

WEIGHTS AND GROUND PRESSURE

Equipped with 4.60 m (15'1") boom, 2.52 m (8'3") arm and 0.50 m³ (0.65 yd³: SAE, PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	500 mm (20")	12 000 kg (26 500 lb)	37 kPa (0.38 kgf/cm ² , 5.40 psi)
	600 mm (24")	12 300 kg (27 100 lb)	32 kPa (0.33 kgf/cm ² , 4.70 psi)
	700 mm (28")	12 500 kg (27 600 lb)	28 kPa (0.29 kgf/cm ² , 4.12 psi)
Flat	510 mm (20")	12 500 kg (27 600 lb)	38 kPa (0.39 kgf/cm ² , 5.55 psi)
Triangular	700 mm (28")	12 300 kg (27 100 lb)	27 kPa (0.28 kgf/cm ² , 3.98 psi)

Weights of the basic machines [including 2 450 kg (5 400 lb), 2 630 kg (5 800 lb) H-type, 3 050 kg (6 720 lb) K-type counterweight and triple grouser shoes, excluding front-end attachment, fuel, hydraulic oil, engine oil and coolant etc.] are :

ZAXIS120..... 9 300 kg (20 500 lb) with 500 mm (20") shoes
 ZAXIS130H..... 9 660 kg (21 300 lb) with 500 mm (20") shoes
 ZAXIS130K..... 10 100 kg (22 300 lb) with 500 mm (20") shoes

ZAXIS130H (Heavy-duty version):

Equipped with 4.60 m (15'1") H-boom, 2.52 m (8'3") H-arm, and 0.50 m³ (0.65 yd³:SAE, PCSA heaped) H-bucket.

	Shoe width	Arm	Operating weight	Ground pressure
ZAXIS130H	500 mm (20")	2.52 m (8'3") H-arm	12 500 kg (27 600 lb)	39 kPa (0.40 kgf/cm ² , 5.69 psi)

ZAXIS130K (Demolition version):

Equipped with 4.60 m (15'1") K-boom, 2.52 m (8'3") K-arm, and 0.50 m³ (0.65 yd³:SAE, PCSA heaped) K-bucket.

	Shoe width	Arm	Operating weight	Ground pressure
ZAXIS130K	500 mm (20")	2.52 m (8'3") K-arm	13 000 kg (28 700 lb)	41 kPa (0.42 kgf/cm ² , 5.97 psi)

Buckets

Capacity		Width		No. of teeth	Weight	Recommendation				
SAE, PCSA heaped	CECE heaped	Without side cutters	With side cutters			ZAXIS120	ZAXIS130H	ZAXIS130K	ZAXIS120	ZAXIS130H
						2.10 m (6'11") arm	2.52 m (8'3") arm	3.01 m (9'11") arm	2.52 m (8'3") H-arm	2.52 m (8'3") K-arm
0.19 m ³ (0.25 yd ³)	0.17 m ³	450 mm (18")	550 mm (22")	3	260 kg (570 lb)	○	○	○	○	○
0.30 m ³ (0.39 yd ³)	0.25 m ³	580 mm (23")	700 mm (28")	3	290 kg (640 lb)	○	○	○	○	○
0.40 m ³ (0.52 yd ³)	0.33 m ³	680 mm (27")	800 mm (31")	4	340 kg (750 lb)	○	○	○	○	○
0.45 m ³ (0.59 yd ³)	0.40 m ³	850 mm (33")	970 mm (38")	5	400 kg (880 lb)	○	○	○	○	○
0.50 m ³ (0.65 yd ³)	0.45 m ³	890 mm (35")	1 010 mm (40")	5	410 kg (900 lb)	○	○	○*	○	○
0.59 m ³ (0.77 yd ³)	0.50 m ³	950 mm (37")	1 070 mm (42")	5	430 kg (950 lb)	○	○	-	○	○
0.66 m ³ (0.86 yd ³)	0.55 m ³	1 030 mm (45")	-	5	430 kg (950 lb)	□	-	-	-	-
1 0.750 m ³ (0.98 yd ³)	0.45 m ³	890 mm (35")	1 010 mm (40")	5	470 kg (1 040 lb)	○	○	○*	○	○
**2 0.50 m ³ (0.65 yd ³)	0.45 m ³	890 mm (35")	1 010 mm (40")	5	500 kg (1 100 lb)	○	○	○*	○	○
**3 0.50 m ³ (0.65 yd ³)	0.45 m ³	890 mm (35")	1 010 mm (40")	5	480 kg (1 060 lb)	○	○	○*	○	○
**1 0.59 m ³ (0.77 yd ³)	0.50 m ³	950 mm (37")	1 070 mm (42")	5	490 kg (1 080 lb)	○	○	-	○	○
V-type bucket: 0.35 m ³ (0.46 yd ³ : CECE heaped)				3	370 kg (820 lb)	○	○	○	○	-
One-point ripper				1	320 kg (710 lb)	●	●	-	●	●
Clamshell bucket: 0.30 m ³ (0.39 yd ³ : CECE heaped), Width 560 mm (22")				6	690 kg (1 520 lb)	○	○	-	○	○
Slope-finishing blade: Width 1 000 mm (39"), length 1 600 mm (63")				4	430 kg (950 lb)	◇	◇	◇	◇	-

* With 700 mm (28") shoes only
 *1 K-bucket
 *2 Level-pin-type reinforced bucket
 *3 H-bucket

○ Suitable for materials with density of 1 800 kg/m³ (3 030 lb/yd³) or less
 ○ Suitable for materials with density of 1 600 kg/m³ (2 700 lb/yd³) or less
 □ Suitable for materials with density of 1 100 kg/m³ (1 850 lb/yd³) or less
 ● Heavy-duty service
 ◇ Slope-finishing service
 - Not applicable

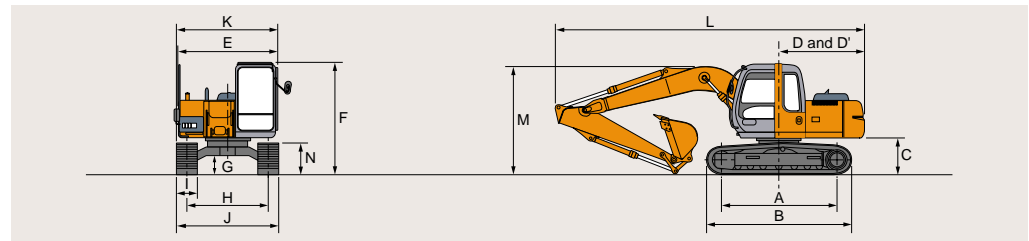
SERVICE REFILL CAPACITIES

	liters	US gal	Imp gal
Fuel tank	250.0	66.1	55.0
Engine coolant	19.0	5.0	4.2
Engine oil	15.8	4.2	3.5
Swing mechanism	3.2	0.8	0.7
Travel final device (each side)	4.0	1.1	0.9
Hydraulic system	130.0	34.3	28.6
Hydraulic tank	69.0	18.2	15.2

BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. 4.60 m (15'1") boom, and 2.10 m (6'11"), 2.52 m (8'3") and 3.01 m (9'11")* arms are available. Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

DIMENSIONS



Unit: mm (ft in)

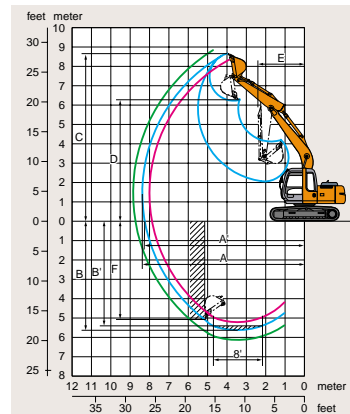
ZAXIS120 / ZAXIS130H / ZAXIS130K				
A Distance between tumbles	2 880 (9'5")			
B Undercarriage length	3 580 (11'9")			
*C Counterweight clearance	890 (2'11")			
D Rear-end swing radius	2 130 (7'0")			
D' Rear-end length	2 130 (7'0")			
E Overall width of upperstructure	2 460 (8'1")			
F Overall height of cab	2 740 (9'0")/2 740 (9'0")/2 870 (9'5")			
*G Min. ground clearance	440 (1'5")			
H Track gauge	1 990 (6'6")			
I Track shoe width	G 500 (20")	G 600 (24")	G 700 (28")	F 510 (20")
J Undercarriage width	2 490 (8'2")	2 590 (8'6")	2 690 (8'10")	2 500 (8'2")
K Overall width	2 500 (8'2")	2 590 (8'6")	2 690 (8'10")	2 500 (8'2")
L Overall length				
With 2.10 m (6'11") arm	7 610 (25'0") / - / -			
With 2.52 m (8'3") arm	7 610 (25'0") / **7 610 (25'0") / ***7 610 (25'0")			
With 3.01 m (9'11") arm	7 620 (25'0") / - / -			
M Overall height of boom				
With 2.10 m (6'11") arm	2 580 (8'6") / - / -			
With 2.52 m (8'3") arm	2 680 (8'10") / **2 680 (8'10") / ***2 680 (8'10")			
With 3.01 m (9'11") arm	***2 680 (8'10") / - / -			
N Track height	790 (2'7")			
With triple grouser shoes				

* Excluding track shoe lug
 ** Equipped with H-front

** Equipped with K-front
 *** The dimension is shown in the transportation hole position of the arm

G : Triple grouser shoe
 F : Flat shoe

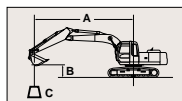
WORKING RANGES



Unit: mm (ft in)

Arm length	ZAXIS120			ZAXIS130H*	ZAXIS130K**
	2.10 m (6'11") arm	2.52 m (8'3") arm	3.01 m (9'11") arm	2.52 m (8'3") H-arm	2.52 m (8'3") K-arm
A Max. digging reach	7 900 (25'11")	8 270 (27'2")	8 740 (28'8")	8 270 (27'2")	8 270 (27'2")
A' Max. digging reach (on ground)	7 770 (25'6")	8 140 (26'8")	8 620 (28'3")	8 140 (26'8")	8 140 (26'8")
B Max. digging depth	5 150 (16'11")	5 570 (18'3")	6 060 (19'11")	5 570 (18'3")	5 570 (18'3")
B' Max. digging depth (8' level)	4 910 (16'1")	5 350 (17'7")	5 870 (19'3")	5 360 (17'7")	5 360 (17'7")
C Max. cutting height	8 370 (27'6")	8 570 (28'1")	8 900 (29'2")	8 550 (28'1")	8 550 (28'1")
D Max. dumping height	5 960 (19'7")	6 160 (20'3")	6 490 (21'4")	6 140 (20'2")	6 140 (20'2")
E Min. swing radius	2 310 (7'7")	2 340 (7'8")	2 590 (8'6")	2 330 (7'8")	2 330 (7'8")
F Max. vertical wall	4 650 (15'3")	5 020 (16'6")	5 500 (18'0")	5 010 (16'5")	5 010 (16'5")
Bucket digging force	99 kN (10 100 kgf, 22 300 lbf)				
	SAE : PCSA 86 kN (8 800 kgf, 19 400 lbf)				
Arm crowd force	ISO 73 kN (7 500 kgf, 16 500 lbf)				
	SAE : PCSA 71 kN (7 200 kgf, 15 900 lbf)				
		65 kN (6 600 kgf, 14 600 lbf)	58 kN (5 900 kgf, 13 000 lbf)	65 kN (6 600 kgf, 14 600 lbf)	65 kN (6 600 kgf, 14 600 lbf)
		63 kN (6 400 kgf, 14 100 lbf)	57 kN (5 800 kgf, 12 800 lbf)	63 kN (6 400 kgf, 14 100 lbf)	63 kN (6 400 kgf, 14 100 lbf)

Excluding track shoe lug
 * Equipped with H-front
 ** Equipped with K-front



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

METRIC MEASURE

ZAXIS120

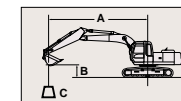
Rating over-side or 360 degrees Rating over-front Unit: 1 000 kg

Conditions	Load point height	Load radius										At max. reach				
		2 m		3 m		4 m		5 m		6 m		7 m		meter	meter	meter
Boom 4.60 m Arm 2.10 m	6 m							*2.28	*2.28					*1.71	*1.71	6.09
	5 m							2.67	*2.96					1.53	*1.63	6.77
	4 m							3.27	*3.27	2.62	*3.10	1.88	2.81	1.33	*1.60	7.22
	3 m			*5.15	*5.15	3.67	*4.02	2.53	*3.48	1.84	2.77			1.21	*1.62	7.49
Bucket SAE, PCSA : 0.59 m ³ CECE : 0.50 m ³	2 m					3.43	*4.97	2.41	3.66	1.78	2.70	1.34	2.06	1.16	*1.67	7.59
	1 m					3.22	5.08	2.30	3.53	1.71	2.63	1.31	2.03	1.15	*1.76	7.54
Shoe 500 mm	0 (Ground)					3.10	4.94	2.21	3.44	1.66	2.57	1.28	2.01	1.19	1.87	7.33
	-1 m			4.91	*5.91	3.06	4.89	2.16	3.39	1.63	2.54			1.30	2.04	6.95
	-2 m	*5.64	*5.64	4.94	*7.56	3.06	4.89	2.16	3.38	1.63	2.54			1.53	2.37	6.35
	-3 m	*7.08	*7.08	5.02	*6.64	3.10	4.94	2.19	3.41					1.99	*2.87	5.46
	-4 m			*5.14	*5.14	3.20	*4.07									

Conditions	Load point height	Load radius										At max. reach				
		2 m		3 m		4 m		5 m		6 m		7 m		meter	meter	meter
Boom 4.60 m Arm 2.52 m	6 m							*2.62	*2.62					*1.44	*1.44	6.55
	5 m							*2.58	*2.58	1.91	*2.28			1.37	*1.38	7.18
	4 m							2.66	*2.77	1.90	*2.75			1.20	*1.37	7.60
	3 m			*4.13	*4.13	*3.55	*3.55	2.56	*3.16	1.85	2.78	1.37	2.10	1.09	*1.38	7.85
Bucket SAE, PCSA : 0.50 m ³ CECE : 0.45 m ³	2 m			5.51	*6.36	3.49	*4.52	2.43	*3.68	1.78	2.71	1.33	2.07	1.04	*1.43	7.95
	1 m					3.26	5.13	2.30	3.55	1.71	2.63	1.30	2.02	1.03	*1.52	7.90
Shoe 500 mm	0 (Ground)			*4.20	*4.20	3.10	4.95	2.20	3.43	1.64	2.56	1.26	1.99	1.07	*1.65	7.71
	-1 m			4.83	*6.28	3.03	4.86	2.14	3.36	1.60	2.51	1.24	1.97	1.15	1.83	7.35
	-2 m	*5.47	*5.47	4.85	*7.96	3.01	4.84	2.11	3.34	1.59	2.50			1.33	2.09	6.79
	-3 m	*7.80	*7.80	4.91	*7.18	3.03	4.87	2.13	3.35							
	-4 m			5.03	*5.92	3.11	*4.65	2.20	3.43							

Conditions	Load point height	Load radius										At max. reach				
		2 m		3 m		4 m		5 m		6 m		7 m		meter	meter	meter
Boom 4.60 m Arm 3.01 m	6 m							*2.22	*2.22	*1.78	*1.78			*1.27	*1.27	7.13
	5 m									1.96	*2.35			1.19	*1.21	7.71
	4 m									2.38	*2.38	1.94	*2.42	1.41	2.08	8.10
	3 m					*2.94	*2.94	2.61	*2.78	1.88	*2.65	1.38	2.12	0.96	*1.21	8.33
Bucket SAE, PCSA : 0.40 m ³ CECE : 0.33 m ³	2 m			*5.25	*5.25	3.59	*3.96	2.47	*3.33	1.80	2.73	1.34	2.08	0.92	*1.26	8.42
	1 m					3.33	*4.96	2.33	3.58	1.71	2.64	1.29	2.02	0.90	*1.32	8.38
Shoe 500 mm	0 (Ground)			4.90	*5.33	3.13	4.98	2.21	3.45	1.64	2.56	1.25	1.98	0.93	*1.43	8.19
	-1 m			4.79	*6.24	3.01	4.85	2.12	3.35	1.58	2.50	1.21	1.94	1.00	*1.59	7.86
	-2 m	*4.80	*4.80	4.77	8.20	2.96	4.79	2.08	3.30	1.55	2.46	1.20	1.93	1.13	1.81	7.35
	-3 m	*7.29	*7.29	4.81	*7.68	2.97	4.80	2.07	3.30	1.55	2.47			1.37	2.16	6.62
	-4 m	*8.03	*8.03	4.90	*6.66	3.02	4.86	2.11	3.34					1.88	*2.60	5.56

Notes: 1. Ratings are based on SAE J1097.
2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm level ground, or 87% full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. *Indicates load limited by hydraulic capacity.



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

METRIC MEASURE

ZAXIS130H

Rating over-side or 360 degrees Rating over-front Unit: 1 000 kg

Conditions	Load point height	Load radius										At max. reach											
		2 m		3 m		4 m		5 m		6 m		7 m		meter	meter	meter							
H-boom 4.60 m H-arm 2.52 m H-bucket SAE, PCSA : 0.50 m ³ CECE : 0.45 m ³	6 m													*2.54	*2.54			*1.37	*1.37	6.55			
	5 m														*2.49	*2.49	1.94	*2.20			*1.31	*1.31	7.18
	4 m														*2.68	*2.68	1.93	*2.66			1.20	*1.29	7.60
	3 m					*4.07	*4.07	*3.46	*3.46	2.61	*3.07	1.87	2.84	1.37	2.13	1.09	*1.31	7.85					
Bucket SAE, PCSA : 0.50 m ³ CECE : 0.45 m ³	2 m			5.70	*6.26	3.59	*4.42	2.48	*3.59	1.80	2.76	1.34	2.09	1.04	*1.36	7.95							
	1 m					3.35	5.27	2.35	3.63	1.73	2.68	1.30	2.05	1.03	*1.44	7.90							
Shoe 500 mm	0 (Ground)					*4.10	*4.10	3.19	5.09	2.25	3.52	1.66	2.61	1.26	2.01	1.06	*1.57	7.71					
	-1 m			5.00	*6.17	3.11	5.00	2.18	3.44	1.62	2.56	1.24	1.99	1.15	*1.77	7.35							
	-2 m	*5.37	*5.37	5.02	*7.85	3.09	4.98	2.16	3.42	1.60	2.54			1.34	*2.08	6.79							
	-3 m	*7.78	*7.78	5.08	*7.07	3.12	5.00	2.17	3.43														
	-4 m			5.20	*5.81	3.19	*4.54	2.24	*3.41														

ZAXIS130K

Conditions	Load point height	Load radius										At max. reach											
		2 m		3 m		4 m		5 m		6 m		7 m		meter	meter	meter							
K-boom 4.60 m K-arm 2.52 m K-bucket SAE, PCSA : 0.50 m ³ CECE : 0.45 m ³	6 m													*2.54	*2.54			*1.36	*1.36	6.55			
	5 m														*2.48	*2.48	2.15	*2.19			*1.30	*1.30	7.18
	4 m														*2.67	*2.67	2.14	*2.65			*1.28	*1.28	7.60
	3 m					*4.06	*3.45	*3.45	*3.45	2.88	*3.06	2.09	*2.84	1.55	2.17	1.24	*1.30	7.85					
Bucket SAE, PCSA : 0.50 m ³ CECE : 0.45 m ³	2 m							3.95	*4.41	2.75	*3.57	2.01	3.02	1.51	2.31	1.18	*1.35	7.95					
	1 m							3.71	*5.31	2.62	3.97	1.94	2.94	1.47	2.26	1.17	*1.43	7.90					
Shoe 500 mm	0 (Ground)					*4.08	*4.08	3.55	5.57	2.51	3.86	1.87	2.87	1.43	2.23	1.21	*1.56	7.71					
	-1 m			5.55	*6.15	3.47	5.48	2.45	3.79	1.83	2.82	1.41	2.20	1.32	*1.76	7.35							
	-2 m	*5.38	*5.38	5.57	*7.83	3.45	5.45	2.42	3.76	1.81	2.81			1.51	*2.08	6.79							
	-3 m	*7.90	*7.90	5.63	*7.05	3.47	*5.45	2.43	3.77	1.84	2.83			1.90	*2.62	5.98							
	-4 m			5.75	*5.79	3.55	*4.53	2.50	*3.39														

Notes: 1. Ratings are based on SAE J1097.
2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm level ground, or 87% full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. *Indicates load limited by hydraulic capacity.



STANDARD EQUIPMENT

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

ENGINE

- H/P mode control
- E mode control
- 50 A alternator
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Radiator and oil cooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system
- Auto acceleration system

HYDRAULIC SYSTEM

- Work mode selector
- Engine speed sensing system
- E-P control system
- Quick warm-up system for pilot circuit
- Shockless valve in pilot circuit
- Boom-arm anti-drift valve
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter

CAB

CRES (Center pillar Reinforced Structure) cab

- OPG top guard fitted level I (ISO) compliant cab
- All-weather sound-suppressed steel cab
- Equipped with reinforced, tinted glass windows
- 4 fluid-filled elastic mounts
- Openable windows-upper and lower front, and lower left side

- Intermittent windshield retractable wipers
- Front window washer
- Adjustable reclining seat with adjustable armrests
- Footrest
- Electric double horn
- AM - FM radio with digital clock
- Auto-idle / acceleration selector
- Seat belt
- Drink holder
- Cigar lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Heater
- Pilot control shut-off lever
- Engine stop knob.

MONITOR SYSTEM

- Meters: Hourmeter and trip-meter, engine coolant temperature gauge and fuel gauge.
- Warning lamps: Alternator charge, air filter restriction and minimum fuel level.
- Pilot lamps: Engine preheat, work light, auto-idle, auto-acceleration, digging mode and attachment mode
- Alarm buzzers: Engine oil pressure and engine overheat

LIGHTS

- 2 working lights

UPPERSTRUCTURE

- Undercover
- 2 450 kg (5 400 lb) counterweight
- Fuel level float
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rearview mirror (right & left side)
- Swing parking brake

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Track guards and hydraulic track adjuster
- Bolt-on sprocket
- Upper rollers and lower rollers
- Reinforced track links with pin seals
- 500 mm (20") triple grouser shoes

FRONT ATTACHMENTS

- HN bushing
- WC thermal spraying
- Reinforced resin thrust plate
- Flanged pin
- Bucket clearance adjust mechanism
- Monolithically cast bucket link A
- Centralized lubrication system
- Dirt seal on all bucket pins
- 2.52 m (8'3") arm
- 0.50 m³ (0.65 yd³ : SAE, PCSA heaped) bucket

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel filling cap
- Skid-resistant tapes, plates and handrails.
- Travel direction mark on track frame

ZAXIS130H (Heavy-duty version)

- H-boom 4.60 m (15'1") and H-arm 2.52 m (8'3")
- Damage prevention plate
- 0.50 m³ (0.65 yd³ : SAE, PCSA heaped) H-reinforced bucket
- Reinforced link B
- Front glass lower guard
- 4.5 mm (0.18") thickness undercover
- 2 630 kg (5 800 lb) heavier counterweight
- Reinforced track guard (1 unit each side)
- Reinforced side steps (bolt mounted)
- Air cleaner double filters

ZAXIS130K (Demolition version)

- K-cab (CRES cab with overhead window and guard)
- K-boom 4.60 m (15'1") and K-arm 2.52 m (8'3")
- 0.50 m³ (0.65 yd³ : SAE, PCSA heaped) K-reinforced bucket
- Reinforced link B for demolition
- Front glass lower guard
- Attachment basic piping
- Damage prevention plate
- 6.0 mm (0.24") thickness undercover
- Track undercover
- Reinforced side step (bolt mounted)
- 3 050 kg (6 720 lb) heavier counterweight
- High-performance full-flow filter (with restriction indicator)
- Air cleaner double filters



OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

- Auto control air conditioner
- Suspension seat
- Hose rupture valves
- Electric fuel refilling pump
- Swing motion alarm device with lamps
- Travel motion alarm device
- Additional pump
- Auto-lubrication system
- Pre-cleaner
- Fuel double filters
- Tropical cover
- Large-capacity battery
- Attachment basic piping
- Accessories for breaker
- Accessories for breaker & crusher
- Accessories for 2 speed selector
- Small swing radius bracket (only ZAXIS130K)
- 200 kg (440 lb) added heavier counterweight
- Front glass lower guard
- Front glass upper guard
- K-cab (CRES cab with overhead window and guard)
- Track guard

Comparative information based on current Japan domestic model.

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, go through Operators Manual for proper operation.