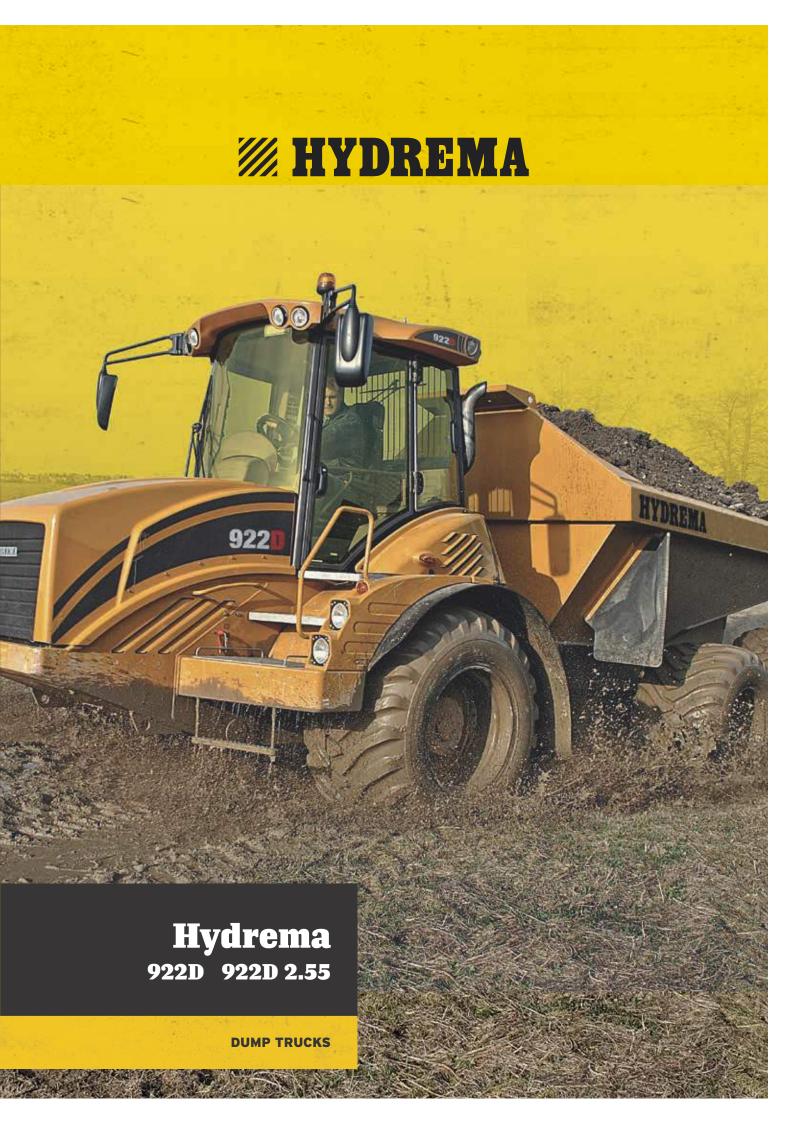


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MORE INFO
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### Versatile 20 T dump truck for terrain and road.

The 922D Series is the obvious choice for soft, muddy terrain or for areas with sensitive ground conditions where the lowest possible ground pressure is required. The dump truck gets through regardless of terrain and without damaging the surface.

The Hydrema 922D Series, 20 T Dump Truck, does in many ways break with the usual construction principles for dump trucks of this class.

### Developed for Sensitive and Difficult Terrain

A low unladen weight, the entirely unique articulated pivot joint, 'genuine' bogie axles with an ample steering angle, as well as the market's best power/ weight ratio, gives the 922D Series unrivalled terrain manoeuvrability. Where other dump trucks have to give up, the 922D keeps going. A great advantage when work needs to be done as efficiently as possible!

### **Stable Driving Performance**

The Hydrema 922D Series has great driving abilities at all speeds and on all



surfaces, due to the oscillated and hydraulic stabilized pivot joint. Combined with electronically controlled suspension and level control on the front axle, the result is a very high operator comfort.

The rear axle is a genuine bogie axle, with a large range of motion for each individual wheel. This ensures the best possible ground contact regardless of level differences.

All six wheels being in constant contact with the surface, and weight therefore being equally distributed, means a very low ground pressure, high stability, safety and comfort for the driver.

### Fuel-Saving Power with Low Noise Levels

In difficult terrain, engine power and torque makes all the difference. In the 922D Series, the torque for the 6 wheels come from a powerful 6-cylinder Cummins QSB-6.7 Stage 3a engine and an intelligent 6-gear ZF Soft-Shift transmission.

The variable engine fans provide cooling as needed, which makes it both very fuel-efficient and quiet. The advanced transmission shifting system guarantees high stability with smooth gear changes. This prevents wheel slipping and provides the best torque.





### **Simple and Quick Operation**

A dump truck from the 922D Series is easy to operate and the driver will soon feel at home with the machine's manoeuvrability and functions. User-friendly switches and joystick-controlled tipping, automatic or manual gearshift and good vi



sibility from the suspended cab, provides the best and most comfortable working conditions.

### **Efficient Tipping**

The 922D has a very energy-efficient 4-pump hydraulic system, ensuring that

control and tipping never feels "sluggish". The separate pumps provide an entirely independent control of steering and tipping functions. The vehicle can be positioned at the same time as tipping is started. The powerful dump truck body has a high tipping angle so the material is unloaded quickly.

The powerful tipping cylinders are protected under the body. The tipping hydraulics will automatically increase the engine speed when the tipping joystick is activated. This provides very fast tipping cycle times. The End Brake and Auto Body Return also increases tipping speed, and makes sure that the body is automatically lowered onto the chassis.

### **High Quality and Long Life**

The 922D series is a high quality product, has long service intervals and can be used almost everywhere. It has been developed and constructed to be used, every day, year after year. Easy use and the many possibilities for individual operator settings in the cab also makes it exceptionally suitable for rental.

### **922D 2.55 for Road Use**

Depending on requirements, the dump truck is also available in a road version. The 922D 2.55 is the same dump truck, only in a smaller version. The dump truck body, axles and tyres are smaller. The 922D 2.55 can be registered for driving on public roads and is available in both 30 km/h and 50 km/h versions.

The 922D 2.55 fitted with wider tyres is just as brilliant in off road.





### **ADVANTAGES**

Great driving performance. Keeps going where other vehicles have to give up.

High quality. Solid construction. Built to last. Rental friendly.

Low unladen weight and genuine bogie axles gives a very low ground pressure.

High-torque Cummins QSB-6.7 Stage 3a engine.

Extremely user-friendly and simple to use. High safety and driver comfort.

### **COMFORTABLE**

# Great comfort and easy service access.

### **Great operator comfort**

The cab has two doors, with lighting for safe entry in all light conditions. The cab is spacious, with perfect visibility and an easy-to-clean interior.

All functions have the best ergonomic positions. The joystick is installed as an integrated part of the right armrest. The seat, armrests and steering wheel are multi-adjustable.

A computer-controlled instrument display with data storage, a powerful heating and cooling system, a storage box, and connection for 12 V/24 V plugs are standard.

Easy operation of all functions leaves the driver with the best working conditions.

Vibrations are also reduced through hydrodynamic cab suspension.

### **Easy Service Access**

The engine bonnet is electric and engine compartment access is therefore easy with a simple push of a button in the cab.

All service points are placed so that the daily service check can be carried out easily and without complications.





### **TECHNICAL DATA**

### Designed and built to last.

### **Chassis**

Articulated chassis with pendulum bar and double hydraulic stabilisers in the pivot joint. The two stabilizers provide great stability during both driving and tipping. The construction is in high tensile steel to have the greatest possible strength with the lowest possible unladen weight. Oscillation: +/- 12°

### **Steering**

The servo-activated hydrostatic steering results in great comfort, as impacts from the terrain are not transferred through to the steering wheel. Separate variable flow pump for steering.

Steering angle: +/- 38°

### Axles

Front: Rigid axle with electronically controlled suspension and level control. The level control ensures that the suspension position remains the same, regardless if the dumper truck drives with or without a load. The front axle has differential locks with 75% locking action.

Rear: Heavy-duty bogie axle with reduction gear at the differential as well as the wheel hubs. Simple and maintenance-free design.

### Retarder

Exhaust brake and hydraulic retarder. Automatically controlled exhaust brake via the engine. The hydraulic retarder can be engaged manually as needed.

### **Transmission**

ZF Ergopower 6 WG 210 automatic transmission with 6 forward gears and 3 reverse gears.

The transmission is equipped with 100% "lock-up" in all gears, which electronically locks the connection between the engine and the transmission and provides direct drive, bypassing the converter. A centre differential is located in the transmission output shaft in order to equalise the speed differential between the front and rear axles. The centre differential has a 100% differential lock. Electronic control of transmission shifting mechanism with a joystick (ZF Ergo 2), fully automatic or manual gearshift. Smooth shifting of gears, which prevents wheel slip in difficult conditions. Max. speed: Forward: 50 km/h - Reverse: 31 km/h - Max. tractive effort: 212 KN.

### **Brakes**

Full dual-circuit brake system with oil-immersed disc brakes on all 6 wheels. Fail-Safe parking brake on the front axle. Maintenance-free brakes. The brakes can be activated by a push button before tipping.

### **Dump truck body**

Robot-welded dump truck body in high tensile Hardox 450 steel without side ribs. The double action tipping cylinders are located under the body for maximum protection. As an option, the dump truck body can be fitted with exhaust heating and Tail Gate.

Tipping angle: 70 °.

### **Hydraulic System**

The hydraulic system consists of 4 independent hydraulic pumps: Pump 1: 32 I/min constant flow pump for brakes, stabilisers, differential locks and suspension. Pump 2: 163 I/min variable flow pump for pivot steering. Pump 3: 189 I/min constant flow pump for tipping operations. Pump 4: 50 I/min variable flow pump for emergency steering.

### Engine

Cummins QSB-6.7 C260, 6.7 litre 6 cyl. stage 3a engine, with turbo and intercooler. The engine is equipped with 24 valves and a fully electronically controlled fuel pump. The engine fan runs at a variable speed based on the cooling requirements. Complies with the EEC Stage 3a requirements for exhaust emissions. Max. power: 264 hp at 2200 rpm. 273 hp at 2000 rpm. Max. torque: 990 Nm at 1300-1500 rpm.

### **Electric System**

Standard 24V electric system with 70 Amp. alternator.

### Sound level

LpA: 74 dB(A) (in cab) LwA: 105 dB(A) (outside cab)

### Fuel

Diesel. 320 I fuel tank integrated in the front chassis.

## High equipment level and great options.

### STANDARD EQUIPMENT

### Exterior

+/- 12° movement in pivot joint.

Pivot joint with double hydraulic stabilisers.

Weight transfer (between front and rear wheels).

Hydraulic hoses hidden/protected in the pivot joint.

Large wide angle mirrors with swivel joint, electrical adjustment and heating.

4 halogen front lights.

Rear lights integrated in dump truck body.

8+2 working lights.

Air filter and exhaust system located under engine bonnet.

Acoustic reversing alarm

Maintenance-free service and parking brake.

Hydraulic retarder.

Engine bonnet with electric opening.

Automatic tipping speed adjustment.

Automatic tipping brake.

Cruise Control.

Front axle with suspension with automatic level control.

Tyres: 600/60x30.5 (922D) - Loaded ground pressure: 117 kPa.

Tyres: EM 20.5-R25 (922D 2.55)

### Interior

Air-suspended seat.

Hydrodynamic cab suspension.

Multi-function joystick in right armrest.

Computer-controlled instrument panel.

Two doors with easy access.

Non-slip steps with lighting for entering and leaving the cab.

### **OPTIONAL EQUIPMENT**

### Exterior

Reinforced dump truck body.

Tail gate for dump truck body (incl. central lubrication system).

Exhaust gas heating for dump truck body.

Rear light protection.

Engine heater (220 V).

Tyres: EM 20.5Rx25 - Loaded ground pressure: 132 kPa. (922D).

Tyres: 800/45x30.5 - Loaded ground pressure: 82 kPa. (922D).

Tyres: 650/65-R25 EM.

Tank pump.

Automatic central lubrication.

Xenon working lights.

Bio hydraulic oil.

Client graphics.

### **Interior**

Diesel heating - 9 kW.

Reversing camera (UK std.).

GPS Tracking.

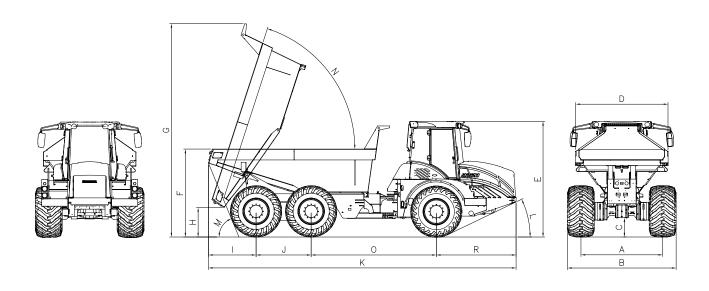
DAB Radio.

Fire extinguiser, 2 kg.



The course designers recommended the Hydrema 922 for construction. We collect sand and soil approx. 2 km from the golf course entry and can drive all the way to where the material is unloaded, without damaging roads or fragile fairways."

### **Dimensions.**



			922D			922D 2.55
	Tyres		600/60x30.5	800/45-30.5	EM 20.5 R25	EM 20.5 R25
	Total weight	kg	35,800	35,800	35,800	36,600
	Unladen weight	kg	15,800	15,800	15,800	16,600
	Load capacity	kg	20,000	20,000	20,000	20,000
В.	Total width	mm	2,930	3,180	2,870	2,550
C.	Clearance	mm	480	480	480	480
D.	Dump truck body width	mm	2,750	2,750	2,750	2,550
E.	Total height	mm	3,390	3,390	3,390	3,390
	Transport height	mm	3,440	3,440	3,440	3,440
F.	Loading height	mm	2,590	2,590	2,590	2,590
G.	Height with raised body	mm	6,290	6,290	6,290	6,290
Н.	Tipping clearance	mm	820	820	820	820
I.	Overhang, rear	mm	1,410	1,410	1,410	1,410
J.	Wheel base, bogie	mm	1,636	1,636	1,636	1,636
K.	Length	mm	9,130	9,130	9,130	9,130
L.	Approach angle, front	0	25	25	25	25
M.	Approach angle, rear	0	67	67	67	67
N.	Tipping angle	0	70	70	70	70
0.	Wheel base	mm	3,708	3,708	3,708	3,708
R.	Overhang, front	mm	2,380	2,380	2,380	2,380
	Body capacity, levelled	m³	8.9	8.9	8.9	8.75
	Body capacity, heaped	m³	12.0	12.0	12.0	12.0
	Tipping time, raise	sec.	7.5	7.5	7.5	7.5
	Tipping time, lower	sec.	5.5	5.5	5.5	5.5
	Turning radius, outer	m	8.51	8.51	8.51	8.16