



DIESEL ENGINE	No emission compliance	Stage IIIA / Tier	Stage IIIB / Tier 4 Interim	
Model :	PERKINS series 1,104	PERKINS series 1,104	PERKINS series 854 E	KOHLER series KDI 3,404
Type :	Turbo	Turbo	Turbo	Turbo Common Rail
Total displacement :	4,400cc - 4 in line	4,400cc - 4 in line	3,400cc - 4 in line + DPF	3,400cc - 4 in line
Injection :	Mechanical control with direct injection	Mechanical control with direct injection	Electronic control with direct injection	Electronic control with direct injection
Cooling :	air water, dry air filter	air water, dry air filter	air water, dry air filter	air water, dry air filter
Maximum power :	82.5 kW (112 Hp)	83 kW (113 Hp)	83 kW (113 Hp)	90 kW (122 Hp)
Adj. power :	82 kW (2,400 rpm)	83 kW (2,200 rpm)	83 kW (2,200 rpm)	90 kW (2,200 rpm)
Maximum torque :	404 Nm a 1,400 rpm	418 Nm a 1,400 rpm	450 Nm a 1,400 rpm	480 Nm a 1,400 rpm
Alternator :	12 V - 65 A	12 V - 65 A	12 V - 80 A	12 V - 90 A

ELECTRIC SYSTEM

Battery: 12 V - 132 Ah (600 A)
Road light system, rear working lights.

4X4 FOUR-WHEEL DRIVE

Hydrostatic "automotive" transmission with variable displacement pump and variable displacement hydraulic motor with electro-hydraulic control, and reverse gear control on the steering wheel.

Electro-hydraulically controlled mechanical gearbox for "working speed" and "road transfer" speed.

SPEED

4 forward gears 2 reverse gears
Ist 0 - 3.0 Km/h 0 - 3.0 Km/h
IInd 0 - 7.2 Km/h 0 - 3.0 Km/h
IIIRD 0 - 10.0 Km/h 0 - 10.0 Km/h
IVth 0 - 25.0 Km/h 0 - 10.0 Km/h
Traction / weight ratio 48%

AXLES AND WHEELS

Front, oscillating ($\pm 6^\circ$) and steering with planetary reduction gears on the wheel hubs.

Rear and steering with planetary reduction gears on the wheel hubs and flanged gearbox.

Tyres 18 -19.5 16PR

BRAKES

Internal oil-bath disc service and emergency brakes acting on the 4 wheels, activation with miniservo pump on independent dual circuit.

Negative type parking brake, with internal oil-bath discs on the rear axle and electro-hydraulically controlled release.

STEERING

Assisted by means of load-sensing power steering with double displacement on 4 steering wheels; steering selection device for: 2 steering wheels, 4 steering wheels - crab steering.

WATER SYSTEM

"Self-priming" volumetric water pump with quick-suction.

Max. capacity: 250 litres/min.

Maximum head: 4 bar

Two connected tanks positioned opposite each other made of polyethylene with a total capacity of 870 litres.

Mix Control system for programmable and controlled management of water feeding to the drum and of mixing and unloading from the ground panel. Water feeding to the drum controlled by means of electromagnetic flow meter and fed litre reading on both the cabin display and at the rear of the vehicle.

Water pump activation from the driver's seat and from the ground panel. Suction selection from the ground with quick-coupling pipes.

MIXING AND UNLOADING

Double-cone drum with double-spiral mixing screws and convex bottom.

Geometrical drum volume: 5,050 litres

Drum rotation speed: 24 rpm.

Class S1 concrete produced as : 4.0 cu m

Counterframe mounted on "heavy-duty" ball fifth wheel, with 245° hydraulic rotation and automatic locking by means of negative brake.

Drum rotation by means of a piston pump with variable flow rate and an orbital hydraulic motor in closed circuit with infinitesimal electrical control positioned in the cabin and at the rear of the machine.

Drum raising up to the horizontal position by means of 2 double-acting jacks.

Unloading chute with hydraulic tilting by means of a double-acting jack and 180° rotation, independent from the mixing drum inclination. Removable chute, for direct unloading from hopper.

2 unloading chute extensions provided as standard equipment.

EQUIPMENT HYDRAULIC SYSTEM

Gear pump

Max. flow rate: 45 litres/min.

Maximum pressure: 180 bar

5-element distributor servo-controlled with multi-function joystick.

Chute lever distributor.

Aluminium heat exchanger for hydraulic oil cooling.

Pressurised closed-circuit intake with oil filter replaceable from the outside.

LOADER

Loading arms with self-compensated kinematic mechanism, double-acting loader lifting and return cylinders, electro-hydraulically controlled hatch with standard Tip-Off function.

Volumetric capacity: 560 litres

Number of loaderfuls per load: around 9 /10

CABIN

Closed cabin with heating system, designed in accordance with ROPS & FOPS 1st Level standards .

Sliding side window

180° pivoting driving post. Anatomic seat with flexible suspension and height adjustment, seat belts.

SERVICE REFILL CAPACITIES

Fuel tank in polyethylene, 95 litres

Total hydraulic system capacity: 125 litres

Engine oil: 7.96 kg

WEIGHTS

Operating weight 7,300 kg

Max gross weight: 16,500 kg

load-carrying capacity: 9,200 kg