

SINOTRUK

CHINA NATIONAL HEAVY DUTY TRUCK GROUP CO., LTD.

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SINOTRUK



HOWO-N

SERIES

COMPANY HISTORY

2003

The Signing Ceremony of Heavy Duty Truck Joint Venture Project between SINOTRUK and VOLVO marked the first heavy duty truck joint venture project approved by Chinese government.



1960

The first heavy duty truck in China—Huanghe JN150 8T truck—was born, marking the start of China's heavy duty truck industry history.

2015

China's exclusive National Heavy-duty Automotive Engineering Technology Research Center was completed and the Group officially moved its HQ into CNHTC Technology Building. With brand-new facility, the group is now heading towards a bright future.



2004

The HOWO series heavy duty truck rolled off the production line, marking the beginning of the convergence of China's heavy-duty vehicle technology with the advanced international heavy-duty vehicle technology.



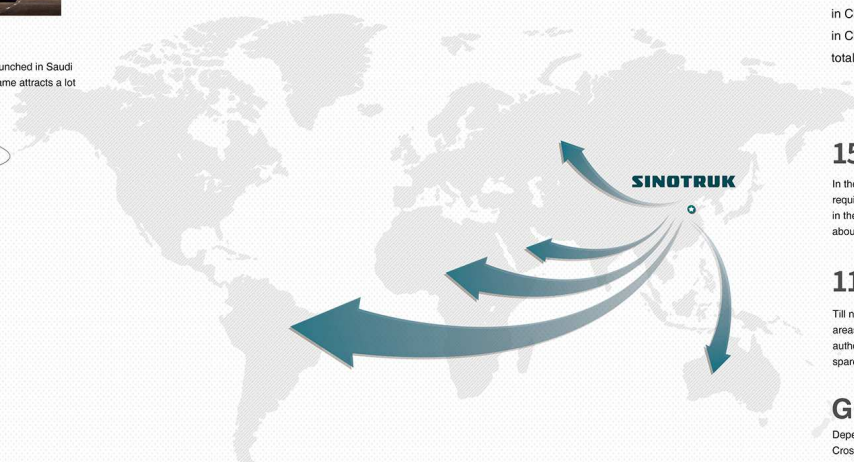
2009

SINOTRUK signed strategic cooperation agreement with MAN and introduced truck, engine, chassis and axle technology.



2019

HOWO-N series Launched in Saudi Market, the good-name attracts a lot of local companies.



PROFILE OF SINOTRUK INTERNATIONAL

SINOTRUK INTERNATIONAL is the largest truck export unit in China, it has ranked No.1 for 17 consecutive years from 2005 in Chinese HDT industry for export business, occupying half of total HDT export volume in China.

15 years

In the past 20 years, SINOTRUK keep improving its products to fulfill the requirements from all over the world. In 2006, SINOTRUK formally entered in the Saudi Market, till now, in the past 15 years, the market holdings about 3000 units.

110+ 79+ 300+ 520+

Till now, The SINOTRUK vehicle products are selling in 110 countries and areas. There are 79 registered offices in overseas market, more than 300 authorized initial distributors, and more than 520 authorized workshops and spare parts sales points globally.

GCC Services

Depends on our after-sales network, We have launched "GCC Countries Cross-regional Services". Our customers could get SINOTRUK premium services in all the GCC countries within the warranty.

COMPANY HISTORY

HOWO-N SERIES

LOW COST WITH HIGH PERFORMANCE

HOWO-N is a cost-effective heavy-duty truck product launched by SINOTRUK, which adopts standardized, modular and lightweight design concepts and has good comfort, reliability and economy.

Low Cost

Much lower Initial purchase cost of other European vehicles, saving your initial cost, long-term service interval + lower-priced service parts, saving operating costs during use. Long-life vehicles can help you in making money for 10-15 years.

High Performance

European technology Power Train, competing with the world-class trucks, strong power, smooth shift, stable attendance. It created a record of 1.5 million km without major repair.



HOWO-N

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SINOTRUK
HOWO-N SERIES

CABIN

- SINOTRUK self-design & made cabin, spacious, robust and streamlined.
- 4-point full floating cab suspension.
- One touch electric windows.
- Ergonomically adjustable steering wheel.
- Height adjustable and integrated safety belts.
- Air suspension seat with a waist cushion.
- Electrically operated rear view mirrors.

ENGINE

- In-line six-cylinder, water cooled, four-stroke, turbocharged inter-cooled, high-pressure common rail.
- Bosch fuel injection system.
- High quality internal components including Mahle pistons.
- Low fuel consumption.
- B10 Life exceeds 1,5M km.

AIR INTAKE SYSTEM

- German air filtration system.
- High level built in snorkel air-intake.

STEERING

- ZF(Bosch) Brand Power Steering.
- Hydraulic steering.



TRANSMISSION

- ZF Brand.
- 16 forwards & 2 reverses, with synchronizer.
- PTO output.
- Valeo clutch.
- 430mm diameter heavy duty clutch.

AXLES

- Heavy duty hub reduction axle or Light-weight single reduction axle.
- Locking differentials.
- Heavy duty Long-life bearing.

TRACTOR FITTINGS

- VOSS fittings (Germany).
- JOST fifth wheel / saddle.

BRAKING SYSTEM

- WABCO braking system (USA).
- ABS(4S/4M).
- Self-adjusting drum brakes.
- Exhaust valve braking system.

HOWO-N Series manufacturers to European Standards and uses the same components and accessories that you will find on other well known European brands.



STANDARD FEATURES

LESS IS MORE

MAKE A CAB LIKE A HOME

- Long-life mechanical instrument, more stable under high temperature.
- Adjustable steering wheel for all types driver.
- Improved AC designed for GCC Area.
- Simple buttons +24V USB socket makes driver operation easily.
- Super-large space keeps more belongings.
- Four-point suspension cab crafted with reliable rigidity, in line with European safety regulations.





SIMPLE INTERIOR GIVES MORE STABILITY & MORE SPACE FOR BELONGINGS



DASHBOARD

Long-life mechanical instrument is stable under high temperature, with a LED screen bringing all information of the vehicle into sight (such as vehicle's speed, Engine rotation speed, fuel consumption, water temperature and vehicle's air pressure, etc.) Simple buttons fulfil basic operations' requirements, with 24V USB socket supports extra small fan and mobile charger.

SLEEPING BUNK

Super-large space : The 900mm-wide lower sleeping bunk provides ultimate comfort to the driver, while the 600mm-wide upper sleeping bunk which the Asian drivers' favorite also could keep drivers belongings.



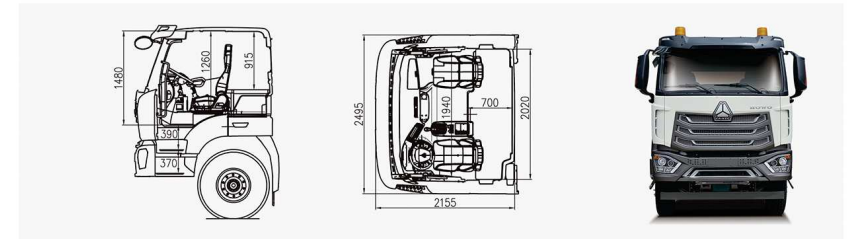
ERGONOMIC AIR BAG SEAT

The airbag seat with waist cushion helps the driver to drive comfortably; the ergonomic integrated design of the safety-belt and the seat avoid driver's suffocation caused by emergency braking during driving on highway.

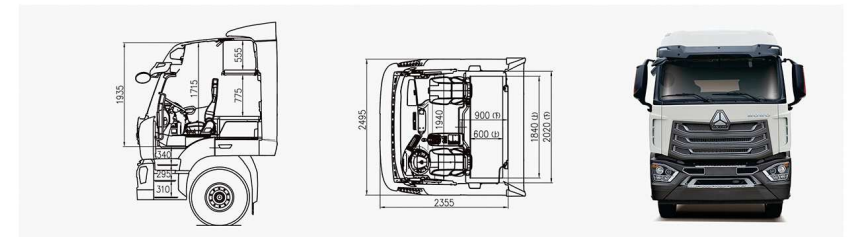


DRAWING OF HOWO-N SERIESE CABIN

H77L



H78L



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HOWO-N SERIES

POWERTRAIN

RELIABLE STRONG AND EFFICIENT

Powertrain is more reliable

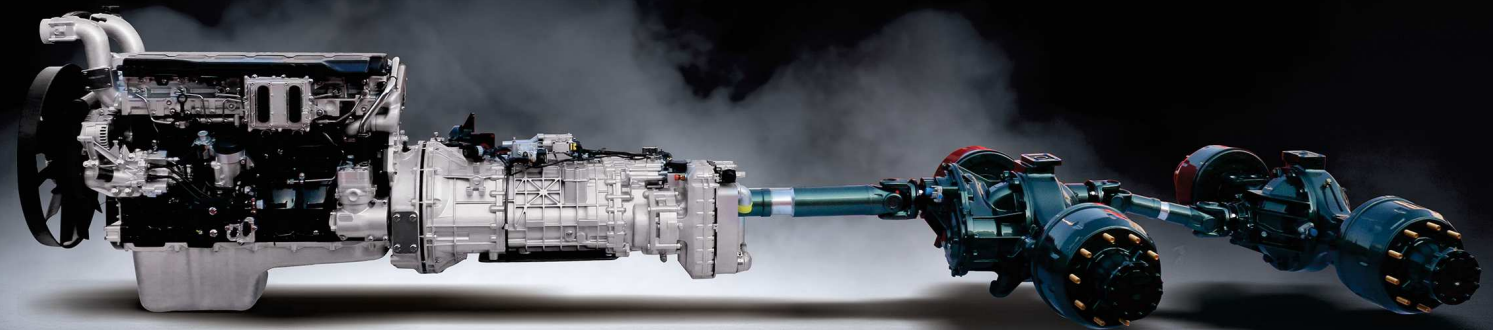
All technologies are 100% stem from Germany, the whole powertrain has gone through vigorous theory verification and various complicated field validation. Every assembly in the powertrain fully plays its superior performance, truly realizing reasonable match and the best use of every parts.

Higher transmission efficiency

Super-various combination of Horsepower and Speed Ratio, using in all working conditions. Precise and reasonable matching, advanced technology and processing technique make the transmission efficiency better for the whole powertrain, saving the fuel consumption (costs).

Longer maintenance interval mileage

The Engine oil change interval reaches 40,000km. The Gearbox oil & Rear axle oil change interval reaches 80,000km. Co-using SINOTRUK premium filters get a low operating cost. Also the easily-gain services parts on the market, make services everywhere.



ADVANCED ENGINE TECHNOLOGY

DERIVING FROM EUROPE AND
IMPROVED IN CHINA



– THE MC-SERIES ENGINE EURO III

Wide range of economic rotation speed with high torque, low rated speed with strong power.

The engines adopt BOSCH(German) High pressure common rail injection system. The power of MC-SERIES engines ranges from 210 to 480HP and the torque ranges from 830 to 2300Nm;

Matching up with from urban-services vehicles to heavy-duty tractors.



Euro III engine main parameters

Item	MODEL						
	MC05.21-30	MC07.24-30	MC07.28-30	MC07.34-30	MC11.39-30	MC11.43-30	MC13.48-30
Cylinder NO.	4	6			6		6
Bore(mm)	108	108			120		126
Stroke(mm)	125	125			155		166
Displacement(L)	4.58	6.871			10.518		12.419
Compression ratio	16.5:1	16.5:1			19:1		19:1
Rated Power(Kw)	151	176	206	248	287	316	353
Rated Speed(rpm)	2400	2300	1900	1900			
Max.Torque(Nm)	830	925	1100	1250	1900	2100	2300
Rpm@Max.Torque	1400	1200-1800			1000-1400		1050-1400

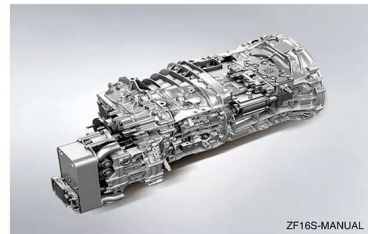
TRANSMISSION

ZF MANUAL / SINOTRUK AMT GEARBOX

Equipping with ZF Manual/ SINOTRUK AMT gearbox. According to the working conditions, we'll recommend the most suitable gear box for your truck.

ZF gearbox, the best gearbox on the world, also the best matching with MC series engine, 80,000km oil changing interval with global warranty, never let you down.

HW-series gearboxes manufactured by SINOTRUK, after 57 years for researching and developing, more than 1 million HW-gearbox were sold all over the world.



ZF16S-MANUAL



HWAMT-12P&16P

DRIVE AXLE

ORIGINATED FROM GERMANY AND MADE IN CHINA

Originated from European technology, but all axles are manufactured by SINOTRUK. Standard-equipped with oerlikon gear for main reduction, drum-type or disc-type brakes and multiple tonnage configuration are optional to meet different working conditions.

MCY series single-reduction drive axle

Axle housing: stamping and welding high-tensile materials featured with light weight and strong carrying capacity.

Wheel hub: adopt wheel bearing unit, which is easy to assemble and have long service life.

MCP series double-reduction drive axle

Axle housing: casting high-tensile materials with its spindle head in terms of one-piece press fitting, of which the structure is reliable.

Wheel hub: hub bearing has reasonable load distribution, designed for complex road conditions.

Light-weight design Raising up loading capacity

MCY-series axles dead weight 741kg, small reduction ratio equipped with high HorsePower engine, easily perform the task of high-way transportation.

Higher attendance rate Longer oil change interval

With machine oil filter inside the drive axle, the oil change interval could be as long as 100 thousand kilometers under highway condition.



MCP16



MCP13

SAFETY ASSISTANCE SYSTEM —YOUR GUARDIAN ANGEL

ABS braking system can be chosen for all models of HOWO-N Series

According to the requirements, the braking system of HOWO-N Series can be equipped with 4-channel ABS, 4-channel ABS+ASR+EBL (1 or 4*2 truck model), 6-channel ABS+ASR+EBL, EBS+ESC.

▶ Anti-Brake System (ABS)

During the braking process, ABS automatically controls the braking force to prevent the wheel from being locked and avoid rolling and sliding simultaneously, and to guarantee the maximum adhesion between the wheels and the ground.

▶ Electronic Brake force Limitation (EBL)

EBL is used for increasing braking force distribution based on ABS for the optimization of vehicle's braking performance.

▶ Acceleration Slip Regulation (ASR)

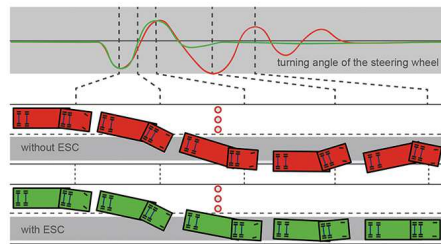
When the vehicle accelerates, ASR can be used to control sliding ratio within a certain range and prevent the driving wheel from slipping, especially on special road surfaces with less friction such as freezing rain and snow, and maintain its driving stability.

▶ Electronic Braking System (EBS)

Electronic Braking System (EBS), developed on the basis of ABS and ASR, can remarkably reduce the response time and braking distance of braking system. Meanwhile, it ensures consistency between axles, tractors and trailers so as to make the brake lining wear evenly in the whole vehicle combination and prolong the service life of brake lining.

▶ Electronic Stability Control (ESC)

Electronic Stability Control (ESC) can achieve anti-rollover and keep the direction of the vehicle. By measuring and calculating the transverse acceleration and critical acceleration as well as controlling engine, retarder and wheel braking, the steering stability can be achieved.



▶ EVB

MC series of engines are standard-equipped with specially-designed EVB, which effectively raises engine braking power by precisely controlling the butterfly-valve opening of the proportional valve. The maximum EVB braking power of MC11 engine and MC13 engine can reach 255kW and 270 kW respectively.

▶ Hydrodynamic retarder

Retarder is a hydraulic continuous brake integrated on the transmission. Retarder is optional for HOWO-N Series according to customers' demand. The driver can turn on/off the transmission with the retarder handle on the right side under the steering wheel and choose proper shift based on the actual situation. In the face of long downhill, retarder can be turned on to reduce the load of the braking system and improve driving safety.

Advanced Driver Assistance System

▶ Hill Start Assist (HSA)

Hill Start Assist (HSA) is achieved based on electronic control system to produce driving brake pressure on the wheels before the start of vehicle. Engine and transmission is monitored through CAN communication to judge if the vehicle is going to start. The brake pressure gradually disappears after the normal start of the vehicle. HSA effectively prevents the vehicle from sliding, and promotes driving safety and comfort.

▶ Adaptive Cruise Control (ACC)

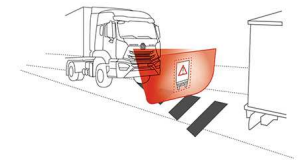
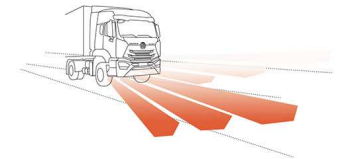
With automatic braking and acceleration, Adaptive Cruise Control (ACC) can automatically control vehicle speed to keep a safe distance from the vehicle in front. ACC can be applied from 30km/h to 125km/h, helping the driver to stay relax while driving and raise comfort. In addition, the system also reduce the fuel consumption loss and loss of brakingsystem due to unreasonable driving habit.

▶ Lane Departure Warning System (LDW)

Forward camera is installed under the windshield, LDW obtains lane mark information through image processing. The system monitors the lane marks on both sides of the lane respectively to ensure its position with respect to the lane and transverse velocity. Provided a driver diverges without starting the turn light, it will send out audible warning. The alarm will ring out on either side from which direction the vehicle is diverging. LDW alerts the driver to focus on the current lane and avoid traffic accident.

▶ Advanced Emergency Braking System (AEB)

Any distraction may lead to accident. Advanced Emergency Braking System (AEB) is optional for HOWO-N Series, the system applies millimeter-wave radar installed on the front bumper to detect the speed and location information of the vehicle in front. It gives out early warning to drivers against the impending crashing to make sure they have enough time to response. Meanwhile, AEB will request braking system to guarantee sufficient air pressure in advance. And the system will brake automatically upon emergency.



SINOTRUK
HOWO-N SERIES

HOWO-N7

4X2 TRACTOR



HOWO N7 4x2 Tractor

		HOWO-N7 Logistics Tractor	HOWO-N7 Heavy Duty Tractor
Drive type		4x2	4x2
Kerb Weight(kg)		6640	6800
GCW(kg)		50000	55000
Dimensions LxWxH(mm)		6175x2500x3790	6475x2500x3120
Wheelbase(mm)		3600 or 3900	3900
Cabin		H78L(with 2 bunks)	H77L(with 1 bunk)
Model		MC11.43-30	MC11.43-30
Displacement(L)		10.518	10.518
Horse Power(Hp)		430	430
Maximum torque (N·M/rpm)		2100N - M/1000-1400rpm	2100N - M/1000-1400rpm
Rated power(KW/rpm)		316KW/1900rpm	316KW/1900rpm
Transmission		ZF16S2230TO(Optional:PTO)	HW25712XAL+HW70PTO
Gear position		16 forwards & 2 reverse	AMT 12 forwards & 2 reverses
Front Axle		Load capacity(kg)	7000
Rear Axle		Load capacity(kg)	13000
Ratio		4.11 or 3.70	3.93
Chassis		Thickness(mm)	8 or 8+5
Suspension		Type	Leaf springs
Fifth Wheel		Size	2 inch
Fuel tank capacity		Volume(L)	600(+400)
Tire		Model	Front 385/65R22.5; Rear 315/80R22.5
			Front 385/65R22.5; Rear 315/80R22.5



SINOTRUK
HOWO-N SERIES

HOWO-N7

6X4 TRACTOR



HOWO N7 6x4 Tractor

Model		HOWO-N7 Heavy duty Tractor
Drive type		6x4
Kerb Weight(kg)		8800
GCW(kg)		70000
Dimensions LxWxH(mm)		7050x2500x3120
Wheelbase(mm)		3400+1350
Cabin	Model	H77L(with 1 bunk)
	Model	MC13.48-30
Engine	Displacement(L)	12.419
	Horse Power(Hp)	480
	Maximum torque (N·M/rpm)	2300N - M/1050-1400rpm
	Rated power(KW/rpm)	353KW/1900rpm
	Model	ZF16S2530TO+PTQ(NH1/B)
Transmission	Gear position	16 forwards & 2 reverses
	Load capacity(kg)	9000
	Load capacity(kg)	2x16000
	Ratio	4.77
Chassis	Thickness(mm)	8*8
Suspension	Type	Leaf springs
Fifth Wheel	Model	3.5 inch
Fuel tank capacity	Volume(L)	600
Tire	Model	12.00R24



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HOWO-N SERIES

HOWO-N5

4X2 CHASSIS



HOWO N5 4x2 Chassis

Model		HOWO-N5 Cargo Chassis	HOWO-N5 Heavy / Sanitation Truck Chassis	HOWO-N5 Heavy / Sanitation Truck Chassis
Drive type		4x2	4x2	4x2
Kerb Weight(kg)		6300	6500	6600
GWW(kg)		17000	19000	23000
Dimensions LxWxH(mm)		8350x2500x3080	6700x2496x3080	6700x2496x3080
Wheelbase		4700	4050	4050
Cabin	Model	H77L(3 seats)	H77L(3 seats)	H77L(3 seats)
	Model	MC05.21-30	MC07.24-30	MC07.28-30
Engine	Displacement(L)	4.58	6.87	6.87
	Horse Power(Hp)	210	240	280
	Maximum torque (N·M/rpm)	830N·M/1400rpm	925N·M/1200-1500rpm	1100N·M/1200-1500rpm
	Rated power(KW/rpm)	151KW/2400rpm	176KW/2300rpm	206KW/2300rpm
Transmission	Model	HW95508STC-HW45ZC	HW95508STC-HW45ZC	ZF9S1310TO+PTO
	Gear position	8 forwards & 1 reverse	8 forwards & 1 reverse	9 forwards & 1 reverse
Front Axle	Load capacity(kg)	5500	7000	7000
	Load capacity(kg)	11000	12000	16000
Rear Axle	Ratio	4.33	4.11	4.42
	Thickness(mm)	7+4	7+4	7+4
Suspension	Type	Leaf springs	Leaf springs	Leaf springs
Fuel tank capacity	Volume(L)	200L (300L)	200L (300L)	200L (300L)
Tire	Model	10.00R20	315/80R22.5	315/80R22.5



SINOTRUK
HOWO-N SERIES

HOWO-N7

6X4 CHASSIS



HOWO N7 6x4 Chassis

Model		HOWO-N7 Heavy / Sanitation Truck Chassis	HOWO-N7 Strengthened/Heavy duty Chassis	HOWO-N7 16-18m³ Dumper Truck
Drive type		6x4	6x4	6x4
Kerb Weight(kg)		8570	9850	12460
GW (kg)		39000	41000	41000
Dimensions LxWxH(mm)		9945x2496x3080	10770x2496x3080	8545x2496x3080
Wheelbase(mm)		4600+1350	5225+1350	3800+1350
Cabin	Model	H77L(3 seats)	H77L(2 seats)	H77L(2 seats)
	Model	MC07.34-30	MC11.39-30	WD615.47
Engine	Displacement	6.87	10.518	9.726
	Maximum torque (N·M/rpm)	1250N·M/1200-1800rpm	1900N·M/1000-1400rpm	1900N·M/1000-1400rpm
	Rated power(KW/rpm)	247KW/2300rpm	287KW/1900rpm	273KW/2200rpm
Transmission	Model	ZF9S1310TO+PTO	ZF16S2230TO+PTO	HW19709XST+PTO
	Gear position	9 forwards & 1 reverse	16 forwards & 2 reverses	9 forwards & 1 reverse
Front Axle	Load capacity(kg)	7000	9000	9000
	Load capacity(kg)	16000	16000	16000
Rear Axle	Ratio	4.42	4.42	5.26
	Ratio	4.42	4.42	5.26
Chassis	Thickness(mm)	8*5	8*5+(partial)	8*8
	Type	Leaf springs	Leaf springs	Leaf springs
Fuel tank capacity	Volume(L)	400	400	300
Tire	Model	315/80R22.5	315/80R22.5	12.00R24



SINOTRUK
HOWO-N SERIES

HOWO-N7

8X4 12M³ MIXER



HOWO N7 8x4 12m³Mixer

Model	HOWO-N7 12m ³ Mixer	
Drive type	8x4	
Kerb Weight(kg)	14980	
GVW (kg)	50000	
Dimensions LxWxH(mm)	10983x2500x4080	
Wheelbase	1800+3200+1350	
Cabin	Model	H77L(with 1 bunk)
	Model	MC11.39-30 with PTO
Engine	Displacement	10.518
	Maximum torque (N·m/rpm)	1900N·M/1000-1400 rpm
	Rated power(KW/rpm)	287KW/1900rpm
Transmission	Model	ZF16S2230TO
	Gear position	16 forwards & 2 reverses
Front Axle	Load capacity(kg)	2x9000
Rear Axle	Load capacity(kg)	2x16000
Chassis	Ratio	4.77
	Thickness(mm)	8x8
Suspension	Type	Leaf springs
Fuel tank capacity	Volume(L)	400
Tire	Model	315/80R22.5
	Mixing Volume(m ³)	12(Water Line)
Mixer Drum	Hydraulic Pump	EATON6423-279 (America)
	Hydraulic Motor	EATON 6433-042 (America)
	Reducer	BONFIGLIOLI 580 (Italy)
	Type & Spec	Water tank capacity: 1000L Mixer drum shell cover 8mm+4mm/Q345B; Mixer drum body 4mm/Q345B; Blade 6mm/B520 Option: HARDOX Plate

