

ZAXIS-5A series

HITACHI

Reliable solutions

ZAXIS 530



HYDRAULIC EXCAVATOR

Model Code : ZX530LCH-5A

Engine Rated Power : 257 kW (345 HP)

Operating Weight : 52 200 kg

Backhoe Bucket : ISO Heaped : 1.30 - 2.50 m³

SPECIFICATIONS

Variable Gauge Undercarriage : ZX530LCH-5A

ENGINE	
Model	Isuzu GH-6UZ1XKSA-01
Type	4-cycle water-cooled, direct injection
Aspiration	Turbocharged, intercooled
No. of cylinders	6
Rated power	
ISO 9249, net	H/P mode:
(Without Fan)	257 kW (345 HP) at 2 000 min ⁻¹ (rpm)
SAE J1349, net	H/P mode:
(Without Fan)	257 kW (345 HP) at 2 000 min ⁻¹ (rpm)
Maximum torque	1 363 Nm (139 kgf m) at 1 500 min ⁻¹ (rpm)
Piston displacement ..	9.839 L
Bore and stroke	120 mm x 145 mm
Batteries	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM	
Hydraulic Pumps	
Main pumps	2 variable displacement axial piston pumps
Maximum oil flow ..	2 x 400 L/min
Pilot pump	1 gear pump
Maximum oil flow ..	30 L/min

Hydraulic Motors	
Travel	2 axial piston motors with parking brake
Swing	2 axial piston motors

Relief Valve Settings	
Implement circuit	31.9 MPa (325 kgf/cm ²)
Swing circuit	28.4 MPa (290 kgf/cm ²)
Travel circuit	35.3 MPa (360 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	35.3 MPa (360 kgf/cm ²)

Hydraulic Cylinders			
	Quantity	Bore	Rod diameter
Boom	2	170 mm	115 mm
Arm	1	190 mm	130 mm
Bucket	1	170 mm	120 mm

UPPERSTRUCTURE	
Revolving Frame	
D-section frame for resistance to deformation.	

Swing Device	
Axial piston motor with planetary reduction gear is bathed in oil.	
Swing parking brake is spring-set/hydraulic-released disc type.	
Swing speed	9.5 min ⁻¹ (rpm)
Swing torque	148 kNm

ZX530LCH-5A:	
Independent spacious cab, 1 025 mm wide by 1 817 mm high,	
The OPG top guard fitted Level II conforms to the related requirements of	
the International Organization for Standardization (ISO) 10262.	

UNDERCARRIAGE	
Tracks	
Track shoes with double grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.	
Numbers of Rollers and Shoes on Each Side	
Upper rollers	3
Lower rollers	8
Track shoes	49
Track guards	Full track guard

Travel Device	
Each track driven by axial piston motor through reduction gear for counterrotation of the tracks. Parking brake is spring-set/hydraulic-released disc type.	
Automatic transmission system: High-Low.	
Travel speeds	High : 0 to 4.4 km/h Low : 0 to 3.4 km/h

Maximum traction force ..	411 kN (41 900 kgf) : ZX530LCH-5A
Gradeability	70% (35 degree) continuous

SERVICE REFILL CAPACITIES	
Fuel tank	725.0 L
Engine coolant	58.0 L
Engine oil	41.0 L
Swing device (each side)	6.5 L
Travel device (each side)	14.0 L
Hydraulic system	510.0 L
Hydraulic oil tank	310.0 L

WEIGHTS AND GROUND PRESSURE					
Operating Weight and Ground Pressure					
				ZX530LCH-5A	
Shoe type	Shoe width	Boom type	Arm type	kg	kPa (kgf/cm²)
Double grouser	600 mm	H 7.0 m	H 3.4 m	52 200	0.94 (92)
		Bucket capacity		2.1 m³ Rock bucket	
		BE 6.3 m	BE 2.5 m	52 700	0.95 (93)
		Bucket capacity		2.5 m³ Rock bucket	

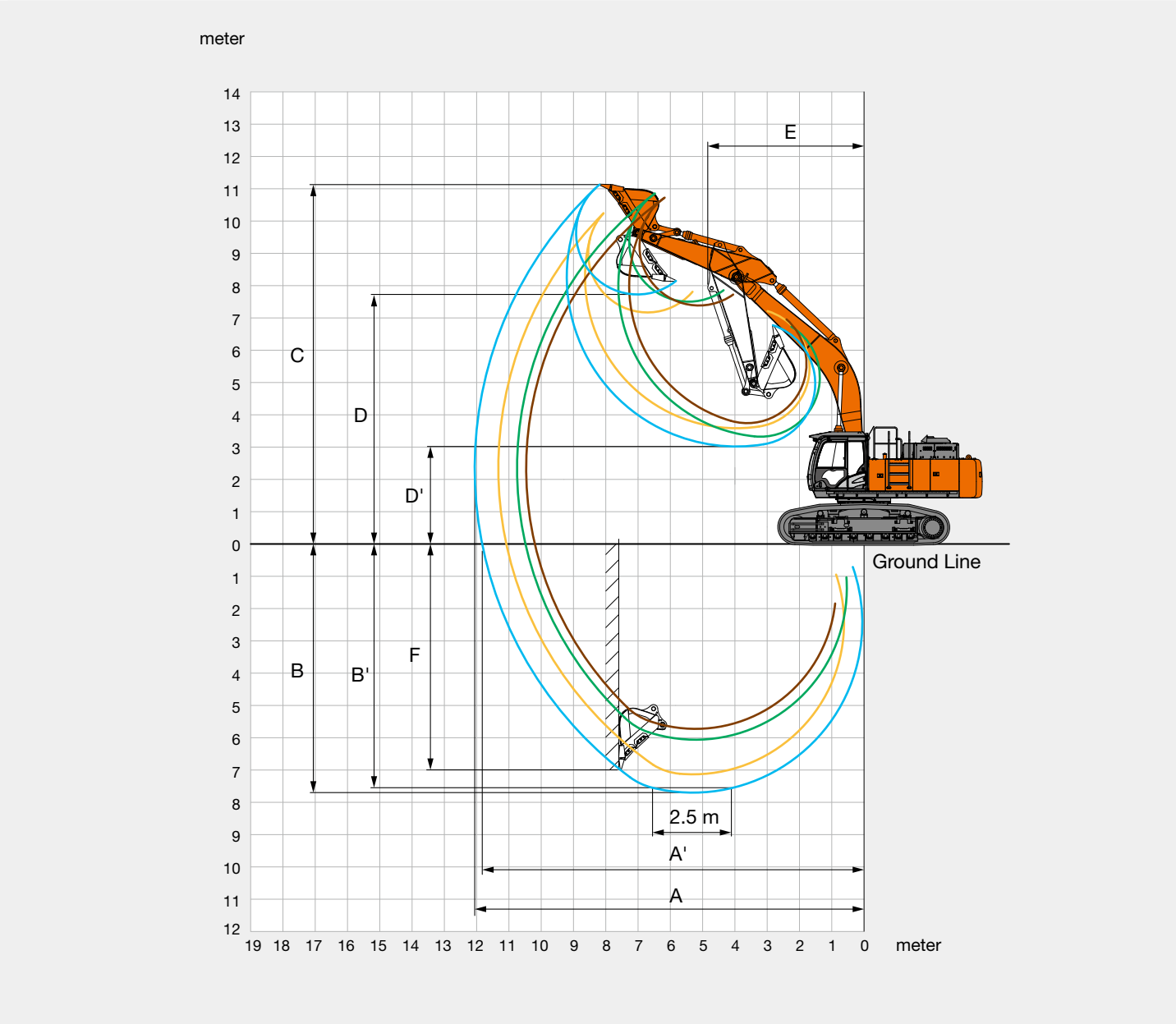
BUCKET LIST								
ZX530LCH-5A								
Capacity	Width		No. of teeth	Weight	Recommendation			
ISO heaped	Without side cutters	With side cutters			BE-boom 6.3 m		H-boom 7.0 m	
					BE-arm 2.5 m	BE-arm 2.9 m	BE-arm 2.9 m	H-arm 3.4 m
*1 1.90 m ³	1 480 mm	1 500 mm	5	2 070 kg	●	●	●	●
*1 2.10 m ³	1 560 mm	1 580 mm	5	2 170 kg	●	●	●	●
*1 2.30 m ³	1 680 mm	1 700 mm	5	2 260 kg	●	●	●	–
*1 2.50 m ³	1 800 mm	1 820 mm	5	2 360 kg	●	●	–	–
*2 1.30 m ³	1 170 mm	–	3	2 330 kg	●	●	●	●
One-point ripper			1	1 260 kg	●	●	●	●
*1 Rock bucket					● Heavy-duty service			
*2 Ripper bucket					– Not applicable			

SPECIFICATIONS

Variable Gauge Undercarriage : ZX530LCH-5A

WORKING RANGES

ZX530LCH-5A

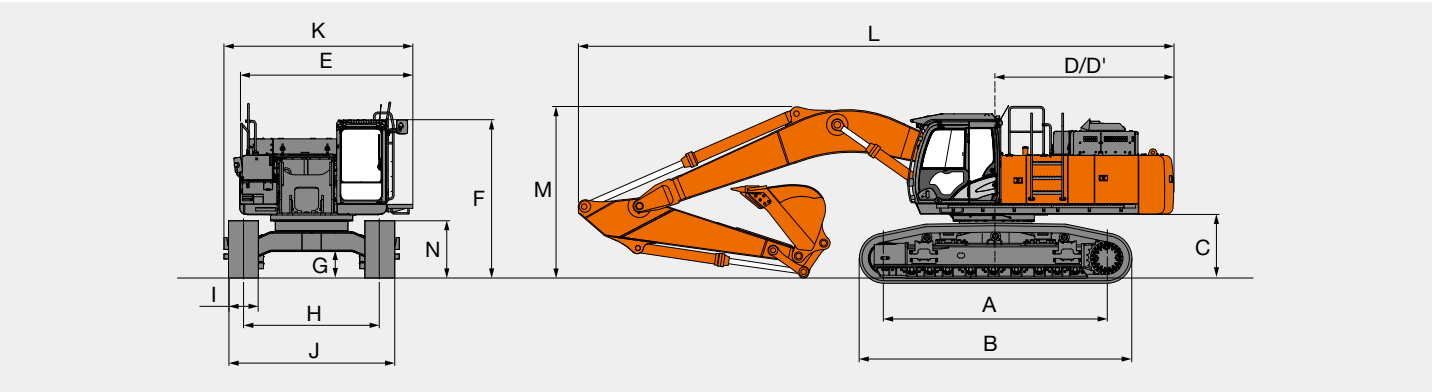


Arm length	ZX530LCH-5A			
	BE-boom 6.3 m		H-boom 7.0 m	
	BE-arm 2.5 m	BE-arm 2.9 m	BE-arm 2.9 m	H-arm 3.4 m
A Max. digging reach	10 460	10 750	11 330	12 060
A' Max. digging reach (on ground)	10 190	10 480	11 080	11 830
B Max. digging depth	5 720	6 060	7 130	7 700
B' Max. digging depth (for 2.5 m level)	5 540	5 890	6 920	7 550
C Max. cutting height	10 710	10 850	10 240	11 080
D Max. dumping height	7 390	7 500	7 170	7 730
D' Min. dumping height	3 740	3 320	3 590	3 020
E Min. swing radius	4 090	3 930	5 020	4 840
F Max. vertical wall	4 420	4 800	4 430	7 230

Excluding track shoe lug

Variable Gauge Undercarriage : ZX530LCH-5A

DIMENSIONS



Unit: mm

Fixed gauge	ZX530LCH-5A		
A Distance between tumblers	4 250		
B Undercarriage length	5 330		
*1 C Counterweight clearance	1 440		
D Rear-end swing radius	3 670		
D' Rear-end length	3 660		
E Overall width upperstructure	3 480		
F Overall height of cab	3 510		
*1 G Min. ground clearance	810		
H Track gauge : Extended / Retracted	2 920 / 2 420		
I Track shoe width	600		
J Undercarriage width : Extended / Retracted	G 600 3 520 / 3 020	G 750 3 670 / 3 170	G 900 3 820 / 3 590
K Overall width	3 840		
L Overall length	12 000		
M Overall height of boom	3 490		
N Track height	1 290		

*1 Excluding track shoe lug

BUCKET AND ARM DIGGING FORCES

ZX530LCH-5A

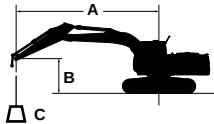
	ZX530LCH-5A			
	BE-boom 6.3 m		H-boom 7.0 m	
	BE-arm 2.5 m	BE-arm 2.9 m	BE-arm 2.9 m	H-arm 3.4 m
Bucket digging force* ISO	295 kN (30 150 kgf)	295 kN (30 150 kgf)	295 kN (30 150 kgf)	296 kN (30 260 kgf)
Bucket digging force* SAE : PCSA	266 kN (27 070 kgf)	266 kN (27 070 kgf)	266 kN (27 070 kgf)	257 kN (26 240 kgf)
Arm crowd force* ISO	302 kN (30 770 kgf)	263 kN (26 860 kgf)	263 kN (26 860 kgf)	224 kN (22 850 kgf)
Arm crowd force* SAE : PCSA	294 kN (30 050 kgf)	256 kN (26 140 kgf)	256 kN (26 140 kgf)	215 kN (21 920 kgf)

*At power boost

LIFTING CAPACITIES (Without bucket)

Variable Gauge Undercarriage : ZX530LCH-5A

- Notes: 1. Ratings are based on ISO 10567.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is the center-line of the bucket pivot mounting pin on the arm.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.



A: Load radius
B: Load point height
C: Lifting capacity

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

ZX530LCH-5A

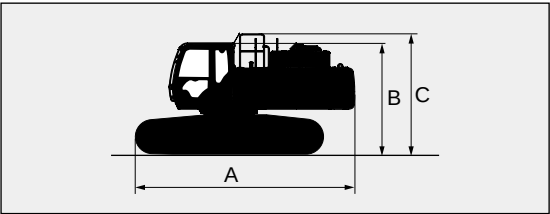
Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height m	Load radius m										At max. reach		
		3.0		4.5		6.0		7.5		9.0				
														meter
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg Shoe 600 mm	7.5							*11 650	*11 650			*8 630	*8 630	8.73
	6.0							*12 300	11 790	*11 450	8 810	*8 510	8 080	9.47
	4.5			*21 050	*21 050	*15 940	15 850	*13 380	11 370	*11 900	8 620	*8 640	7 360	9.92
	3.0			*25 030	22 630	*18 130	14 990	*14 560	10 920	*12 490	8 380	*9 010	6 990	10.14
	1.5			*17 050	*17 050	*19 720	14 320	*15 520	10 520	12 250	8 150	*9 650	6 890	10.12
	0 (Ground)			*20 710	*20 710	*20 330	13 930	15 720	10 250	12 080	7 990	10 600	7 040	9.88
	-1.5	*15 400	*15 400	*26 030	21 250	*19 930	13 790	15 590	10 130	12 020	7 940	11 350	7 520	9.39
	-3.0	*24 820	*24 820	*23 560	21 450	*18 440	13 860	*14 560	10 170			*11 900	8 510	8.61
-4.5	*24 410	*24 410	*19 540	*19 540	*15 430	14 130					*11 490	10 540	7.45	
Boom 7.0 m H Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	7.5							*12 360	11 840			*12 240	10 740	7.95
	6.0					*14 650	*14 650	*12 880	11 580			*12 080	9 050	8.75
	4.5			*22 600	*22 600	*16 670	15 510	*13 850	11 170	*12 280	8 470	12 090	8 120	9.24
	3.0					*18 670	14 650	*14 890	10 730	12 370	8 250	11 450	7 650	9.47
	1.5					*19 940	14 040	*15 680	10 360	12 150	8 050	11 320	7 520	9.46
	0 (Ground)			*22 430	21 040	*20 180	13 740	15 600	10 130	12 020	7 930	11 670	7 710	9.19
	-1.5	*18 560	*18 560	*24 750	21 140	*19 420	13 680	*15 420	10 060			12 660	8 330	8.67
	-3.0	*26 300	*26 300	*21 930	21 430	*17 520	13 830	*13 740	10 180			*12 930	9 660	7.82
-4.5			*17 360	*17 360	*13 770	*13 770					*12 370	*12 370	6.51	
Boom 6.3 m BE Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	7.5					*14 010	*14 010					*8 920	*8 920	7.24
	6.0					*14 940	*14 940	*13 610	11 680			*8 680	*8 680	8.12
	4.5			*21 370	*21 370	*16 700	15 970	*14 330	11 380			*8 810	*8 810	8.65
	3.0			*25 570	23 110	*18 670	15 170	*15 270	10 990			*9 250	8 530	8.89
	1.5			*27 760	22 000	*20 120	14 540	*16 010	10 640			*10 070	8 400	8.87
	0 (Ground)			*27 610	21 610	*20 550	14 170	15 930	10 420			*11 460	8 680	8.60
	-1.5	*27 520	*27 520	*25 810	21 620	*19 710	14 070	*15 320	10 380			*13 850	9 510	8.03
	-3.0	*28 360	*28 360	*22 280	21 920	*17 180	14 240					*13 600	11 370	7.10
Boom 6.3 m BE Arm 2.5 m BE Counterweight 9 080 kg Shoe 600 mm	7.5					*14 670	*14 670					*13 650	13 340	6.89
	6.0			*18 310	*18 310	*15 470	*15 470	*14 060	11 500			*13 250	10 760	7.80
	4.5			*22 270	*22 270	*17 140	15 710	*14 630	11 210			*13 430	9 470	8.35
	3.0					*18 970	14 920	*15 450	10 840			13 290	8 850	8.60
	1.5					*20 200	14 320	16 040	10 510			13 140	8 710	8.59
	0 (Ground)			*27 040	21 420	*20 350	14 010	15 830	10 320			13 710	9 040	8.30
	-1.5	*27 800	*27 800	*24 860	21 510	*19 200	13 980	*14 760	10 340			*14 110	10 000	7.71
	-3.0			*20 890	*20 890	*16 130	14 230					*13 590	12 210	6.73

TRANSPORTATION

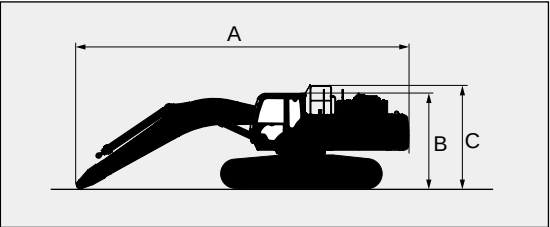
Variable Gauge Undercarriage : ZX530LCH-5A

BASIC MACHINE (WITHOUT COUNTERWEIGHT)



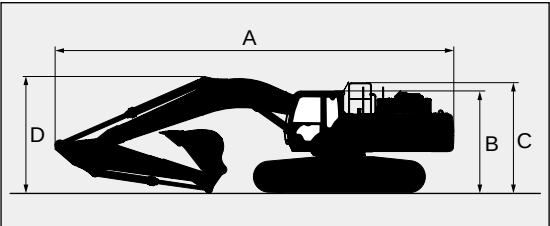
Shoe width	A	B	C	Overall width	Weight
600 mm	5 610 mm	3 510 mm	3 660 mm	3 020 mm	32 300 kg
750 mm				3 170 mm	32 600 kg
900 mm				3 590 mm	33 300 kg

BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



Boom length	Shoe width	A	B	C	Overall width	Weight
6.3 m BE	600 mm	9 150 mm	3 510 mm	3 660 mm	3 020 mm	40 200 kg
	750 mm				3 170 mm	40 400 kg
	900 mm				3 590 mm	50 100 kg
7.0 H m	600 mm	9 910 mm	3 510 mm	3 660 mm	3 020 mm	40 100 kg
	750 mm				3 170 mm	40 300 kg
	900 mm				3 590 mm	41 000 kg

BASIC MACHINE WITH FRONT AND SIDEWALK

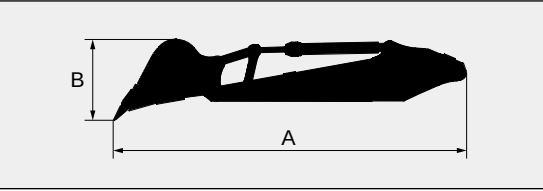


Boom length	6.3 m BE		7.0 m H	
Arm length	2.5 m BE	2.9 m BE	2.9 m BE	3.4 m H
A	11 660 mm	11 320 mm	12 100 mm	12 010 mm
B	3 510 mm			
C	3 660 mm			
D	4 100 mm	3 980 mm	3 500 mm	3 500 mm

TRANSPORTATION

Variable Gauge Undercarriage : ZX530LCH-5A

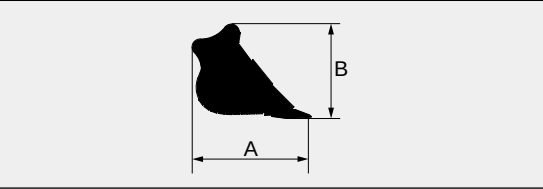
ARM AND BUCKET



ZX530LCH-5A

Arm	Bucket Capacity ISO heaped	A	B	Overall width	Weight
BE 2.5 m	2.50 m³	5 650 mm	1 470 mm	1 820 mm	5 010 kg
BE 2.9 m	2.30 m³	5 950 mm	1 460 mm	1 700 mm	4 800 kg
H 3.4 m	1.90 m³	6 440 mm	1 300 mm	1 500 mm	4 630 kg

BUCKET



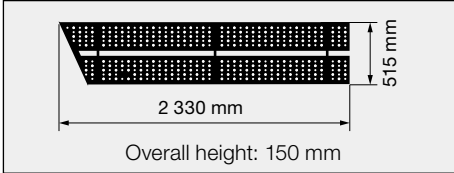
ZX530LCH-5A (Rock bucket)

Bucket capacity ISO heaped	A	B	Overall width	Weight
1.90 m³	2 030 mm	1 480 mm	1 500 mm	2 070 kg
2.10 m³	1 950 mm	1 650 mm	1 580 mm	2 170 kg
2.30 m³	1 950 mm	1 650 mm	1 700 mm	2 260 kg
2.50 m³	1 950 mm	1 650 mm	1 820 mm	2 360 kg

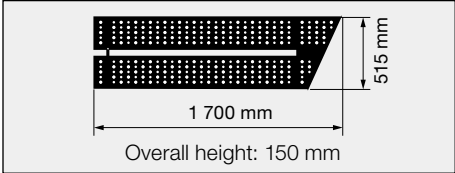
COUNTERWEIGHT 9 780 kg



LEFT FRONT SIDEWALK 48 kg



LEFT REAR SIDEWALK 34 kg



EQUIPMENT

Variable Gauge Undercarriage : ZX530LCH-5A

	ZX530LCH-5A
ENGINE	
Alternator 50 A	●
Auto idle system	●
Cartridge-type engine oil filter	●
Cartridge-type fuel filter	●
Dry-type air double filter with evacuator valve(with air filtr restriction switch for monitor)	●
Expansion tank	●
Fan guard	●
Fuel pre-filter	●
Isolation-mounted engine	●
Power mood control [H/ P (High Power) PWR(Power) ECO(Economy)]	●
Pre-cleaner	●
Radiator, oil cooler with dust protective net	●
Water separator	●

HYDRAULIC SYSTEM	
Accessories for breaker	○
Accessories for breaker & crusher	○
Accessories for 2 speed selector	○
Auto power lift	●
Boom mode selector system	●
Control valve with main relief valve	●
Drain filter	●
Engine speed sensing system	●
E-P control system	●
Extra port for control valve	●
Full-flow filter	●
Hose rupture valve	○
Pilot filter	●
Power boost	●
Quick warm-up system for pilot circuit	●
Shockless valve in pilot circuit	●
Suction filter	●
Work mode selector	●

CAB	
Additional fuse box	●
Adjustable armrests	●
All-weather sound suppressed steel cab	●
AM-FM radio	●
Ashtray	●
Auto control air conditioner	●
Auto-idle selector	●
AUX. terminal and storage	○

● : Standard equipment ○ : Optional equipment — : Not applicable

	ZX530LCH-5A
Cab : H/R cab	●
OPG top guard fitted Level II (ISO10262)	●
OPG front guard fitted Level II (ISO10262)	○
Laminated straight glass front window	●
Left side window can be opened	●
Cigarette lighter 24 V	●
Drink holder	●
Engine shut-off switch	●
Electric double horn	●
Evacuation hammer	●
Fire extinguisher bracket	○
Floor mat	●
Footrest	●
Front window washer	●
Glove compartment	●
Hot & cool box	●
Intermittent windshield wiper	●
Key cylinder light	●
LED room light with door countesy	●
Pilot control shut-off lever	●
Power outlet 12 V	○
Rear tray	●
Retractable seat belt	●
Rubber radio antenna	●
Seat : Adjustable reclining mechanical suspension	●
Seat : Adjustable reclining mechanical suspension with heater	○
Seat : Adjustable reclining air suspension with heater	○
Short wrist control levers	●
Storage box	●
Sun visor (front)	○
Sun visor (side)	○
Transparent roof with slide curtain	●
2 speaker	●
6 fluid-filled elastic mounts	●

MONITOR SYSTEM	
Alarm buzzers: overheat, engine oil pressurre	●
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, air filter restriction, work mode, etc	●
Display of meters: water temperature, hour, fuel rate, clock	●
Other displays: work mode, auto-idle, glow, operating conditions etc	●

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

Variable Gauge Undercarriage : ZX530LCH-5A

	ZX530LCH-5A
LIGHTS	
Additional working lights (boom right side)	○
2 working lights	●
2 cab lights	●
4 cab lights	○
UPPER STRUCTURE	
Auto-grease lubricator	○
Battery disconnect switch	●
Batteries 170 Ah	●
Counterweight 9 780 kg	●
Electric fuel refilling pump with auto stop	○
Electrical grease pump with hose-reel	●
Fuel level float	●
Hydraulic oil level gauge	●
Ladder	●
Rear view camera	●
Rear view mirror(right & left side)	●
Side walk (cab side)	●
Swing parking brake	●
Tool box	●
Utility space	●
4.5 mm thickness undercover	●
UNDERCARRIAGE	
Bolt-on sprocket	●
Full track guard	●
Hydraulic track adjuster	●
Reinforced track links with pin seals	●
Shoe : 600 mm double grouser	●
Shoe : 600 mm triple grouser	○
Travel motor covers	●
Travel parking brake	●
Track undercover	○
Upper and lower rollers	●
2 track guard (each side)	○

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

● : Standard equipment ○ : Optional equipment — : Not applicable

	ZX530LCH-5A
FRONT ATTACHMENTS	
Arm 2.5 m BE	○
Arm 2.9 m BE	○
Boom 7.0 m H and arm 3.4 m H	●
Boom 6.3 m BE	○
Bucket 1.9 m³ rock (ISO heaped) with dual type side shrouds	●
Centralized lubrication system	●
Damage prevention plate and square bars	●
Dirt seal on all bucket pins	●
Flanged pin	●
Monolithically cast bucket link A	●
Reinforced weld link A	○
Reinforced link B	○
MISCELLANEOUS	
Anti-slip steps and handrails	●
Lockable fuel refilling cap	●
Lockable machine covers	●
Onboard information controller	●
Standard tool kit	●
Theft deterrent system	●
Travel direction mark on track frame	●
OTHERS	
Global e-service	●



Built on the foundation of superb technological capabilities, Hitachi Construction Machinery is committed to providing leading-edge solutions and services to contribute as a reliable partner to the business of customers worldwide.

Hitachi Environmental Vision 2025

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals — prevention of global warming, conservation of resources, and preservation of ecosystem.

Reducing Environmental Impact by New ZAXIS

Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling.

*Life Cycle Assessment – ISO 14040

Before using a machine with a satellite communication system, please make sure that the satellite communication system complies with local regulations, safety standards and legal requirements. If not so, please make modifications accordingly.

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.