inside of the bend are braked, depending on how far the steering wheel is turned. This considerably decreases the turning circle. The steering brake, which is available for the 6x4 vehicles with tandem axles, is activated by pressing a button and functions at speeds up to 30 km/h.

EasyStart.

Problems with hill starts are no longer an issue: MAN EasyStart has arrived. The start assistant for slopes makes things easy for the driver. When the brake pedal is released, the brake pressure is maintained for a 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. EasyStart is available for the TGS and TGX with MAN TipMatic®.

Hill-climbing brake.

The hill-climbing brake for the TGM 4x4 acts pneumatically on all four wheels, holding the truck reliably and under the driver's control for stopping and moving off on hills. As opposed to systems that use spring-loaded cylinders to brake only the rear axle, the TGM equipped with the hill-climbing brake can't slip.



Chassis module

- Wheelbase and overhang modifications
- Relocation of axles
- Installation of additional axles (rigid or steered, lifting or fixed)

Cab module

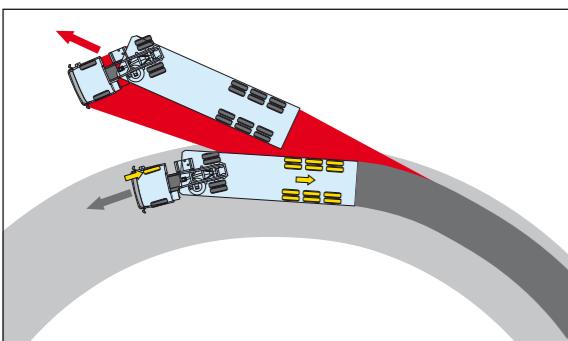
- Inclined roofs to take cooling equipment or for car transporters
- Roof cut-outs for long timber cranes, turntable ladders or drilling platforms
- Flat roofs

Modifications to cab and chassis.

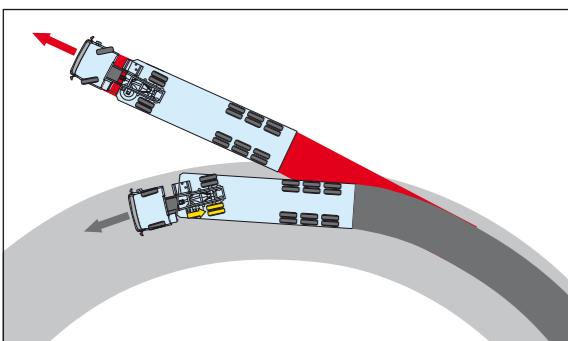
At MAN you get individual, customer- or sector-specific solutions, e.g. special axle configurations or modifications to the cab, in one-stop shopping. For this please also note our special brochure "MAN Modification Competence".



The MAN driver assistance systems.



Compensatory braking when tractor is oversteered.



Compensatory braking when tractor is understeered.

Lane guard system LGS.

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

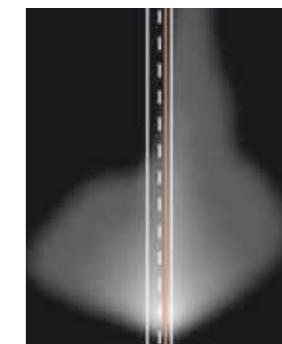
Electronic stability program ESP.

ESP protects you from unpleasant surprises. ESP sensors constantly monitor the driving dynamics. If there is a risk of skidding or overturning, individual wheels are braked and if necessary engine torque is reduced. In this way ESP stabilises the vehicle and keeps it safely in the lane. The electronic stability program is available as special equipment for solo vehicles, while TGS/TGX semitrailer tractors with MAN TipMatic® and Intarder are fitted with ESP as standard.



Active roll stabilisation CDC and high-load roll stabilisation.

With active roll stabilisation, dampers and ride height are automatically regulated by means of 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 the side inclination is effectively reduced.

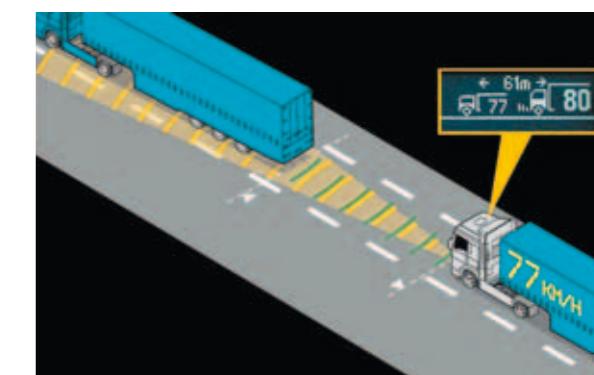


Brake system MAN BrakeMatic with ABS and ASR.

The most important distance is the braking distance. To guard against unpleasant surprises, the electronic brake system MAN BrakeMatic, which includes ABS and ASR, ensures shorter braking distances. Coupling force control, which guarantees optimal matching of the trailer or semitrailer's brakes, leads to a perfectly harmonious train, shorter braking distances and equalisation of the brake pad wear of the entire train combination with extremely long pad service lives.

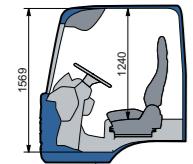
Adaptive cruise control ACC.

Automatic ranging determines the distance from and the differential speed of the vehicle ahead and maintains a safe distance by electronic intervention in the accelerator or brake pedal. ACC can be used at speeds of 25 km/h and above and helps the driver to be more relaxed when operating the vehicle.

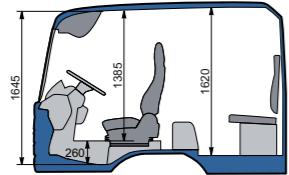


MAN driver's cabs.

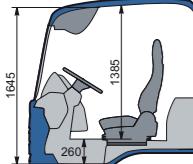
C cab



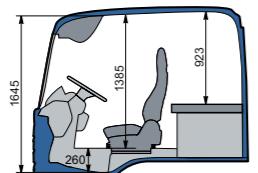
Crew cab



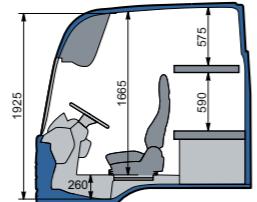
M cab



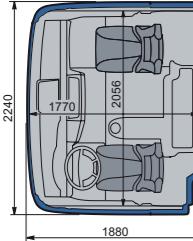
L cab



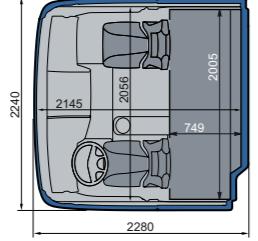
LX cab



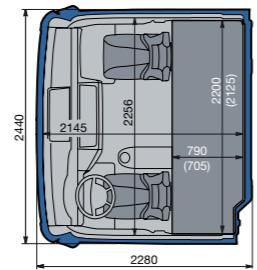
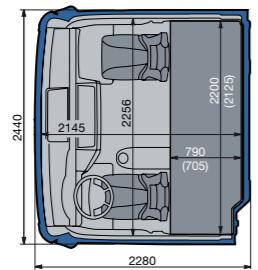
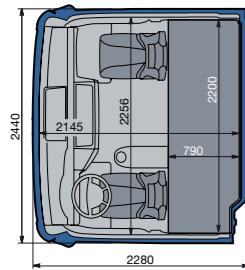
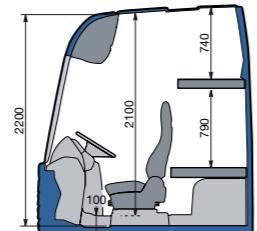
XL cab



XLX cab



XXL cab



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

The MAN common-rail engines.

Dynamically economical.

The innovative MAN common-rail engines move more than just wheels. They drive progress. The state-of-the-art 4-, 6- and 8-cylinder propulsion units develop more power and burn less fuel, have a compellingly low power/weight ratio and built-in durability. They offer outstanding torque and superb pulling power, right from the low end of the rpm range. 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.

Cleaner than Euro 5 requires.

MAN has developed innovative exhaust systems to meet statutory Euro 5 limits, and to offer engines that meet the even stricter EEV standard. MAN PURE DIESEL® is a system with cooled exhaust gas recirculation, oxidising catalytic converter and two-stage turbocharging with intercooling. This technology needs no AdBlue®, saves on weight and frees up additional space on the chassis. Nor does the SCR technology MAN AdBlue® mean any enlargement of exhaust silencer dimensions compared to Euro 3. The space available on the chassis and payload figures of the vehicles are better than competing solutions.

Overview of the Euro 5 and EEV engines

	MAN PURE DIESEL® Euro 5 EGR	Euro 5 SCR	EEV EGR	EEV SCR
D0834				
110 kW (150 hp)	•			•
132 kW (180 hp)	•			•
162 kW (220 hp)	•			•
D0836				
184 kW (250 hp)	•			•
213 kW (290 hp)	•			•
250 kW (340 hp)	•			•
D2066				
235 kW (320 hp)		•		•
265 kW (360 hp)		•		•
294 kW (400 hp)		•		•
324 kW (440 hp)		•		•
D2676				
353 kW (480 hp)	•			•
397 kW (540 hp)	•			•
D2868				
500 kW (680 hp)	•*			•**



enhanced environmentally friendly vehicle

* with 2700 Nm for heavy-duty tractor units.

** with 3000 Nm for semitrailer tractors for long-haul transport.

The MAN trucks at a glance.

Heavy-duty semitrailer tractor units

Model	Gross combination weight			Suspension
Rear-wheel drive				
TGX/TGS	18.XXX	4x2	50 t*	LL, LA
TGX/TGS	26.XXX	6x2/2	50 t*	LA
TGX/TGS	26.XXX	6x2/4	50 t*	LA
TGX/TGS	26.XXX	6x-2	50 t*	LA
TGX/TGS	28.XXX	6x-2	50 t*	LA
TGX/TGS	26.XXX	6x4	90 – 160 t	LL, LA
TGX/TGS	33.XXX	6x4	90 – 160 t	LL, LA
TGX	41.XXX	8x4/4	90 – 160 t	LL, LA
TGX	41.680	8x4/4	250 t	LL, LA
All-wheel drive				
TGS	18.XXX	4x4	90 t	LL, LA
TGS	26.XXX	6x6	160 t	LL, LA
TGS	33.XXX	6x6	160 t	LL, LA
TGS	35.XXX	8x6	160 t	LL
TGS	41.XXX	8x6	160 t	LL
TGS	35.XXX	8x8	160 t	LL
TGS	41.XXX	8x8	160 t	LL

* Depending on axle type and axle ratio, up to 90 t gross train weight for occasional use, subject to restricted climbing capability

Chassis for logging

Model	Suspension	Wheelbase (mm)
Rear-wheel drive		
TGS	18.XXX	4x4H
TGS	26.XXX	6x4
TGS	33.XXX	6x4
TGS/TGX	26.XXX	6x4
TGS/TGX	33.XXX	6x4
TGS	26.XXX	6x4H-2
TGX	33.680	6x4
TGS	26.XXX	6x6
TGS	33.XXX	6x6
TGS	26.XXX	6x6H

Chassis for transport of construction materials

Model	Suspension	Wheelbase (mm)
TGM	18.XXX	4x2
TGS/TGX	26.XXX	6x2-2
TGS/TGX	26.XXX	6x2-4
TGS	26.XXX	6x4

Chassis for heavy-duty cranes

Model	Suspension	Wheelbase (mm)
TGS	28.XXX	6x4-4
TGS	41.XXX	8x4
TGS	35.XXX	8x4
TGS	35.XXX	8x4H-6
TGS	35.XXX	8x6H
TGS	41.XXX	8x8

Chassis for crane tippers, with ex works tipper body optional

Model	Suspension	Wheelbase (mm)
TGL	8.XXX	4x2
TGL*	12.XXX	4x2
TGM	13.XXX	4x4
TGM	18.XXX	4x2
TGM	18.XXX	4x4
TGS	18.XXX	4x2
TGS	18.XXX	4x4

* Platform trucks and chassis, ex works tipper body not possible

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MAN Nutzfahrzeuge Group

Postfach 50 06 20
D-80976 München

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