BEIBEN 2646Z 6X4

HEAVY-DUTY PRIME MOVER / TRACTOR UNIT

DOC-REF: BB-2646Z-T64-EN
TECHNICAL DATA SHEET

ENGINE POWER	MAX TORQUE	MAX. GCW	DRIVE LINE
460 HP	**2,110 Nm**	**60,000 kg**	**6x4 Heavy**
338 kW @ 1,900 rpm	1,000 - 1,400 rpm	Fifth Wheel Load: 16 T	Mercedes-Benz Technology

GENERAL SPECIFICATIONS & ENGINE

WEICHAI WP12 ENGINE

Vehicle Model	**BEIBEN ND4250 (2646Z / V3 Series)** — 6x4 Left-Hand Drive (LHD) Configuration
Diesel Engine	WEICHAI WP12.460N — 6 cylinders in-line, 4-stroke, Direct Common Rail Injection, Turbocharged with Intercooler
Displacement & Emission	11.596 Liters | Euro III emission standard (Euro V option available)
Transmission / Gearbox	FAST 12JS200T — Mechanical manual, 12 forward gears + 2 reverse gears (Synchronized)
Clutch	Single dry plate Ø430 mm, Hydraulic control with air booster (WABCO source)
Front Axle	7.5 Tons — Non-driven steering axle (Mercedes-Benz Technology License), drum brakes
Rear Axle (Tandem)	2x 13 Tons (Total 26 T) — Double reduction axles with hub reduction & inter-wheel / inter-axle differential lock
Chassis Frame	Heavy-duty variable section "Fish-belly" type (317 × 70 × 8.5 + 7 mm reinforced double frame)

Mercedes-Benz Heritage Architecture

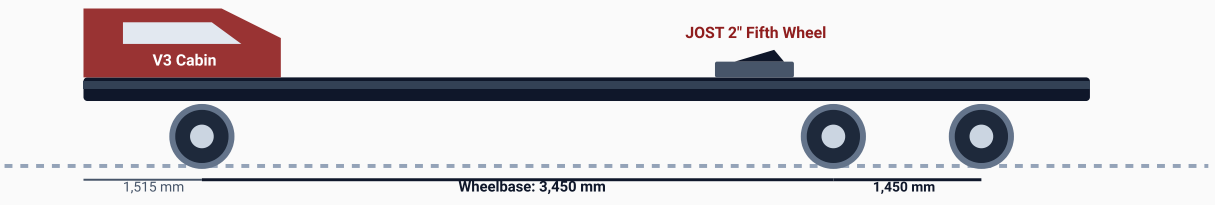
The Beiben 2646Z tractor unit benefits from technology transfer under Daimler/Mercedes-Benz NG80 licensing. The heavy-duty hub reduction rear axles ensure exceptional off-road capability and high breakaway torque under heavy loads.

Cooling & Endurance Systems

Enhanced fuel filtration system equipped with a heated water/fuel separator adapted for extreme environments. High-capacity radiator designed for heavy transport in desert and tropical climates.

DYNAMIC SCHEMATIC & AXLE LAYOUT

HEAVY DUTY CHASSIS



WEIGHTS, DIMENSIONS & PERFORMANCE

HOMOLOGATED DATA

Overall Dimensions (L × W × H)	7,240 mm × 2,500 mm × 3,600 mm (with roof spoiler: H 3,880 mm)
Wheelbase	3,450 mm + 1,450 mm (Rear tandem axle)
Front / Rear Track Width	1,995 mm / 1,800 mm
Curb Weight	8,800 kg (Chassis-cab with full fluids)
Gross Combination Weight (GCW)	50,000 kg to 60,000 kg (Depending on configuration and local regulations)
Max. Fifth Wheel Payload	16,070 kg (JOST 3.5-inch / 90# adjustable coupling plate)
Max Speed & Gradeability	90 km/h (electronic limiter) | Max. Gradeability: 40%
Fuel Tank Capacity	400 Liters Aluminum / Steel, with lockable cap and water separator filter
Tyre Specification	12.00R20 (18PR) — 10 wheels + 1 spare wheel mounted on rear carrier

SAFETY EQUIPMENT & V3 CAB

COMFORT & ERGONOMICS

V3 High-Roof Sleeper Cab
4-point air suspension cabin, double sleeping bunk (Double Sleeper), air-suspended driver seat with multi-adjustments.

Pneumatic Braking System
Dual-circuit air brake system WABCO, engine exhaust brake (EVB), spring-loaded parking brake.

Air Conditioning & Interior
High-output heavy-duty AC system, power windows, central locking, MP3 / Bluetooth radio with ergonomic console.

Steering & Handling
ZF / TAS85 high-precision hydraulic power steering, steering wheel adjustable in height and tilt.

OPTIONS & STANDARD EQUIPMENT

OPTIONS CATALOG

Category	Equipment Description	Availability
Braking / Safety	Anti-lock Braking System (ABS) & ASR	**Standard / Option**
Tyres	Tubeless tyres 315/80R22.5 or 12.00R24 construction pattern	Optional on request
Fuel Tank	High capacity 500L / 600L Aluminum fuel tank	Optional on request
Power Take-Off	Gearbox Power Take-Off (PTO) for tipper/tanker hydraulic pump	Optional on request
Fifth Wheel Coupling	JOST 2" (50#) or 3.5" (90#) swivel fifth wheel plate	Customer choice

Technical Note: The above specifications are provided for reference and may be adjusted according to local homologation requirements and selected option packages. All payload values comply with Beiben Heavy Duty Truck Co., Ltd. manufacturing standards.