

ZW550-6 SPECIFICATIONS

HITACHI

Reliable Solutions

LANDCROS

ENGINE

Gross power (ISO 14396)	520 HP/1,800 RPM (382 kW/1,800 RPM)
Net power (ISO 9249)	517 HP/1,800 RPM (380 kW/1,800 RPM)
Make/Model	Isuzu 6WG1 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	Forced circulation type
Number of cylinders	6
Bore and stroke	5.8" x 6.1" (147mm x 154mm)
Total displacement	956.9 in ³ (15.68 liters)
Alternator	AC 24V-110A (2.64 kW)
Air cleaner	Dry type (double element) with restriction indicator
Starter motor	DC 24V-9.5 HP (7.0 kW)
Battery	12V-1300 CCA (170Ah), 2 units

TORQUE CONVERTER AND TRANSMISSION

Torque converter	3-element, single-stage, 1-phase w/lock-up clutch			
Transmission	Torque converter, planetary gear type powershift 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: 4.3 MPH (7.0 km/hr)	4.4 MPH (7.1 km/hr)	8.3 MPH (13.3 km/hr)	8.3 MPH (13.3 km/hr)
	2nd: 7.9 MPH (12.7 km/hr)	8.0 MPH (12.9 km/hr)	13.9 MPH (22.3 km/hr)	13.9 MPH (22.3 km/hr)
	3rd: 12.9 MPH (20.7 km/hr)	12.9 MPH (20.7 km/hr)	21.8 MPH (35.1 km/hr)	21.8 MPH (35.1 km/hr)
	4th: 21.7 MPH (35.0 km/hr)	21.7 MPH (35.0 km/hr)		
Speeds: Reverse	1st: 4.8 MPH (7.8 km/hr)	4.8 MPH (7.8 km/hr)	8.8 MPH (14.1 km/hr)	8.8 MPH (14.1 km/hr)
	2nd: 8.8 MPH (14.1 km/hr)	8.8 MPH (14.1 km/hr)	15.3 MPH (24.6 km/hr)	15.3 MPH (24.6 km/hr)
	3rd: 14.0 MPH (22.6 km/hr)	14.0 MPH (22.6 km/hr)		

SYSTEMS REFILL CAPACITY

LOCATION	GALLONS	LITERS
Fuel tank (diesel fuel)	171.2	648
Engine lubricant (including oil pan)	15.1	57
Engine coolant	21.7	82
T/M & T/C	23.8	90
Axle (front/rear)	47.6/47.6	180/180
Hydraulic oil tank	79.3	300
Hydraulic system (including hydraulic tank)	145.3	550
DEF/AdBlue® tank	15.1	57

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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: 7.5" x 5.2" (190mm x 1132mm)	
Tilt (bucket) cylinder	Two (2) double-acting piston type: 6.3" x 30.2" (160mm x 767mm)	
Steering cylinder	Two (2) double-acting piston type: 3.9" x 28.3" (100mm x 720mm)	
Main oil pump	Variable displacement axial plunger pump: 100.4 GPM/972 PSI @ 1,800 RPM (380 LPM/6.9 MPa (70 kgf/cm ²) @ 1,800 RPM)	
Brake & Fan & Pilot pump	Variable displacement axial plunger pump: 27.7 GPM/3,017 PSI @ 1,800 RPM (105 LPM/28.0 MPa (266 kgf/cm ²) @ 1,800 RPM)	
Relief valve set pressure	Control	4,554 psi, 31.4 MPa (320 kgf/cm ²)
	Steering	3,989 psi, 27.5 MPa (280 kgf/cm ²)

HYDRAULIC CYCLE TIME* front end loading, Z bar linkage system

	Normal Mode	Power Mode
Lifting time (at full load)	8.5 sec.	8.5 sec.
Lowering time (empty)	4.5 sec.	4.5 sec.
Bucket dumping time	2.3 sec.	2.3 sec.
TOTAL	15.3 sec.	15.3 sec.

* Measured in accordance with SAE J732C

AXLE SYSTEM

Drive system	4-wheel drive
Front and rear axle	Full-floating type
Tires	35/65 R33 (L-5)
Reduction and differential gear	Single stage reduction with conventional type
Final reduction gear	Outboard mounted, heavy duty planetary gear
Oscillation angle	Total 24 (+12, -12)°

BRAKE SYSTEM

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

Model Name: ZW550-6, EPA Tier 4 Final/EU Stage IV Certified

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 Hitachi Construction Machinery Americas authorized local dealer for additional information.

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BUCKET DATA

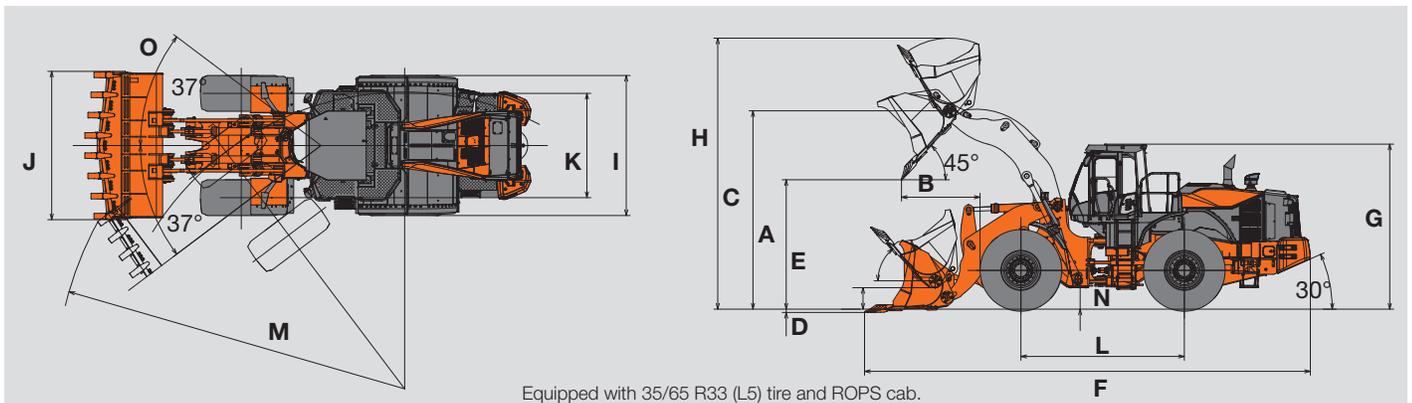
				Standard Arm		High Lift Arm	
				Rock Bucket	Material Handling	General Purpose	
				V-Edge	Straight Edge	Straight Edge	
				Weld-on Adaptor & Teeth/ Segment Edge Edge	Bolt-on Cutting Edge	Bolt-on Cutting Edge	
							
Capacity	Heaped	yd ³ (m ³)	8.3 (6.3)	9.0 (6.9)	9.0 (6.9)		
	Struck	yd ³ (m ³)	7.3 (5.6)	8.0 (6.1)	8.0 (6.1)		
A	Maximum dumping clearance	ft-in (mm)	10'8" (3,270)	11'6" (3,520)	13' (3,965)		
B	Dumping reach (to front of bucket edge or tooth)	ft-in (mm)	6'8" (2,045)	6' (1,825)	6'4" (1,925)		
C	Max. hinge pin height	ft-in (mm)	16'6" (5,040)	16'6" (5,040)	18' (5,480)		
D	Digging depth (with bucket level)	in (mm)	6" (165)	4" (135)	6" (145)		
Breakout force		lb (kN)	83,460 (371)	83,460 (371)	83,460 (371)		
Bucket tilt-back angle	at ground level	degree	43°	43°	43°		
	E at carry position	degree	50°	50°	50°		
Overall	F Length	ft-in (mm)	37'4" (11,370)	36'3" (11,040)	37'9" (11,510)		
	G Height (up to cab top)	ft-in (mm)	13'9" (4,195)	13'9" (4,195)	13'9" (4,195)		
	H Height (bucket fully raised)	ft-in (mm)	29'8" (7,040)	22'9" (6,940)	24'3" (7,385)		
	I Width (outside tire)	ft-in (mm)	11'9" (3,570)	11'9" (3,570)	11'9" (3,570)		
	J Width (outside bucket)	ft-in (mm)	12'4" (3,770)	12'4" (3,770)	12'4" (3,770)		
	K Tread	ft-in (mm)	8'8" (2,650)	8'8" (2,650)	8'8" (2,650)		
Wheel base	L	ft-in (mm)	13'7" (4,150)	13'7" (4,150)	13'7" (4,150)		
	Clearance Circle (bucket carry position)	M at outside of bucket	ft-in (mm)	24'9" (7,545)	24'9" (7,545)	24'9" (7,545)	
at outside of tire		ft-in (mm)	29' (8,835)	29'1" (8,870)	29'9" (9,055)		
N	Minimum ground clearance	ft-in (mm)	1'10" (545)	1'10" (545)	1'10" (545)		
O	Full articulation angle	degree	37°	37°	37°		
Operating weight (with ROPS cab)*		lb (kg)	104,880 (47,573)	102,445 (46,468)	102,944 (46,695)		
Static tipping load (with ROPS cab)+	Straight	lb (kg)	71,310 (32,340)	73,200 (33,200)	62,420 (28,310)		
	Full turn	lb (kg)	60,370 (27,380)	61,980 (28,110)	52,850 (23,970)		

Note: All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7137:2009 and ISO 7546:1983

: Static tipping load and operating weight marked with include 35/65 R33 (L5) 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 35/65 R33 (L5) tire and ROPS cab.

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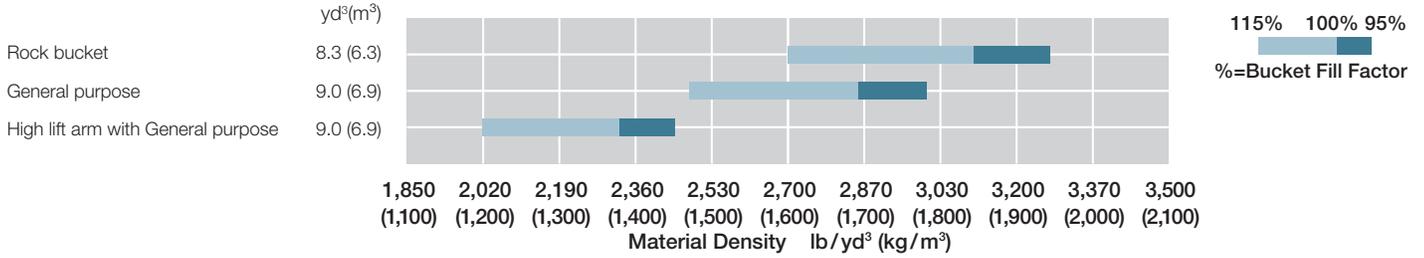
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WEIGHTS AND DIMENSIONS

Option item	Operating weight lb (kg)	Tipping load lb (kg)		Overall width in (mm) (outside tire)	Overall height in (mm)	Overall length in (mm)
		Straight	Full turn			
Remove ROPS and Cab	-3,110 (-1,410)	-2,870 (-1,300)	-2,381 (-1,080)	±0	-1,380 (-625)	±0

BUCKET SELECTION CHART



EQUIPMENT DATA

ZW550-6

STANDARD EQUIPMENT

ENGINE

Air cleaner, double element
Auto idle shut down
Cold start (glow plug)
Cooling fan, automatic reversible
EGR (exhaust gas recirculation)
Fuel filter, w/water separator
Fuel pre-filter, w/water separator
Isuzu 6WG1 diesel engine
Pre-cleaner (Power Ram)
SCR (selective catalytic reduction)
VGT (variable geometry turbocharger)
Work mode selector

POWERTRAIN

Autobrake
Brakes, service
Enclosed wet disc
Dual system
Outboard mounted
Brake, parking
Spring applied
Oil pressure released
Wet disc type
Counterweight with towing pin
CRN certified accumulators
Differential, conventional type (F/R)
Down-shift switch
Drive shafts, low maintenance
F-R direction selector (joystick steer mounted)
Lock-up torque converter
Propeller shafts, low maintenance
Quick Power switch
Traction control
Transmission, automatic w/load sensing system
Transmission declutch (3-position L/H/Off)
Transmission mode selection (3-position AUTO1/MAN/AUTO2)

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
CRN certified accumulator
Pump, variable displacement, load-sensing
Ride control w/load sensing valve and automatic shut-off
Secondary steering
Steering, pilot, joystick
System; open-center, high-pressure, load-sensing

ELECTRICAL

24-volt electrical system
Back-up alarm
Batteries (2), 12V, 1,300 CCA
Battery disconnect switch
Camera, rear-view
Converter
Horn, dual electric
Instrument panel, LCD, color
Lights:
2 Headlights (Halogen)
4 Forward working lights (LED)
4 Rear working lights (LED)

2 Stop/tail/backup (LED)
Turn signal w/4-way flashers/marker

CAB

Soft cab: enclosed cab with sound suppression, front & rear wipers and washers, two rear view and side mirrors, tinted glass, front hinge doors, sliding side windows. Outer ROPS
Accessory outlet, 12v
Adjustable armrest/console
Air conditioner/heater/pressurizer
AM/FM/WB radio with AUX input and Bluetooth®
Ashtray
Cab dome lamps (2)
Cigarette lighter, 24V
Coat hook
Cup holder (1) for joystick steering
Floormat, sweep-out
Heated rear view mirrors
Retractable seat belt (3-inch)
ROPS/FOPS, ISO 3449 Level II compliant
Seat, deluxe heated w/TLV suspension
Front console with grab handle
Joystick steering
Storage box (heated/cooled)
Storage tray
Sun visor

OTHERS

Articulation locking bar
Belly guard, rear chassis
Counterweight
Fenders, front, w/mudflap
Fenders, rear, full, w/mudflap
Global e-service, telematic monitoring system
Ladders, inclined
Lifting lugs/ tie downs
Neutral safety start
Rear grill, hinged
Steps, rear
Vandalism protection
Z-bar loader linkage

ALARMS, GAUGES, INDICATORS

Alarms (visual & audible)	Aftertreatment device
	Air cleaner element
	Auto brake
	Axle oil temperature
	Battery discharge warning
	Boost temperature rise
	Brake oil low pressure
	CAN network system
	DEF/AdBlue tank level/quality/system
	Engine coolant temp
	Engine oil low pressure
	Engine trouble
	Engine warning
	Exhaust gas temperature
	Fuel filter restriction
	Fuel filter (water in fuel)
	Fuel temperature
	Hydraulic oil level
	Hydraulic oil temperature
	Intake air temperature
	Main pump oil pressure
	Transmission filter restriction
	Transmission oil pressure
	Transmission oil temp
	Transmission warning

ALARMS, GAUGES, INDICATORS (con't.)

Gauges	DEF/AdBlue tank level
	Engine coolant temperature
	Fuel gauge
	Speedometer
	Tachometer
	Transmission oil temp
Indicators	Auto idling stop
	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
	Joystick steering status
	Parking brake
	Shift hold
	Time/Operating hour/ODO
	Traction Control
	Transmission mode and status
	Turn signal w/4-way flashers/Marker
	Work light
	Work mode (Normal, Power)

OPTIONAL EQUIPMENT

3rd function hydraulics multi-lever
Bolt-on cutting edge & segments
Bucket teeth with teeth and segments
Cab prefilter (Respa)
Cab window guards
Head light
Heavy counterweight – Logging
High lift arm
High-mount sub-monitor
Hydraulic tank sight gauge guard
Rear light guard
Satellite GPS telematics
Single lever hydraulic control w/multifunction grip

QUICK LINKS

Website's
Product Page



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