

ALTERIO

M HYDREMA

912-5

Bussal

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ARTICULATED DUMP TRUCKS

Since 1959 Hydrema has developed, manufactured, sold and serviced high-tech construction machines. Efficient, innovative and high-quality machines. Our products distinguish themselves from other products on the market through their technical and physical capabilities. Very well suited to perform specialized tasks in construction and installation work.





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HYDREMA 912F SERIES

Compact, highly mobile and off-road superior.

Articulated compact dump trucks with superb power to weight, durable and easy to operate. Providing efficiency and flexibility - every day, year after year.

In 1983 Hydrema launched the first compact dump truck. Today these small, agile and robust dump trucks work all over the globe.

The main reason for the success of the

Hydrema 912 dump truck is found in the

The center pivot with hydraulic stabilizers

automatically transferring the weight to

The chassis design ensures that the front

and rear wheels are running in the same

track, and the standard twin tyres gives

outstanding traction with minimum ground

damage. The pivot, which is centrally pla-

articulated and oscillating pivot point.

keep the machine stable and safe by

where it is needed for added stability.

Stable

ced, increases maneuverability with a low turning radius of just 6.1 m and great positioning characteristics.

Easy to operate

Operating the 912F is easy and the driver becomes familiar with the machine functions and maneuverability in no time. Userfriendly controls, joystick operation, unrivalled visibility and a well-designed cabin, ensures the best working conditions.

A well proven 6 speed ZF Soft-Shift transmission offers full auto or manual shift. This intelligent transmission will automatically shift 2 gears in the right conditions to smoothly increase acceleration regardless of the payload.



Strong but fuel efficient

A state of the art 147 hp Cummins engine offers one of the best power-to-weight ratios on the market. Whether the machine is working on steep gradients or in poor ground conditions, the 912F-series has the power to cope.

The high torgue offers more power at lower revs, which improves fuel economy and noise levels. Positive for both environmental and financial reasons.



Working on poor ground conditions and where space is scarce

The compact design along with smart features like the swiveling dump body -MultiTip - allow the truck to work on minimal space on narrow and congested sites.

The unique combination of high level of stability, outstanding traction and lots of power provides the 912F-series dump trucks with great driving abilities even in rough, hilly and muddy conditions.

Due to a low net weight the dump truck has very low ground pressure - down to 85 kPa - when carrying a full load of 10 tons. Together with tracking of the wheels this ensures minimal ground damage which is great for working on sensitive surfaces like golf courses, landscaping and for environmental work. When other dump trucks give up the Hydrema 912 keeps going, giving the operator a major advantage. That is why it is chosen for a wide variety of tasks and jobs with low accessibility.

Rental friendly

The 912 dump truck is well-known for its robustness, low maintenance costs and usage in a wide range of applications. The truck is engineered and produced to give many years of solid performance which combined with its ease of operation makes it particularly suitable for rental applications.

Visible safety

To increase the visibility of the dump truck, orange flashing LED lights can be mounted both at the front and rear (option). Furthermore, up to 4 rearwards facing LED working lights can be fitted to the dump truck body in order to ease the work during the dark hours.





ADVANTAGES

| High mobility due to center pivot steering and hydraulic stabil | zers. |
|---|-------|
| Quality made. Heavy duty construction. Build to last. | |

Low weight of the truck provides a very low ground pressure.

Strong Cummins QSB 4.5 stage 4 engine with DOC and SCR catalyst. Great torque.

User friendly and easy to operate. High operator comfort and safety. Perfect for rental.



EASY UNLOADING

Unloading that works for you.

The dump truck body is the backbone of the vehicle. The unloading process is optimized through a re-designed body and by utilizing smart features like automatic tipping throttle and MultiTip.

Quick unloading

A tipping time of 6 seconds means the material can be unloaded quickly. The truck is fitted with an automatic tippingthrottle, where the machine will automatically increase the engine speed when the tipping function is activated to quickly raise the body and thereby increase the efficiency.

The ground clearance when tipping is 110 cm, which provides the opportunity to unload the material over edges, or in high piles in order to save space.

The robust body is manufactured in durable high-tensile steel and a rigid frame along the top provides greater stability. In addition, the body is designed with rounded corners so even wet and sticky material will easily slide off when tipping.

In cases where additional stability is required - for example, loading over the side - the pivot lock can be activated.

Precise and flexible unloading

A popular optional feature is the MultiTip, where the dump truck can turn the body 90 degrees to each side and deliver the payload anywhere you want in the 180 degrees area with high precision.

MultiTip makes several working situations easier. For example when tipping a certain amount of payload sideways, whilst moving forward, or into a trench. MultiTip also allows you to work in very narrow conditions.

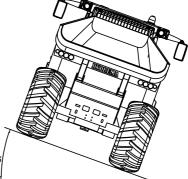
Greater efficiency with Auto-Body-Return

With the (optional) Auto-Body-Return function, the body is automatically lowered back onto the chassis with a push of a button. In other words, the operator does not have to look backwards when the body is being lowered - instead he can move on to the next task while the body lowers itself into the resting position. It saves valuable hours and allows the operator to focus on what happens in front of the truck.



Stable even on inclines

The low center of gravity of the 912F series dump trucks and good weight distribution between the chassis parts provide great stability, no matter if the dump truck is carrying load or not.



Driving on in-clines

(Slope angle where the machine overturns).

| | 91 | 2F | 912FS | | | |
|-----------------|-------|--------|-------|--------|---|--|
| | EMPTY | LOADED | EMPTY | LOADED | E | |
| Going straight | 40° | 32° | 39° | 38° | | |
| Turning up-hill | 39° | 29° | 31º | 28° | | |



| 912HM | | | | | | | |
|-------|--------|--|--|--|--|--|--|
| EMPTY | LOADED | | | | | | |
| 39° | 38° | | | | | | |
| 31° | 28° | | | | | | |





COMFORT AND SERVICE:

Optimal visibility, comfort and service access.

MACHINE DATA

Specifications.

Optimal operator comfort

The spacious cab offers great visibility and a soft touch interior that is easy to clean. All the instrumentation is ergonomically placed and the steering wheel, seat and arm rests are fully adjustable to suit the individual operator.

A joystick is installed as an integrated part of the right armrest. From here you operate the main dumper functions such as tipping, gear selection, forwards / reverse and differential lock. This provides easy control at your fingertips.

An air-conditioning system is incorporated as standard, with 8 air nozzles placed throughout the cab for optima indoor climate. The cab is also fitted

with automatic entry/exit lighting for safer nighttime operation. To reduce vibration the cab-mountings are spring dampened.

A great view

The engine is placed behind the cab, which gives the operator an unobstructed forward view from the driver's seat for safer operation. An optional rearview camera provides greater visibility when reversing.

Front-axle suspension minimizes operator fatigue

The front axle on the 912FS and HM models is equipped with an electro-hydraulic suspension system that provides unprecedented comfort for this type of

machine. The system has independent suspension cylinders and level control of the two front wheels. This reduces the vibration level substaintially over a long working day, especially on longer hauls.

The built-in computer automatically adjusts the suspension depending on how much the dumper is loaded so that the vehicle is comfortable to drive both with and without loads

Easy service access

Opening the large bonnet gives easy access to the different service points: engine, oil level, hydraulic system, etc. The two front fenders have integrated storage and built-in battery housing.



Articulated chassis in a heavy-duty robot-welded construction. 912F has rigid integral axles, whilst the 912FS and 912HM have front axle suspension in heavy-duty pivot bearings and two suspension cylinders. Pivot with pendulum bar and double hydraulic stabilizers with the option of locking the oscillation movement. The pivot is fitted with large spherical pivot bearings. The fuel, AdBlue and hydraulic tanks are integrated into the front chassis. Oscillation: +/- 12º

Axles

The 912F has fixed, rigid axles. The 912FS and 912HM has electronically suspension with two independent suspension cylinders on the front axle. The axles have planetary reduction in the wheel hubs and separate oil reservoirs in the hubs. The front axle has automatic limited-slip differential lock whilst the rear axle has an electro-hydraulically activated 100% differential lock.

Engine

Cummins QSB 4.5L Stage 4 engine with DOC and SCR catalysts with Ad-Blue additive. 16 valve common rail turbo diesel engine with intercooler, electronically variable turbo charger and EGR with cooling. Max power: 108 kW (147 hp) at 2000 rpm. Max. torque: 597 Nm at 1500 rpm.

Transmission

ZF WG115 6-speed fully automatic »ERGOPOWER« with full electronic control. 6 forward and 3 reverse gears. Electronically controlled pressure on each clutch ensures completely smooth gear shifts without any loss of tractive effort. Automatic or manual gear shifts; it is possible to shift manually using push buttons on the joystick. Constant 4WD.

Steering

Hydrostatic Load Sensing pivot steering with 2 double acting cylinders. Priority valve and integrated emergency steering. Steering cylinders with damping. Max. steering angle: +/- 35°

Hydraulic System

Hydraulic pump with 84 I/min for tipping function and with priority valve for steering function. Separate hydraulic pump for brakes and pivot stabilizers.

Brakes

Dual-circuit hydraulic servo system with oil-immersed brake discs on each wheel. The brakes are self-adjusted and maintenance-free. The parking brake is a Maintenance-free, »Fail-safe« brake with electro-hydraulic activation of the wet disc brakes on the front axle.



Cab

Spacious ROPS / FOPS approved cab with cab suspension. Mechanical or air-suspended seat. Adjustable steering wheel and multi-joystick control.

Body

5.6 m3 body fabricated in robotically welded high tensile steel.

Electric System

Standard 24V system with 70 Amp. alternator. Batteries: 2x 12V, 100Ah.

Noise levels

LpA: 72 dB(A) (inside cab) LwA: 102 dB(A) (outside cab)

Fuel

Diesel: 140 L fuel tank. Ad Blue: 14 L tank. Integrated into the front chassis.

MultiTip (optional)

Compact slewing system with rapid unloading at the rear and to both sides. The slewing system is supported in a robust ball-bearing slewing ring. Pivotal movement takes place by means of 2 double acting cylinders. Tipping function by means of 2 double acting cylinders.

Many machine configurations.

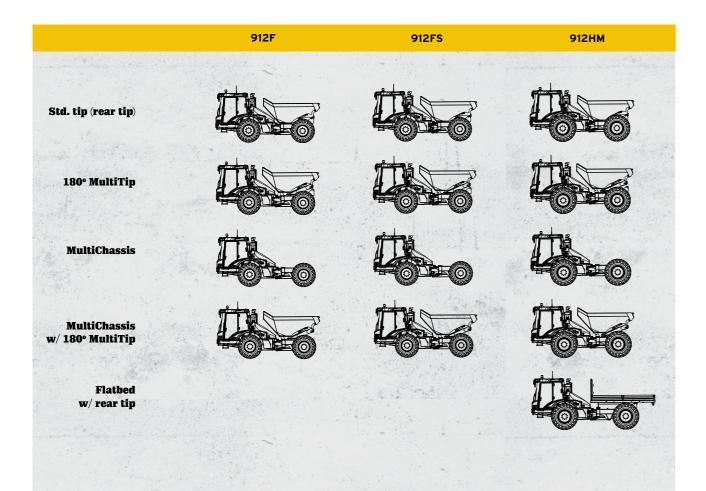
Dimensions.

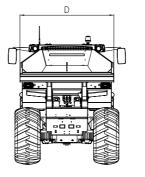
The 912 F-series dump truck range offers many different options to suit your needs and requirements.

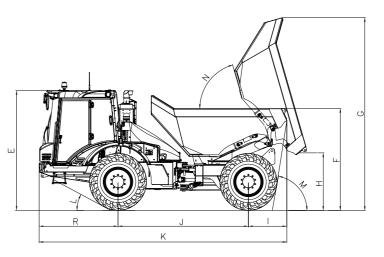
The standard dump truck is the 912F, while the 912FS and 912HM has a suspended front axle. The High-Mobility version - the 912HM - features taller tyres, higher ground clearance and can accommodate up to 800mm wide tyres for minimized ground pressure. As standard the dump trucks are mounted with a rear tip body and can be fitted with the optional MultiTip, which allows the body to turn through a 180 degrees area. The 912HM is also available with a flatbed body, where the rear chassis is ex-tended to accommodate the increased length of the body.

The MultiChassis version is a universal platform where a variety of customized solution can be mounted, such as water tanks, concrete mixers or salt spreaders.

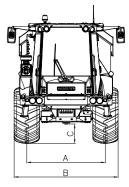
Furthermore, items like brushes and snow blades can be mounted both at the front and on the rear of the truck.







| | | | 912F | | | | 912FS | | 912HM | | | | | |
|----|--------------------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| | | | STD. TIP | MULTITIP | MULTICHAS. | STD. TIP | MULTITIP | MULTICHAS. | STD. TIP | STD. TIP | MULTITIP | MULTICHAS. | FLATBED | |
| | Tires | | 600/55-26,5 | 600/55-26,5 | 600/55-26,5 | 600/55-26,5 | 600/55-26,5 | 600/55-26,5 | 800/45x30.5 | 600/60x30.5 | 800/45x30.5 | 800/45x30.5 | 800/45x30.5 | |
| | Total weight | kg | 17270 | 17730 | 18000 | 17540 | 18000 | 18000 | 18260 | 17970 | 18720 | 18000 | 18260 | |
| | Unladen weight | kg | 7270 | 7730 | 6100 | 7540 | 8000 | 6200 | 8260 | 7970 | 8720 | 6900 | 8260 | |
| | Load capacity | kg | 10000 | 10000 | 11900 | 10000 | 10000 | 11700 | 10000 | 10000 | 10000 | 11100 | 10000 | |
| | Body capacity | m ³ | 5.6 | 5.6 | - | 5.6 | 5.6 | - | 5.6 | 5.6 | 5.6 | - | 5,6 | |
| | Turning radius | m | 6.1 | 6.1 | 6,1 | 6.1 | 6.1 | 6,1 | 6.3 | 6.1 | 6.3 | 6,3 | 7,0 | |
| | Ground pressure (loaded) | kPa | 122 | 123 | - | 123 | 125 | - | 85 | 113 | 86 | - | 85 | |
| | Suspended front axle | | | | | Х | Х | х | Х | Х | Х | х | х | |
| Α. | Track | mm | 1860 | 1860 | 1860 | 1860 | 1860 | 1860 | 2060 | 1900 | 2060 | 2060 | 2060 | |
| В. | Total width | mm | 2470 | 2470 | 2470 | 2470 | 2470 | 2470 | 2870 | 2540 | 2870 | 2870 | 2870 | |
| C. | Clearance | mm | 450 | 450 | 450 | 450 | 450 | 450 | 520 | 520 | 520 | 520 | 520 | |
| D. | Dump truck body width | mm | 2210 | 2210 | | 2210 | 2210 | - | 2210 | 2210 | 2210 | - | 2485 | |
| E. | Total height | mm | 2750 | 2750 | 2750 | 2790 | 2790 | 2750 | 2865 | 2865 | 2865 | 2868 | 2865 | |
| F. | Loading height | mm | 2225 | 2390 | | 2245 | 2410 | - | 2330 | 2330 | 2480 | - | 1950 | |
| G. | Height with raised body | mm | 4385 | 4550 | - | 4385 | 4550 | - | 4470 | 4470 | 4635 | - | 4330 | |
| Н. | Tipping clearance | mm | 1110 | 1280 | | 1110 | 1280 | - | 1195 | 1195 | 1365 | - | 400 | |
| ١. | Overhang, rear | mm | 990 | 910 | - | 990 | 910 | - | 990 | 990 | 910 | - | 1675 | |
| J. | Wheel base, bogie | mm | 3080 | 3080 | 3080 | 3080 | 3080 | 3080 | 3080 | 3080 | 3080 | 3080 | 3480 | |
| К. | Length | mm | 5940 | 5860 | 5650 | 5940 | 5860 | 5650 | 5940 | 5940 | 5860 | 5730 | 7025 | |
| L. | Approach angle, front | 0 | 27 | 27 | 27 | 28 | 28 | 28 | 30 | 30 | 30 | 30 | 30 | |
| М. | Approach angle, rear | 0 | 75 | 80 | - | 75 | 80 | | 80 | 80 | 83 | - | 45 | |
| N. | Tipping angle | 0 | 75 | 75 | - | 75 | 75 | | 75 | 75 | 75 | | 72 | |
| R. | Overhang, front | mm | 1870 | 1870 | - | 1870 | 1870 | - | 1870 | 1870 | 1870 | - | 1870 | |



Well equipped with many options.

STANDARD EQUIPMENT

Machine:

Tyres, 912F & 912FS: 600/55 - 26.5 Twin Tyres, 912HM: 600/60 - 30.5 Twin Front axle: Limited slip differential lock Rear axle: 100% electro-hydraulic differentiel lock Suspended front axle (only 912FS and 912HM) Oscillation of center pivot point

Cabin:

Green rotating beacon - seatbelt activated 12V and 24V plug box in cab Wiper with interval control - front / rear Sunshade - front Handheld light Red lighting effect inside cab (for night use) Sun shield on cap - front Automatic air-conditioning Headrest Rotating beacon Radio with FM Two side mirrors with heating - front Seat heating Automatic driving lights 8 Megabeam working lights

Operation:

Automatic tipping throttle Automatic tipping brake Automatic Lock of oscillation in pivot point when tipping Cruise control Rear view system with monitor in cab

OPTIONAL EQUIPMENT

Wheels / Tires:

912F & 912FS: Wheel set; 17.5 x 25 EM 912HM: Wheel set: 800/45-30.5 Wheel set: 650/65-R25 EM

Dumper body:

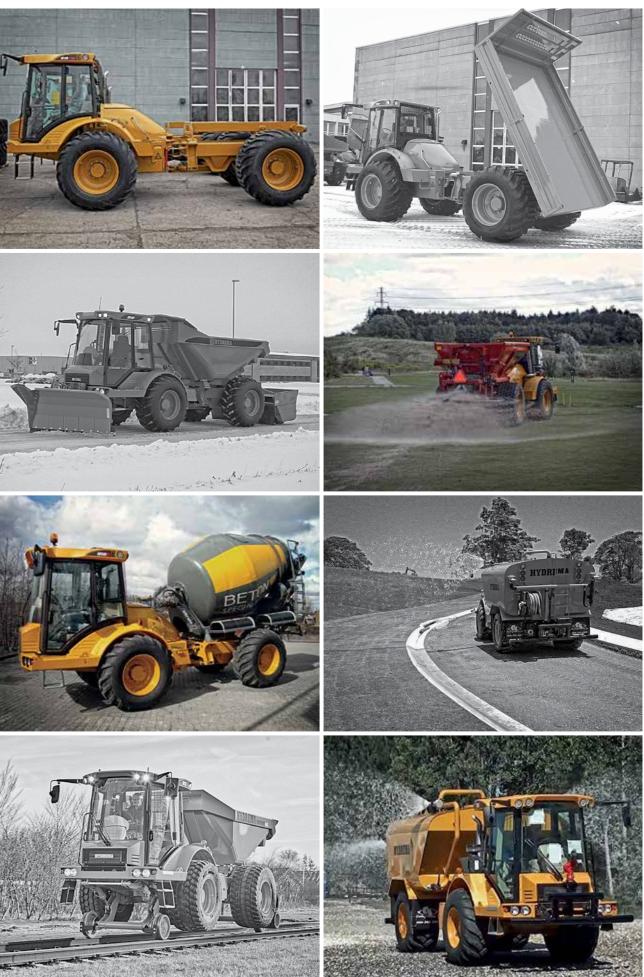
180° Multitip Extended upper body edge Extension of rear body edge, 400 mm Reinforced body - 8mm Hardox Automatic body return (only possible with Multitip) Rear lights protection

Cab:

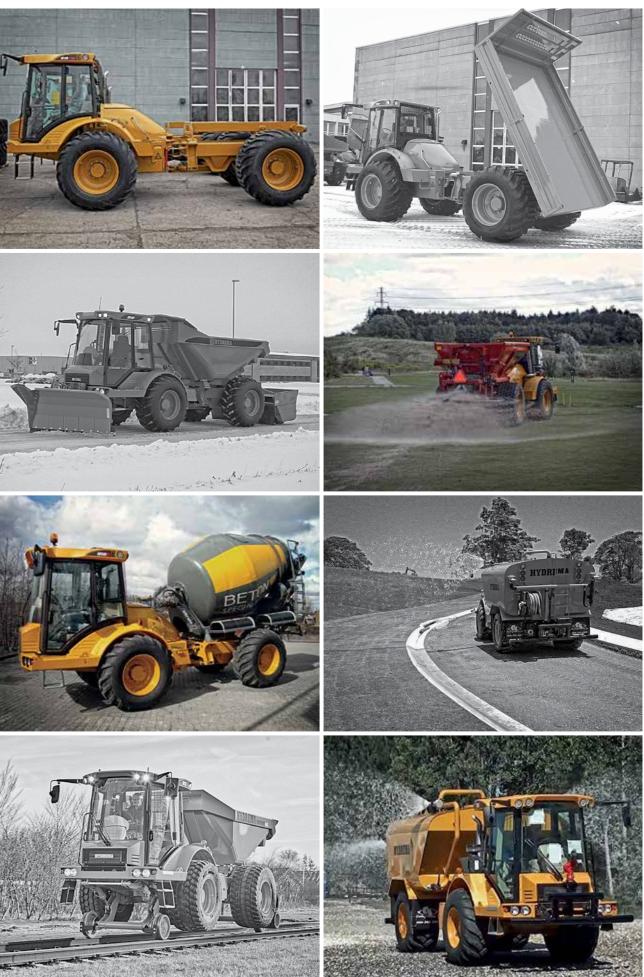
Extra rotating beacon Air suspended drivers comfort seat Two Electrically adjustable and heated side mirrors DAB-radio with Bluetooth 4 ps. Xenon working lights - FRONT 2 ps. Xenon working lights - REAR 2 ps. Xenon working lights - SIDE 4 ps. LED working lights - FRONT 2 ps. LED working lights - REAR 2 ps. LED working lights - SIDE

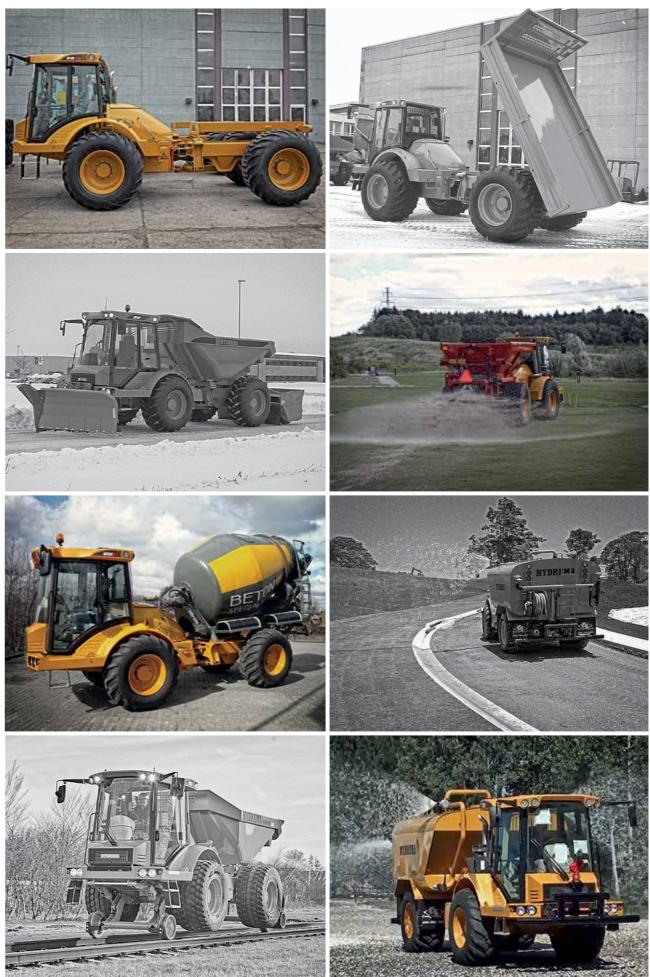
Machine:

Engine heater (220 V) Bio-hvdraulic oil Front mounted three point hitch, cat. 2 - incl. electronichydraulic direction of oilflow Towing hitch, rear - fork type Automatic, central lubrication system GPS trackunit Special colour

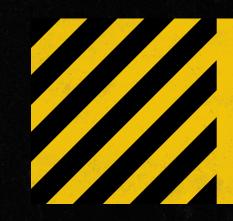












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