ZAXIS 350 LC-6 FT4 EXCAVATOR

20-Aug-2020

Code	Description	Qty	List Price(USD)
4331FF	**ZAXIS 350 LC-6 FT4 EXCAVATOR**	**1**	**$329,023.00**
	Option Codes		
1095	**Engine Stage IV Emissions**	**1**	**$36,995.00**
080Z	**STANDARD EXCAVATOR**	**1**	**No Added Cost**
1600	**English Customer Delivery Packet**	**1**	**No Added Cost**
170C	**JDLink Ultimate - 5 Year Subscription**	**1**	**No Added Cost**
3350	**Triple Semi-Grouser Shoes**	**1**	**No Added Cost**
4125	**Seat, Standard Mechanical**	**1**	**No Added Cost**
6835	**One Piece Boom with Arm Cylinder and Plumbing**	**1**	**$29,127.00**
7901	**Less Grade Reference Ready Mounts**	**1**	**No Added Cost**
7222	**Arm with Bucket Cylinder and Linkage**	**1**	**$21,359.00**
7401	**Less Auxiliary Hydraulics**	**1**	**No Added Cost**
8340	**Heavy-Duty Bucket**	**1**	**$13,063.00**

Total $429,567.00

Manufacturer's Suggested List Price shown. Retail prices may vary by dealer. Unless stated otherwise, taxes, freight, setup, delivery and other dealer specific charges not included in the pricing. Options/items noted with anything other than price will have additional costs. Pricing, availability, and specifications subject to change without notice. Special program pricing may be available on certain models. See dealer for details. Prices shown are in U.S. dollars and valid only in the U.S.

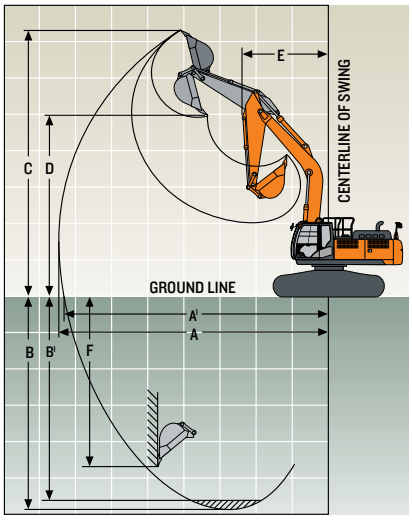
ZX350LC-6 SPECS

ZX350LC-6

Engine	ZX350LC-6		
Manufacturer and Model	Isuzu 6HKI		
Non-Road Emission Standard	EPA Final Tier 4 / EU Stage IV		
Net Rated Power (ISO 9249)	202 kW (271 hp) at 1,900 rpm		
Cylinders	6		
Displacement	7.8 L (475 cu. in.)		
Off-Level Capacity	70% (35 deg.)		
Aspiration	Turbocharged, air-to-air charge-air cooler		
Cooling			
High efficiency direct-driven, suction-type fan and cool-on-demand hydraulic-driven, suction-type fan with remote-mounted drive for hydraulic oil cooler			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.2 km/h (2.0 mph)		
High	5.0 km/h (3.1 mph)		
Drawbar Pull	30 350 kg (66,900 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps	2 variable-displacement pumps		
Maximum Rated Flow	288 L/m (76.1 gpm) x 2		
System Operating Pressure			
Circuits			
Implement	34 300 kPa (4,975 psi)		
Travel	35 500 kPa (5,149 psi)		
Swing	33 300 kPa (4,830 psi)		
Power Boost	38 000 kPa (5,511 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)	145 mm (5.7 in.)	100 mm (3.9 in.)	1520 mm (59.8 in.)
Arm (1)	170 mm (6.7 in.)	115 mm (4.5 in.)	1740 mm (68.5 in.)
Bucket (1)	140 mm (5.5 in.)	95 mm (3.7 in.)	1250 mm (49.2 in.)
Mass-Excavating (ME) Bucket (1)	145 mm (5.7 in.)	95 mm (3.7 in.)	1250 mm (49.2 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	1,000 CCA		
Alternator Rating	50 amp		
Work Lights	2 halogen (one mounted on boom, one on frame)		
Undercarriage			
Rollers (each side)			
Carrier	2		
Track	8		
Shoes, Triple Semi-Grousers (each side)	48		
Track			
Adjustment	Hydraulic		
Guides	3 per side		
Chain	Sealed and lubricated		
Ground Pressure			
800-mm (32 in.) Triple Semi-Grouser Shoes	49.3 kPa (7.15 psi)		
Swing Mechanism			
Speed	10.7 rpm		
Torque	120 000 Nm (88,500 lb.-ft.)		

SPECS

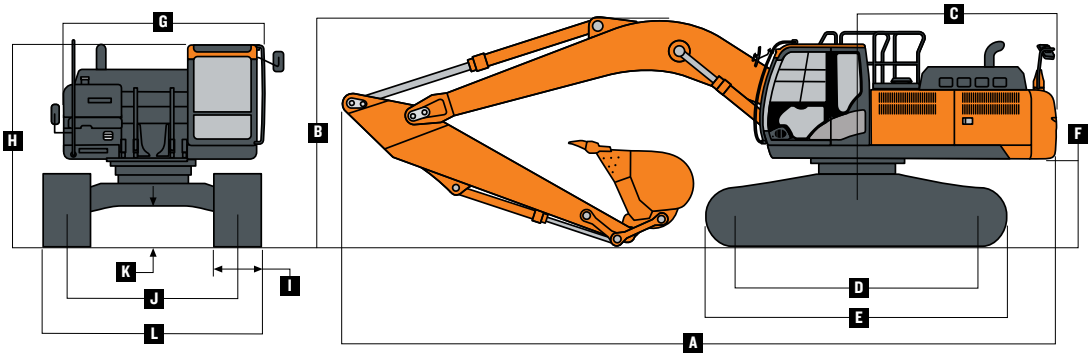
Serviceability	ZX350LC-6
Refill Capacities	
Fuel Tank	630 L (166 gal.)
Diesel Exhaust Fluid (DEF) Tank	70 L (18 gal.)
Cooling System	45 L (12 gal.)
Engine Oil with Filter	48 L (13 gal.)
Hydraulic Tank	180 L (48 gal.)
Hydraulic System	340 L (90 gal.)
Swing Drive	15.7 L (16.6 qt.)
Gearbox	
Propel (each)	9.2 L (9.7 qt.)
Pump Drive	1.1 L (1.2 qt.)
Operating Weights	
With full fuel tank; 79-kg (175 lb.) operator; 1.4-m³ (1.8 cu. yd.), 1370-mm (54 in.), 1160-kg (2,557 lb.) bucket; 4.0-m (13 ft. 1 in.) arm; 6900-kg (15,212 lb.) counterweight; and 800-mm (32 in.) triple semi-grouser shoes	
Operating Weight	35 090 kg (77,360 lb.)
Component Weights	
Undercarriage w/ Triple Semi-Grouser Shoes	
800-mm (32 in.)	12 710 kg (28,021 lb.)
One-Piece Boom (with arm cylinder)	
6.4 m (21 ft. 0 in.)	3246 kg (7,156 lb.)
5.7 m (18 ft. 8 in.) ME	3173 kg (6,995 lb.)
Arm with Bucket Cylinder and Linkage	
2.10 m (6 ft. 10 in.) ME	1830 kg (4,034 lb.)
2.67 m (8 ft. 9 in.) Heavy-Duty (HD)	1904 kg (4,198 lb.)
3.20 m (10 ft. 6 in.)	1811 kg (3,993 lb.)
4.00 m (13 ft. 1 in.)	1935 kg (4,266 lb.)
Boom Lift Cylinders (2), Total Weight	290 kg (639 lb.)



Operating Dimensions					
Arm Length	**2.1 m (6 ft. 10 in.)**	**2.67 m (8 ft. 9 in.)**	**2.67 m (8 ft. 9 in.)**	**3.2 m (10 ft. 6 in.)**	**4.0 m (13 ft. 1 in.)**
Boom Length	**5.7 m (18 ft. 8 in.)**	**5.7 m (18 ft. 8 in.)**	**6.4 m (21 ft. 0 in.)**	**6.4 m (21 ft. 0 in.)**	**6.4 m (21 ft. 0 in.)**
Arm Digging Force					
SAE	275 kN (61,822 lb.)	213 kN (47,884 lb.)	213 kN (47,884 lb.)	177 kN (39,791 lb.)	153 kN (34,396 lb.)
ISO	288 kN (64,745 lb.)	222 kN (49,908 lb.)	222 kN(49,908 lb.)	185 kN (41,590 lb.)	159 kN (35,745 lb.)
Bucket Digging Force					
SAE	229 kN (51,481 lb.)	214 kN (48,109 lb.)	214 kN (48,109 lb.)	214 kN (48,109 lb.)	214 kN (48,109 lb.)
ISO	264 kN (59,350 lb.)	246 kN (55,303 lb.)	246 kN (55,303 lb.)	246 kN (55,303 lb.)	246 kN (55,303 lb.)
A Maximum Reach	9.41 m (30 ft. 10 in.)	9.93 m (32 ft. 7 in.)	10.57 m (34 ft. 8 in.)	11.10 m (36 ft. 5 in.)	11.86 m (38 ft. 11 in.)
A' Maximum Reach at Ground Level	9.16 m (30 ft. 1 in.)	9.69 m (31 ft. 9 in.)	10.36 m (34 ft. 0 in.)	10.89 m (35 ft. 9 in.)	11.67 m (38 ft. 3 in.)
B Maximum Digging Depth	5.62 m (18 ft. 5 in.)	6.22 m (20 ft. 5 in.)	6.84 m (22 ft. 5 in.)	7.38 m (24 ft. 3 in.)	8.18 m (26 ft. 10 in.)
B' Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	5.39 m (17 ft. 8 in.)	6.02 m (19 ft. 9 in.)	6.64 m (21 ft. 9 in.)	7.21 m (23 ft. 8 in.)	8.04 m (26 ft. 5 in.)
C Maximum Cutting Height	9.43 m (30 ft. 11 in.)	9.66 m (31 ft. 8 in.)	9.99 m (32 ft. 9 in.)	10.36 m (34 ft. 0 in.)	10.75 m (35 ft. 3 in.)
D Maximum Dumping Height	6.39 m (20 ft. 12 in.)	6.60 m (21 ft. 8 in.)	6.94 m (22 ft. 9 in.)	7.24 m (23 ft. 9 in.)	7.63 m (25 ft. 0 in.)
E Minimum Swing Radius	4.04 m (13 ft. 3 in.)	4.05 m (13 ft. 3 in.)	4.61 m (15 ft. 1 in.)	4.46 m (14 ft. 8 in.)	4.47 m (14 ft. 8 in.)
F Maximum Vertical Wall	4.15 m (13 ft. 7 in.)	4.78 m (15 ft. 8 in.)	5.51 m (18 ft. 1 in.)	6.42 m (21 ft. 1 in.)	7.27 m (23 ft. 10 in.)

ZX350LC-6 SPECS

Machine Dimensions		ZX350LC-6
A	Overall Length	
	2.1-m (6 ft. 10 in.) ME arm / 5.7-m (18 ft. 8 in.) ME boom	10.99 m (36 ft. 1 in.)
	2.67-m (8 ft. 9 in.) HD arm / 5.7-m (18 ft. 8 in.) ME boom	11.34 m (37 ft. 2 in.)
	2.67-m (8 ft. 9 in.) HD arm / 6.4-m (21 ft. 0 in.) boom	11.33 m (37 ft. 2 in.)
	3.2-m (10 ft. 6 in.) arm / 6.4-m (21 ft. 0 in.) boom	11.20 m (36 ft. 9 in.)
	4.0-m (13 ft. 1 in.) arm / 6.4-m (21 ft. 0 in.) boom	11.29 m (37 ft. 0 in.)
B	Overall Height	
	2.1-m (6 ft. 10 in.) ME arm / 5.7-m (18 ft. 8 in.) ME boom	4.04 m (13 ft. 3 in.)
	2.67-m (8 ft. 9 in.) HD arm / 5.7-m (18 ft. 8 in.) ME boom	3.47 m (11 ft. 5 in.)
	2.67-m (8 ft. 9 in.) HD arm / 6.4-m (21 ft. 0 in.) boom	3.47 m (11 ft. 5 in.)
	3.2-m (10 ft. 6 in.) arm / 6.4-m (21 ft. 0 in.) boom	3.27 m (10 ft. 9 in.)
	4.0-m (13 ft. 1 in.) arm / 6.4-m (21 ft. 0 in.) boom	3.60 m (11 ft. 10 in.)
C	Swing Radius	3.60 m (11 ft. 10 in.)
D	Distance Between Idler/Sprocket Centerline	4.05 m (13 ft. 3 in.)
E	Undercarriage Length	4.94 m (16 ft. 2 in.)
F	Counterweight Clearance	1.18 m (3 ft. 10 in.)
G	Upperstructure Width	2.99 m (9 ft. 10 in.)
H	Cab Height	3.14 m (10 ft. 4 in.)
I	Track Width with Triple Semi-Grouser Shoes	600 mm (24 in.) / 700 mm (28 in.) / 800 mm (32 in.)
J	Gauge Width	2.59 m (8 ft. 6 in.)
K	Ground Clearance	0.51 m (20 in.)
L	Overall Width with Triple Semi-Grouser Shoes	
	600 mm (24 in.)	3.19 m (10 ft. 6 in.)
	700 mm (28 in.)	3.29 m (10 ft. 10 in.)
	800 mm (32 in.)	3.39 m (11 ft. 2 in.)



SPECS

Lift Charts ZX350LC-6

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). All lift capacities are based on ISO 10567 (with power boost). Machine equipped with 800-mm (32 in.) shoes; 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.

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.)	
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
With 2.1-m (6 ft. 10 in.) ME arm, 5.7-m (18 ft. 8 in.) ME boom and 1273-kg (2806 lb.) bucket												
6.0 m (20 ft.)							**10 900** **(23,900)**	8750 (18,800)				
4.5 m (15 ft.)					**15 050** **(32,350)**	13 550 (29,200)	**11 800** **(25,650)**	8400 (18,050)				
3.0 m (10 ft.)							**13 100** **(28,350)**	7950 (17,100)	9200 (19,800)	5500 (11,750)		
1.5 m (5 ft.)							13 050 (28,000)	7550 (16,250)	9050 (19,400)	5300 (11,450)		
Ground Line					**19 350** **(41,950)**	11 550 (24,800)	12 800 (27,500)	7350 (15,850)				
–1.5 m (–5 ft.)					**17 600** **(38,150)**	11 600 (24,950)	12 800 (27,550)	7350 (15,900)				
–3.0 m (–10 ft.)			**17 750** **(38,500)**	**17 750** **(38,500)**	**14 050** **(30,150)**	11 950 (25,700)						
With 2.67-m (8 ft. 9 in.) HD arm, 5.7-m (18 ft. 8 in.) ME boom and 1273-kg (2,806 lb.) bucket												
6.0 m (20 ft.)							**9950** **(21,800)**	9000 (19,250)				
4.5 m (15 ft.)					**13 700** **(29,550)**	**13 700** **(29,550)**	**11 050** **(23,950)**	8600 (18,500)	9550 (20,500)	5800 (12,400)		
3.0 m (10 ft.)					**17 000** **(36,550)**	**12 850** **(27,700)**	**12 500** **(27,050)**	8100 (17,500)	9350 (20,050)	5600 (11,950)		
1.5 m (5 ft.)					**19 250** **(41,550)**	**12 000** **(25,850)**	13 200 (28,350)	7700 (16,550)	9100 (19,550)	5350 (11,550)		
Ground Line					**19 650** **(42,600)**	11 650 (25,050)	12 900 (27,700)	7400 (15,950)	8950 (19,250)	5250 (11,250)		
–1.5 m (–5 ft.)			**19 100** **(43,400)**	**19 100** **(43,400)**	**18 500** **(40,100)**	11 650 (25,000)	12 800 (27,500)	7350 (15,850)				
–3.0 m (–10 ft.)			**21 100** **(45,750)**	**21 100** **(45,750)**	**15 700** **(33,900)**	11 850 (25,450)	**11 400** **(24,200)**	7500 (16,200)				
–4.5 m (–15 ft.)					**9700**	**9700**						
With 2.67-m (8 ft. 9 in.) HD arm, 6.4-m (21 ft. 0 in.) boom and 1273-kg (2,806 lb.) bucket												
6.0 m (20 ft.)							**9370** **(20,380)**	9370 (20,220)	**8640** **(18,970)**	6340 (13,590)		
4.5 m (15 ft.)					**13 990** **(29,980)**	**13 990** **(29,980)**	**10 730** **(23,210)**	8950 (19,280)	**9170** **(19,960)**	6150 (13,220)		
3.0 m (10 ft.)					**17 510** **(37,570)**	13 040 (28,140)	**12 340** **(26,640)**	8430 (18,160)	9750 (20,950)	5900 (12,690)		
1.5 m (5 ft.)					**(37,770)**	(26,560)	13 610 (29,310)	8000 (17,240)	9490 (20,410)	5670 (12,200)		
Ground Line					**19 190** **(42,350)**	12 130 (26,070)	13 360 (28,700)	7770 (16,720)	9330 (20,050)	5520 (11,880)		
–1.5 m (–5 ft.)			**12 790** **(29,200)**	**12 790** **(29,200)**	**18 520** **(40,190)**	12 160 (26,120)	13 290 (28,550)	7710 (16,590)	9290 (19,990)	5490 (11,820)		
–3.0 m (–10 ft.)			**21 520** **(46,790)**	**21 520** **(46,790)**	**16 430** **(35,560)**	12 350 (26,550)	**12 430** **(26,770)**	7820 (16,840)				
–4.5 m (–15 ft.)			**16 160** **(34,620)**	**16 160** **(34,620)**	**12 550** **(26,720)**	**12 550** **(26,720)**						

Lift Charts ZX350LC-6

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). All lift capacities are based on ISO 10567 (with power boost). Machine equipped with 800-mm (32 in.) shoes; 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.

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.)	
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
With 3.20-m (10 ft. 6 in.) arm, 6.4-m (21 ft. 0 in.) boom and 1273-kg (2,806 lb.) bucket												
6.0 m (20 ft.)									**7960** **(17,430)**	6440 (13,810)		
4.5 m (15 ft.)							**9960** **(21,550)**	9100 (19,600)	**8610** **(18,740)**	6230 (13,370)		
3.0 m (10 ft.)					**16 250** **(34,880)**	13 410 (28,920)	**11 680** **(25,230)**	8560 (18,440)	**9480** **(20,580)**	5950 (12,800)	**6360**	4430
1.5 m (5 ft.)					**18 820** **(40,590)**	12 520 (26,970)	**13 160** **(28,450)**	8080 (17,410)	9520 (20,460)	5690 (12,240)	7190 (15,430)	4310 (9,230)
Ground Line					**19 600** **(42,440)**	12 150 (26,120)	13 390 (28,750)	7780 (16,750)	9310 (20,020)	5510 (11,840)	7050 (15,150)	4180 (8,970)
−1.5 m (−5 ft.)			**12 220** **(27,720)**	**12 220** **(27,720)**	**19 070** **(41,350)**	12 080 (25,960)	13 250 (28,450)	7660 (16,490)	9220 (19,830)	5430 (11,670)	6960 (14,960)	4100 (8,800)
−3.0 m (−10 ft.)	**14 530** **(32,600)**	**14 530** **(32,600)**	**19 970** **(45,330)**	**19 970** **(45,330)**	**17 430** **(37,730)**	12 210 (26,230)	**13 030** **(28,110)**	7710 (16,590)	9290 (20,000)	5480 (11,820)		
−4.5 m (−15 ft.)			**19 200** **(41,260)**	**19 200** **(41,260)**	**14 280** **(30,590)**	12 530 (26,960)	**10 490** **(22,170)**	7950 (17,150)				
With 4.0-m (13 ft. 1 in.) arm, 6.4-m (21 ft. 0 in.) boom and 1273-kg (2,806 lb.) bucket												
7.5 m (25 ft.)									**(14,660)**	(14,340)		
6.0 m (20 ft.)									**6,940** **(15,190)**	6580 (14,110)	**5700** **(11,000)**	4600 (9,810)
4.5 m (15 ft.)									**7700** **(16,760)**	6340 (13,600)	**7140** **(15,550)**	4500 (9,620)
3.0 m (10 ft.)					**14 170** **(30,440)**	13 920 (30,010)	**10 530** **(22,750)**	8750 (18,840)	**8700** **(18,870)**	6030 (12,950)	7230 (15,510)	4340 (9,290)
1.5 m (5 ft.)					**17 420** **(37,540)**	12 800 (27,580)	**12 280** **(26,550)**	8190 (17,630)	9560 (20,550)	5720 (12,290)	7040 (15,120)	4170 (8,930)
Ground Line			**6960** **(15,920)**	**6960** **(15,920)**	**19 120** **(41,350)**	12 170 (26,180)	13 410 (28,800)	7790 (16,750)	9290 (19,970)	5480 (11,770)	6900 (14,810)	4030 (8,650)
−1.5 m (−5 ft.)	**7010** **(15,670)**	**7010** **(15,670)**	**11 120** **(25,190)**	**11 120** **(25,190)**	**19 370** **(41,950)**	11 930 (25,640)	13 160 (28,260)	7570 (16,280)	9130 (19,620)	5330 (11,460)	6820 (14,660)	3960 (8,510)
−3.0 m (−10 ft.)	**11 610** **(26,040)**	**11 610** **(26,040)**	**16 550** **(37,530)**	**16 550** **(37,530)**	**18 430** **(39,880)**	11 950 (25,670)	13 110 (28,150)	7530 (16,190)	9100 (19,580)	5310 (11,420)		
−4.5 m (−15 ft.)	**17 110** **(38,570)**	**17 110** **(38,570)**	**22 900** **(49,330)**	**22 900** **(49,330)**	**16 180** **(34,810)**	12 160 (26,160)	**11 970** **(25,650)**	7660 (16,490)	**8670** **(18,130)**	5450 (11,780)		
−6.0 m (−20 ft.)			**16 290** **(34,320)**	**16 290** **(34,320)**	**11 790** **(24,700)**	**11 790** **(24,700)**	**7960**	7960				

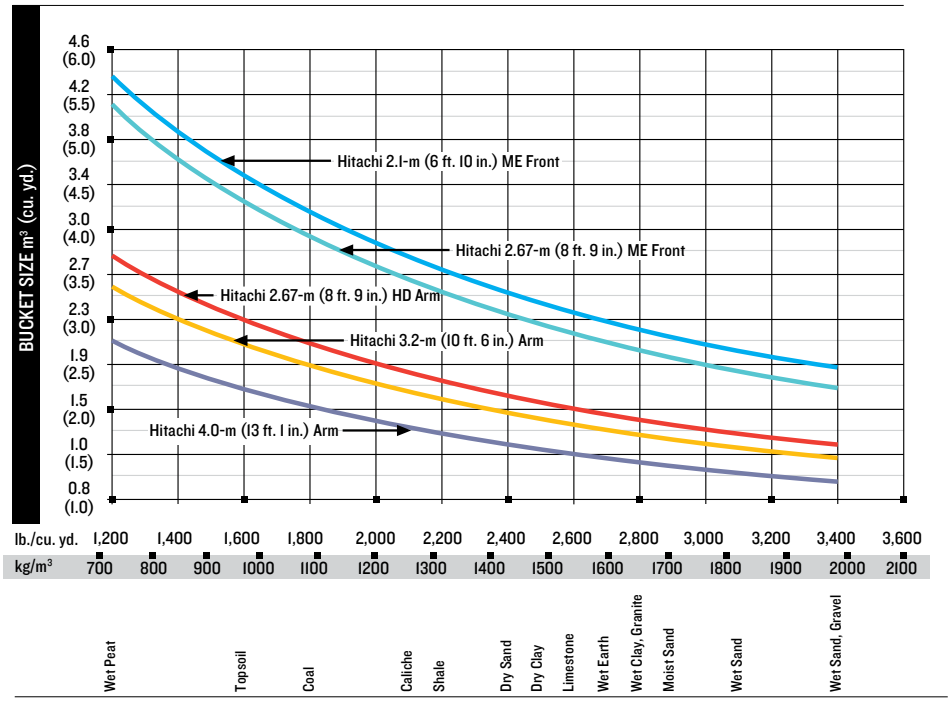
SPECS

Buckets ZX350LC-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 dealer 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 2.67 m (8 ft. 9 in.) HD		Arm Dig Force 3.2 m (10 ft. 6 in.)		Arm Dig Force 4.0 m (13 ft. 1 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.	
General Purpose, High Capacity	1524	60	2.13	2.78	1673	3,687	225.7	50,737	213.9	48,093	185.0	41,581	154.5	34,725	1811	71.31	7
Heavy Duty Plate Lip	914	36	0.99	1.30	1061	2,338	244.6	54,994	220.9	49,653	185.0	41,581	158.3	35,585	1671	65.79	4
	1067	42	1.22	1.59	1203	2,651	244.8	55,044	220.9	49,671	185.0	41,594	158.3	35,595	1670	65.73	5
	1219	48	1.44	1.88	1300	2,866	244.7	55,019	220.9	49,662	185.0	41,588	158.3	35,590	1670	65.76	6
	1372	54	1.67	2.18	1393	3,072	244.7	55,019	220.9	49,662	185.0	41,588	158.3	35,590	1673	65.86	6
Heavy Duty Plate Lip, High Capacity	1067	42	1.33	1.74	1370	3,020	225.5	50,687	213.8	48,074	179.7	40,401	154.4	34,715	1813	71.38	5
	1219	48	1.58	2.07	1507	3,323	225.5	50,687	213.8	48,074	179.7	40,401	154.4	34,715	1813	71.38	6
	1372	54	1.84	2.41	1618	3,568	225.3	50,652	213.8	48,060	179.7	40,391	154.4	34,707	1814	71.43	6

Bucket Selection Guide*



*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.