





### **ENGINE**

# Mercedes OM470/MTU6R1100 (Tier 4f / Stage 4)

Six-cylinder four-stroke direct-injection diesel engine with turbo charging and air to air intercooler.

Engine equipped with 4 valves/cylinder, latest generation amplified pressure common rail fuel system and an extremely powerful 340 kW engine brake to enable a safe/fast downhill operation and to ensure longest possible brake lining lifetime.

Engine equipped with airless Mercedes (AdBlue) system including

SCR-catalyst.

Displacement:	10.6 dm <sup>3</sup>
Bore:	125 mm
Stroke:	145 mm
Compression ratio:	
Fuel sulphur level (max):	50 ppm
Output: 300kW(408hp) at 14	50-1800 rpm
Torque: 2000 Nm at 90	00 - 1400 rpm

Acc. to ECE R120

### Optional:

# Cummins QSM11-335 (Tier3/Stage 3A)

Six-cylinder four-stroke direct-injection diesel engine with turbo charging and air to air intercooler.

Engine equipped with 4 valves/cylinder, latest generation full electronic fuel metering and 260 kW engine brake.

Displacement:	10.8 dm <sup>3</sup>
Bore:	125 mm
Stroke:	147 mm
Compression ra	atio:16.3:1
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Output: 272 kW (370 hp) at 1800 rpm 250 kW (340 hp) at 2100 rpm

Torque: 1674 Nm at 1000 - 1400 rpm

Acc. to ISO 3046

### **GEARBOX**

# ZF, type, 6WG310

Full powershift transmission with 6 speeds forward and 3 speeds reverse. Well-matched torque converter equipped with Lock-Up clutch ensuring the lowest possible fuel consumption.

Integrated pneumatically lockable longitudinal differential with 1/3 front: 2/3 rear torque split.

Gear ratio's	Speed (km/h)	
5.350	4,4	(F+R)
3.445	6,9	(F)
2.206	10,7	(F+R)
1.421	16,7	(F)
0.969	24,4	(F+R)
0.624	37.9	(F)

# FRONT AXLE

## **Kessler LT81**

Heavy duty front axle with planetary wheel ends and 19.8:1 reduction ratio Capacity: 25.000kg at 10km/h\*

\*Actual axle load capacity depending on tyre load rating.

### **REAR AXLE**

### Kessler D91

Extreme heavy-duty rear axle with planetary wheel ends and 19.33:1 reduction ratio

Capacity: 48.000kg at 10km/h\*

\*Actual axle load capacity depending on tyre load rating.

### **SUSPENSION**

**Front:** Parabolic 5-leaf springs in rubber mountings with 2 telescopic shock absorbers and 2 additional rubber springs. Fully maintenance-free system.

Rear: Directly bolted to chassis frame.

### Optional on rear axle:

 Air suspension with 2 rubber stops and triangle type stabiliser.

# **RIMS AND TYRES**

Tyres: 325/95R24 Goodyear MSD

tubeless mounted (6 pieces)

Rims front: Extreme heavy Duty 12 stud disc wheels 8.5-24.

Rims rear: Extreme heavy Duty 24 stud disc wheels 8.5-24.

### Optional:

Tyres 12.00R24 XZM Michelin tubeless mounted.

### STEERING SYSTEM

Fully hydrostatic orbitrol steering system with priority valve and 2 double acting steering cylinders.

Emergency steering property.

Steering wheel diameter 350 mm.

Turning radius over front bumper left & right: ±7500mm (Wheelbase 3400mm)

### **5TH WHEEL**

# 2" Cardanic heavy duty cast steel plate

Technical capacity 45.000 kgs.

Lifting capacity 45.000 kgs\*.

Pneumatic unlocking of 5th wheel, operated from cabin.

Indicator light for positive locking inside the cabin.

Welded lifting frame construction from stabile and strong steel plate.

Optional: 3,5 " Cardanic 5th wheel \*Actual lifting capacity depending on tyre load ratings and 5<sup>th</sup> wheel height.

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### **HYDRAULIC SYSTEM**

High capacity load sensing hydraulic pump for steering and lifting of the 5th wheel plate, directly mounted to engine, with priority valve for the steering system. Heavy duty PTO on the rear of the transmission to drive optional hydraulic

Hydraulic oil tank protected mounted on the right-hand side.

Volume: ±410dm<sup>3</sup>.

Hydraulic valve electrically/pneumatically operated from inside the cab to lift/lower/hold the 5th wheel.

Working pressure 230 Bar

2 heavy-duty hydraulic 2 stage single acting telescopic lift rams.

# **CHASSIS**

Welded construction of rolled steel channels with reinforcement strips on top and bottom.

Air-reservoirs, fuel tank and hydraulic oil tank protected mounted inside the chassis, access steps with anti-slip surface integrated in chassis creating a safe and easy access to the cab and working platform behind the cabin from both sides.

Side plating and front bumper protected with heavy duty overriders bolted to the chassis.

Reinforced diameter 50mm towing pin attachment at front- and rear.

### **BRAKE SYSTEM**

2-Cilinder 650cc air compressor.

Full air brake system with split front and rear axle circuits.

Front axle and rear axle with Simplex wedge-brake system and automatic slack adjusters.

Tank reservoirs: 4 x 30 dm<sup>3</sup>. Total 120  $dm^3$ .

2 Line trailer brake system mounted on rearside of cabin, with yellow and red spiral hoses with gladhands.

Standard air dryer with integrated air pressure regulator.

Brake cylinders: Front axle diagram and Rear axle combined diagram/spring brake.

Brake pressure: 7.8-8.5 Bar

# **FUEL TANK**

Capacity 315 dm<sup>3</sup> and protected mounted next to the cabin.

### **ADBLUE TANK**

Capacity 40 dm<sup>3</sup> and protected mounted on the left.

# **COOLING SYSTEM**

Heavy Duty plate and bar type radiator mounted on rubber silent blocks with air-cooled transmission-oil separate cooler and air to air intercooler all side by side.

Coolers are equipped with very open fins which ensure minimum clogging. Fan shroud equipped with window for easy cooler core cleaning.

### **EXHAUST**

T4f: Mercedes SCR Catalyst/silencer with horizontal outlet.

Catalyst/silencer protected mounted on the left-hand side.

T3: Normal box type silencer protected mounted on the left-hand side.

## **ELECTRICAL SYSTEM**

24 Volt negative earth.

Alternator : 28 V/100 A : 2 x 12 Volt / 185 Ah Batteries

Output starter: 7 kW

Fuses and relays mounted in central

electrical box.

Can-Bus system allowing multiple options/flexibility and easy fault tracing. All wiring with code numbers and easy readable/visible mounted in accessible electrical box.

7 pin SAE socket at rear of cab for trailer connection (DIN ISO 1185).

# LIGHTING

H4 head lights with dipped and main beam and direction indicators.

LED rear lights on rear of chassis, with direction indicators and brake lights.

5<sup>th</sup> wheel floodlight behind cabin.

Mounting for rotating beacon light.

Interior light in cabin with integrated spotlight.

# CABIN

1 person – left-hand drive position. With 180° swivelling seat.

### Dimensions inside:

• width: 1520 mm length: 1670 mm

height: 1660 mm

Cabin construction of overdimensioned strong steel profiles to comply to latest Rops/Fops regulations.

Cab comfortable mounted anti-vibration mounts.

Entrance to cab by rear sliding door with rubber mounted window pane.

Vertical electric sliding window at driver's side with "Comfort" control.

Cabin can be tilted with hydraulic hand pump to 73°

Large windows for excellent visibility.

All window panes safety glass and tinted. Front window pane layered with a total thickness of 6,76 mm.

Noise insulation exceeds international standards.

ISRI driver's seat with air suspension and fully adjustable, mounted on a 180° swivelling seat assembly for easy entrance/exit to/from driver's position. Swivelling seat assembly equipped with 2 brake pedals and 1 accelerator pedal.

Demister/heater with 3 speed blower, recirculation system and all around demisting including 4 adjustable outlet louvers.

### Side dashboard:

- Parking brake lever.
- Heater controls.
- Switches for:
  - Ignition
  - Wiper rear
  - Differential lock transfer case
  - Working light(s)
  - Hazard lights
  - Lighting
  - Differential lock rear axle

# Steering console:

- Steering wheel fully adjustable in height and angle.
- Combi switch for:
  - Direction indicators
  - Wiper front 2 speed
  - High/low beam +head lights flasher
  - Horn
- Gearbox selector
- Lift frame up/down control lever
- Switches for:
  - 5<sup>th</sup> wheel unlocking
  - Unlocking swivelling seat
  - Electrically operated driver side window with "Comfort" control.
- Terberg Driver Information Module connected to the CAN-Bus system incorporating main indicator lights, gauges and vehicle information.