EQUIPMENT

STANDARD EQUIPMENT

ENGINE
- Meets EPA Tier II non-road emissions regulations
- H/P mode control
- E mode control
- 50 A alternator
- Dry-type air filter with evacuator valve (with safety element)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Air cleaner double filters
- 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 reduced drift valve
- Control valve with main relief valve
- Auxiliary valve section
- Suction filter
- Full-flow filter
- Pilot filter

CAB
- CRES (Center pillar Reinforced Structure) cab
- All-weather sound-suppressed steel cab
- Reinforced, tinted (bronze color) glass windows
- 4 fluid-filled elastic mounts
- Upper and lower front windows and left side windows that open
- Intermittent windshield retractable wipers
- Front window washer
- Adjustable reclining seat with adjustable armrests
- Footrest
- Electric double horn
- 12 V-60 W, 5 amp, cellular phone outlet
- 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
- Auto control air conditioner

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

LIGHTS
- 2 working lights

UPPERSTRUCTURE
- Undercover
- 7,270 lb (3 300 kg) counterweight
- Fuel level float
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rearview mirror (right and 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
- 28” (700 mm) triple grouser shoes
- Travel motion alarm device

FRONT ATTACHMENTS
- HN bushing
- WC thermal spraying
- Reinforced resin thrust plate
- Flanged pin
- Bucket clearance adjust mechanism
- Centralized lubrication system
- Dirt seal on all bucket pins
- 8’ 6” (2.58 m) arm

MISCELLANEOUS
- Lockable fuel filling cap
- Skid-resistant tapes, plates and handrails.
- Travel direction mark on track frame
- Onboard Machine Information Center (MIC)

OPTIONAL EQUIPMENT
- 10’ 2” (3.1 m) arm
- Tropical doors
- 24” (600 mm) triple grouser shoes
- Window vandal protection covers
- Auxiliary hydraulic and electric pilot contols
- Hydraulic filter restriction indicator kit
- Single pedal propel control
- Auxiliary lines with shutoff valve
- Buckets: ditching, general purpose, general purpose high capacity, heavy-duty, heavy-duty high capacity, side cutters and teeth
- Heavy-duty grapple
- Hydraulic bucket material clamps
- Hydraulic coupler
- Seat belt, 3” (76 mm) non-retractable
- Alternate pilot control pattern
- Cab circulation fan
- Protection screens for cab front, rear and side
- 24- to 12-volt, DC radio converters, 10 amp
- Cab extension harness
- Secondary exit kit-top hatch
- Ripper
- Auto-lubrication systems
- Boom and arm anti-drift kits

HITACHI

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.

Hitachi Construction Products
P.O. Box 8806 • 1515 5th Avenue • Moline, IL 61265
www.hitachiconstruction.com

DKA160HT (03-12)

HITACHI

ZAXIS 160LC

Rated Engine
110 hp (82.2 kW)

Operating Weight
35,500 lbs (16 100 kg)

Bucket Capacity
0.50 - 1.30 yd³ (0.38 - .99 m³)

SMARTER and FASTER

Smarter, faster, more productive yet more efficient–the versatile Hitachi Zaxis 160LC can be found at construction sites all over the world. Boasting a cleaner yet more powerful engine and a host of new items as well as significant refinements, Zaxis is the next generation in excavator development.

Durable

Extensive steps have been taken to improve basic performance and overall durability.

Rigid Undercarriage

The overall rigidity of the entire undercarriage has been increased to support a heavier front attachment and counterweight.

High-Power Engine

The Isuzu AA-4BG1TC generates

- **105 hp @ 1,950 rpm in P mode (78.0 kW/min^{-1})**
- **110 hp @ 2,150 rpm in H/P mode (82.2 kW/min^{-1})**
- **295 lbf•ft max. torque @ 1,800 rpm (40.8 kgf•m/min^{-1})**

and meets EPA Tier II non-road emission regulations.

Safety, Comfort, and Convenience

The operator's compartment is designed for both comfort and operating efficiency.

Machine Information Center

The Machine Information Center captures and stores vital machine performance data such as engine speeds, hydraulic temperatures, pump pressures, alarms and faults, hours of operation, and more. The data is downloadable through a Palm™ Pilot and is transferred to your PC. Special PC software interprets the data and generates valuable machine performance reports and graphs highlighting machine utilization, performance history, and more to help users improve productivity and profit.

Multi-function Operations

The Zaxis 160LC continues the Hitachi tradition of smooth, multi-functioning excavators. Executing combined operations such as simultaneous swinging and traveling are easy with Zaxis.

The Zaxis Advantage

Higher Productivity

Zaxis uses the latest technologies to achieve lower total operational costs while boosting productivity. In comparison to the EX160, in H/P mode, production has been increased by 4% with a 2% decrease in fuel consumption. In the P mode, production has been increased by 3% with 3% less fuel consumption.

Cab Comfort

The easy-to-read monitor panel and switches are located near the operator to minimize fatigue and enhance operator control. Noise levels inside the cabin have been reduced. The Auto-control air conditioner allows you to set a specific temperature, then forget it. Bi-level air ducts are positioned throughout the cab to promote even air flow.

Lower Operating Costs

Reduced fuel consumption, a strengthened main frame, front attachment, and undercarriage, longer lubrication intervals, 4,000-hour hydraulic oil and 1,000-hour hydraulic oil filters all work together to extend the durability of Zaxis while reducing running and repair costs.

Work Modes

Two modes simplify excavating operations. Select the "Digging" mode for smooth and speedy front operations or "Attachment" to use a wide variety of tools such as breakers, compactors, and crushers.

The powerful engine and hydraulic system work together to bring the maximum amount of excavating forces to the toughest of job sites.

Cab Safety

The CRES (Center pillar Reinforced Structure) rigid cab is designed with safety in mind. The closed-section pillar and reinforcing members at central areas withstand vertical and horizontal external forces. This can help reduce the potential of operator injury in the event of an accident.

Operator Command

The newly refined hydraulic system gives the operator unprecedented control. The bucket regenerative mechanism makes light-duty operation quicker.

Increased Travel and Swing Power

Armed with plenty of dependable power for travel and swing operations, the Zaxis 160 is ready for the toughest of terrains and job sites thanks to improved travel motors and swing reduction gear. It has 8% more swing torque and 17% more travel power than the EX160.

Auto Acceleration and Auto Idle

Engine speed is automatically controlled in response to the amount of lever operation. This helps reduce fuel consumption, especially during light-load work, up to 9%. The Auto-idle control reduces the engine speed automatically to save energy when the lever is in neutral.

Easy-to-read monitor panel.

A low-noise muffler and the Isuzu Tier II emissions control engine ensure a quieter, more environmentally friendly excavator. Plastic parts are labeled for easy recycling. Wiring is lead-free.

Cab design both guards the operator and contributes to efficient operation through its comfortable, ergonomic layout and its CRES design.

Spec Summary

ENGINE

Model .....Isuzu AA-4BG1TC
Type .....4-cycle water-cooled, direct injection
Aspiration .....Turbocharged, intercooled
No. of cylinders 4
Rated power SAE J1349, net
H/P mode .....110 hp (82.2 kW) @ 2,150 rpm (min^{-1})
P mode .....105 hp (78.0 kW) @ 1,950 rpm (min^{-1})
Maximum torque .....295 lbf•ft (40.8 kgf•m) @ 1,800 rpm (min^{-1})
Piston displacement .....264 in^3 (4.329 L)
Bore and stroke .....4.13" x 4.92" (105 mm x 125 mm)
Batteries .....2 x 12 V, 97 AH
Governor .....Mechanical speed control with stepping motor

HYDRAULIC SYSTEM

Work mode selector allows operator to choose between Digging mode or Attachment mode.
Engine speed sensing system.
Main pumps .....2 variable displacement axial piston pumps
Max. oil flow ....2 x 36.5 US gpm (2 x 138 L/min, 2 x 30.4 lmp gpm)
Pilot pump .....1 gear pump
Max. oil flow.....6.4 US gpm (24.2 L/min, 5.3 lmp gpm)

Hydraulic Motors

Travel .....2 variable displacement axial piston motors
Swing .....1 axial piston motor

Relief Valve Settings

Implement circuit .....4,980 psi (350 kgf/cm^2)
Swing circuit .....4,410 psi (310 kgf/cm^2)
Travel circuit .....4,980 psi (350 kgf/cm^2)
Pilot circuit .....570 psi (40 kgf/cm^2)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Dimensions:

	Qty.	Bore	Rod Diameter
Boom	2	4.33" (110 mm)	3.15" (80 mm)
Arm	1	4.72" (120 mm)	3.54" (90 mm)
Bucket	1	4.13" (105 mm)	2.76" (70 mm)

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. Reinforced frame for resistance to deformation.

Swing Mechanism

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.
Swing speed .....13.6 rpm (min^{-1})
Swing torque .....29,850 lb•ft (4 128 N•m)

Operator's Cab

Independent roomy cab, 40" (1 005 mm) wide by 66" (1 675 mm) high, conforming to ISO Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) are openable. Adjustable, reclining seat with armrests; movable with or without control levers.

CONTROLS

Pilot Controls

Hitachi's original shockless valve and quick warm-up system built in the pilot circuit. Hydraulic warm-up control system for engine and hydraulic oil.
Implement levers 2
Travel levers with pedals 2

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Lubricated track rollers, idlers, and sprockets with floating seals.
Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.
Number of Rollers and Shoes on Each Side, standard N.A. model
Upper rollers 2
Lower rollers 7
Track shoes 43
Track guard 1

Traction Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counter-rotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel.
Automatic transmission system: High-Low.
Travel speeds High: .....0-3.3 mph (5.3 km/h)
Low: .....0-1.9 mph (3.1 km/h)
Maximum traction force .....33,670 lbf (15 273 kgf)
Gradeability .....35° (70%) continuous

SERVICE REFILL CAPACITIES

	US gal	Liters	Imp gal
Fuel tank	74.0	280.0	61.6
Engine coolant	5.1	19.2	4.2
Engine oil	4.2	15.8	3.5
Swing mechanism (each side)	1.6	6.2	1.4
Travel final device (each side)	0.9	3.5	0.8
Hydraulic system	44.9	170.0	37.4
Hydraulic tank	26.4	100.0	22.0

WEIGHTS/GROUND PRESSURE

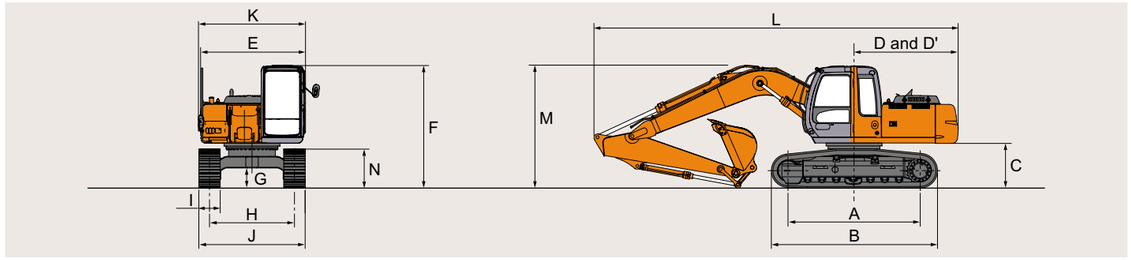
Standard North America backhoe model Zaxis 160LC:
16' 9" (5.10 m) boom, 8' 6" (2.58 m) arm and 0.79 yd^3 (0.60 m^3) PCSA heaped bucket, 28" (700 mm) shoes.
Weight: .....35,500 lb (16 100 kg)
Ground pressure: .....4.83 psi (0.34 kgf/cm^2)

BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design.
16' 9" (5.10 m) boom, 8' 6" (2.58 m) and 10' 2" (3.10 m) arms are available.

DIMENSIONS / WORKING RANGES

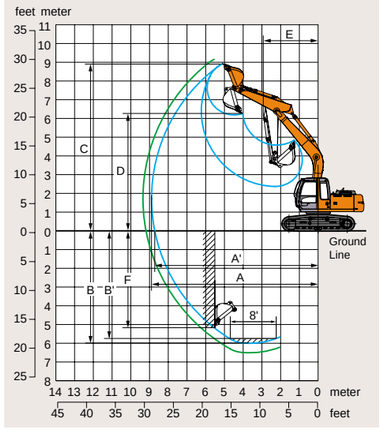
ZAXIS160LC



Unit: ft in (mm)

		ZAXIS160LC			ZAXIS160LC
A	Distance between tumblers	10'2" (3 100)	J	Undercarriage width - 24" (600 mm) shoes	8'6" (2 590)
B	Undercarriage length	12'10" (3 920)		- 28" (700 mm) shoes	8'10" (2 690)
*C	Counterweight clearance	3'3" (1 000)	K	Overall width	8'2" (2 500)
D	Rear-end swing radius	8'0" (2 440)	L	Overall length	
D'	Rear-end length	8'0" (2 440)		With 2.58 m (8'6") arm	28'0" (8 530)
E	Overall width of upperstructure	8'1" (2 460)		With 3.10 m (10'2") arm	28'1" (8 560)
F	Overall height of cab	9'5" (2 880)	M	Overall height of boom	
*G	Min. ground clearance	1'7" (470)		With 2.58 m (8'6") arm	9'5" (2 870)
H	Track gauge	6'6" (1 990)		With 3.10 m (10'2") arm	10'2" (3 110)
I	Track shoe width	G 28" (700)	N	Track height with triple grouser shoes	3'0" (910)

* Excluding track shoe lug. G: Triple grouser shoe



Unit: ft in (mm)

Arm length	ZAXIS160LC 8'6" (2.58 m)	ZAXIS160LC 10'2" (3.10 m)
A Max. digging reach	28'8" (8 740)	30'2" (9 200)
A' Max. digging reach (on ground)	28'1" (8 570)	29'8" (9 030)
B Max. digging depth	19'2" (5 850)	20'10" (6 360)
B' Max. digging depth (8' level)	18'5" (5 610)	20'2" (6 140)
C Max. cutting height	28'8" (8 750)	29'6" (8 940)
D Max. dumping height	20'8" (6 130)	21'5" (6 540)
E Min. swing radius	9'7" (2 910)	9'7" (2 920)
F Max. vertical wall	16'6" (5 030)	18'3" (5 560)
Bucket digging force SAE : PCSA	23,200 lbf (103.2 kN)	
Arm crowd force SAE : PCSA	18,600 lbf (82.7 kN)	16,715 lbf (74.3 kN)

A full line of buckets is offered to meet a wide variety of applications. The buckets have an adjustable bushing for side clearance, with the exception of the ditching bucket. Tooth selection includes either the John Deere Fanggs® or the ESCO (Helilok) Standard tooth. Replaceable cutting edges are available through Hitachi parts. Optional side cutters add 6 inch (150 mm) to bucket widths.

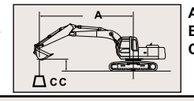
Type Bucket	Bucket Width		Bucket Capacity*		Weight		Bucket Dig Force		Arm Dig Force 5 ft. 4 in. (1.62 m)		Arm Dig Force 6 ft. 11 in. (2.12 m)		Bucket Tip Radius		No. Teeth
	in.	mm	cu. yd.	m^3	lb.	kg	lb.	kN	lb.	kN	lb.	kN	in.	mm	
General-Purpose Plate Lip	24	610	0.50	0.38	899	408	23,200	103.2	18,600	82.7	16,715	74.3	50.5	1 283	4
	30	760	0.64	0.49	1,068	484	23,200	103.2	18,600	82.7	16,715	74.3	50.5	1 283	4
	36	915	0.78	0.60	1,096	497	23,200	103.2	18,600	82.7	16,715	74.3	50.5	1 283	5
	42	1 065	0.92	0.70	1,253	568	23,200	103.2	18,600	82.7	16,715	74.3	50.5	1 283	6
	48	1 220	1.06	0.81	1,399	635	23,200	103.2	18,600	82.7	16,715	74.3	50.5	1 283	7
General-Purpose High Capacity	24	610	0.59	0.45	1,106	502	21,110	93.9	18,010	80.1	16,245	72.3	55.5	1 410	4
	30	760	0.77	0.59	1,182	536	21,110	93.9	18,010	80.1	16,245	72.3	55.5	1 410	4
	36	915	0.95	0.73	1,401	635	21,110	93.9	18,010	80.1	16,245	72.3	55.5	1 410	5
	42	1 065	1.12	0.86	1,590	721	21,110	93.9	18,010	80.1	16,245	72.3	55.5	1 410	6
	48	1 220	1.30	0.99	1,400	635	23,200	103.2	18,600	82.7	16,715	74.3	50.5	1 283	6
Heavy-Duty Plate Lip	24	610	0.59	0.45	1,390	630	21,110	93.9	18,010	80.1	16,245	72.3	55.5	1 410	4
	30	760	0.77	0.59	1,481	672	21,110	93.9	18,010	80.1	16,245	72.3	55.5	1 410	4
	36	915	0.95	0.73	1,558	707	21,110	93.9	18,010	80.1	16,245	72.3	55.5	1 410	5
	42	1 065	1.12	0.86	1,617	733	21,110	93.9	18,010	80.1	16,245	72.3	55.5	1 410	5
Ditching	60	1 525	0.90	0.69	959	435	31,665	140.9	20,400	90.7	18,135	80.7	37.0	940	0
	72	1 829	1.06	0.81	1,087	493	30,845	137.2	20,260	90.1	18,020	80.2	38.0	965	0

*All capacities are SAE heaped ratings.

LIFTING CAPACITIES

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.

Rating over-side or 360 degrees Rating over-front



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

ZAXIS160

Unit: lb (kg)

Conditions	Load point height	Load radius 5 ft. (1.52 m)		10 ft. (3.05 m)		15 ft. (4.57 m)		20 ft. (6.10 m)		25 ft. (7.62 m)	
Boom 16'9" (5.10 m) Arm 8'6" (2.60 m) Bucket .78 yd³ (.60 m³) Shoe 24" (600 mm)	15 ft. (4.57 m)							5,944 (2 696)	*6,629 (3 007)		
	10 ft. (3.05 m)			*13,261 (6 015)	*13,261 (6 015)	*9,070 (4 114)	*9,070 (4 114)	5,659 (2 567)	*7,636 (3 464)	3,704 (1 680)	*5,083 (2 306)
	5 ft. (1.52 m)					8,322 (3 775)	*12,214 (5 540)	5,291 (2 400)	8,694 (3 944)	3,565 (1 617)	5,982 (2 713)
	Ground Line					7,752 (3 516)	13,249 (6 010)	4,988 (2 263)	8,361 (3 793)	3,435 (1 558)	5,842 (2 650)
	–5 ft. (–1.52 m)			14,626 (6 634)	*17,223 (7 812)	7,556 (3 427)	13,021 (5 906)	4,840 (2 195)	8,197 (3 718)		
	–10 ft. (–3.05 m)	*18,856 (8 553)	*18,856 (8 553)	14,910 (6 763)	*20,665 (9 374)	7,624 (3 458)	13,101 (5 943)	4,888 (2 217)	8,250 (3 742)		
	–15 ft. (–4.57 m)			15,494 (7 028)	*16,081 (7 294)	7,987 (3 623)	*11,152 (5 059)				
Boom 16'9" (5.10 m) Arm 8'6" (2.60 m) Bucket .78 yd³ (.60 m³) Shoe 28" (700 mm)	15 ft. (4.57 m)							6,023 (2 732)	*6,629 (3 007)		
	10 ft. (3.05 m)			13,261* (6 015)	13,261* (6 015)	9,070* (4 114)	*9,070 (4114)	5,738 (2 603)	*7,636 (3 464)	3,765 (1 708)	*5,083 (2 306)
	5 ft. (1.52 m)					8,436 (3 827)	*12,214 (5 540)	5,370 (2 436)	8,819 (4 000)	3,626 (1 645)	6,076 (2 756)
	Ground Line					7,866 (3 568)	13,437 (6 095)	5,068 (2 299)	8,486 (3 849)	3,495 (1 585)	5,935 (2 692)
	–5 ft. (–1.52 m)			14,828 (6 726)	*17,223 (7 812)	7,669 (3 479)	13,209 (5 992)	4,919 (2 231)	8,322 (3 775)		
	–10 ft. (–3.05 m)	*18,856 (8 553)	*18,856 (8 553)	15,112 (6 855)	*20,665 (9 374)	7,738 (3 510)	13,289 (6 028)	4,967 (2 253)	8,375 (3 799)		
	–15 ft. (–4.57 m)			15,695 (7 119)	*16,081 (7 294)	8,100 (3 674)	*11,152 (5 059)				
Boom 16'9" (5.10 m) Arm 10'2" (3.10 m) Bucket .78 yd³ (.60 m³) Shoe 24" (600 mm)	20 ft. (6.10 m)							*5,585 (2 533)	*5,585 (2 533)		
	15 ft. (4.57 m)							*5,825 (2 642)	*5,825 (2 642)		
	10 ft. (3.05 m)					*7,871 (3 570)	*7,871 (3 570)	5,797 (2 630)	*6,921 (3 139)	3,802 (1 725)	*6,073 (2 755)
	5 ft. (1.52 m)					8,544 (3 876)	*11,141 (5 054)	5,390 (2 445)	*8,442 (3 829)	3,621 (1 642)	6,046 (2 742)
	Ground Line			*10,402 (4 718)	*10,402 (4 718)	7,840 (3 556)	13,358 (6 059)	5,031 (2 282)	8,413 (3 816)	3,448 (1 564)	5,860 (2 658)
	–5 ft. (–1.52 m)	*7,664 (3 476)	*7,664 (3 476)	14,435 (6 548)	*17,080 (7 747)	7,525 (3 413)	12,995 (5 895)	4,822 (2 187)	8,182 (3 711)	3,356 (1 522)	5,760 (2 613)
	–10 ft. (–3.05 m)	*16,271 (7 381)	*16,271 (7 381)	14,628 (6 635)	*21,897 (9 932)	7,510 (3 407)	12,977 (5 886)	4,797 (2 176)	8,155 (3 699)		
	–15 ft. (–4.57 m)			15,121 (6 859)	*18,222 (8 265)	7,763 (3 521)	*12,537 (5 687)				
Boom 16'9" (5.10 m) Arm 10'2" (3.10 m) Bucket .78 yd³ (.60 m³) Shoe 28" (700 mm)	20 ft. (6.10 m)							*5,585 (2 533)	*5,585 (2 533)		
	15 ft. (4.57 m)							*5,825 (2 642)	*5,825 (2 642)		
	10 ft. (3.05 m)					*7,871 (3 570)	*7,871 (3 570)	5,876 (2 665)	*6,921 (3 139)	3,862 (1 752)	*6,073 (2 755)
	5 ft. (1.52 m)					8,657 (3 927)	*11,141 (5 054)	5,469 (2 481)	*8,442 (3 829)	3,681 (1 670)	6,140 (2 785)
	Ground Line			*10,402 (4 718)	*10,402 (4 718)	7,954 (3 608)	13,546 (6 144)	5,111 (2 318)	8,538 (3 873)	3,509 (1 592)	5,953 (2 700)
	–5 ft. (–1.52 m)	*7,664 (3 476)	*7,664 (3 476)	14,637 (6 639)	*17,080 (7 747)	7,639 (3 465)	13,183 (5 980)	4,901 (2 223)	8,307 (3 768)	3,416 (1 549)	5,854 (2 655)
	–10 ft. (–3.05 m)	*16,271 (7 381)	*16,271 (7 381)	14,829 (6 726)	*21,897 (9 932)	7,624 (3 458)	13,165 (5 972)	4,876 (2 212)	8,280 (3 756)		
	–15 ft. (–4.57 m)			15,323 (6 951)	*18,222 (8 265)	7,877 (3 573)	*12,537 (5 687)				