WEIGHTY IN PERFORMANCE.

MAN heavy-duty tractors up to 250 t.



M AN 4168

MAN

EFFICIENCY EXERTS A PARTICULAR PULLING POWER.

If the goods to be transported are somewhat wider, longer, higher or heavier, then one needs professionals with the know-how for special loads. MAN heavy-aduty tractors are the perfect solution for these operations: no task is too difficult, no route is too arduous.

Challenges are not only set today by demanding, special transportation. Companies must also be up to the tasks involved. The emphasis in today's market place is not only to increase performance, but also to reduce costs. Short, but to the point: businesses must be more efficient.

www.truck.man



The many industry-related solutions and individual, customer details for the relevant vehicles contribute to optimum profitability and reliability. MAN efficiency for transport, ex-works. The best idea – experience it yourself.



CONTENT

Euro 6 heavy-duty tractors

 8x4 up to 250 tonnes 	Page	4
 Perfection ex works 	Page	4
 Euro 6 vehicle range 	Page	8
Heavy-duty tractors worldwide		

• 6x6 up to 250 tonnes	Page 10
 MAN TGS vehicle range 	Page 12
 MAN TGX vehicle range 	Page 13
Cabs	Page 14

Driver assistance systems Page 20

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

OUR FLAGSHIP.

Whenever you are on the road with a special load, you will always think: It's great that it's an MAN. Because our tractor units are exactly what you require.

In addition to the numerous ex-works customisations for special load transportation and countless, selectable options, the MAN Euro 6 four-axle vehicle also offers a new driveline. The torquey new MAN D38 six-cylinder engine develops the power you need for reliable performance. The standard torque converter clutch ensures safe, comfortable and almost wear-free driving as well as enabling exceptionally, precise parking manoeuvres.

In normal driving operations, the torque converter clutch is overridden so that special loads can be more efficiently transported.

The combination of TurboEVBec[®] and retarder delivers efficient and effective brake output. TurboEVBec[®] operates in response to the engine speed, while the power of the retarder is dependent on the vehicle speed. As such, the ideal permanent brake is available for all speed ranges. The interaction of the two systems is controlled automatically, without driver intervention. The combination of these systems provides impressive braking power of up to 900 kW over a very wide range of applications.

Our new four-axle units are available in two power ranges with 427 kW (580 hp) as well as 471 kW (640 hp) and three weight classifications up to 250 tonnes. The cab can be selected as variants XL, XLX, XXL. The driven, tandem-axle assembly can be provided as a leaf and/or air-sprung variant. New is operation as a ballast vehicle with an airsprung, rear axle. The vehicles are available ex works as left-hand and/or right-hand drive.

Heavy-load equipment ex works:

- Generator unit behind the driver's cab with additional radiator, fuel tank, oil tank and compressed-air tanks
- Drawbar coupling at the front in combination with a steel bumper and bodywork panel
- Double, strengthened final cross member for standard and heavy load coupling in normal and lowered installation
- Fifth-wheel coupling with sliding device
- Transmission-independent, three-stage hydraulic unit for heavy-duty transport, with a connection to the final cross member and to the drawbar coupling
- Support plate for the gooseneck
- Spotlight on the generator support frame, detachable
- Revolving beacons
- Access ladder to the working platform
- Additional brake connection at the front and rear, additional trailer socket and ABS connection at the rear
- High-power compressed-air system

Performance and weight classifications

Туре	Suspension	Torque	Additional cooling	Gross train weight up to
41.580 8x4	BB/BL	2 900 Nm*	-	120 t
41.580 8x4	BB/BL	2 900 Nm*	Yes	210 t
41.640 8x4	BB/BL	3 000 Nm*	Yes	250 t

* The torque converter clutch increases the torque by a factor of 1.58



READY TO GO WHEN IT COMES OFF THE LINE.

No subsequent retrofitting, bodywork or additional extras; no half-finished job. Rather the perfect solution as a serial product, designed for your demands.

MAN tractors for heavy-duty transport roll off the production line ready to meet industrial requirements because when it come to the special demands of this transport sector, we have the knowhere right here. Our vehicles for heavy-duty transport are subjected to strict testing requirements, and fulfil the same quality control requirements as those for all trucks from MAN. All the required equipment, fixtures and fittings for special transport are available ex works this means for you that there is no need for special production, just the same service conditions as those for large-scale, series production.



Additional radiator for engine + torque converter clutch



Double final cross member



Sliding device for fifth-wheel coupling

Hydraulics for heavy duty trailer



Drawbar coupling, front



Support plate for gooseneck













Make it simple: MAN can easily supply the vehicle that you are looking for.

Irrespective of whether transporting 90, 120, 160 or 250 tonnes, MAN trucks are the market leaders with regard to efficiency. Innovative technology is the basis for profitability and reliability. Here are just a few examples of MAN heavy-duty tractors.

VARIETY IS OUR STANDARD PROGRAMME.

Strong and efficient heavy-duty trucks.

Choice of strong and efficient heavy-duty trucks

Wheel Power		Power Torque Gearbox		Gross train weight
configuration			of up to	
Universal and ec	conomical			
6x2/4	368 kW (500 hp)	2500 Nm	Manual	90 t
6x2/4	368 kW (500 hp)	2500 Nm	Automatic	90 t
6x2/4	397 kW (540 hp)	2700 Nm	Automatic	90 t
6x2/4	427 kW (580 hp)	2900 Nm	Automatic	90 t
6x2/4	471 kW (640 hp)	3000 Nm	Automatic	90 t

The lifting leading front axle and the hypoid rear axle create a very efficient and economical vehicle with a wide application field.

Individual				
6x4	368 kW (500 hp)	2500 Nm	Manual	180 t
6x4	368 kW (500 hp)	2500 Nm	Automatic	90 t
6x4	397 kW (540 hp)	2700 Nm	Automatic	120 t
6x4	427 kW (580 hp)	2900 Nm	Automatic	120 t
6x4	471 kW (640 hp)	3000 Nm	Automatic	120 t

Unbelievably variable: tandem-axle assembly with either leaf and/or air-sprung suspension, selectable as hypoid or planetary axles. Normal or medium-high design height.

Traction on dema	nd			
6x6 HydroDrive	368 kW (500 hp)	2 500 Nm	Manual	120 t
6x6 HydroDrive	368 kW (500 hp)	2500 Nm	Automatic	90 t

A 6x6 without side effects: MAN HydroDrive[®] – traction on demand. No increased consumption from a transfer case and differential gearbox, standard fifth-wheel height as the 6x4. Now up to 120-t gross train weight.







Heavy-duty equipment (ex works):

- Torque converter clutch: virtually wear-free moving off even at high gross train weight and in the most difficult conditions
- Additional radiator for the engine, torque converter clutch, gearbox, and transfer case
- Raised exhaust pipe and air intake
- Sturdy leaf-spring suspension and planetary axles
- Permissible axle loads: 9/16/16 tonnes
- Fifth-wheel coupling load: ca. 25 tonnes

MAN TGS 40.540 6x6 BBS: heavy-duty tractor for global operation

STRONG, STURDY, EFFICIENT.

Transport heavy loads with ease: the heavy-duty tractor with maximum traction for the toughest jobs (up to 250 t gross train weight).

Special jobs call for special solutions. The MAN heavy-duty tractor not only moves big loads but also those that are heavy, long and tall. Whenever a real strongman is required.

➔ Available versions/optional equipment:

- Emission class: Euro 4/Euro 5
- Left-hand drive vehicle/right-hand drive vehicle
- Cab available in L and LX versions (headroom)
- Sliding device for fifth-wheel coupling
- Mining version for use as a semitrailer tractor
- Heavy-duty version for operation as a semitrailer tractor and with a ballast box
- Two-stage hydraulic system for low loader trailers
- Front drawbar coupling
- Additional front and rear brake connections
- Additional front and rear hydraulic connections
- Additional front and rear electrical connections
- Heavy-duty rear trailer coupling, also in low mounting position
- Extended fuel system with 560 + 310 litre capacity









MAN TGX. Heavy-duty tractors for global use.

The MAN TGX offers very roomy cabs with every conceivable comfort.

Thanks to the virtually flat cab floor and the roomy storage compartments, the MAN TGX is perfectly designed for longer stretches and two-driver operation. Proven, efficient Euro 5 engines (available in V8 or straight-six) guarantee confident handling.

Wheel	Emissions class	Power	Gearbox	Gross train weight
configuration				of up to
8x4/4	Euro 5	500 kW (680 hp)	Automated + converter-clutch unit	250 t
8x4/4	Euro 5	397 kW (540 hp)	Automated + converter-clutch unit	180 t
8x4/4	Euro 5	397 kW (540 hp)	Manual	180 t

When the highest fifth-wheel coupling loads are needed, our 8x4/4 is the best choice.

6x4	Euro 5	397 kW (540 hp)	Manual	180 t
6x4	Euro 5	397 kW (540 hp)	Automatic	120 t

Our all-rounder: very versatile, very high traction, rear axles in an efficient hypoid construction or as sturdy planetary axles.

6x2-2	Euro 5	397 kW (540 hp)	Manual or automatic	90 t
6x2/2	Euro 5	397 kW (540 hp)	Manual or automatic	90 t
6x2/4	Euro 5	397 kW (540 hp)	Manual or automatic	90 t
6x4H/4	Euro E		Mapual	100 +
HydroDrive	Euro 5	397 kW (540 hp)	Manual	120 t

Thanks to the very efficient single hypoid axle and the lifting leading/trailing axle, even heavy loads can be transported highly efficiently. And in case the driven rear axle doesn't offer enough traction – with a front axle powered by MAN HydroDrive[®], you can get traction on demand from the 6x4H4, without the disadvantages of high fuel consumption.

MAN TGS. Heavy-duty tractors for global use.

MAN TGS – the all-rounder. The best visibility and a narrow yet very comfortable cab. Choose between the practical M cab for local transport use, the long L cab for single-driver operation, or the roomy LX cab with a high roof for two drivers.

MAN TGS for heavy-duty jobs - the best choice for every conceivable task thanks to its incredible versatility: it is available in 6x2 and 6x4 HydroDrive, 6x4 and 6x6, with rear axles in a very efficient hypoid construction or as extremely sturdy planetary axles, with tandem-axle assembly with leaf springs or air suspension, in normal, medium-high, and high design height (also for 6x4). Many types are also available as right-hand-drive vehicles.

Wheel	Emissions class	Power	Gearbox	Gross train weight
configuration				of up to
6x2-2	Euro 5	397 kW (540 hp)	Manual or automatic	90 t
6x2/2	Euro 5	397 kW (540 hp)	Manual or automatic	90 t
6x2/4	Euro 5	397 kW (540 hp)	Manual or automatic	90 t
6x4H/4 HydroDrive	Euro 5	397 kW (540 hp)	Manual or automatic	90 t
6x4	Euro 2/3/4	353 kW (480 hp)	Manual	180 t
6x4	Euro 2/3/4	353 kW (480 hp)	Automated	90 t
6x4	Euro 5	397 kW (540 hp)	Manual	180 t
6x4	Euro 5	397 kW (540 hp)	Automated	120 t
6x6	Euro 2/3/4	353 kW (480 hp)	Manual	180 t
6x6	Euro 2/3/4	353 kW (480 hp)	Automated	90 t
6x6	Euro 5	397 kW (540 hp)	Manual	180 t
6x6	Euro 5	397 kW (540 hp)	Automated	120 t
6x6	Euro 4/5	397 kW (540 hp)	Automated + converter-clutch unit	250 t
6x6H Hydrodrive	Euro 5	397 kW (540 hp)	Manual	120 t



Heavy-duty tra

ors worldwide

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 of course safety. All cabs meet the crash safety requirements, comply with the ECE-R29 Directive and offer optimum passenger protection.

The many useful details such as the washable door interior cladding, the easy-care fittings, the compressed-air connection that turns cleaning into such a simple job and the optional headlight washer unit make it clear: nothing has been forgotten. Take the optimum all-round visibility, for example, which is supported by such features as the mirror concept with the main and wide-angle mirror, large kerb mirror and front mirror. The blind spot has been practically eliminated.

Cab		Vehicle	e series	
	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 infotainment system

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.

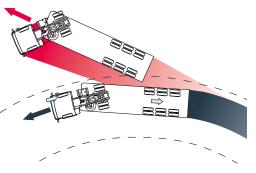


MAN Media Truck Navigation

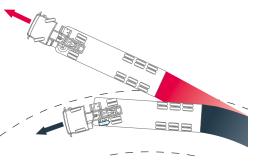


Function "Mirror Link"

MAN DRIVER ASSISTANCE EQUIPMENT.



ESP compensatory braking when vehicle is oversteered.



ESP compensatory braking when vehicle is understeered.

Electronic stability program (ESP)

ESP protects you from unpleasant surprises. ESP sensors constantly monitor the driving dynamics. If there is a risk of imminent skidding or tipping over, the separate wheels are braked accordingly and, where necessary, the engine torque is reduced. In this way ESP stabilises the vehicle and keeps it safely in the lane. MAN offers the electronic stability program for vehicles with leading or trailing axles and even for four-axle vehicles or articulated road trains. ESP offers a particular advantage when the all-wheel drive is engaged. Thus you have all the benefits of ESP when driving on the road – a special gain for fire brigades during an alarm situation.

MAN BrakeMatic[®] brake system with ABS and ASR

The most important distance is the braking distance. To prevent any nasty surprises, the electronic brake system (EBS), including ABS and ASR, ensures reduced braking distances. 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 Pri-Tarder 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 maintenancefree system increases the payload by up to 64 kg while doubling the brake lining service life of the service brake. The MAN PriTarder[®] is integrated into the MAN BrakeMatic[®] electronic continuous brake management and is easy to operate via the stalk switch.

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, in low wear and without rolling back.

Adaptive Cruise Control (ACC)

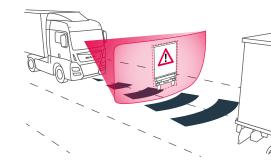
Adaptive cruise control automatically evaluates the distance and differential speed of the vehicle in front and ensures a safe distance through electronic intervention in the accelerator or brake pedal. ACC can be used at driving speeds from 25 km/h and helps the driver to stay relaxed while driving.

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.

Variable axle load ratio

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

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



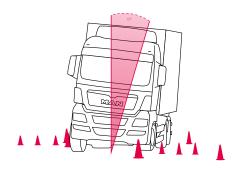
Functional principle EBA: advanced traffic monitoring by using two independent sensor systems (radar and video)



LGS for staying in the lane



Vehicle behaviour with CDC



Vehicle behaviour without CDC

Lane guard system LGS

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

MAN AttentionGuard

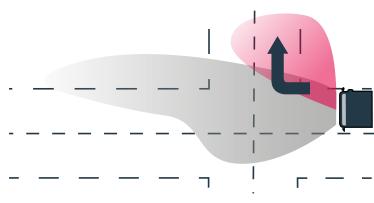
MAN AttentionGuard detects signs of reduced driver alertness at an early stage, and warns the driver accordingly. A second-generation (or higher) Lane Guard System is required for this system to work. The MAN AttentionGuard is a key factor in preventing the driver from accidentally leaving the lane on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

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 TGX and TGS 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

MAN Truck & Bus AG

Dachauer Straße 667 80995 München www.truck.man

D111.3556/E · pi 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