

# ZW310



## ZW310S-7

The ZW310S-7 is an upgrade in the ZW-7 series, with its main enhancement being a new 5-speed transmission. This major change delivers better travel speed and improved fuel consumption compared to the previous ZW310-7 model. Operators will benefit from smoother gear shifting, enhanced climbing performance, and up to 15% lower fuel usage, making the ZW310S-7 ideal for demanding sites where efficiency and productivity are essential. It combines power, reliability, and advanced fuel-saving technology. The innovative Approach Speed Control (ASC) system further optimises performance for every task, ensuring maximum uptime and lower operating costs.

## Discover the benefits

- ✓ Enhanced uphill travelling performance and higher travel speeds, especially on gradients, thanks to the improved transmission.
- ✓ Up to 15% improvement in total fuel consumption for combined digging and travelling operations, helping to reduce operating costs.
- ✓ Ideal for long-distance sites or jobsite where frequent travel is required.
- ✓ Built on the reliable ZW310-7 platform, ensuring durability and ease of maintenance.

## WHEEL LOADER

Model code : ZW310S-7

Engine maximum power : 233 kW / 312 HP

Operating weight : 24 150 – 24 500 kg

Bucket ISO heaped : 3.2 - 4.5 m<sup>3</sup>

# SPECIFICATIONS

## ENGINE

Model .....	CUMMINS L9
Type .....	4-cycle water-cooled, direct injection
Aspiration .....	Waste-gate turbocharger and intercooled
Aftertreatment .....	DPF and SCR system
No. of cylinders .....	6
Maximum power	
ECE R120, gross .....	233 kW (312 HP) at 1 700 min <sup>-1</sup>
ISO9249: 2007, net .....	226 kW (303 HP) at 1 700 min <sup>-1</sup>
Rated power	
ISO14396: 2002, gross ....	213 kW (286 HP) at 2 000 min <sup>-1</sup>
ISO9249: 2007, net .....	204 kW (274 HP) at 2 000 min <sup>-1</sup>
Maximum torque, gross ....	1 636 Nm at 1 100 min <sup>-1</sup>
Bore and stroke .....	137 mm X 146 mm
Piston displacement .....	8.9 L
Batteries .....	2 x 12 V
Air cleaner .....	Two element dry type with restriction indicator

## POWER TRAIN

Transmission .....			
Torque converter .....			
Main clutch .....			
Cooling method .....			
Travel speed* Forward / Reverse			
		Standard & Power Mode	Power+ Mode
1st	km/h	6.0 / 5.5	6.2 / 6.2
2nd	km/h	10.3 / 9.2	10.5 / 10.5
at Lock-up clutch ON	km/h	10.7 / 9.7	10.8 / 10.8
3rd	km/h	16.1 / 23.1	16.1 / 23.1
at Lock-up clutch ON	km/h	16.8 / 24.7	16.8 / 24.7
4th	km/h	23.1 / 23.1	23.1 / 23.1
at Lock-up clutch ON	km/h	24.7 / 24.7	24.7 / 24.7
5th	km/h	34.5 / 34.5	34.5 / 34.5
at Lock-up clutch ON	km/h	38.3 / 38.3	38.3 / 38.3

\*With 26.5R25(L3) tires

## AXLE AND FINAL DRIVE

Drive system .....	Four-wheel drive system
Front & rear axle .....	Semi-floating
Front .....	Fixed to the front frame
Rear .....	Trunnion support
Reduction and differential gear .....	Two stage reduction with torque proportioning differential
Oscillation angle .....	Total 24° (+12°, -12°)
Final drives .....	Heavy-duty planetary, mounted inboard

## TIRES

Tire size .....	26.5R25 (L3) XHA2
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## BRAKES

Service brakes .....	Inboard mounted fully hydraulic 4 wheel wet disc brake. Front & rear independent brake circuit
Parking brakes .....	Spring applied, hydraulically released, located in transmission.

## STEERING SYSTEM

Type .....	Articulated frame steering
Steering angle .....	Each direction 37° ; total 74°
Cylinders .....	Double-acting piston type
No. x Bore x Stroke .....	2 x 85 mm x 498 mm

## HYDRAULIC SYSTEM

Arm and bucket are controlled by multifunction lever	
Arm controls .....	Four position valve; Raise, hold, lower, float
Bucket controls with automatic bucket return-to-dig control .....	Three position valve ; Roll back, hold, dump
Main pump (Serve as steering pump)	
.....	Variable piston type
Maximum flow .....	315 L/min at 2 000 min <sup>-1</sup> (rpm)
Maximum pressure ..	31.4 MPa
Fan pump	
.....	Gear type
Maximum flow .....	85 L/min at 2 000 min <sup>-1</sup> (rpm)
Maximum pressure ..	14.1 MPa
Hydraulic cylinders	
Type .....	Double acting type
No. x Bore x Stroke ...	Arm : 2 x 145 mm x 884 mm
	Bucket : 1 X 180 mm X 528 mm
Filters .....	Full-flow 9 micron return filter in reservoir
Hydraulic cycle times	
Lift arm raise .....	5.4 s (5.1 s)
Lift arm lower .....	4.1 s (4.1 s)
Bucket dump .....	1.4 s (1.4 s)
Total .....	10.9 s (10.6 s)

( ): Data at Power+ Mode

## ENVIROMENT

### Engine Emissions

EU Stage V

### Sound level

Sound level in cab according to ISO 6396: 2008 ..... LpA 69 dB(A)

External sound level according to ISO 6395: 2008 and

EU Directive 2000/14/EC ..... LwA 107 dB(A)

### Air Conditioning System

The air conditioning system contains fluorinated greenhouse gases.

Refrigerant type: HFC-134a, GWP: 1430, Amount: 0.75 kg, CO<sub>2</sub>e: 1.07 ton.

## SERVICE REFILL CAPACITIES

Fuel tank .....	380 L
Engine coolant .....	34 L
Engine oil .....	33 L
Torque converter & transmission .....	52 L
Front axle differential & wheel hubs .....	48 L
Rear axle differential & wheel hubs .....	48 L
Hydraulic oil tank .....	139 L
DEF/AdBlue® tank .....	44 L

Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your authorized dealer in case of questions about compliance.

These specifications are subject to change without notice.

Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features.

Before use, read and understand the Operator's Manual for proper operation.