

The supply of:

Mulder truck mixers, type H-12 with a capacity of 12 m³, depending on the concrete composition. The mixers are placed at Mercedes Arocs chassis.

- Provided with lateral protection.
- The supplied rear bumper.
- Provided with side and back reflection.
- Provided with Clear Pass by the 3th and 4th axis
- Provided with the delivery and assembly of steel mudguards on the 3th and 4th axis.
- Between chassis and mudguard from axis 3 and 4, where necessary, sealed with rubber.
- Provided with a hinged chute (L=1500mm) Hinged chute with adjustable telescopic, and wear plates.
- Provided with 2 steel extension (L=800mm), mounted on the left and right mudguard.
- Provided with a 2" Storz coupling receivers for filling the watertank.
- Provided with a drum in high wear resistant performance.
- Drum provided manhole.
- Drum rotate +/- 12 rotations per minute, left and right.
- Provided with a pressure watersystem 600 liters (4,5 bar).
- Aluminium watertank 600 liters.
- Provided with a pipe system with drains where necessary.
- Provided with a water hose (10m) with spraynozzle at the back of the mixer.
- Provided with a water connection on the plateau with hose and spraynozzle.
- Feeding hopper with wear plates.
- Provided with a slide stair and plateau..
- Provided with a discharge hopper, assembled and provided of rubber slab.
- All components are according to SA 2.5 and sprayed in a double coating.
- Mechanical control for pump left and right mounted on the back
- 3 buttons cabinet for electronic controls on and off touring truck engine mounted left and right on the back.
- Mixer is painted in one color DB 9147

Mixing drum H-12

The construction of the mixing drum, combined with the design of the blades, ensures optimum mixing of all types of concrete. The outlet of the mixing drum is equipped with blades, ensuring rapid loading and discharge.

Description	Thickness	Steel
Wall thickness	5mm	S355J2+N
Bottom	5mm + 8mm	S355J2+N
Blades	4mm L-rims High wear resistant steel TBL 2AThijssen on top of the blades	S355J2+N
Geometric volume	23 m ³	
Filling ratio	53%	

Drum rollers

Cast iron with rollers supports.

Chutes

Removable hinged chute, can be folded away to one side next to the truck mixer. Angle of the hinged chute continuously adjustable by means of a jack screw.

Description	Thickness
Length of hinged chute	: Approx.. 1.500mm
Length of extension chute	: Approx.. 800mm
Plate thickness	: 3mm

Mixerframe

Welded construction with longitudinal beams and box sections for planetary gearbox and drum roller supports.

Drive

Directly to the drum flange by means of a planetary reduction gearbox with special bearing system and quadrant link to compensate for movement of the drum shaft. The drive system hydraulic pump is driven from the truck engine via a Truck engine PTO. The hydraulic drive pump and motor have axial pistons. The hydraulic pump has continuously variable output.

Cooling

The hydraulic oil cooling system is thermostatically controlled. The cooler is fitted with a fan for forced maintenance of a working temperature of 60 – 80 degrees Celsius.

Oil in planetary gearbox

18 litre UNIL

Hydraulic oil

The total amount of oil in the system is 25 liter UNIL

Control

This is to the left rearside of the mixer. This device allows to control all the features of the mixer.

Electric PTO

Concrete truck mixer



The electric drive

The Electric PTO is a parallel electric drive for any type of concrete truck mixer. This means that the truck mixer can now be powered by a heavy-duty electric motor. The conventional diesel engine remains switched off, therefore one can continue work quietly and cleanly during the entire day. Work in environmental zones, urban areas and deep into the night without being a burden for anyone.

How does it work?

The operation of the Electric PTO is simple and works fully automatically after switching on. A set time after starting the conventional PTO, the Electric PTO automatically engages the vehicle's concrete mixer. At that time, the diesel engine switches off and the mixer can be fully electrically operated. During this transition the mixer can still be operated smoothly. During operation, the battery power of the vehicle and the Electric PTO are constantly monitored. If either are too low, the diesel engine starts automatically and the conventional PTO takes over. By means of a switch, the driver can always determine whether the Electric PTO is turned on or off.

Now available

Do not wait longer than needed. The Electric PTO, is now available at Wierda Hybrid Technologies. You can reduce more than 30% of the daily based fuel costs. And save more than 150.000 kg of CO2 emissions within the truck's lifetime. We ensure our dedicated support, guarantee and high service. Not only for the Electric PTO but for any electric vehicle.

Technical specifications

Continuous power E-motor	30 kW - 70 kW
LifePO4 battery package	20 kWh - 60 kWh
Nominal cell Voltage	3,2 Vdc
Charger power AC-DC	2,3 kW - 22 kW
Torque	300 Nm - 790 Nm

FAQ HYBRID INSTALLATION

What is the charging time from empty to full on a 220V plug and what is the charging time with a normal charging station of 3.7 KW and a fast charging station of max 50 KW?

The hybrid mixer can only be charged with standard 220 Volt and not with a fast charging station. This means that the battery pack can be charged 20 kWh with 3 kW: $20/3 = 6-7$ hours from completely empty to 100% full

Suppose the hybrid drive malfunctions, the motor will then work immediately in emergency mode, for example when unloading cement or does it have to be switched manually

The moment the electric drive stops working, it automatically switches to conventional drive. The display in the cabin also has a key ("leaf" key, leftmost key on the display) with which you can manually select the drive

At 100% charged, how long can it be used?

It's hard to say. Everything depends on how energy-efficient the driver uses his battery pack. When taking in concrete, the drum often rotates faster than necessary. The faster the junk spins, the more energy is consumed. Normally the hybrid mixer can last a working day

Can the battery be completely discharged or do faults occur, for example at less than 10/20 % power

The battery pack can be turned completely empty. Our BMS continuously monitors the cell voltage and ensures that it does not fall below a certain limit value. When the voltage is too low, it automatically switches to conventional drive. You can also safely recharge the battery pack during a break. Interrupting the charging cycle does not affect the battery life. It is important, however, that the hybrid package can be balanced once every 2 weeks. This is done automatically by leaving the plug in the 220 Volt socket in the socket for a weekend. Our advice: always plug in the charging plug and leave it in place