

MAN HYDRODRIVE®

More traction. More flexibility. More safety.



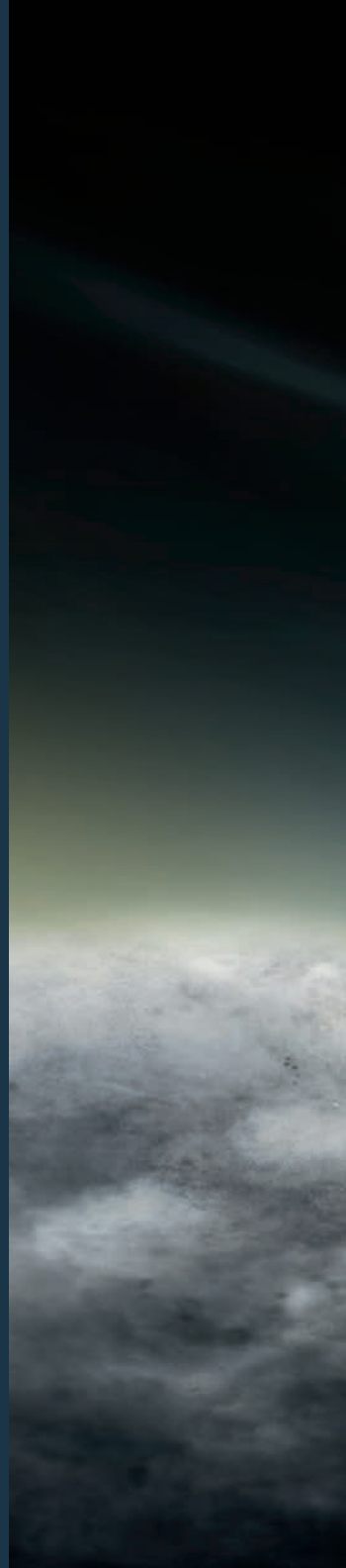
A WONDER OF TRACTION EFFICIENCY.

More traction but little extra weight. Lower fuel consumption and higher payload than on conventional all-wheel-drive vehicles. That's the kind of efficiency you get with unique MAN HydroDrive®. With the development of the engageable hydraulic front-axle drive, MAN has once again proven its innovative capabilities, creating a transport solution that gives a new impulse to mobility. The reliable, tried and tested MAN HydroDrive® is ideal for situations in which extra traction is briefly needed on the front axle, such as when entering and leaving construction sites and dirt roads, on slopes, unsurfaced forest tracks and earth roads, on gradients and slippery surfaces.

These are all cases where MAN HydroDrive®, already sold more than 13000 times, is the answer to producing more traction, in other words decent propulsion both forwards and in reverse.

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









MORE TRACTION ALLROUND.

Unbounded use.

The range of possible uses for MAN HydroDrive® covers the whole market from long-haul transport through to special-purpose. Whether it's tippers, truck mixers, heavy-duty semitrailer tractors, roll-off or set-down systems, suction dredgers or fire trucks, tankers or silo vehicles – MAN HydroDrive® is a convincing solution for any sector or transport operations in which extra traction may be needed. The MAN range offers similar variety. MAN HydroDrive® vehicles MAN TGS and MAN TGX range from two-through three- to four-axle solutions. And something else the user will appreciate – MAN HydroDrive® creates no restrictions in design height, manoeuvrability, choice of cab or axles. The MAN HydroDrive® is available in combination with automated MAN TipMatic® and manually operated gearboxes.

Safer driving on downhill routes with MAN HydroDrive®.

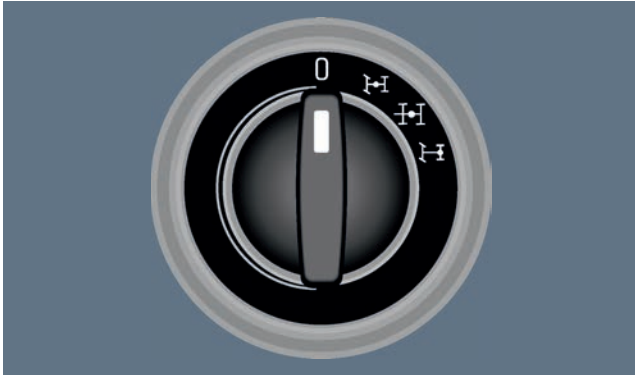
With MAN, driving downhill is safer as the engine braking torque is also transferred to the front axle ("support"). The strain on the service brake is also eased thanks to the combination of MAN HydroDrive® and a PriTarder. That means improved driving safety, better tracking stability on uneven ground, even when driving downhill – the perfect solution for your applications.

→ Efficiency from MAN HydroDrive®:

- Available for MAN TipMatic® and manual gearbox
- MAN HydroDrive® vehicle range of unmatched variety (two-, three- and four-axle versions)
- MAN four-axle vehicle, also in 8x6H or 8x4-6H wheel configurations
- Highly cost-effective through consumption and payload benefits compared with conventional all-wheel drive
- Weight advantage of up to 750 kg compared to classic all-wheel drive, independent of wheel configuration
- Engagement of hydrostatic front-axle drive also while moving
- The RPMs of the front and rear axles are coupled, with MAN HydroDrive® thereby acting as a differential lock
- Improved driving safety, better tracking stability on uneven ground and when travelling downhill: With MAN HydroDrive® vehicles, the engine braking torque is also transferred to the front axle ("support") when driving downhill, thus providing safer handling
- Intuitive operation
- No increased fuel consumption due to frictional losses in comparison to mechanical all-wheel drive
- Simultaneous use of PTO on flywheel side possible (e.g. for roll-off skip loader and truck mixer)
- No adaptation of body auxiliary frame necessary
- Direct takeoff of power on drive shaft, thus no restriction of load limit of PTO
- More traction through additionally driven front axle, forward and reverse
- Greater flexibility in vehicle use
- Time and cost savings because vehicles no longer get stuck or have to be towed free
- Improved manoeuvrability compared to a mechanically driven front axle, as the size of the turning circle remains the same as with non-driven axles
- Little maintenance
- No influence on design height, choice of cab and wheelbase
- Available ex works
- Deliverable for normal and medium-height designs







More traction at the turn of a switch.

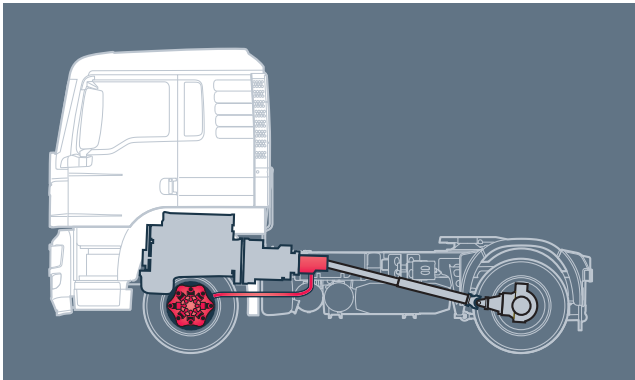
You engage the MAN HydroDrive® using the rotary switch for the differential lock, even while driving under load. From a speed of about 28 km/h upwards it cuts out automatically. If speed drops below 23 km/h it automatically cuts in again. A lamp on the central display lights up to tell the driver that the front-axle drive is activated. When you drive downhill with the MAN HydroDrive® engaged, the continuous brake also acts on the front axle, thus stabilizing the vehicle.

Ruggedly engineered.

In MAN HydroDrive® a hydraulic pump is seated on the gearbox output shaft to feed the wheel hub motors on the front axle. When it comes to fuel consumption and wear and tear, this ingeniously simple, rugged and maintenance-friendly technology is comparable to conventional rear-wheel drive. And it creates a number of advantages over classic all-wheel drive. A weight-saving of up to 750 kg, the transfer case is done away with, only the rear wheels are driven onroad, and the hydraulic pump and wheel motors produce no friction. In an all-wheel drive, by contrast, the transmission elements keep turning even when the front-axle drive is disengaged.

With MAN HydroDrive®, PTO on flywheel side is available for all applications and this means there are no limitations on the body to be used. Thus, the problem-free construction of applications such as truck mixers or roll-off skip loaders is easily possible without additional effort, without additional modifications. A body manufacturer and customer-oriented solution.

The combination of MAN HydroDrive® with the unique MAN PriTarder®, a wear-free extra brake acting directly on the engine, also produces maximum braking power – regardless of speed – in vehicles of the MAN TGS series. More active safety and substantially reduced service brake wear mean greater transport efficiency.



MAN HydroDrive® wheel hub motor

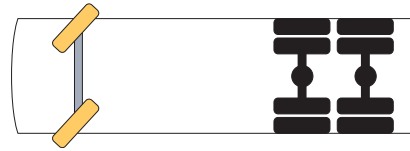




MAN HYDRODRIVE® VEHICLE RANGE.



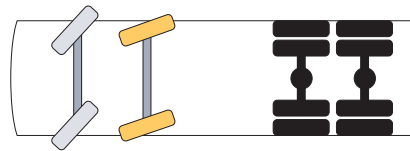
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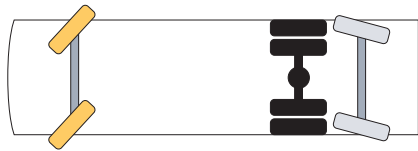
6x6H BL, BLS



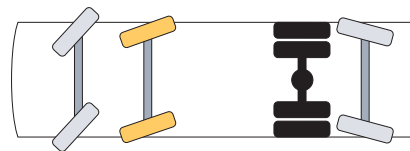
6x4-2H BL, BLS



8x6H BL



6x4-4H BL



8x4-6H BL

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