

PRODUCTION-CLASS EXCAVATORS

ZAXIS

DASH-6

ZX670LC-6
ZX870LC-6



HITACHI

PROVEN PERFORMANCE PASSED DOWN.

PRODUCTIVITY-BOOSTING ADVANTAGES.

At Hitachi, efficiency, reliability and durability are in our genes – built into our large mining excavators and passed down to our line of construction excavators. So you get maximum performance, no matter which Hitachi excavator you're running. And the ZX670LC-6 and ZX870LC-6, our largest production-class excavators, are no exceptions.

These models feature a fuel-efficient EPA Final Tier 4 (FT4)/EU Stage IV Isuzu engine that meets rigid emission standards. The best part? No diesel particulate filter (DPF) is needed. You also get generous swing torque, digging force and lift capacity. Convenient machine access with steps and upperstructure walkways. Easy-to-operate controls for smooth and responsive hydraulics. Highly efficient cooling system. And simplified maintenance with features like a battery disconnect switch and engine and hydraulic oil sample ports. Add it all up, and the ZX670LC-6 and ZX870LC-6 are...

POWERFUL WORKHORSES.



PERFORMANCE

PRODUCTIVITY



MORE WORK DONE, MORE EFFICIENTLY.

RELIABLE PERFORMANCE.

The ZX670LC-6 and ZX870LC-6 take productivity to a higher level. Our HIOS III hydraulic system perfectly balances engine performance with hydraulic flow. The hydraulic boost system and enhanced boom recirculation generate aggressive boom and arm speed – returning the arm to dig faster, so you can move more dirt in a day.

Three modes provide efficient power to fit the task. High Productivity (H/P) delivers more power and faster hydraulic response. Power (PWR) delivers a balance of power and speed, plus fuel economy for normal operation. Economy (ECO) maximizes fuel efficiency while delivering an enhanced level of productivity.

Need extra stability or lift capacity? Choose from a wide variety of track widths, arm lengths, boom lengths and bucket sizes.

With the ZX670LC-6 and ZX870LC-6, you get...

PRODUCTIVITY ON A HIGHER LEVEL.

- It's not always about brute force. Unmatched metering and smooth multifunction operation provide finesse and precision.
- Stay on schedule with generous swing torque, digging force and lift capacity.
- An added coolant expansion tank provides make-up fluid when needed and improves cooling system efficiency, keeping the engine at peak performance.
- Muscle through tough digging by pressing the power-boost button.

MAXIMUM COMFORT.
MAXIMUM PRODUCTIVITY.

COMFORTABLE AND SAFE CAB.

It's true – a more comfortable operator is more productive and efficient. And the ZX670LC-6 and ZX870LC-6 keep operators focused on the job. Silicone-filled cab mounts provide isolation from noise and vibration. An LCD monitor provides access to a wealth of performance information and functions. Operators will also appreciate the wide entryway, fully adjustable high-back sculpted seat, storage space and generous legroom. Unsurpassed visibility, ergonomically placed low-effort joysticks, a highly efficient HVAC system, plus other features contribute to...

COMFORTABLE PRODUCTIVITY.



Multi-language LCD monitor and rotary dial provide easy access to machine info and functions. Turn and tap to select work modes, monitor maintenance intervals, check diagnostic codes and set cab temperature. Control oil flow and toggle between dig and thumb modes with a programmable thumb attachment mode.



Ergonomically correct short-throw pilot levers provide smooth, precise control with less effort.



Get unobstructed all-around visibility thanks to a wide expanse of front, side and overhead glass and mirrors.



Cab-mounted lights, two boom-mounted lights and a rearview camera provide excellent job site visibility, regardless of when or where you work.

The ZX670LC-6 and ZX870LC-6 are standard equipped with five years of ZXLink™ Ultimate, which gives you 24/7 online access to machine locations, health, utilization, fuel consumption and other valuable information.

Automatic, high-velocity bi-level climate-control system with automotive-style adjustable louvers helps keep the glass clear, the cab comfortable and the operator productive.

Operators get maximum support from a heated, air suspension high-back seat.



EFFICIENT

LESS MAINTENANCE TIME. MORE UPTIME.

SIMPLE SERVICING.

The ZX670LC-6 and ZX870LC-6 are equipped with time-saving and productivity-boosting advantages — from grouped service points to at-a-glance gauges. You get convenient machine access with steps, handrails and walkways. Extended service intervals lower daily operating costs. Scheduled maintenance is easy to track using ZXLink™ and the in-cab diagnostic monitor. These models work hard so you have...

LOWER OPERATING COSTS.

■ Step positioning on the track frame and walkways on the upperstructure allow for easy access around the machine while maintaining appropriate points of contact.

■ Auto-idle, which reduces engine speed when hydraulics aren't in use, and auto-shutdown contribute to fuel efficiency.

■ A battery disconnect switch, located in the battery box on the right side of the machine, is easily accessible and extends battery life.

■ The FT4 engine solution does not require a diesel particulate filter (DPF), saving service time and lowering operating costs. Fluid consumption (fuel and diesel exhaust fluid [DEF]) is equal or reduced compared to ZX670LC-5 or ZX870LC-5 (Interim Tier 4/EU Stage IIIB) consumption.



■ Easy-to-navigate LCD monitor tracks various fluid levels and issues, scheduled maintenance alerts and diagnostic information.



■ Centralized lube banks place zerks within easy reach, making greasing less messy and time-consuming.



■ Easily installed spin-on main fuel filters help prevent contamination when servicing. Two additional water separators help extend fuel filter life.



■ A reversing fan back-blows cooler cores to reduce debris buildup and increase uptime.

DURABILITY BUILT-IN, DOWNTIME TOSSED OUT.

TACKLE TOUGH JOBS.

Toughness is built into the ZX670LC-6 and ZX870LC-6 with a heavy-duty undercarriage and durable D-channel mainframe. Added strength comes from welded bulkheads within the boom that resist torsional stress.

The boom, arm and mainframe are so tough, they're warranted for three years or 10,000 hours, whichever comes first. Add it all up, and these models give you...

DEPENDABLE DURABILITY.

■ Our FT4 field-proven technology is simple and efficient, employing cooled exhaust gas recirculation (EGR), a diesel oxidation catalyst (DOC) and selective catalytic reduction (SCR). An improved piston design allows particulate matter to be burned in cylinder, so there's no need for a DPF.

■ With large idlers, rollers and strutted track links, the sealed and lubricated undercarriage is built for the long haul.

■ Swing-out coolers, protected behind heavy-duty hinged doors, are easy to access and clean.

■ Thick-plate single-sheet mainframe, box-section track frames and industry exclusive double-seal swing bearings deliver rock-solid durability.

■ Engine and hydraulic oil sample ports allow for quick and convenient, proactive maintenance checks, which keep you running longer.



DURABILITY

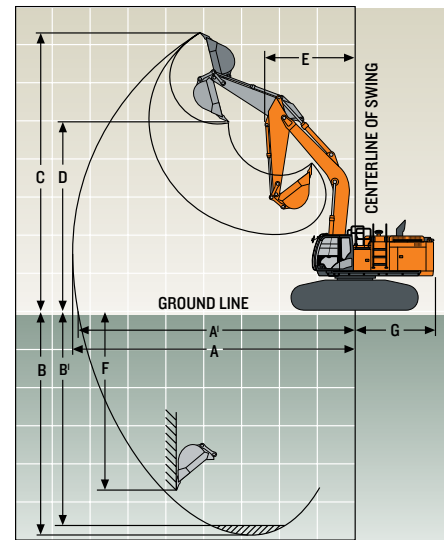
ZX670LC-6

Engine			
ZX670LC-6			
Manufacturer and Model	Isuzu 6WGI-FT4		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		
Net Rated Power (ISO 9249)	345 kW (463 hp) @ 1,800 rpm		
Cylinders	6		
Displacement	15.68 L (957 cu. in.)		
Off-Level Capacity	70% (35 deg.)		
Aspiration	Turbocharged, air-to-air charge-air cooler		
Cooling			
2 cool-on-demand hydraulic-driven, suction-type fans with remote-mounted drives			
Powertrain			
2-speed propel			
Maximum Travel Speed			
Low	3.6 km/h (2.2 mph)		
High	5.2 km/h (3.2 mph)		
Drawbar Pull	46 115 kg (101,666 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps			
2 variable-displacement pumps			
Maximum Rated Flow	489 L/m (129 gpm) x 2		
Pilot Pump			
One gear			
Maximum Rated Flow	30 L/m (7.9 gpm)		
Pressure Setting	3900 kPa (566 psi)		
System Operating Pressure			
Circuits			
Implement	31 900 kPa (4,627 psi)		
Travel	34 300 kPa (4,975 psi)		
Swing	29 400 kPa (4,264 psi)		
Power Boost	34 300 kPa (4,975 psi)		
Controls			
Pilot levers, short-stroke, low-effort hydraulic pilot controls with shutoff lever			
Cylinders			
Heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins			
	Bore	Rod Diameter	Stroke
Boom (2)	191 mm (7.5 in.)	130 mm (5.1 in.)	1806 mm (71 in.)
Arm (1)	201 mm (7.9 in.)	140 mm (5.5 in.)	2164 mm (85 in.)
Bucket (1)	180 mm (7.1 in.)	130 mm (5.1 in.)	1555 mm (61 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	500 CCA		
Alternator Rating	50 amp		
Work Lights	5 halogen (1 mounted on frame, 2 mounted on boom and 2 mounted on top of cab)		
Undercarriage			
Rollers (each side)			
Carrier	3		
Track	8		
Double-Bar Grouser Shoes (each side)	47		
Track			
Adjustment	Hydraulic		
Guides	Front and center		
Chain	Sealed and lubricated		
Planetary Final Drives with Axial Piston Motors			

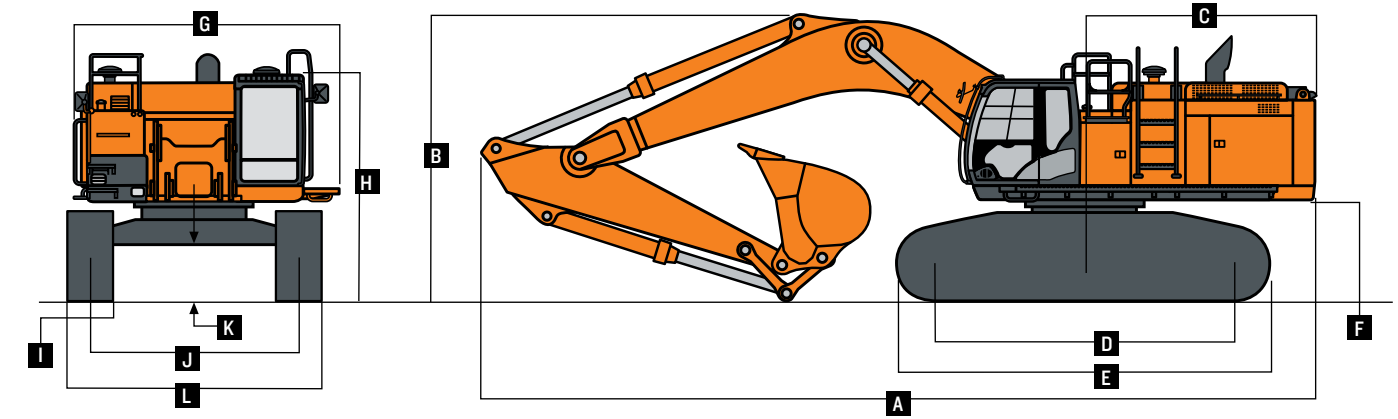
Ground Pressure		ZX670LC-6
650-mm (26 in.) Double-Bar Grouser Shoes	104.2 kPa (15.1 psi)	
750-mm (30 in.) Double-Bar Grouser Shoes	90.3 kPa (13.1 psi)	
900-mm (36 in.) Double-Bar Grouser Shoes	75.3 kPa (10.9 psi)	
Swing Mechanism		
Swing Speed	9.1 rpm	
Swing Torque	206 000 Nm (151,938 lb.-ft.)	
Serviceability		
Refill Capacities		
Fuel Tank	900 L (238 gal.)	
Diesel Exhaust Fluid (DEF) Tank	95 L (25.1 gal.)	
Cooling System	76 L (20.1 gal.)	
Engine Oil with Filter	57 L (15.1 gal.)	
Hydraulic Tank	380 L (100.4 gal.)	
Hydraulic System	750 L (198.1 gal.)	
Gearbox		
Swing (each)	10.5 L (11.1 qt.)	
Travel (each)	16 L (16.9 qt.)	
Pump Drive	6.2 L (6.6 qt.)	
Operating Weights		
With full fuel tank; 79-kg (175 lb.) operator; 3.09-m ³ (4.04 cu. yd.), 1370-mm (54 in.), 3126-kg (6,892 lb.) bucket; 4.2-m (13 ft. 9 in.) arm; 9800-kg (21,605 lb.) counterweight; counterweight removal device; and 900-mm (36 in.) double-bar grouser shoes		
SAE Operating Weight	69 900 kg (154,103 lb.)	
Components		
Undercarriage w/ Double-Bar Grouser Shoes		
650 mm (26 in.)	26 953 kg (59,421 lb.)	
750 mm (30 in.)	27 333 kg (60,259 lb.)	
900 mm (36 in.)	28 353 kg (62,508 lb.)	
One-Piece Boom (with arm cylinder)		
7.8 m (25 ft. 7 in.)	6560 kg (14,462 lb.)	
6.8-m (22 ft. 4 in.) Mass Excavating	6130 kg (13,514 lb.)	
Arm with Bucket Cylinder and Linkage		
3.6 m (11 ft. 10 in.)	3640 kg (8,025 lb.)	
4.2 m (13 ft. 9 in.)	3840 kg (8,466 lb.)	
5.3 m (17 ft. 5 in.)	3620 kg (7,981 lb.)	
2.9-m (9 ft. 6 in.) Mass Excavating	3715 kg (8,190 lb.)	
Boom-Lift Cylinders (2), Total Weight	1135 kg (2,502 lb.)	
Counterweight with Standard Mainframe	10 400 kg (22,928 lb.)	

ZX670LC-6

Operating Dimensions	ZX670LC-6			
Arm Length	3.6 m (11 ft. 10 in.) w/ 7.8-m (25 ft. 7 in.) Boom	4.2 m (13 ft. 9 in.) w/ 7.8-m (25 ft. 7 in.) Boom	5.3 m (17 ft. 5 in.) w/ 7.8-m (25 ft. 7 in.) Boom	2.9-m (9 ft. 6 in.) Mass Excavating w/ 6.8-m (22 ft. 4 in.) Mass-Excavating Boom
Arm Digging Force				
SAE	247 kN (55,528 lb.)	224 kN (50,357 lb.)	192 kN (43,163 lb.)	297 kN (66,768 lb.)
ISO	255 kN (57,326 lb.)	231 kN (51,931 lb.)	196 kN (44,063 lb.)	306 kN (68,792 lb.)
Bucket Digging Force				
SAE	290 kN (65,195 lb.)	290 kN (65,195 lb.)	245 kN (55,078 lb.)	332 kN (74,637 lb.)
ISO	324 kN (72,838 lb.)	324 kN (72,838 lb.)	277 kN (62,272 lb.)	369 kN (82,954 lb.)
A Maximum Reach	13.25 m (43 ft. 6 in.)	13.85 m (45 ft. 5 in.)	14.74 m (48 ft. 4 in.)	11.81 m (38 ft. 9 in.)
A' Maximum Reach at Ground Level	13 m (42 ft. 8 in.)	13.61 m (44 ft. 8 in.)	14.51 m (47 ft. 7 in.)	11.50 m (37 ft. 9 in.)
B Maximum Digging Depth	8.53 m (28 ft.)	9.15 m (30 ft.)	10.03 m (32 ft. 11 in.)	7.12 m (23 ft. 4 in.)
B' Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	8.40 m (27 ft. 7 in.)	9.03 m (29 ft. 8 in.)	9.92 m (32 ft. 7 in.)	6.97 m (22 ft. 10 in.)
C Maximum Cutting Height	11.92 m (39 ft. 1 in.)	12.24 m (40 ft. 2 in.)	12.65 m (41 ft. 6 in.)	11.92 m (39 ft. 1 in.)
D Maximum Dumping Height	8.05 m (26 ft. 5 in.)	8.33 m (27 ft. 4 in.)	9.17 m (30 ft. 1 in.)	7.33 m (24 ft. 1 in.)
E Minimum Swing Radius	5.78 m (19 ft.)	5.76 m (18 ft. 11 in.)	5.70 m (18 ft. 8 in.)	5.24 m (17 ft. 2 in.)
F Maximum Vertical Wall	7.38 m (24 ft. 3 in.)	8.18 m (26 ft. 10 in.)	9.17 m (30 ft. 1 in.)	5.28 m (17 ft. 4 in.)
G Tail Swing Radius	4.02 m (13 ft. 2 in.)	4.02 m (13 ft. 2 in.)	4.02 m (13 ft. 2 in.)	4.02 m (13 ft. 2 in.)



Machine Dimensions	ZX670LC-6	
A Overall Length w/ Arm	3.6 m (11 ft. 10 in.)	13.40 m (44 ft.)
	4.2 m (13 ft. 9 in.)	13.40 m (44 ft.)
	5.3 m (17 ft. 5 in.)	13.25 m (43 ft. 6 in.)
2.9-m (9 ft. 6 in.) Mass Excavating with Mass-Excavating Boom		12.42 m (40 ft. 9 in.)
B Overall Height w/ Arm	3.6 m (11 ft. 10 in.)	4.46 m (14 ft. 8 in.)
	4.2 m (13 ft. 9 in.)	4.98 m (16 ft. 4 in.)
	5.3 m (17 ft. 5 in.)	5.28 m (17 ft. 4 in.)
2.9-m (9 ft. 6 in.) Mass Excavating with Mass-Excavating Boom		4.96 m (16 ft. 3 in.)
C Rear-End Length		3.91 m (12 ft. 10 in.)
D Distance Between Idler/Sprocket Centerline		4.59 m (15 ft. 1 in.)
E Undercarriage Length		5.84 m (19 ft. 2 in.)
F Counterweight Clearance		1.53 m (5 ft.)
G Upperstructure Width		4.09 m (13 ft. 5 in.)
H Cab Height		3.55 m (11 ft. 8 in.)
I Track Width w/ Double-Bar Grouser Shoes		650 mm (26 in.) / 750 mm (30 in.) / 900 mm (36 in.)
J Gauge Width w/900-mm (36 in.) Double-Bar Grouser Shoes		
Operating Position		3.30 m (10 ft. 10 in.)
Transport Position		2.82 m (9 ft. 3 in.)
K Ground Clearance		0.86 m (34 in.)
L Overall Width w/ 900-mm (36 in.) Double-Bar Grouser Shoes		
Operating Position		4.20 m (13 ft. 9 in.)
Transport Position		3.73 m (12 ft. 3 in.)



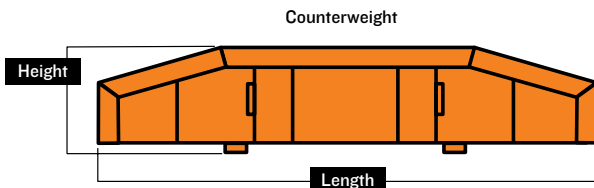
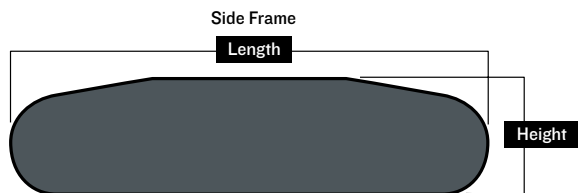
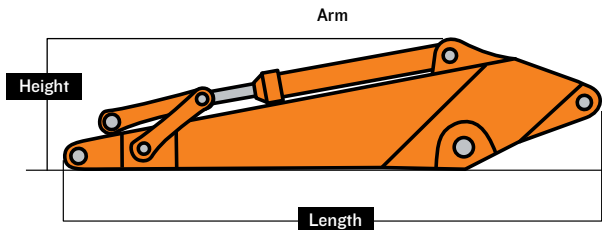
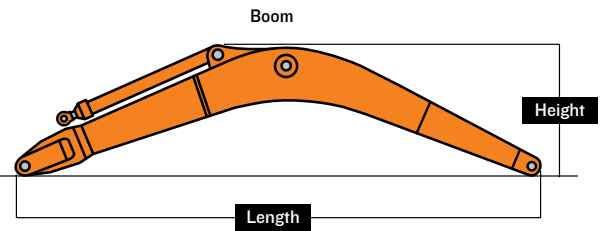
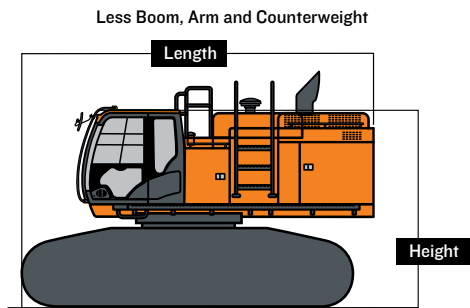
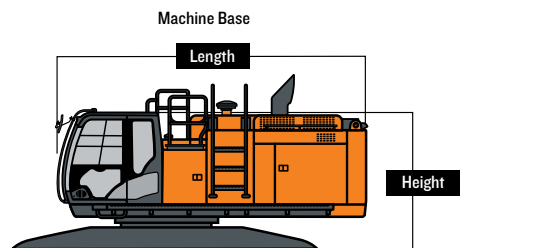
ZX670LC-6

Packing Dimensions and Weights for Transportation

Base Machine (without front attachment and side frame)*	Length 5.68 m (18 ft. 8 in.)	Height 2.77 m (9 ft. 1 in.)	Overall Width 3.42 m (11 ft. 3 in.)	Weight 21 400 kg (47,179 lb.)
Side Frame**				
650-mm (26 in.) Shoe Width	5.85 m (19 ft. 2 in.)	1.45 m (4 ft. 9 in.)	1.25 m (4 ft. 1 in.)	10 400 kg (22,928 lb.)
750-mm (30 in.) Shoe Width	5.85 m (19 ft. 2 in.)	1.45 m (4 ft. 9 in.)	1.25 m (4 ft. 1 in.)	10 600 kg (23,369 lb.)
900-mm (36 in.) Shoe Width	5.85 m (19 ft. 2 in.)	1.45 m (4 ft. 9 in.)	1.32 m (4 ft. 4 in.)	11 100 kg (24,471 lb.)
Counterweight, Standard	3.36 m (11 ft.)	1.55 m (5 ft. 1 in.)	0.59 m (23 in.)	10 400 kg (22,928 lb.)
Boom				
6.8 m (22 ft. 4 in.)	7.14 m (23 ft. 5 in.)	2.51 m (8 ft. 3 in.)	1.39 m (4 ft. 7 in.)	6130 kg (13,514 lb.)
7.8 m (25 ft. 7 in.)	8.13 m (26 ft. 8 in.)	2.33 m (7 ft. 8 in.)	1.39 m (4 ft. 7 in.)	6560 kg (14,462 lb.)
Arm				
2.9-m (9 ft. 6 in.) Mass Excavating	4.37 m (14 ft. 4 in.)	1.69 m (5 ft. 7 in.)	0.80 m (31 in.)	3715 kg (8,190 lb.)
3.6 m (11 ft. 10 in.)	5.11 m (16 ft. 9 in.)	1.44 m (4 ft. 9 in.)	0.80 m (31 in.)	3640 kg (8,025 lb.)
4.2 m (13 ft. 9 in.)	5.71 m (18 ft. 9 in.)	1.39 m (4 ft. 7 in.)	0.80 m (31 in.)	3840 kg (8,466 lb.)
5.3 m (17 ft. 5 in.)	6.73 m (22 ft. 1 in.)	1.26 m (4 ft. 2 in.)	0.80 m (31 in.)	3620 kg (7,981 lb.)
Length Less Boom, Arm and Counterweight	6.70 m (22 ft.)	3.68 m (12 ft. 1 in.) / 3.76 m (12 ft. 4 in.) without exhaust stack	3.48 m (11 ft. 5 in.) w/ 650-mm (26 in.) shoes / 3.58 m (11 ft. 9 in.) w/ 750-mm (30 in.) shoes / 3.73-m (12 ft. 3 in.) w/ 900-mm (36 in.) shoes	43 999 kg (97,000 lb.) w/ 650-mm (26 in.) shoes / 44 402 kg (97,890 lb.) w/ 750-mm (30 in.) shoes / 45 404 kg (100,100 lb.) w/ 900-mm (36 in.) shoes

*Steps on the track frame, exhaust stack, side hydraulic oil tank, handrails and upper fuel tank must be removed to comply with the width dimensions above.

**The dimensions and the weights indicate those of one side frame.



Lift Charts ZX670LC-6

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with standard gauge and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

Load Point Height	3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)		10.5 m (35 ft.)			
	Horizontal Distance from Centerline of Rotation		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side		
With 2.5-m ³ (3.3 cu. yd.) bucket, 4.2-m (13 ft. 9 in.) arm, 7.8-m (25 ft. 7 in.) boom, and 650-mm (26 in.) double-bar grouser shoes														
7.5 m (25 ft.)									10 880	10 880	6780	6780		
									(23,790)	(23,790)				
6.0 m (20 ft.)									11 700	11 700	10 070	8980		
									(25,460)	(25,460)	(20,250)	(19,170)		
4.5 m (15 ft.)					(54,750)	(54,750)	18 420	18 420	14 850	14 850	12 770	11 620		
									(39,600)	(39,600)	(32,080)	(32,080)	(27,100)	(24,970)
3.0 m (10 ft.)							21 780	21 380	16 790	15 010	13 940	11 100		
									(46,870)	(46,090)	(36,260)	(32,310)	(30,190)	(23,860)
1.5 m (5 ft.)							24 280	20 160	14 420	14 250	14 970	10 630		
									(52,390)	(43,420)	(39,820)	(30,680)	(32,420)	(22,850)
Ground Line							14 150	14 150	25 550	19 440	19 470	13 720		
									(32,800)	(32,800)	(55,260)	(41,810)	(42,130)	(29,510)
-1.5 m (-5 ft.)	10 800	10 800	19 890	19 890	25 670	19 120	19 800	13 420	14 940	10 050	11 680			
									(24,430)	(24,430)	(45,600)	(45,600)	(55,570)	(41,090)
-3.0 m (-10 ft.)	17 780	17 780	27 900	27 900	24 710	19 090	19 270	13 340	14 880	10 000				
									(40,170)	(40,170)	(63,880)	(63,880)	(53,470)	(41,010)
-4.5 m (-15 ft.)	26 090	26 090	29 340	29 340	22 540	19 310	17 630	13 480	13 570	10 180				
									(59,140)	(59,140)	(63,390)	(63,390)	(48,600)	(41,510)
-6.0 m (-20 ft.)			23 970	23 970	18 550	18 550	13 910	13 910						
									(51,240)	(51,240)	(39,460)	(39,460)	(28,970)	(28,970)
With 3.5-m ³ (4.6 cu. yd.) bucket, 2.9-m (9 ft. 6 in.) BE arm, 6.8-m (22 ft. 4 in.) BE boom, and 650-mm (26 in.) double-bar grouser shoes														
7.5 m (25 ft.)									14 400	14 400				
									(31,610)	(31,610)				
6.0 m (20 ft.)							17 530	17 530	15 280	15 280				
									(37,890)	(37,890)	(33,220)	(33,220)		
4.5 m (15 ft.)							20 470	20 470	16 700	15 250	14 650	10 920		
									(44,110)	(44,110)	(36,200)	(32,780)		
3.0 m (10 ft.)							23 430	21 030	18 260	14 580	15 370	10 630		
									(50,520)	(45,280)	(39,520)	(31,340)		
1.5 m (5 ft.)							25 430	20 100	19 480	14 020	15 260	10 330		
									(54,940)	(43,230)	(42,140)	(30,130)		
Ground Line							26 020	19 610	19 950	13 670	15 070	10 150		
									(56,320)	(42,140)	(43,140)	(29,370)		
-1.5 m (-5 ft.)			33 520	32 190	25 150	19 490	19 300	13 560						
									(72,780)	(68,930)	(54,430)	(41,870)		
-3.0 m (-10 ft.)	34 290	34 290	29 560	29 560	22 510	19 710	16 670	13 790						
									(77,980)	(77,980)	(63,980)	(63,980)		
-4.5 m (-15 ft.)			22 630	22 630	16 490	16 490								
									(48,280)	(48,280)	(34,300)	(34,300)		
With 2.5-m ³ (3.3 cu. yd.) bucket, 4.2-m (13 ft. 9 in.) arm, 7.8-m (25 ft. 7 in.) boom, and 750-mm (30 in.) double-bar grouser shoes														
7.5 m (25 ft.)									10 880	10 880	6780	6780		
									(23,790)	(23,790)				
6.0 m (20 ft.)									11 700	11 700	10 070	9040		
									(25,460)	(25,460)	(20,250)	(19,290)		
4.5 m (15 ft.)					(54,750)	(54,750)	18 420	18 420	14 850	14 850	12 770	11 690		
									(39,600)	(39,600)	(32,080)	(32,080)		
3.0 m (10 ft.)							21 780	21 500	16 790	15,090	13 940	11 170		
									(46,870)	(46,340)	(36,260)	(32,500)		
1.5 m (5 ft.)							24 280	20 280	18 420	14 340	14 970	10 700		
									(52,390)	(43,670)	(39,820)	(30,870)		
Ground Line							14 150	14 150	25 550	19 560	19 470	13 810		
									(32,800)	(32,800)	(55,260)	(42,070)		
-1.5 m (-5 ft.)	10 800	10 800	19 890	19 890	25 670	19 240	19 800	13 510	15 030	10 120	11 760			
									(24,430)	(24,430)	(45,600)	(45,600)		
-3.0 m (-10 ft.)	17 780	17 780	27 900	27 900	24 710	19 210	19 270	13 420	14 980	10 070				
									(40,170)	(40,170)	(63,880)	(63,880)		
-4.5 m (-15 ft.)	26 090	26 090	29 340	29 340	22 540	19 430	17 630	13 570	13 570	10 250				
									(59,140)	(59,140)	(63,390)	(63,390)		
-6.0 m (-20 ft.)			23 970	23 970	18 550	18 550	13 910	13 910						
									(51,240)	(51,240)	(39,460)	(39,460)		

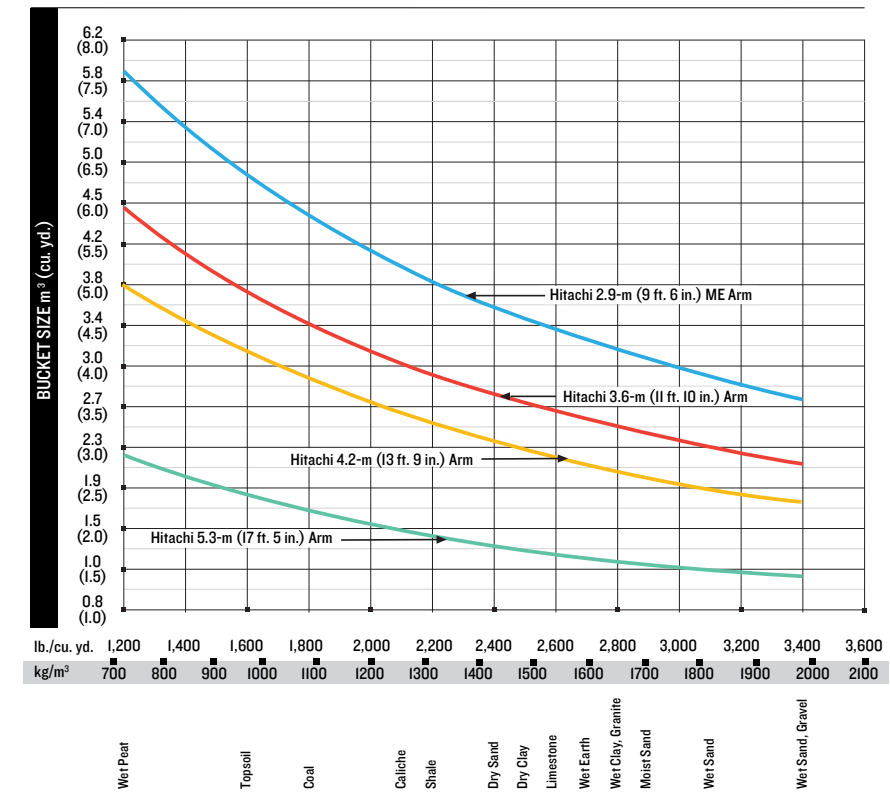
ZX670LC-6

Buckets ZX670LC-6

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with ESCO teeth standard. Replaceable cutting edges and a variety of teeth are available through Hitachi parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force		Arm Dig Force 3.6 m (11 ft. 10 in.)		Arm Dig Force 4.2 m (13 ft. 9 in.)		Arm Dig Force 5.3 m (17 ft. 5 in.)		ME Arm Dig Force 2.9 m (9 ft. 6 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m ³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Extreme-Duty Plate Lip	1219	48	2.65	3.5	3396	7,487	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	3
	1372	54	3.06	4	3546	7,817	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	3
	1524	60	3.53	4.6	3795	8,368	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	3
Heavy-Duty High Capacity	914	36	1.80	2.4	2664	5,873	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	3
	1067	42	2.22	2.9	2867	6,320	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	3
	1219	48	2.06	2.7	2966	6,540	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	4
	1372	54	3.09	4	3129	6,898	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	5
	1524	60	3.54	4.6	3302	7,280	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	5
Heavy Capacity Dirt Heavy-Duty	1829	72	4.44	5.8	3593	7,921	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	6
	2032	80	5.05	6.6	3916	8,634	275	61,851	242	54,423	220	49,448	189	42,497	290	65,260	2281	89.79	6
	2184	86	4.59	6	3941	8,688	287	64,421	246	55,278	223	50,152	58	13,013	295	66,427	2190	86.23	6
Truck Loading	914	36	1.30	1.7	2252	4,964	326	73,327	258	57,940	233	52,331	198	44,597	312	70,090	1924	75.75	3
	1067	42	1.58	2.1	2594	5,719	326	73,327	258	57,940	233	52,331	198	44,597	312	70,090	1924	75.75	4
	1219	48	1.90	2.5	2722	6,000	326	73,327	258	57,940	233	52,331	198	44,597	312	70,090	1924	75.75	4
	1372	54	2.19	2.9	2858	6,302	326	73,327	258	57,940	233	52,331	198	44,597	312	70,090	1924	75.75	5
Truck Loading	1524	60	2.52	3.3	3062	6,750	326	73,327	258	57,940	233	52,331	198	44,597	312	70,090	1924	75.75	5
	1930	76	3.75	4.9	3043	6,709	287	64,421	246	55,278	223	50,152	58	13,013	295	66,427	2189	86.20	6
	2083	82	4.05	5.3	3292	7,257	287	64,421	246	55,278	223	50,152	58	13,013	295	66,427	2189	86.20	7

Bucket Selection Guide* ZX670LC-6



*Contact your Hitachi dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials, and volume loading applications such as mass-excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.

ZX870LC-6

Engine	ZX870LC-6
Manufacturer and Model	Isuzu 6WGI-FT4
Non-Road Emission Standards	EPA Final Tier 4/EU Stage IV
Net Rated Power (ISO 9249)	382 kW (512 hp) @ 1,800 rpm
Cylinders	6
Displacement	15.68 L (957 cu. in.)
Off-Level Capacity	70% (35 deg.)
Aspiration	Turbocharged, air-to-air charge-air cooler

Cooling
2 cool-on-demand hydraulic-driven, suction-type fans with remote-mounted drives

Powertrain	
2-speed propel	
Maximum Travel Speed	
Low	3.2 km/h (2 mph)
High	4.7 km/h (2.9 mph)
Drawbar Pull	57 085 kg (125,850 lb.)

Hydraulics	
Open center, load sensing	
Main Pumps	2 variable-displacement pumps
Maximum Rated Flow	566 L/m (150 gpm) x 2
Pilot Pump	One gear
Maximum Rated Flow	30 L/m (7.9 gpm)
Pressure Setting	3900 kPa (566 psi)
System Operating Pressure	
Circuits	
Implement Circuits	31 900 kPa (4,627 psi)
Travel Circuits	34 300 kPa (4,975 psi)
Swing Circuits	29 400 kPa (4,264 psi)
Power Boost	34 300 kPa (4,975 psi)
Controls	Pilot levers, short-stroke, low-effort hydraulic pilot controls with shutoff lever

Cylinders	Heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins		
	Bore	Rod Diameter	Stroke
Boom (2)	215 mm (8.5 in.)	150 mm (5.9 in.)	1835 mm (72.2 in.)
Arm (1)	225 mm (8.9 in.)	160 mm (6.3 in.)	2225 mm (87.6 in.)
Bucket (1)	200 mm (7.9 in.)	140 mm (5.5 in.)	1555 mm (61.2 in.)

Electrical	
Number of Batteries (12 volt)	2
Battery Capacity	500 CCA
Alternator Rating	50 amp
Work Lights	5 halogen (1 mounted on frame, 2 mounted on boom, and 2 mounted on top of cab)

Undercarriage	
Rollers (each side)	
Carrier	3
Track	9
Double-Bar Grouser Shoes (each side)	51
Track	
Adjustment	Hydraulic
Guides	Front and center
Chain	Sealed and lubricated
Planetary Final Drives with Axial Piston Motors	

Ground Pressure	
700-mm (28 in.) Double-Bar Grouser Shoes	106.9 kPa (15.5 psi)
800-mm (32 in.) Double-Bar Grouser Shoes	94.5 kPa (13.5 psi)
900-mm (36 in.) Double-Bar Grouser Shoes	84.8 kPa (12 psi)

Swing Mechanism	
Swing Speed	7.8 rpm
Swing Torque	269 000 Nm (198,404 lb.-ft.)

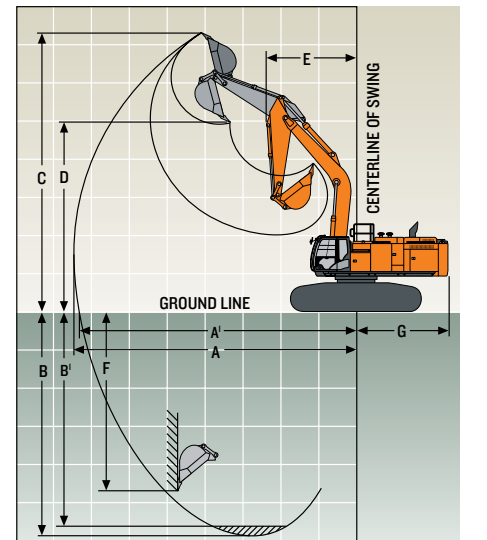
Serviceability	ZX870LC-6
Refill Capacities	
Fuel Tank	1110 L (293 gal.)
Diesel Exhaust Fluid (DEF) Tank	95 L (25.1 gal.)
Cooling System	124 L (32.8 gal.)
Engine Oil with Filter	57 L (15.1 gal.)
Hydraulic Tank	500 L (132.1 gal.)
Hydraulic System	1042 L (275.3 gal.)
Gearbox	
Swing (each)	15.7 L (16.6 qt.)
Travel (each)	19 L (20.1 qt.)
Pump Drive	6.2 L (6.6 qt.)

Operating Weights
With full fuel tank; 79-k (175 lb.) operator; 3.49-m³ (4.57 cu. yd.), 1370-mm (54 in.), 3558-kg (7,845 lb.) bucket; 4.4-m (14 ft. 5 in.) arm; 12 400-kg (27,337 lb.) counterweight; counterweight removal device and 900-mm (36 in.) double-bar grouser shoes

SAE Operating Weight	85 600 kg (188,716 lb.)
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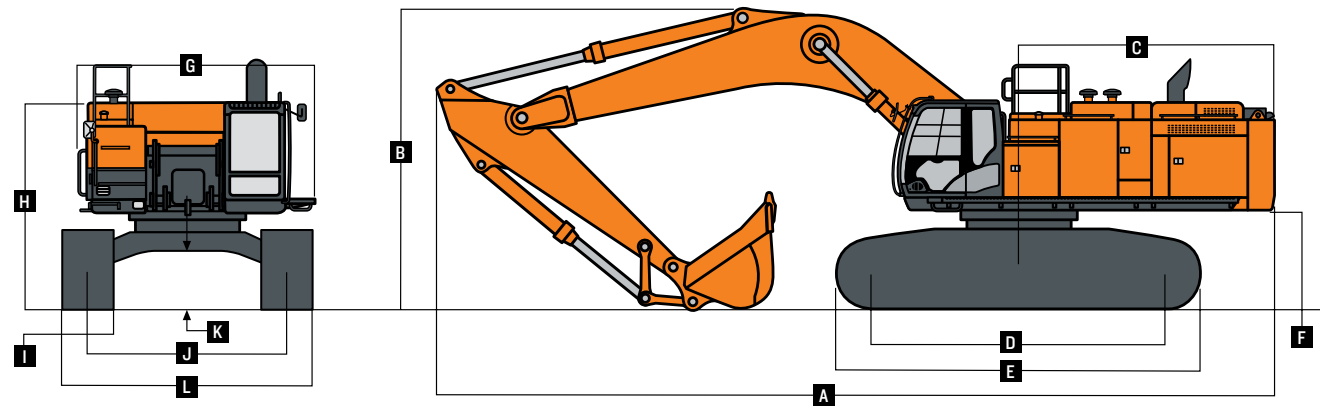
Components	
Undercarriage w/ Double-Bar Grouser Shoes	
650 mm (26 in.)	32 326 kg (71,267 lb.)
750 mm (30 in.)	33 026 kg (72,810 lb.)
900 mm (36 in.)	33 966 kg (74,882 lb.)
1020 mm (40 in.)	34 396 kg (75,830 lb.)
One-Piece Boom (with arm cylinder)	
8.4 m (27 ft. 7 in.)	8190 kg (18,056 lb.)
7.1-m (23 ft. 4 in.) Mass Excavating	7670 kg (16,909 lb.)
10 m (32 ft. 10 in.)	9390 kg (20,701 lb.)
Arm with Bucket Cylinder and Linkage	
3.7 m (12 ft. 1 in.)	4290 kg (9,458 lb.)
4.4 m (14 ft. 5 in.)	4630 kg (10,207 lb.)
5.4 m (17 ft. 9 in.)	4940 kg (10,891 lb.)
2.95-m (9 ft. 8 in.) Mass Excavating w/ 7.1-m (23 ft. 4 in.) Mass-Excavating Boom	4620 kg (10,185 lb.)
Boom-Lift Cylinders (2), Total Weight	1700 kg (3,748 lb.)
Counterweight with Standard Mainframe	13 300 kg (29,321 lb.)

Operating Dimensions						
Arm Length	3.7 m (12 ft. 2 in.)	4.4 m (14 ft. 5 in.)	5.4 m (17 ft. 9 in.)	2.95-m (9 ft. 8 in.)	4.4 m (14 ft. 5 in.)	5.4 m (17 ft. 9 in.)
	w/ 8.4-m (27 ft. 7 in.) Boom	w/ 8.4-m (27 ft. 7 in.) Boom	w/ 8.4-m (27 ft. 7 in.) Boom	Mass Excavating w/ 7.1-m (23 ft. 4 in.) Boom	w/ 10-m (32 ft. 10 in.) Boom	w/ 10-m (32 ft. 10 in.) Boom
Arm Digging Force						
SAE	315 kN (70,815 lb.)	273 kN (61,373 lb.)	237 kN (53,280 lb.)	378 kN (84,978 lb.)	273 kN (61,373 lb.)	237 kN (53,280 lb.)
ISO	323 kN (72,613 lb.)	280 kN (62,946 lb.)	243 kN (54,629 lb.)	394 kN (88,575 lb.)	280 kN (62,946 lb.)	243 kN (54,629 lb.)
Bucket Digging Force						
SAE	359 kN (80,706 lb.)	359 kN (80,706 lb.)	289 kN (64,970 lb.)	411 kN (92,396 lb.)	359 kN (80,706 lb.)	289 kN (64,970 lb.)
ISO	399 kN (89,699 lb.)	399 kN (89,699 lb.)	323 kN (72,613 lb.)	472 kN (106,110 lb.)	399 kN (89,699 lb.)	323 kN (72,613 lb.)
A Maximum Reach	14.10 m (46 ft. 3 in.)	14.91 m (48 ft. 11 in.)	15.91 m (52 ft. 2 in.)	12.34 m (40 ft. 6 in.)	16.55 m (54 ft. 4 in.)	17.56 m (57 ft. 7 in.)
A' Maximum Reach at Ground Level	13.82 m (45 ft. 4 in.)	14.64 m (48 ft.)	15.67 m (51 ft. 5 in.)	12.02 m (39 ft. 5 in.)	16.32 m (53 ft. 7 in.)	17.34 m (56 ft. 11 in.)
B Maximum Digging Depth	8.87 m (29 ft. 1 in.)	9.57 m (31 ft. 5 in.)	10.57 m (34 ft. 8 in.)	7.14 m (23 ft. 5 in.)	11.16 m (36 ft. 7 in.)	12.16 m (39 ft. 11 in.)
B' Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	8.74 m (28 ft. 8 in.)	9.46 m (31 ft.)	10.47 m (34 ft. 4 in.)	7 m (23 ft.)	11.04 m (36 ft. 3 in.)	12.06 m (39 ft. 7 in.)
C Maximum Cutting Height	13.03 m (42 ft. 9 in.)	13.82 m (45 ft. 4 in.)	14.52 m (47 ft. 8 in.)	12.01 m (39 ft. 5 in.)	14.66 m (48 ft. 1 in.)	15.34 m (50 ft. 4 in.)
D Maximum Dumping Height	9.08 m (29 ft. 9 in.)	9.74 m (31 ft. 11 in.)	10.41 m (34 ft. 2 in.)	8.13 m (26 ft. 8 in.)	10.81 m (35 ft. 6 in.)	11.26 m (36 ft. 11 in.)
E Minimum Swing Radius	5.95 m (19 ft. 6 in.)	5.95 m (19 ft. 6 in.)	5.94 m (19 ft. 6 in.)	5.21 m (17 ft. 1 in.)	7.35 m (24 ft. 1 in.)	7.32 m (24 ft.)
F Maximum Vertical Wall	7.17 m (23 ft. 6 in.)	8.48 m (27 ft. 10 in.)	9.75 m (32 ft.)	4.10 m (13 ft. 5 in.)	9.87 m (32 ft. 5 in.)	11.34 m (37 ft. 2 in.)
G Tail Swing Radius	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)



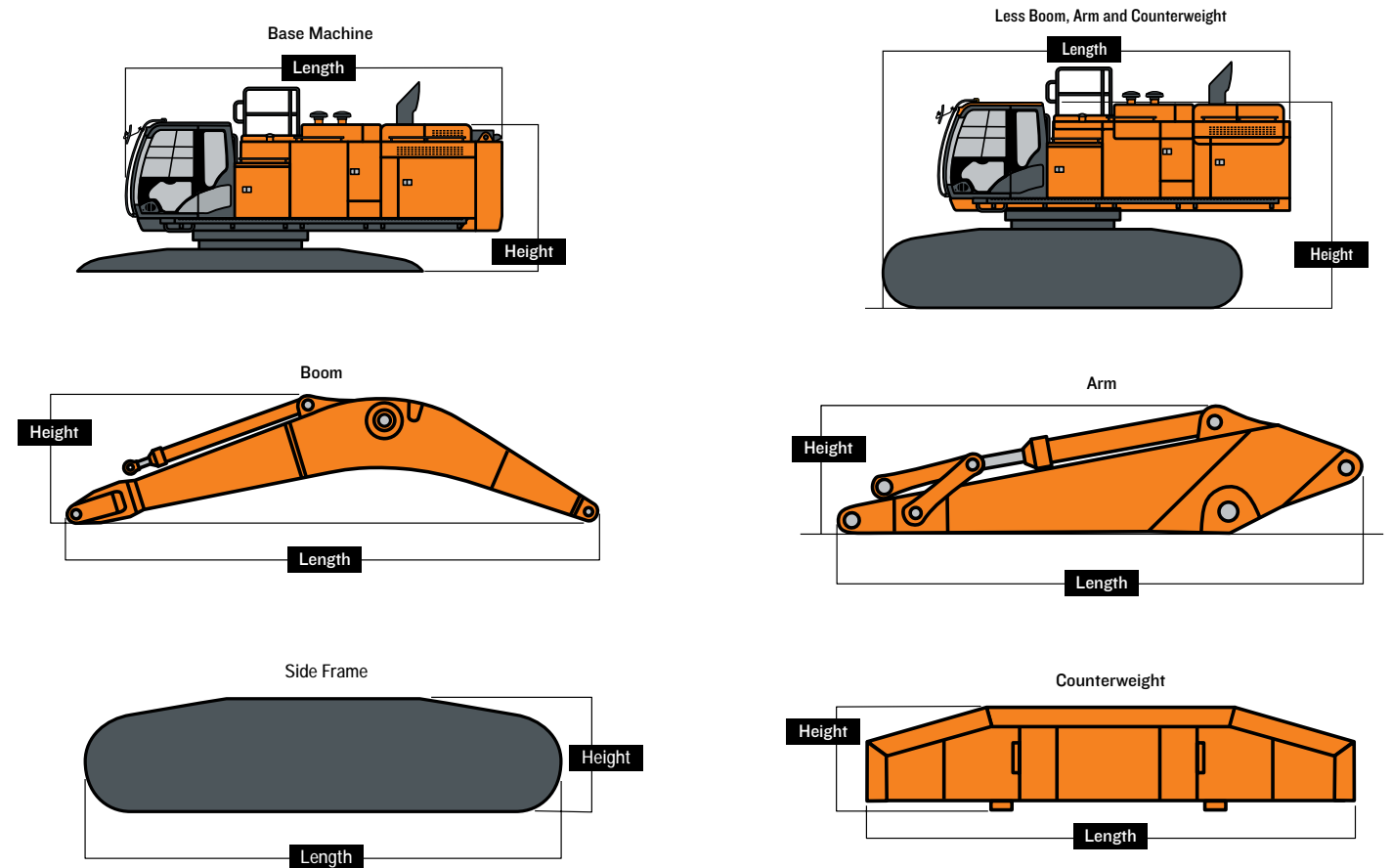
ZX870LC-6

Machine Dimensions	ZX870LC-6
A Overall Length w/ Arm	
3.7 m (12 ft. 2 in.)	14.88 m (48 ft. 7 in.)
4.4 m (14 ft. 5 in.)	14.80 m (48 ft. 7 in.)
5.4 m (17 ft. 9 in.)	14.65 m (48 ft. 1 in.)
2.95-m (9 ft. 8 in.) Mass Excavating with Mass-Excavating Boom	13.55 m (44 ft. 5 in.)
B Overall Height w/ Arm	
3.7 m (12 ft. 2 in.)	4.77 m (15 ft. 8 in.)
4.4 m (14 ft. 5 in.)	5.13 m (16 ft. 10 in.)
5.4 m (17 ft. 9 in.)	5.76 m (18 ft. 11 in.)
2.95-m (9 ft. 8 in.) Mass Excavating with Mass-Excavating Boom	5.20 m (17 ft. 1 in.)
C Rear-End Length/Swing Radius	4.54 m (14 ft. 11 in.)
D Distance Between Idler/Sprocket Centerline	5.11 m (16 ft. 9 in.)
E Undercarriage Length	6.36 m (20 ft. 10 in.)
F Counterweight Clearance	1.68 m (5 ft. 6 in.)
G Upperstructure Width	4.12 m (13 ft. 6 in.)
H Cab Height	3.69 m (12 ft. 1 in.)
I Track Width w/ Double-Bar Grouser Shoes	650 mm (26 in.) / 750 mm (30 in.) / 900 mm (36 in.)
J Gauge Width w/900-mm (36 in.) Double-Bar Grouser Shoes	
Operating Position	3.45 m (11 ft. 4 in.)
Transport Position	2.83 m (9 ft. 3 in.)
K Ground Clearance	0.89 m (35 in.)
L Overall Width w/ 900-mm (36 in.) Double-Bar Grouser Shoes	
Operating Position	4.35 m (14 ft. 3 in.)
Transport Position	3.73 m (12 ft. 3 in.)



Packing Dimensions and Weights for Transportation	ZX870LC-6			
Base Machine (without front attachment and side frame)*	Length	Height	Overall Width	Weight
	6.5 m (21 ft. 4 in.)	2.96 m (9 ft. 9 in.)	3.42 m (11 ft. 3 in.)	29 000 kg (63,934 lb.)
Side Frame**				
650-mm (26 in.) Shoe Width	6.36 m (20 ft. 10 in.)	1.50 m (4 ft. 11 in.)	1.33 m (4 ft. 4 in.)	12 300 kg (27,117 lb.)
750-mm (30 in.) Shoe Width	6.36 m (20 ft. 10 in.)	1.50 m (4 ft. 11 in.)	1.33 m (4 ft. 4 in.)	12 600 kg (27,778 lb.)
900-mm (36 in.) Shoe Width	6.36 m (20 ft. 10 in.)	1.50 m (4 ft. 11 in.)	1.42 m (4 ft. 8 in.)	13 100 kg (28,881 lb.)
1020-mm (40 in.) Shoe Width	6.36 m (20 ft. 10 in.)	1.50 m (4 ft. 11 in.)	1.45 m (4 ft. 9 in.)	13 500 kg (29,762 lb.)
Counterweight, Standard	3.36 m (11 ft.)	1.62 m (5 ft. 4 in.)	0.72 m (28 in.)	13 300 kg (29,321 lb.)
Boom				
7.1 m (23 ft. 4 in.)	7.49 m (24 ft. 7 in.)	2.70 m (8 ft. 10 in.)	1.45 m (4 ft. 9 in.)	7670 kg (16,909 lb.)
8.4 m (27 ft. 7 in.)	8.78 m (28 ft. 10 in.)	2.50 m (8 ft. 2 in.)	1.45 m (4 ft. 9 in.)	8190 kg (18,056 lb.)
10 m (32 ft. 10 in.)	10.37 m (34 ft.)	2.70 m (8 ft. 10 in.)	1.45 m (4 ft. 9 in.)	9390 kg (20,701 lb.)
Arm				
2.95 m (9 ft. 8 in.)	4.46 m (14 ft. 8 in.)	1.66 m (5 ft. 5 in.)	0.85 m (33 in.)	4620 kg (10,185 lb.)
3.7 m (12 ft. 2 in.)	5.29 m (17 ft. 4 in.)	1.42 m (4 ft. 8 in.)	0.82 m (32 in.)	4290 kg (9,458 lb.)
4.4 m (14 ft. 5 in.)	5.88 m (19 ft. 3 in.)	1.42 m (4 ft. 8 in.)	0.82 m (32 in.)	4630 kg (10,207 lb.)
5.4 m (17 ft. 9 in.)	6.83 m (22 ft. 5 in.)	1.48 m (4 ft. 10 in.)	0.80 m (31 in.)	4940 kg (10,891 lb.)
Length Less Boom, Arm and Counterweight	7.53 m (24 ft. 8 in.)	3.89 m (12 ft. 9 in.) / 3.86 m (12 ft. 8 in.) without exhaust stack	3.48 m (11 ft. 5 in.) w/ 650-mm (26 in.) shoes / 3.58 m (11 ft. 9 in.) w/ 750-mm (30 in.) shoes / 3.73 m (12 ft. 3 in.) w/ 900-mm (36 in.) shoes	53 400 kg (117,727 lb.) w/ 650-mm (26 in.) shoes / 54 000 kg (119,050 lb.) w/ 750-mm (30 in.) shoes / 55 000 kg (121,254 lb.) w/ 900-mm (36 in.) shoes

*Steps on the track frame, exhaust stack, side hydraulic oil tank, handrails and upper fuel tank must be removed to comply with the width dimensions above.
**The dimensions and the weights indicate those of one side frame.





Lift Charts		ZX870LC-6																		
Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with standard gauge and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).																				
Load Point Height	1.5 m (5 ft.)	3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)		10.5 m (35 ft.)		12.0 m (40 ft.)		13.5 m (45 ft.)				
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 2.3-m ³ (3.01 cu. yd.) bucket, 5.4-m (17 ft. 9 in.) arm, 8.4-m (27 ft. 7 in.) boom, and 900-mm (36 in.) double-bar grouser shoes																				
10.5 m (35 ft.)													7900	7900	(15,910)	(15,910)				
9.0 m (30 ft.)													9200	9200	5930	5930	(19,730)	(19,730)		
7.5 m (25 ft.)													10 200	10 200	8360	8360	(22,080)	(22,080)	(16,960)	(16,960)
6.0 m (20 ft.)													12 310	12 310	11 660	11 660	9880	9880	(20,710)	(20,710)
4.5 m (15 ft.)													21 680	21 680	17 380	17 380	14 830	14 830	13 180	12 680
3.0 m (10 ft.)													26 460	26 460	20 200	20 200	16 610	15 800	14 320	12 780
1.5 m (5 ft.)													30 210	28 350	22 650	20 060	18 220	15 040	15 390	11 640
Ground Line													10 910	10 910	31 520	27 140	24 390	19 190	19 470	14 420
-1.5 m (-5 ft.)													7900	7900	15 260	15 260	33 060	26 520	25 270	18 640
-3.0 m (-10 ft.)													10 450	10 450	13 570	13 570	21 250	21 250	32 710	26 310
-4.5 m (-15 ft.)													16 070	16 070	20 110	20 110	29 200	29 200	31 050	26 420
-6.0 m (-20 ft.)													28 310	28 310	36 610	36 610	27 970	26 830	21 990	18 650
-7.5 m (-25 ft.)													29 490	29 490	22 810	22 810	17 610	17 610		
With 4.5-m ³ (5.89 cu. yd.) bucket, 2.95-m (9 ft. 8 in.) BE arm, 7.1-m (23 ft. 4 in.) BE boom, and 900-mm (36 in.) double-bar grouser shoes																				
7.5 m (25 ft.)													18 590	18 590	(40,540)	(40,540)				
6.0 m (20 ft.)													24 030	24 030	20 180	20 180	17 960	15 960		
4.5 m (15 ft.)													28 170	28 170	22 240	21 570	18 940	15 620		
3.0 m (10 ft.)													31 890	29 570	24 270	20 590	19 970	15 100		
1.5 m (5 ft.)													33 940	28 330	25 680	19 790	20 660	14 630		
Ground Line													34 060	27 700	26 030	19 270	20 610	14 310		
-1.5 m (-5 ft.)													37 400	37 400	32 420	27 510	24 990	19 070		
-3.0 m (-10 ft.)													37 120	37 120	37 090	37 090	28 750	27 650		
-4.5 m (-15 ft.)													28 290	28 290	21 550	21 550				

Lift Charts		ZX870LC-6																		
Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with standard gauge and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).																				
Load Point Height	3.0 m (10 ft.)	4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)		10.5 m (35 ft.)		12.0 m (40 ft.)		13.5 m (45 ft.)		15 m (50 ft.)				
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 2-m ³ (2.63 cu. yd.) bucket, 4.4-m (14 ft. 5 in.) arm, 10-m (32 ft. 10 in.) boom, and 900-mm (36 in.) double-bar grouser shoes																				
10.5 m (35 ft.)																			7660	7660
9.0 m (30 ft.)																			10 150	10 150
7.5 m (25 ft.)																			10 900	10 900
6.0 m (20 ft.)																			16 520	16 520
4.5 m (15 ft.)																			19 240	19 240
3.0 m (10 ft.)																			21 600	18 730
1.5 m (5 ft.)																			23 190	17 810
Ground Line																			23 960	17 320
-1.5 m (-5 ft.)																			13 350	13 350
-3.0 m (-10 ft.)																			11 970	11 970
-4.5 m (-15 ft.)																			15 260	15 260
-6.0 m (-20 ft.)																			23 300	23 300
-7.5 m (-25 ft.)																			26 930	26 930
With 1.9-m ³ (2.48 cu. yd.) bucket, 5.4-m (17 ft. 9 in.) arm, 10-m (32 ft. 10 in.) boom, and 900-mm (36 in.) double-bar grouser shoes																				
10.5 m (35 ft.)																			8490	8490
9.0 m (30 ft.)																			8720	8720
7.5 m (25 ft.)																			9860	9860
6.0 m (20 ft.)																			12 360	12 360
4.5 m (15 ft.)																			17 400	17 400
3.0 m (10 ft.)																			19 980	19 620
1.5 m (5 ft.)																			21 990	18 390
Ground Line																			23 290	17 590
-1.5 m (-5 ft.)																			13 380	13 380
-3.0 m (-10 ft.)																			10 770	10 770
-4.5 m (-15 ft.)																			12 310	12 310
-6.0 m (-20 ft.)																			18 200	18 200
-7.5 m (-25 ft.)																			25 380	25 380
-9.0 m (-30 ft.)																			25 770	25 770

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Lift Charts

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with standard gauge and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

Load Point Height	3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)		10.5 m (35 ft.)		12.0 m (40 ft.)		13.5 m (45 ft.)													
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side												
With 2-m ³ (2.63 cu. yd.) bucket, 4-4-m (14 ft. 5 in.) arm, 10-m (32 ft. 10 in.) boom, and 1020-mm (40 in.) double-bar grouser shoes	10.5 m (35 ft.)																											
	7660 7660																											
	(21,430) (21,430) (21,450) (21,450)																											
9.0 m (30 ft.)	10 150 10 150 9760 9760																											
	(22,130) (22,130) (21,450) (21,450)																											
7.5 m (25 ft.)	10 900 10 900 10 130 10 130 7460 7460																											
	(23,660) (23,660) (22,110) (21,730)																											
6.0 m (20 ft.)	16 520 16 520 13 630 13 630 11 860 11 860 10 720 9840 10 030 7670																											
	(35,420) (35,420) (29,380) (29,380) (25,670) (25,670) (23,320) (21,080) (20,810) (16,290)																											
4.5 m (15 ft.)	19 240 19 240 15 300 15 300 12 930 11 960 11 410 9440 10 420 7470																											
	(41,260) (41,260) (32,950) (32,950) (27,960) (25,730) (24,750) (20,240) (22,710) (15,920)																											
3.0 m (10 ft.)	21 600 18 930 16 860 14 490 13 990 11 360 12 110 9040 10 850 7240																											
	(46,410) (40,900) (36,330) (31,250) (30,220) (24,450) (26,240) (19,400) (23,590) (15,470)																											
1.5 m (5 ft.)	23 190 18 020 18 100 13 790 14 890 10 860 12 730 8690 11 230 7020																											
	(49,970) (38,850) (39,060) (29,710) (32,180) (23,360) (27,570) (18,660) (24,350) (15,020)																											
Ground Line	23 960 17 520 18 920 13 310 15 550 10 490 13 190 8430 11 440 6850																											
	(51,760) (37,720) (40,870) (28,660) (33,600) (22,540) (28,550) (18,080) (24,580) (14,690)																											
-1.5 m (-5 ft.)	13 350 13 350 24 070 17 320 19 270 13 050 15 890 10 260 13 400 8260 11 370 6780																											
	(31,420) (31,420) (52,080) (37,240) (41,660) (28,070) (34,320) (22,050) (28,960) (17,740)																											
-3.0 m (-10 ft.)	11 970 (27,640)		11 970 (27,640)		20 970 (46,640)		20 970 (46,640)		23 610 (51,000)		17 320 (37,230)		19 130 (41,350)		12 970 (27,900)		15 810 (34,130)		10 170 (21,870)		13 240 (28,510)		8220 (17,680)					
-4.5 m (-15 ft.)	15 260 (34,670)		15 260 (34,670)		20 150 (46,110)		20 150 (46,110)		27 960 (60,590)		25 380 (54,510)		22 560 (48,790)		17 490 (37,620)		18 430 (39,780)		13 060 (28,110)		15 210 (32,730)		10 250 (22,060)		12 440 (26,420)		8350 (18,050)	
-6.0 m (-20 ft.)	23 300 (52,950)		23 300 (52,950)		29 880 (68,530)		29 880 (68,530)		25 530 (55,120)		25 530 (55,120)		20 770 (44,760)		17 850 (38,420)		16 990 (36,480)		13 340 (28,750)		13 760 (29,210)		10 530 (22,750)					
-7.5 m (-25 ft.)	26 930 (57,740)		26 930 (57,740)		21 900 (46,870)		21 900 (46,870)		17 840 (38,010)		17 840 (38,010)		14 240 (29,900)		13 890 (29,900)													

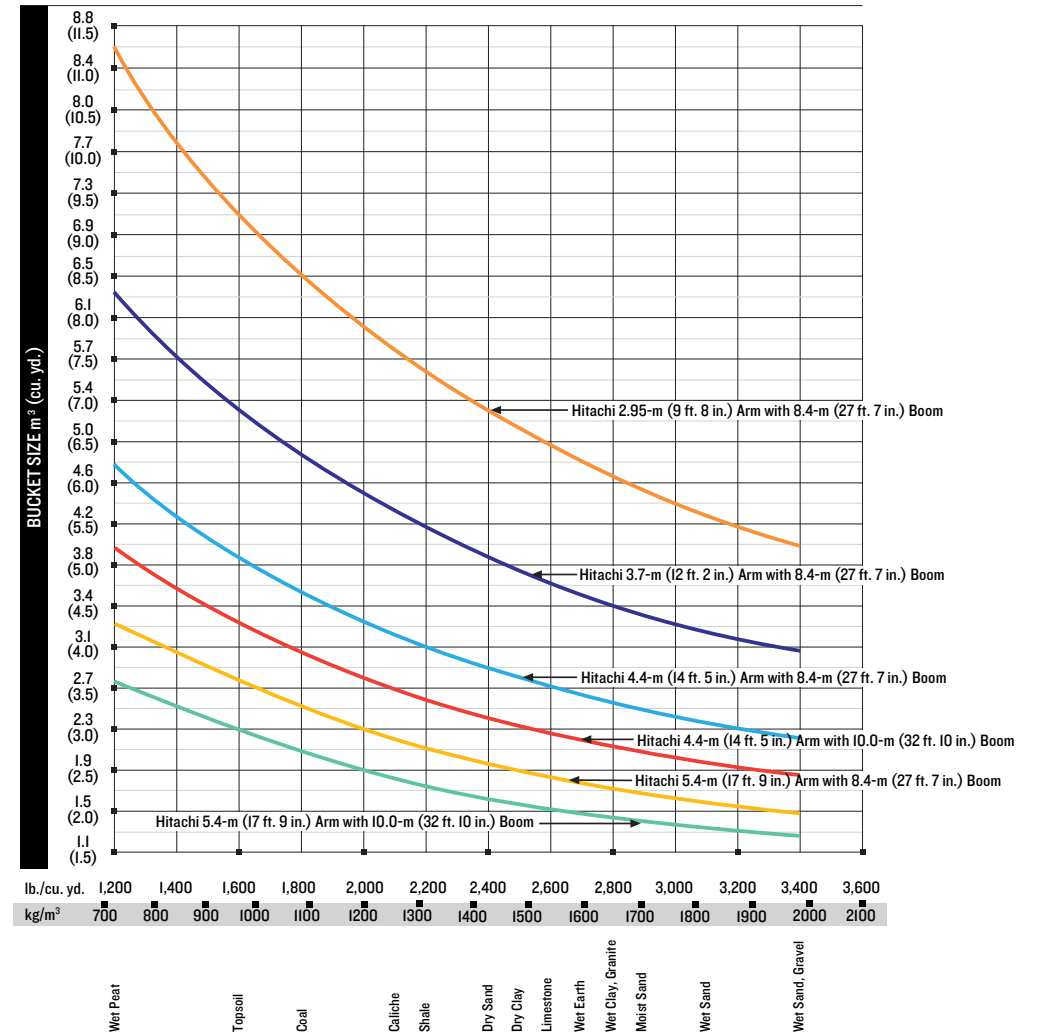
Buckets

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with ESCO teeth standard. Replaceable cutting edges and a variety of teeth are available through Hitachi parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force		Arm Dig Force 4.4 m (14 ft. 5 in.)		Arm Dig Force 5.4 m (17 ft. 9 in.)		ME Arm Dig Force 2.95 m (9 ft. 8 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m ³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy-Duty High Capacity	914	36	2.09	2.7	2767	6,100	360	80,973	264	59,251	230	51,673	361	81,247	2426	95.53	3
	1067	42	2.55	3.3	2972	6,552	360	80,973	264	59,251	230	51,673	361	81,247	2426	95.53	4
	1219	48	3.02	3.9	3177	7,004	360	80,973	264	59,251	230	51,673	361	81,247	2426	95.53	4
	1372	54	3.49	4.6	3558	7,844	360	80,973	264	59,251	230	51,673	361	81,247	2426	95.53	5
	1524	60	3.98	5.2	3572	7,875	360	80,973	264	59,251	230	51,673	361	81,247	2426	95.53	5
Heavy Capacity Dirt	1829	72	4.96	6.5	3786	8,346	360	80,973	264	59,251	230	51,673	361	81,247	2426	95.53	6
	2032	80	5.63	7.4	4519	9,963	360	80,973	264	59,251	230	51,673	361	81,247	2426	95.53	6
	2286	90	5.81	7.6	4296	9,471	341	76,746	268	60,338	275	61,782	370	83,150	2303	90.66	7
	914	36	1.51	2.0	2510	5,534	372	83,647	276	62,098	300	67,336	384	86,270	2113	83.19	3
	1067	42	1.86	2.4	2761	6,087	372	83,647	276	62,098	300	67,336	384	86,270	2113	83.19	4
Truck Loading	1219	48	2.22	2.9	2935	6,471	372	83,647	276	62,098	300	67,336	384	86,270	2113	83.19	4
	1372	54	2.58	3.4	3091	6,814	372	83,647	276	62,098	300	67,336	384	86,270	2113	83.19	5
	1524	60	2.95	3.9	3232	7,125	372	83,647	276	62,098	300	67,336	384	86,270	2113	83.19	5
	2134	84	4.21	5.5	3285	7,242	363	81,638	274	61,607	238	53,456	380	85,393	2165	85.22	6
	2337	92	4.63	6.0	3598	7,932	363	81,638	274	61,607	238	53,456	380	85,393	2165	85.22	8

Bucket Selection Guide*

ZX670LC-6



*Contact your Hitachi dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials, and volume loading applications such as mass-excitation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.

SPECS

ADDITIONAL EQUIPMENT

Key: ● Standard ▲ Optional or special kit

670 870 Engine

- ● Auto-idle system
- ● Batteries (2 – 12 volt), 280-min. reserve capacity
- ● Coolant expansion tank
- ● Dual-element dry-type air filter
- ● Electronic engine control
- ● Enclosed fan guard (conforms to SAE J1308)
- ● Engine coolant to –37 deg. C (–34 deg. F)
- ● Automatic belt-tension device
- ● Fuel filter with water separator
- ● Full-flow oil filter
- ● Turbocharger with charge air cooler
- ● Cool-on-demand hydraulic-driven fan
- ● Glow-plug start aid
- ● 500-hour engine-oil-change interval
- ● 70% (35 deg.) off-level capability
- ● Hydraulic fan reverser

Hydraulic System

- ● Reduced-drift valve for boom down, arm in
- ● Auxiliary hydraulic valve section
- ● Spring-applied, hydraulically released automatic swing brake
- ● Auxiliary hydraulic-flow adjustments through monitor
- ● Auto power lift
- ● 4,000-hour hydraulic-oil-change interval
- ▲ ▲ Single-pedal propel control
- ▲ ▲ Control pattern change valve

Undercarriage

- ● Planetary drive with axial piston motors
- ● Propel motor shields
- ● Spring-applied, hydraulically released automatic propel brake
- ● Track guides, front idler and center
- ● 2-speed propel
- ● Upper carrier rollers (3)
- ● Sealed and lubricated track chain
- ▲ ▲ Double-bar grouser shoes, 650 mm (26 in.)
- ▲ ▲ Double-bar grouser shoes, 750 mm (30 in.)
- ▲ ▲ Double-bar grouser shoes, 900 mm (36 in.)
- ▲ ▲ Double-bar grouser shoes, 1020 mm (40 in.)

670 870 Upperstructure

- ● Right-hand and left-hand mirrors
- ● Vandal locks with ignition key: Cab door / Fuel cap / Service doors / Toolbox
- ● Debris screen in side panel
- ● Remote-mounted engine oil and fuel filters
- ● Service platform, left side
- ● Service handrails
- ▲ ▲ Counterweight-removal system

Front Attachments

- ● Centralized lubrication system
- ● Dirt seals on all bucket pins
- ● No-boom-arm option
- ▲ ▲ Boom, 7.8 m (25 ft. 7 in.)
- ▲ ▲ Boom, mass excavating, 6.8 m (22 ft. 4 in.)
- ▲ ▲ Arm, mass excavating, 2.9 m (9 ft. 6 in.)
- ▲ ▲ Arm, 3.6 m (11 ft. 10 in.)
- ▲ ▲ Arm, 4.2 m (13 ft. 9 in.)
- ▲ ▲ Arm, 5.3 m (17 ft. 5 in.)
- ▲ ▲ Boom, 8.4 m (27 ft. 7 in.)
- ▲ ▲ Boom, 10 m (32 ft. 10 in.)
- ▲ ▲ Boom, mass excavating, 7.1 m (23 ft. 4 in.)
- ▲ ▲ Arm, mass excavating, 2.95 m (9 ft. 8 in.)
- ▲ ▲ Arm, 3.7 m (12 ft. 1 in.)
- ▲ ▲ Arm, 4.4 m (14 ft. 5 in.)
- ▲ ▲ Arm, 5.4 m (17 ft. 9 in.)
- ▲ ▲ Buckets: Heavy duty / Heavy-duty high capacity / Side cutters and teeth

Operator's Station

- ● Adjustable independent-control positions (levers-to-seat, seat-to-pedals)
- ● AM/FM radio
- ● Auto climate control / air conditioner / heater / pressurizer
- ● Cell-phone power outlet, 12 volt, 60 watt, 5 amp
- ● Coat hook
- ● Deluxe-suspension cloth seat with 100-mm (4 in.) adjustable armrests
- ● Floor mat
- ● Front windshield wiper with intermittent speeds
- ● Gauges (illuminated): Diesel Exhaust Fluid (DEF) / Engine coolant / Fuel
- ● Horn, electric
- ● Hour meter, electric
- ● Hydraulic shutoff lever, all controls

670 870 Operator's Station (continued)

- ● Hydraulic warm-up control
- ● Interior light
- ● Large cup holders (2)
- ● Machine Information Center (MIC)
- ● Mode selectors (illuminated): Power modes (3) / Travel modes (2) / Work modes (2)
- ● Multifunction, color LCD monitor with: Diagnostic capability / Multiple-language capabilities / Maintenance tracking / Clock / System monitoring with alarm features: Auto-idle indicator, engine-air-cleaner-restriction indicator light, engine check, engine-coolant-temperature indicator light with audible alarm, engine-oil-pressure indicator light with audible alarm, low-alternator-charge indicator light, low-fuel indicator light, low DEF indication with audible alarm, fault-code-alert indicator, fuel-rate display, wiper-mode indicator, work-lights-on indicator and work-mode indicator
- ● Fluid-level switch and indicator light for engine coolant and engine oil
- ● Motion alarm with cancel switch (conforms to SAE J994)
- ● Power-boost switch on right console lever
- ● Propel pedals and levers
- ● SAE 2-lever control pattern
- ● Seat belt, 51 mm (2 in.), retractable
- ● Tinted glass
- ● Transparent tinted overhead hatch
- ● Hot/cold beverage compartment
- ▲ ▲ Protection screens for cab front
- ▲ ▲ Seat belt, 76 mm (3 in.), non-retractable
- ▲ ▲ Window vandal-protection covers

Electrical

- ● 50-amp alternator
- ● Blade-type multi-fused circuits
- ● Positive-terminal battery covers
- ● Battery disconnect switch
- ● ZXLink™ wireless communication system (available in specific countries; see your dealer for details)

- ▲ ▲ Cab extension wiring harness

Lights

- ● Work lights: Halogen / 2 mounted on boom / 1 mounted on frame / 2 mounted on top of cab

See your Hitachi dealer for further information.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator and cooling fan, at test conditions specified per ISO 9249. No derating is required up to 2000-m (6,560 ft.) altitude. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on units with 1370-mm (54 in.) buckets, full fuel tanks and 79-kg (175 lb.) operators; a ZX670LC-6 unit with 9800-kg (21,605 lb.) counterweight; counterweight removal device and 900-mm (36 in.) double-bar grouser shoes; and a ZX870LC-6 unit with 12,400-kg (27,337 lb.) counterweight; counterweight removal device and 900-mm (36 in.) double-bar grouser shoes.

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