CONSISTENTLY EFFICIENT



MAN chassis for public-utility tasks. Clean, reliable, superior.

MAI

Engineering the Future – since 1758. **MAN Truck & Bus**

Principle: Sustainability. Concept: Efficiency.

Today's high demands for sustainable protection of the environment and the quality of logistic operations within cyclic waste management call for innovative solutions. The objectives: to permanently optimise the cost/benefit relationship and to maximise the efficiency of processes. In this context, special significance attaches to flexible, economical and ecological transport.

Logistic collection and disposal operations range from classic domestic waste through recyclable material, construction site refuse, bulky waste and container services to drain cleaning and the disposal of faecal matter, biological and electrical/electronic refuse. Not forgetting, of course, the responsibility of a municipality for the maintenance of its roads in normal and winter conditions.

For every one of these tasks, MAN has the right vehicle. Trucks that combine innovation with reliability, aimed at creating maximum transport efficiency. The torquey common-rail engines, for instance, give you more power for less fuel. Then the MAN TipMatic® transmissions take stress off the driver, ease the load on the drive train and further reduce fuel consumption. When more traction is needed, you can engage the hydrostatic MAN HydroDrive® on the front axle. Its benefits in terms of consumption and payload underscore the attractive economies of this unique system compared to a classic all-wheel-drive vehicle. A further highlight among many: MAN PURE DIESEL® technology, enabling all TGL and TGM vehicles to comply with Euro 5 and the even stricter EEV (enhanced environmentally-friendly vehicle) exhaust standard – and without needing any additive. You see, MAN efficiency offers many advantages. Best of all, find out for yourself.

www.L-Umweltreinigung.de

MAN

OG JL 3333



ff-Platz

Heavyweight performers.







The MAN TGS as a refuse-collection vehicle.

No matter whether it's household or industrial refuse, bulky rubbish or bio-waste, recyclable resources or hazardous waste: MAN trucks send the rubbish packing. Leading the field here is the MAN TGS as a three-axle version for bodies with container volumes of up to approximately 30 m³. The optional steered nine-tonne trailing axle combines high payloads with optimum agility. It results in a longer technical wheelbase which increases the front-axle load and optimises the easy steering of the vehicle whatever the load. TGS chassis with leading axles or the robust tandem unit are also part of the MAN range.

A safe, comfortable workplace - who doesn't want one of these? The driver of an MAN TGS already has one. The ergonomic M and L driver's cabs convince with the generous amount of space they offer, their functional trays and stowage spaces as well as their low weight, which makes for high payloads.

All TGS refuse-collection vehicles as well as all TGM RCVs equipped with MAN TipMatic® meet the highest requirements defined by the RCV standard DIN EN 1501-1. They come ready for the straightforward fitting of all kinds of refuse-collection bodies, whether rear, front or side loaders, as fixed bodies or swap systems. Then there are the matching power take-offs. In gearboxes, you have the choice of automated MAN TipMatic® with special RCV logic, fully automatic or manual.

Light and middleweight champions.

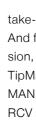




MAN TGM and TGL in refuse collection.

MAN's light and middleweight ranges also show their class. The TGM 26-tonner presents itself as a truck that packs a real payload with its steered, liftable trailing axle. It is predestined for bodies with container volumes of up to approximately 22 m³. Optionally also available with steered leading axle and axle lift. The two-axle TGM and TGL similarly put big payloads on the road. The compact TGL is a genuine city truck: with its great agility it was made for narrow streets, while its capacity of up to nine cubic metres ensures even long collection cycles.

Whether TGM or TGL, the C and L cabs are perfectly matched to their deployment. Especially comfortable is the extremely low, double-step entry to the C cab on the TGM - entrance height here is around a mere 360 mm, depending on the vehicle's laden condition. If you need space for a third person (2+1), take the L cab with an additional seat as special equipment. There is a wide variety of power





take-offs available for both the TGM and the TGL. And for turning the power of the engine into propulsion, you can choose between automated MAN TipMatic[®] and manual transmission. The TGM with MAN TipMatic® transmission complies with the RCV standard DIN EN 1501-1.

Shift control for refuse-collection vehicles.

The shift control attached to the armrest of the driver's seat combines a whole range of functions that improve operating comfort and make the job easier. The neutral setting of the gearbox can be externally activated and deactivated at the touch of a button. The pre-set comfort frequent-stop brake is automatically activated and deactivated. Requesting the power take-off speed for the hydraulic system for emptying and pressing the refuse is comfortable to deal with manually on the shift control. Further benefits are the high levels of safety and reliability resulting from more efficient loading operations, reliable securing of the vehicle, earlier readiness for loading and a faster releasing of the brake than is the case with a parking brake.



Practical, ergonomic, good: control unit for refuse collection vehicles.



The cleanest sweep.

MAN chassis with a sweeper body.

8

Millions of kilometres of road in Europe are itching to be cleaned. Just the right job for the reliable chassis from MAN, which are optimally prepared ex works for their purpose. As two-axle vehicles with permissible gross weights from 12 to 18.5 tonnes they are the perfect basis for every conceivable type of sweeper body. Take a tip from us and try out the leaf/air suspension. It ensures that the vehicle retains the same driving level in every laden condition which thus reduces the wear on the brush - an advantage that pays off.

From an environmental point of view too, driving the sweeper by means of the engine is the ideal solution, because all MAN engines are distinguished by their low levels of pollution and noise emission. They even comply with the stringent EEV exhaust standard. Contributing to the vehicle's high level of eco-friendliness: minimal formation of dust thanks to optional air-guide plates underneath the radiator.

Drives at 90 km/h. Sweeps at 0.9 km/h.

MAN's unique concept for extremely low sweeping speeds sets new standards. The challenge: the ideal sweeping speed for special assignments such as sweeping away chippings or cleaning building sites is less than 2 km/h. Standard gearboxes are normally not able to provide power at such low speeds at the necessary engine speed of approx. 1,000 rpm – unlike MAN's new concept. Here, the sweeper is powered via a PTO at the flywheel end, a motor in the body is not necessary. The extremely low sweeping speed is achieved by an additional reduction gearbox. The result: sweeping speeds of 0.9 km/h in first gear, up to 2.2 km/h in fourth gear and full driving speed for the outward and return journeys.





Ideal preparation for the sweeper body: lateral add-on parts such as a battery box, air intake and exhaust-gas system are situated behind the cab. As an option, the tank is mounted behind the rear axle.

Special mission: Going underground.

Flushing, extracting, cleaning.

Spraying down conduit walls, extracting sludge, emptying pits: MAN's vehicles designed for cleaning conduits are up to any task, whether with highpressure flushers, extractors or high-pressure flushing and extraction combinations. The truck range includes two-axle and three-axle vehicles, the latter with a steered leading axle, with a rigid or steered trailing axle or with a tandem unit. A special model: the three-axle truck with a steered ninetonne trailing axle for optimal weight distribution and perfect steering of the vehicle. And for the really heavy assignments, four-axle chassis are ready and waiting. A fifth axle can be retrofitted. The right PTOs are available as an option to suit every task. Appropriate ADR equipment is available for the transport of hazardous materials.

Ideal for vehicles with high centers of gravity: active high-load continuous damping control. This effectively reduces the lateral inclination and prevents the development of rolling and pitching movements. What this means is greater driving safety when cornering, changing lanes rapidly or braking sharply.















Change systems. Keep the best.





MAN vehicles with swap-body systems.

These systems minimise downtimes, enabling high transport performance. They are easy to load and unload, they make transfer handling superfluous, and in addition to all that, they can also be used for interim storage. Swap-body systems set-down or roll-off containers have a firm place in disposal logistics.

Regardless of which swap system you use, there is no need for a system swap: just keep on rolling with MAN. In our range you'll find the right chassis for every type of swap container body from four to forty cubic metres. They are available as two-, three- and four-axle vehicles with the required carrying loads, wheelbases and overhangs, combined with powerful common-rail engines, axle configurations suitable for the planned deployment with leading axles, trailing axles or tandem units and numerous drive formulae. The ranges extend through to the MAN TGX as a roll-off skip loader for the transport of resources in international longhaul transport.











Real street workers.



Technology with snow-how.



MAN chassis for winter services.

Next winter is sure to come, so it's good to be well prepared - best of all with MAN vehicles in the fleet. The two- three- and four-axle vehicles with gross weights from 13 to 40 tonnes, equipped with engageable or permanent all-wheel drive and single tyres hold their own as true miracles of traction. The innovative alternative to this is known as MAN HydroDrive®. This engageable hydrostatic front-axle drive for greater traction as required is a unique concept, exclusive to the MAN TGS. Depending on series and type there are manually operated or automatically acting drive-off assistants to prevent a vehicle from rolling on gradients.

On request, all MAN chassis can be equipped at the plant with a standard add-on plate for frontmounted equipment. This also applies to the publicutility hydraulics for controlling snow ploughs and for driving sprayers and gritters.

On request, a wide variety of PTOs is available to meet the demands of the customer - for a power hydraulic system installed by the manufacturer of the body or for so-called load sensing, a hydraulic control system where pressure and volume can be adjusted to the current requirements of one or several consumers.

The leaf-/air-sprung three-way tipper plays to its strengths when spraying: thanks to the air suspension, the height of the load surface always remains the same, regardless of the load. This ensures a constant spraying pattern during the entire assignment. A unique combination in the 13-tonne class is offered by the MAN TGM as a 4x4-chassis with leaf/air suspension.









Standard add-on plate for front-mounted equipment on request. Control unit for public-utility hydraulics.









Air suspension on the rear axle of the 13-tonne vehicle.



As individual as your demands.

Customised vehicle solutions.

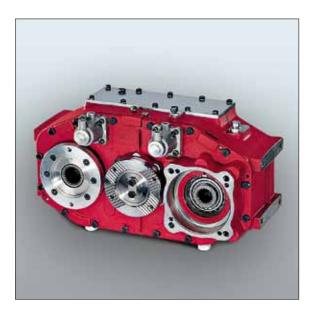
In the broad spectrum of public-utility tasks there's actually nothing that our vehicles aren't capable of doing. We have a solution even for the most highly specialised requirements: the MAN Modification Center realises individual special requirements, professionally and technically one hundred percent. An almost unlimited variety of modifications can be carried out on the vehicles. Whether it's the cab, the chassis, the drive train, the electronic system or the body, customised solutions are realised not just for specific, individual requirements but also for the entire vehicle.



Cab with side- and rear-wall glazing.



Swivel seat with control units.



Hydrostatic transmission for extremely low driving speeds, ideal for sweepers and road-marking vehicles.



Retarder for MAN TGM.



Steered, liftable leading axle on MAN TGM.



Air-sprung, adjustable center seat with integrated three-point seatbelt system.



The better the driver's workplace, the better the driver.

Top workplace for top performance.

MAN cabs always focus on the driver's needs. Drivers sitting here. not only feel extremely comfortable, they also immediately find their way around. All controls are clearly arranged and easy to reach. Height and inclination of the steering wheel are infinitely adjustable and the wheel itself folds up for more space when getting into, out of or across the cab. Many useful details such as washable interior door panelling, easy-care fittings, a compressed-air terminal that turns cleaning into such a simple job and an optional headlight washer unit make it clear: nothing has been left out, everything has been thought of.

Good all-round visibility.

1222222

The mirror concept with main and wide-angle mirrors, big ramp mirror and front mirror is perfectly designed for optimum vision and safety. The driver now has a clear view of the areas right in front of the vehicle, and the potential danger zone when turning right. There is practically no blind spot any longer. The rear window with curtain also contributes to optimum all-round vision and is ideal for manoeuvring.

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











The MAN crew cab.

The crew cab for the MAN TGL and TGM series is in a class of its own when it comes to space: with the comfortable row of four seats in the rear plus the optional second co-driver's seat, it can hold up to seven people (6 + 1). The access to the crew space is extremely comfortable: wide, non-slip and on request illuminated steps make it easy to climb aboard. Inside you'll find fittings that leave hardly anything to be desired. The tidily arranged, driverorientated cockpit draws approval with its clearly laid-out and easy-to-operate instruments. The ergonomics and comfort of the crew cab meet the high standard of the attractive C, M and L cabs.

MAN engines get things moving. Above all for the environment.

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.

D0834 110 kV 132 k 162 k

D0830 184 k\ 213 k 250 k\

D2066 235 k 265 k\

294 k 324 k\

D2676 353 k 397 k\

D2868 500 k

D2842 735 k\

MAN PURE DIESEL®



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.

	MAN PURE DIESEL® Euro 5 EGR	Euro 5 SCR	EEV EGR	EEV SCR
34				
W (150 hp)	•		•	
(180 hp)	•		•	
W (220 hp)	•		•	
36				
(W (250 hp)	•		•	
W (290 hp)	•		•	
(W (340 hp)	•		•	
6				
(W (320 hp)		•		•
(W (360 hp)		•		•
(400 hp)		•		•
W (440 hp)		•		•
/6				
(W (480 hp)		•		•
(540 hp)		•		
38				
(W (680 hp)		•*		•**
12				
W (1 000 hp)		•		

Overview of the Euro 5 and EEV engines

* with 2700 Nm for heavy-duty tractor units.

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

Where there's a MAN there's a way.

Tough guys wanted!



MAN all-wheel drive vehicles.

Whether for municipal road and snow-clearing services or off-road, wherever maximum traction is needed, MAN vehicles with permanent or engageable 4x4 or 6x6 all-wheel drive go into action. Power is distributed by 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. In the MAN TGM an optional electronic transfer case and differential management supports the driver in operating a vehicle on and off the road to match traction conditions and ease the load on the drive train. In the TGS and TGX too, the engaging and disengaging of differential locks is electronically monitored.



MAN HydroDrive[®].

There is an alternative available between conventional rear-wheel and classic all-wheel drive: MAN HydroDrive®, the engageable hydrostatic front-axle drive for more traction and full driving power for on-road vehicles. Offered for the MAN TGS and TGX, this technology is ideal for assignments with occasional off-road sections and for situations in which extra traction is needed on the front axle. In normal operation, TGS and TGX trucks equipped with MAN HydroDrive® run as usual with rear-wheel drive. In MAN HydroDrive® a hydraulic pump at the gearbox output supplies fluid to the wheel-hub motors on the front axle. This ingeniously simple, rugged and maintenance-friendly technology ensures that fuel consumption and vehicle height are kept at the attractive level of the conventional rear-wheel drive.

Chassis for waste collection bodies

	Perm. gross	
Model	vehicle weight (kg)	Wheelbases (mm)
TGL 12.180 - 250 4x2 BL	11 990	3 050/3 300
TGM 18.250 - 340 4x2 BL	18 000	3 575/3 875
TGM 26.290 - 340 6x2-4 BL ³⁾	26 000	3 875/4 425/4 725
TGS 18.320 - 440 4x2 BL	18 000	3 600/3 900/4 200/4 500/4 800
TGS 26.320 - 480 6x2/4 BL	26 000	3 150/3 750/4 150 + 1 350
TGS 26.320 - 480 6x2-2 BL1)	26 000	3 900/4 200/4 500/4 800 + 1 350
TGS 26.320 - 480 6x4 BB	26 000	3 200/3 600/3 900/ 4 200/4 500/4 800 + 1 400
TGS 26.320 - 480 6x4 BL	26 000	3 200/3 600/3 900/ 4 200/4 500/4 800 + 1 350
TGS 28.320 - 480 6x2-4 BL ²⁾	26 000	3 600/3 900/4 200/4 500 + 1 350
TGS 35.320 - 480 8x4-4 BL	32 000	3 600/3 900/4 200 + 1 350 + 1 450
TGS 35.320 - 480 8x2-6 BL	32 000	1 795 + 2 980/3 505 + 1 350
TGS 35.320 - 480 8x4 BB	32 000	1 795 + 2 980/3 505 + 1 400

also available with steered trailing axle.
with steered 9 t trailing axle.
serially with steered axle.

Chassis for road sweeper bodies

	Perm. gross	
Model	vehicle weight (kg)	W
TGL 12.180 - 250 4x2 BL	11 990	3
TGM 15.250 - 340 4x2 BL	15 500	3
TGS 18.320 - 480 4x2 BL	18 000	3

Vheelbases (mm)

3 050/3 300 3 575 3 600/3 900

Chassis for roll-off skips

	Perm. gross	
Model	vehicle weight (kg)	Wheelbases (mm
TGL 8.180 - 250 4x2 BB	7 4901)	3 300/3 600
TGL 10.180 - 250 4x2 BB	10 000	3 300/3 600
TGL 12.180 - 250 4x2 BB	11 990	3 300/3 600/3 900
TGM 18.250 - 340 4x2 BB, BL	18 000	4 725/5 075
TGS 18.320 - 480 4x2 BB, BL	18 000	4 500
TGS 26.320 - 480 6x2-2 BL ²⁾	26 000	4 200/4 500/4 800/5 100 + 1 350
TGS 28.320 - 480 6x2-4 BL ³⁾	26 000	4 200/4 500/4 800/5 100 + 1 350
TGS 28.320 - 480 6x2-2 BL4)	26 000	4 200/4 500/4 800/5 100 + 1 350
TGS 26.320 - 480 6x4 BB	26 000	3 900/4 200/4 500/4 800 + 1 400
TGS 26.320 - 480 6x4 BL	26 000	3 900/4 200/4 500/4 800/ 5 100 + 1 350
TGS 35.320 - 480 8x4-4 BL	32 000	3 600/3 900 + 1 350 + 1 450
TGX 18.360 - 480 4x2 BL	18 000	4 800
TGX 26.360 - 480 6x2-2 BL ²⁾	26 000	4 200/4 500/4 800/5 100 + 1 350
TGX 28.360 - 480 6x2-2 BL ⁴⁾	26 000	4 200/4 500/4 800/5 100 + 1 350
TGX 35.360 - 480 8x4-4 BL	32 000	3 600/3 900 + 1 350 + 1 450

1) can be upweighted to 8 800 kg. 3) with steered 9 t trailing axle.

2) also available with steered trailing axle. 4) with twin-tyred 10 t trailing axle.

Chassis for set-down skips

	Perm. gross	
Model	vehicle weight (kg)	Wheelbases (mm)
TGL 8.180 - 250 4x2 BB	7 4901)	3 050/3 300
TGL 10.180 - 250 4x2 BB	10 000	3 050/3 300/3 600
TGL 12.180 - 250 4x2 BB	11 990	3 050/3 300/3 600
TGM 18.250 - 340 4x2 BB, BL	18 000	3 575/3 875
TGS 18.320 - 480 4x2 BB, BL	18 000	3 600/3 900
TGS 26.320 - 480 6x2/4 BL	26 000	2 600/3 150/3 750 + 1 350
TGS 26.320 - 480 6x4 BB	26 000	3 200/3 600/3 900 + 1 400
TGS 26.320 - 480 6x4 BL	26 000	3 200/3 600/3 900 + 1 400
TGX 18.360 - 480 4x2 BL	18 000	3 900/4 200
TGX 26.360 - 480 6x4 BL	26 000	3 900 + 1 350

1) can be upweighted to 8 800 kg.

Chassis for drain and sewer cleaning bodies

	Perm. gross	
Model	vehicle weight (kg)	Wheelbases (mm)
TGL 10.180 - 250 4x2 BB, BL	10 000	3 050/3 300/3 600
TGL 12.180 - 250 4x2 BB, BL	11 990	3 050/3 300/3 600
TGM 18.250 - 340 4x2 BB	18 000	3 875/4 125/4 425/4 725
TGS 18.320 - 480 4x2 BB	18 000	3 900/4 200/4 500/4 800
TGS 26.320 - 480 6x2/4 BL	26 000	3 150/3 750/4 150 + 1 350
TGS 26.320 - 480 6x2-2 BL ¹⁾	26 000	3 900/4 200/4 500/4 800 + 1 350
TGS 26.320 - 480 6x4 BB	26 000	3 200/3 600/3 900/ 4 200/4 500/4 800 + 1 400
TGS 26.320 - 480 6x4 BL	26 000	3 200/3 600/3 900/ 4 200/4 500/4 800 + 1 350
TGS 28.320 - 480 6x2-4 BL ²⁾	26 000	3 600/3 900/4 200/4 500 + 1 350
TGS 28.360 - 480 6x2-2 BL ³⁾	26 000	3 900/4 200/4 500/4 800 + 1 350
TGS 35.320 - 480 8x4 BB	32 000	1 795 + 3 505/4 105 + 1 400
TGS 35.320 - 480 8x4 BL	32 000	1 795 + 3 505/4 105 + 1 350
TGS 35.320 - 480 8x2-4 BL	32 000	1 795 + 3 505/4 105 + 1 350
TGX 35.320 - 480 8x4-4 BL	32 000	3 900/4 200 + 1 350 + 1 450

1) also available with steered trailing axle. 2) available with steered trailing axle 9 t. 3) with twin-tyred 10 t trailing axle.

Chassis for road maintenance and winter service

	Perm. gross	
Model	vehicle weight (kg)	Wheelbases (mm)
TGM 13.250 - 290 4x4 BL	13 0001)	3 050/3 250/3 650/3 950/4 250
TGM 18.250 - 340 4x4 BB ²⁾	18 000	3 600/3 900/4 200/4 500
TGS 18.320 - 480 4x4 BB, BL	18 000 ³⁾	3 600/3 900/4 500
TGS 18.320 - 480 4x4H BL	18 000	3 600/3 900/4 500
TGS 26.320 - 480 6x4H BL	26 000	3 600/3 900/4 200 + 1 350
TGS 26.320 - 480 6x6 BB, BL	26 000	3 600/3 900/4 200 + 1 400
TGS 28.320 - 480 6x4-4 BL4)	26 000	3 600/3 900/4 350 + 1 400

1) can be upweighted to 15 000 kg with twin-tyred rear axle. can be upweighted to 14 100 kg for single-tyred rear axle for winter service and 62 km/h. 2) upweighting to 18 600 kg possible for public-utility service. 3) upweighting to 23 000 kg possible for winter service and 62 km/h. 4) upweighting to 30 000 kg possible for winter service and 62 km/h.

Special chassis for refuse-collection vehicles

	Perm. gross	
Model	vehicle weight (kg)	W
TGM 25.250 - 340 6x2/4	26 000	2
		3

Wheelbases (mm)

2 525/3 075/3 375/ 8 725/4 075/4 025 + 1 350 D 111.3471/E · bv 08121 · Printed in Germany Text and illustrations not binding. Subject to changes in the course of technical progress.

MAN Truck & Bus AG

Postfach 50 06 20 D-80976 Munich www.mantruckandbus.com