

SPECIFICATIONS

Model Name: ZW330-6, EPA Tier 4 Final/EU Stage IV Certified

ENGINE

Gross power (ISO 14396)	311 HP/1,600 RPM (232 kW/1,600 RPM)
Net power (ISO 9249)	302 HP/1,600 RPM (225 kW/1,600 RPM)
Make/Model	Cummins QSL9 diesel engine
Type	4-cycle, water-cooled, direct injection with turbocharger and air cooled intercooler
Fuel type	#2 Diesel (Requires ultra-low sulfur fuel.)
Fuel injection pump	Electronically controlled, common rail type
Governor	All speed electrical type
Cooling module type	Hydraulic-driven, suction-type fan, pressurized radiator
Number of cylinders	6
Bore and stroke	4.5" x 5.7" (114mm x 145mm)
Total displacement	543 in ³ (8.9 liters)
Alternator	AC 24V—2.64 kW (110A)
Air cleaner	Dry type (double element)
Starter motor	DC 24V—7.8 kW (10.5 HP)
Battery	12V—200AH (930 CCA), 2 units

TORQUE CONVERTER AND TRANSMISSION

Torque converter	3-element, single-stage, 1-phase w/lock-up clutch			
Transmission	Torque converter, countershaft type power shift with computer-controlled automatic shift and manual shift features included			
	Normal Mode	Power Mode	Normal Mode w/Lock-up clutch	Power Mode w/Lock-up clutch
Speeds: Forward	1st:	4.0 MPH (6.4 km/hr)	4.2 MPH (6.8 km/hr)	
	2nd:	7.0 MPH (11.3 km/hr)	7.3 MPH (11.7 km/hr)	7.0 MPH (11.3 km/hr)
	3rd:	13.6 MPH (21.9 km/hr)	13.7 MPH (22.0 km/hr)	13.6 MPH (21.9 km/hr)
	4th:	22.4 MPH (36.0 km/hr)	22.4 MPH (36.0 km/hr)	22.4 MPH (36.0 km/hr)
Speeds: Reverse	1st:	4.0 MPH (6.4 km/hr)	4.2 MPH (6.8 km/hr)	
	2nd:	7.0 MPH (11.3 km/hr)	7.0 MPH (11.3 km/hr)	7.3 MPH (11.7 km/hr)
	3rd:	13.6 MPH (21.9 km/hr)	13.7 MPH (22.0 km/hr)	13.6 MPH (21.9 km/hr)
	4th:	22.4 MPH (36.0 km/hr)	22.4 MPH (36.0 km/hr)	22.4 MPH (36.0 km/hr)

SYSTEMS REFILL CAPACITY

LOCATION	GALLONS	LITERS
Fuel tank (diesel fuel)	99.1	375
Engine lubricant (including oil pan)	6.3	24
Engine coolant	12.4	47
T/M & T/C	13.5	51
Axle (front/rear)	15.8/15.8	60/60
Hydraulic oil tank	36.2	137
Hydraulic system (including hydraulic tank)	52.8	200
DEF/AdBlue® tank	9.2	35

HYDRAULIC AND STEERING SYSTEM

Steering type	Articulated frame steering	
Steering mechanism	Hydraulic power steering unit, pilot operated type	
Lift (boom) cylinder	Two (2) double-acting piston type: 5.9" x 36.6" (150mm x 930mm)	
Tilt (bucket) cylinder	Two (2) double-acting piston type: 7.4" x 19.9" (190mm x 507mm)	
Steering cylinder	Two (2) double-acting piston type: 3.5" x 17.7" (90mm x 450mm)	
Main oil pump	Variable Piston type: 79.0 GPM/1,000 PSI @ 2,000 RPM (300 LPM/6.9 MPa @ 2,000 RPM)	
Pilot oil pump	Variable Piston type: 22.5 GPM/3,260 PSI @ 2,000 RPM (85 LPM/16.5 MPa @ 2,000 RPM)	
Relief valve set pressure	Loading	4,554 psi, 31.4 MPa (320 kgf/cm ²)
	Steering	3,974 psi, 27.4 MPa (280 kgf/cm ²)
HYDRAULIC CYCLE TIME* front end loading, Z bar linkage system		

	Normal Mode	Power Mode
Lifting time (at full load)	6.4 sec.	6.3 sec.
Lowering time (empty)	4.4 sec.	4.4 sec.
Bucket dumping time	1.2 sec.	1.2 sec.
TOTAL	12.0 sec.	11.9 sec.

* Measured in accordance with SAE J732C

AXLE SYSTEM

Drive system	4-wheel drive
Front and rear axle	Full-floating type
Tires	26.5R25 (L-3)
Reduction and differential gear	Spiral bevel gear, torque proportioning, single stage reduction
Final reduction gear	Inboard mounted, internal planetary gear
Oscillation angle	Total 24 (+12, -12)°

BRAKE SYSTEM



Service brakes	Inboard mounted fully hydraulic 4-wheel disc brake. Front and rear independent brake circuit.
Parking/Emergency brake	Spring-applied, hydraulically-released. Located in transmission.

Remarks

- Materials and specifications are subject to change without notice and without any obligation on the part of the manufacturer.
- This information, while believed to be completely reliable, is not to be taken as warranty for which we assume legal responsibility.
- Dumping clearance and reach are measured from bucket edge in accordance with SAE J732C.
- Counterweight should not be used with tire ballast.
- This specification sheet may contain attachments and optional equipment not available in your area.

Please contact your local HCMA dealer for additional information.

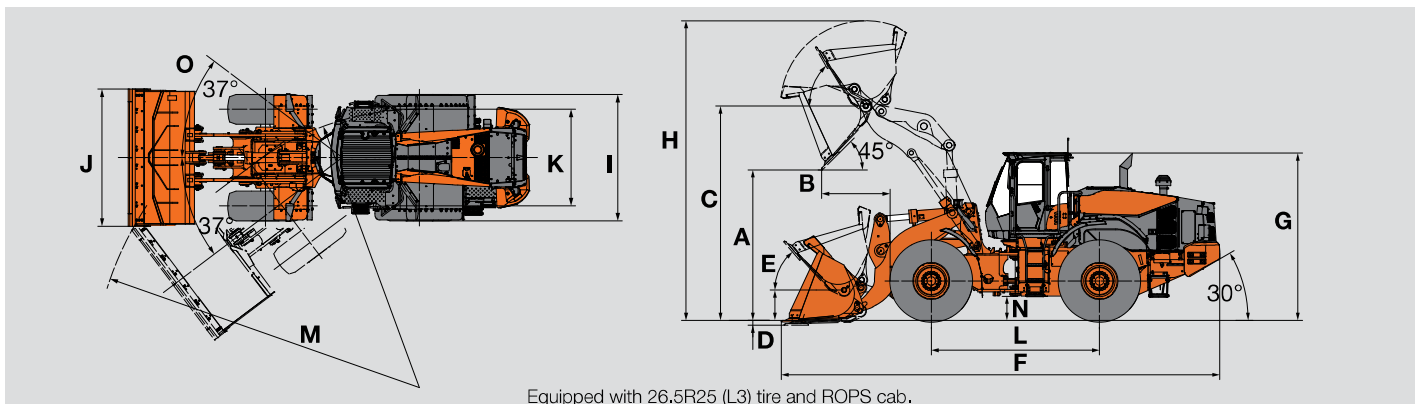
BUCKET DATA

			Standard Boom	
			General Purpose	Material Handling
			Straight Edge With Bolt-on Cutting Edge	Straight Edge With Bolt-on Cutting Edge
				
Capacity	Heaped	yd ³ (m ³)	6.3 (4.8)	6.5 (5.2)
	Struck	yd ³ (m ³)	5.5 (4.2)	5.9 (4.5)
A	Maximum dumping clearance	ft-in (mm)	10'5" (3,175)	10'3" (3,120)
B	Dumping reach (to front of bucket edge or tooth)	ft-in (mm)	4'9" (1,440)	4'11" (1,495)
C	Max. hinge pin height	ft-in (mm)	14'10" (4,525)	14'10" (4,525)
D	Digging depth (with bucket level)	in (mm)	4.1" (105)	4.1" (105)
Breakout force		lb (kN)	42,430 (189)	40,241 (179)
Bucket tilt-back angle	at ground level	degree	41°	41°
	E at carry position	degree	45°	45°
Overall	F Length	ft-in (mm)	30'4" (9,255)	30'6" (9,291)
	G Height (up to cab top)	ft-in (mm)	11'7" (3,530)	11'7" (3,530)
	H Height (bucket fully raised)	ft-in (mm)	20'9" (6,320)	21' (6,405)
	I Width (outside tire)	ft-in (mm)	9'7" (2,930)	9'7" (2,930)
	J Width (outside bucket)	ft-in (mm)	10'5" (3,170)	10'5" (3,170)
K	Tread	ft-in (mm)	7'4" (2,230)	7'4" (2,230)
L	Wheel base	ft-in (mm)	11'8" (3,550)	11'8" (3,550)
Clearance Circle (bucket carry position)	M at outside of bucket	ft-in (mm)	24'9" (7,535)	24'9" (7,535)
	at outside of tire	ft-in (mm)	21'1" (6,420)	21'1" (6,420)
N	Minimum ground clearance	in (mm)	20" (505)	20" (505)
O	Full articulation angle	degree	37°	37°
Operating weight (with ROPS cab)*		lb (kg)	58,158 (26,380)	57,915 (26,270)
Static tipping load (with ROPS cab)*	Straight	lb (kg)	45,085 (20,450)	44,571 (20,220)
	Full turn	lb (kg)	39,330 (17,840)	38,890 (17,640)

Note: All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7131:2009 and ISO 7546:1983

: Static tipping load and operating weight marked with include 26.5 R25 (L-3) tires (No ballast) with lubricants, full fuel tank and operator. Machine stability and operating weight depend on counterweight, tire size and other attachments.

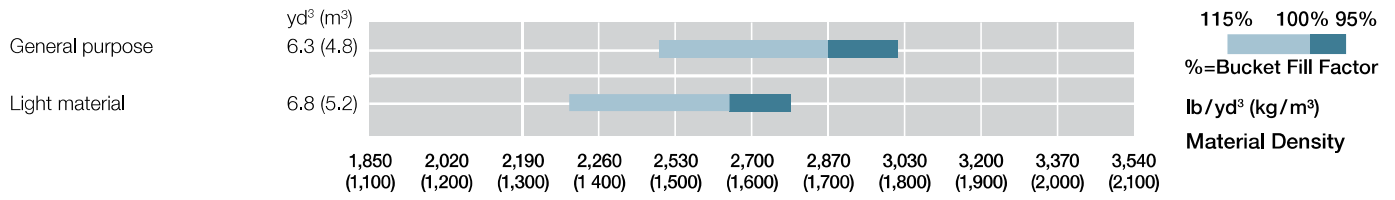
DIMENSIONS



Equipped with 26.5R25 (L3) tire and ROPS cab.

SPECIFICATIONS

BUCKET SELECTION CHART



Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.

EQUIPMENT DATA

STANDARD EQUIPMENT

ENGINE

Air cleaner, double element
Auto idle shut down
Cold start (intake air heater)
Cooling fan, automatic reversible
Cummins QSL9 diesel engine
EGR System
Fuel filter (Main)
Fuel pre-filter, w/water separator
Rain cap
SCR catalyst and DOC
VGT (variable geometry turbocharger)
Work mode selector

POWERTRAIN

Brakes, service
Enclosed wet disc
Dual system
Inboard mounted
Brake, parking
Spring applied
Oil pressure released
Wet disc type
Differential, torque proportioning type (F/R)
Down-shift switch
Drive shafts, low maintenance
F-R direction selector (2-column mounted/console mounted)
Lock-up torque converter
Quick Power switch
Transmission, automatic w/load sensing system.
Transmission declutch (3-position L/H/Off)
Transmission mode selection (3-position AUTO1/MAN/AUTO2)
Universal joints, sealed

HYDRAULIC SYSTEM

Boom kick-out, dual (operator adjustable in cab)
Bucket positioner (horizontal)
Control lever, dual, pilot-assisted
Control lever lock (electric)
Control valve, 2-function, parallel and tandem control
E-stick steering
Pump, variable displacement, load-sensing
Ride control w/load sensing valve and automatic shut-off
Steering, pilot
System; open-center, high-pressure, load-sensing
Valve, anti-drift

ELECTRICAL

24-volt electrical system
Back-up alarm
Batteries (2), 12 V, 930 CCA
Battery disconnect switch
Camera, rear-view
Converter, 12 V/15 Amp
Horn, dual electric
Instrument panel, LCD, color
Lights:
2 Headlights (halogen)
4 Forward working lights (4 LED)
4 Rear working lights (LED)
2 Stop/tail/backup (LED)
Turn signal w/4-way flashers/marker

CAB

ROPS cab: enclosed cab with sound suppression, front & rear wipers and washers, two rear view and side mirrors, tinted glass, full view latch-back doors, sliding side windows.
Accessory outlet, 12 V
Adjustable armrest/console
Air conditioner/heater/pressurizer
AM/FM/WB radio with AUX input
Ashtray
Cab dome lamps (2)
Cigarette lighter, 24 V
Coat hook
Cup holder (2)
Floor mat, sweep-out
E-stick steering
Prepped for Loadrite Scale
Retractable seat belt (3-inch)
ROPS/FOPS certified
Seat, deluxe heated w/TLV suspension
Steering column, telescoping and tilting w/quick-release pedal
Steering wheel
Storage box (heated/cooled)
Storage tray
Sun visor

OTHERS

Articulation locking bar
Belly guard, transmission (rear)
Counterweight
Drawbar
Fenders, front, w/mudflap
Global e-service, telematic monitoring system
Ladders, inclined
Lifting eyes
Linkage pins, HN bushing
Neutral safety start
Rear grill, hinged
Steps, rear
Z-bar loader linkage

ALARMS, GAUGES, INDICATORS

Alarms (visual & audible)	Aftertreatment device
	Air cleaner element
	Axle oil temperature
	Battery discharge warning
	Brake oil low pressure
	CAN network system
	DEF/AdBlue tank level/quality/system
	Engine oil low pressure
	Engine trouble
	Engine warning
	Fuel filter (water in fuel)
	Hydraulic oil level
	Hydraulic oil temperature
	Main pump oil pressure
Overheat (engine coolant)	
Gauges	Transmission oil temp
	Transmission warning
	DEF/AdBlue tank level
	Engine coolant temperature
Indicators	Fuel gauge
	Speedometer
	Tachometer
	Transmission oil temperature
	Aftertreatment device
	Air conditioner display
	Boom kick-out, dual
	Cold start
	Control lever lock
	Declutch
	ECO-Operating Status
	Fan reverse rotation
	F-N-R Selection
	F-N-R Switch enable
High beam	
Parking brake	
Shift hold	
Time/Operating hour/ODO	
Transmission mode and status	
Turn signal w/4-way flashers/Marker	
Work light	
Work mode (Normal, Power)	

OPTIONAL EQUIPMENT

High mount in-cab monitor
Hydraulic system, 3rd auxiliary hydraulic function
Loadrite scale
Satellite Telematic monitoring
Single lever hydraulic control w/multifunction grip