

HITACHI



ZAXIS 135US

- Engine Net Power: 88 hp (65 kW) @ 2,150 rpm
- Operating Weight: 30,440 lb. (13 808 kg)
- Backhoe Bucket: 0.82 cu. yd. (0.63 m³), 28 in. (700 mm)

ZAXIS 135US SPECIFICATIONS

Engine

Type	Isuzu CC-4BG1TC with turbocharger and air-to-air charge air cooler; meets EPA Tier II non-road emissions regulations
Net Power (ISO9249)	88 SAE net hp (65 kW) @ 2,150 rpm
Cylinders.....	4
Displacement	264 cu. in. (4.329 L)
Cooling Fan.....	suction-type
Electrical System	24 volt with 50-amp alternator
Batteries (two 12 volt)	reserve capacity: 180 min .
Off-level Capacity	70% (35 deg.)

Hydraulic System

Main Pumps	two variable-displacement axial-piston
Maximum Rated Flow	2 x 27.7 gpm (2 x 105 L/min.)
Pilot Pump	one gear
Maximum Rated Flow	8.7 gpm (33 L/min.)
Pressure Setting	570 psi (3930 kPa)

System Operating Pressure

Implement Circuits	4,980 psi (34 336 kPa)
Travel Circuits	4,980 psi (34 336 kPa)
Swing Circuits	4,690 psi (32 337 kPa)
Oil Filtration	one 10-micron full-flow return filter with by-pass / one pilot oil filter / one suction filter

Cylinders

	Bore	Rod Diameter	Stroke
Boom (2)	4.13 in. (105 mm)	2.76 in. (70 mm)	39.2 in. (995 mm)
Arm (1).....	4.53 in. (115 mm)	3.15 in. (80 mm)	44.4 in. (1127 mm)
Bucket (1).....	3.94 in. (100 mm)	2.76 in. (70 mm)	34.4 in. (875 mm)

Swing Mechanism

Swing Speed.....	0–13.7 rpm
Swing Torque	24,387 lb.-ft. (33 089 Nm)

Undercarriage

Carrier Rollers (per side)	1
Track Rollers (per side)	7
Shoes (per side).....	44
Track Guides.....	front
Track Adjustment	hydraulic
Travel Speed	
Low	0–1.9 mph (0–3.0 km/h)
High.....	0–3.1 mph (0–5.0 km/h)
Drawbar Pull.....	26,300 lb. (11 930 kg)

Ground Pressure Data

Average Ground Pressure	Without Blade	With Blade
20-in. (500 mm) Rubber Crawler Pad.....	5.96 psi (41.1 kPa)	6.42 psi (44.3 kPa)
24-in. (600 mm) Triple Semi-Grouser Shoes	5.09 psi (35.1 kPa)	5.48 psi (37.8 kPa); recommended for rocky terrain, hard ground, and stumps
28-in. (700 mm) Triple Semi-Grouser Shoes	4.43 psi (30.5 kPa)	4.76 psi (32.8 kPa); recommended for general conditions and soft terrain

SAE Operating Weights

With Full Fuel Tank; 175-lb. (79 kg) Operator; 0.82-cu. yd. (0.63 m³), 36-in. (915 mm), 1,040-lb. (472 kg) General-Purpose Bucket; 9-ft. 11-in. (3.01 m) Arm; 8,047-lb. (3650 kg) Counterweight; and 28-in. (700 mm) Triple Semi-Grouser Shoes30,440 lb. (13 808 kg)

Capacities (U.S.)

Fuel Tank	53 gal. (201 L)
Cooling System	15 qt. (14.2 L)
Engine Lubrication, Including Filter	14 qt. (13 L)
Hydraulic Tank	19 gal. (71.9 L)
Hydraulic System	31.7 gal. (120 L)
Propel Gearbox (each)	3.8 qt. (3.5 L)
Swing Drive	2.5 qt. (2.4 L)

Component Weights

Undercarriage	Without Blade	With Blade
20-in. (500 mm) Rubber Crawler Pad.....	9,338 lb. (4236 kg)	11,616 lb. (5269 kg)
24-in. (600 mm) Triple Semi-Grouser Shoes	9,780 lb. (4436 kg)	12,057 lb. (5469 kg)
28-in. (700 mm) Triple Semi-Grouser Shoes	10,190 lb. (4622 kg)	12,467 lb. (5655 kg)
Upperstructure with Full Fuel Tank (less front attachments and counterweight).....	6,990 lb. (3171 kg)	
One-Piece Boom (with arm cylinder)	2,105 lb. (955 kg)	
Arm with Bucket Cylinder and Linkage		
8 ft. 3 in. (2.52 m)	1,274 lb. (578 kg)	
9 ft. 11 in. (3.01 m)	1,424 lb. (646 kg)	
Boom Lift Cylinders (2) Total Weight	472 lb. (214 kg)	
36-in. (915 mm), 0.82-cu.-yd. (0.63 m ³) bucket	1,040 lb. (472 kg)	
Counterweight	8,047 lb. (3650 kg)	

Lifting Capacities

Boldface italic type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook, machine equipped with 0.82-cu. yd. (0.63 m³), 36-in. (915 mm) wide, 1,040-lb. (472 kg) bucket; 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. Ratings are based on SAE J1097.

Load Point Height	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)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 8-ft. 3-in. (2.52 m) arm and 24-in. (600 mm) shoes, without blade</i>										
20 ft. (6.10 m)					6,293 (2855)	6,293 (2855)				
15 ft. (4.57 m)					6,364 (2887)	6,364 (2887)	5,875 (2665)	4,237 (1922)		
10 ft. (3.05 m)			9,103 (4129)	9,103 (4129)	7,872 (3571)	6,791 (3080)	6,338 (2875)	4,108 (1863)		
5 ft. (1.52 m)					9,783 (4438)	6,221 (2822)	6,089 (2762)	3,878 (1759)		
Ground Line					9,279 (4209)	5,771 (2618)	5,861 (2659)	3,666 (1663)		
-5 ft. (-1.52 m)	7,108 (3224)	7,108 (3224)	17,499 (7938)	10,751 (4877)	9,069 (4114)	5,582 (2532)	5,744 (2605)	3,558 (1614)		
-10 ft. (-3.05 m)	13,933 (6320)	13,933 (6320)	14,588 (6617)	10,936 (4961)	9,110 (4132)	5,620 (2549)	5,816 (2638)	3,625 (1644)		
<i>With 9-ft. 11-in. (3.01 m) arm and 24-in. (600 mm) shoes, without blade</i>										
20 ft. (6.10 m)					5,191 (2355)	5,191 (2355)	3,521 (1597)	3,521 (1597)		
15 ft. (4.57 m)					5,383 (2442)	5,383 (2442)	5,636 (2556)	4,325 (1962)		
10 ft. (3.05 m)			5,583 (2532)	5,583 (2532)	6,750 (3062)	6,750 (3062)	6,212 (2818)	4,163 (1888)	3,608 (1637)	2,641 (1198)
5 ft. (1.52 m)					9,227 (4185)	6,334 (2873)	6,124 (2778)	3,903 (1770)	4,145 (1880)	2,552 (1158)
Ground Line			12,068 (5474)	10,874 (4932)	9,318 (4227)	6,796 (3083)	5,862 (2659)	3,651 (1656)	4,035 (1830)	2,448 (1110)
-5 ft. (-1.52 m)	6,643 (3013)	6,643 (3013)	16,441 (7458)	10,600 (4808)	9,010 (4087)	5,520 (2504)	5,683 (2578)	3,495 (1585)		
-10 ft. (-3.05 m)	14,342 (6506)	14,342 (6506)	15,923 (7223)	10,699 (4853)	8,975 (4071)	5,488 (2489)	5,675 (2574)	3,487 (1582)		
-15 ft. (-4.57 m)			11,285 (5119)	11,087 (5029)	7,649 (3470)	5,705 (2588)				
<i>With 8-ft. 3-in. (2.52 m) arm and 28-in. (700 mm) shoes, without blade</i>										
20 ft. (6.10 m)					6,293 (2855)	6,293 (2855)				
15 ft. (4.57 m)					6,364 (2887)	6,364 (2887)	5,875 (2665)	4,303 (1952)		
10 ft. (3.05 m)			9,103 (4129)	9,103 (4129)	7,872 (3571)	6,885 (3123)	6,432 (2918)	4,174 (1893)		
5 ft. (1.52 m)					9,924 (4502)	6,315 (2864)	6,184 (2805)	3,943 (1789)		
Ground Line					9,420 (4273)	5,864 (2660)	6,966 (3160)	3,732 (1693)		
-5 ft. (-1.52 m)	7,108 (3224)	7,108 (3224)	17,499 (7938)	10,917 (4952)	9,210 (4178)	5,676 (2575)	5,838 (2648)	3,623 (1643)		
-10 ft. (-3.05 m)	13,933 (6320)	13,933 (6320)	14,588 (6617)	11,102 (5036)	9,251 (4196)	6,713 (3045)	5,911 (2681)	3,690 (1674)		

Lifting Capacities

Boldface italic type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook, machine equipped with 0.82-cu. yd. (0.63 m³), 36-in. (915 mm) wide, 1,040-lb. (472 kg) bucket; 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. Ratings are based on SAE J1097.

Load Point Height	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)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 9-ft. 11-in. (3.01 m) arm and 28-in. (700 mm) shoes, without blade</i>										
20 ft. (6.10 m)					5,191 (2355)	5,191 (2355)	3,521 (1597)	3,521 (1597)		
15 ft. (4.57 m)					5,383 (2442)	5,383 (2442)	5,636 (2556)	4,291 (1946)		
10 ft. (3.05 m)			5,583 (2532)	5,583 (2532)	6,750 (3062)	6,750 (3062)	6,212 (2818)	4,130 (1873)	3,608 (1637)	2,615 (1186)
5 ft. (1.52 m)					9,227 (4185)	6,286 (2851)	6,102 (2768)	3,869 (1755)	4,128 (1872)	2,526 (1146)
Ground Line			12,068 (5474)	10,788 (4893)	9,286 (4212)	5,747 (2607)	5,830 (2644)	3,617 (1641)	4,018 (1823)	2,422 (1099)
-5 ft. (-1.52 m)	6,643 (3013)	6,643 (3013)	16,441 (7458)	10,514 (4769)	8,977 (4072)	5,472 (2482)	5,661 (2568)	3,461 (1570)		
-10 ft. (-3.05 m)	14,342 (6506)	14,342 (6506)	15,923 (7223)	10,613 (4814)	8,942 (4056)	5,440 (2468)	5,653 (2564)	3,453 (1566)		
-15 ft. (-4.57 m)			11,285 (5119)	11,001 (4990)	7,649 (3470)	5,656 (2566)				
<i>With 8-ft. 3-in. (2.52 m) arm and 24-in. (600 mm) shoes, blade on ground</i>										
20 ft. (6.10 m)					6,293 (2855)	6,293 (2855)				
15 ft. (4.57 m)					6,364 (2887)	6,364 (2887)	5,875 (2665)	4,625 (2098)		
10 ft. (3.05 m)			9,103 (4129)	9,103 (4129)	7,872 (3571)	7,347 (3333)	6,819 (3093)	4,496 (2039)		
5 ft. (1.52 m)					10,057 (4562)	6,777 (3074)	7,675 (3481)	4,266 (1935)		
Ground Line					11,588 (5256)	6,327 (2870)	8,356 (3790)	4,054 (1839)		
-5 ft. (-1.52 m)	7,108 (3224)	7,108 (3224)	17,499 (7938)	11,735 (5323)	11,696 (5305)	6,138 (2784)	8,331 (3779)	3,945 (1789)		
-10 ft. (-3.05 m)	13,933 (6320)	13,933 (6320)	14,588 (6617)	11,920 (5407)	10,208 (4630)	6,176 (2801)	6,701 (3040)	4,013 (1820)		
<i>With 9-ft. 11-in. (3.01 m) arm and 24-in. (600 mm) shoes, blade on ground</i>										
20 ft. (6.10 m)					5,191 (2355)	5,191 (2355)	3,521 (1597)	3,521 (1597)		
15 ft. (4.57 m)					5,383 (2442)	5,383 (2442)	5,636 (2556)	4,588 (2081)		
10 ft. (3.05 m)			5,583 (2532)	5,583 (2532)	6,750 (3062)	6,750 (3062)	6,212 (2818)	4,426 (2008)	3,608 (1637)	2,843 (1290)
5 ft. (1.52 m)					9,227 (4185)	6,712 (3045)	7,192 (3262)	4,166 (1890)	5,204 (2361)	2,754 (1249)
Ground Line			12,068 (5474)	11,542 (5235)	11,128 (5048)	6,173 (2800)	8,068 (3660)	3,914 (1775)	5,531 (2509)	2,650 (1202)
-5 ft. (-1.52 m)	6,643 (3013)	6,643 (3013)	16,441 (7458)	11,267 (5111)	11,713 (5313)	5,897 (2675)	8,352 (3788)	3,758 (1705)		
-10 ft. (-3.05 m)	14,342 (6506)	14,342 (6506)	15,923 (7223)	11,367 (5156)	10,788 (4893)	5,866 (2661)	7,506 (3405)	3,750 (1701)		
-15 ft. (-4.57 m)			11,285 (5119)	11,285 (5119)	7,649 (3470)	6,082 (2759)				
<i>With 8-ft. 3-in. (2.52 m) arm and 28-in. (700 mm) shoes, blade on ground</i>										
20 ft. (6.10 m)					6,293 (2855)	6,293 (2855)				
15 ft. (4.57 m)					6,364 (2887)	6,364 (2887)	5,875 (2665)	4,690 (2127)		
10 ft. (3.05 m)			9,103 (4129)	9,103 (4129)	7,872 (3571)	7,441 (3375)	6,819 (3093)	4,561 (2069)		
5 ft. (1.52 m)					10,057 (4562)	6,871 (3117)	7,675 (3481)	4,331 (1965)		
Ground Line					11,588 (5256)	6,420 (2912)	8,356 (3790)	4,119 (1868)		
-5 ft. (-1.52 m)	7,108 (3224)	7,108 (3224)	17,499 (7938)	11,901 (5398)	11,696 (5305)	6,232 (2827)	8,331 (3779)	4,011 (1819)		
-10 ft. (-3.05 m)	13,933 (6320)	13,933 (6320)	14,588 (6617)	12,086 (5482)	10,208 (4630)	6,269 (2844)	6,701 (3040)	4,078 (1850)		
<i>With 9-ft. 11-in. (3.01 m) arm and 28-in. (700 mm) shoes, blade on ground</i>										
20 ft. (6.10 m)					5,191 (2355)	5,191 (2355)	3,521 (1597)	3,521 (1597)		
15 ft. (4.57 m)					5,383 (2442)	5,383 (2442)	5,636 (2556)	4,653 (2111)		
10 ft. (3.05 m)			5,583 (2532)	5,583 (2532)	6,750 (3062)	6,750 (3062)	6,212 (2818)	4,492 (2038)	3,608 (1637)	2,893 (1312)
5 ft. (1.52 m)					9,227 (4185)	6,805 (3087)	7,192 (3262)	4,232 (1920)	5,204 (2361)	2,804 (1272)
Ground Line			12,068 (5474)	11,708 (5311)	11,128 (5048)	6,267 (2843)	8,068 (3660)	3,980 (1805)	5,531 (2509)	2,700 (1225)
-5 ft. (-1.52 m)	6,643 (3013)	6,643 (3013)	16,441 (7458)	11,433 (5186)	11,713 (5313)	5,991 (2718)	8,352 (3788)	3,824 (1735)		
-10 ft. (-3.05 m)	14,342 (6506)	14,342 (6506)	15,923 (7223)	11,533 (5231)	10,788 (4893)	5,960 (2703)	7,506 (3405)	3,816 (1731)		
-15 ft. (-4.57 m)			11,285 (5119)	11,285 (5119)	7,649 (3470)	6,176 (2801)				
<i>With 8-ft. 3-in. (2.52 m) arm and 20-in. (500 mm) rubber crawler pad, without blade</i>										
20 ft. (6.10 m)					6,293 (2855)	6,293 (2855)				
15 ft. (4.57 m)					6,364 (2887)	6,364 (2887)	5,875 (2665)	4,167 (1890)		
10 ft. (3.05 m)			9,103 (4129)	9,103 (4129)	7,872 (3571)	6,689 (3034)	6,235 (2828)	4,037 (1831)		
5 ft. (1.52 m)					9,630 (4368)	6,119 (2776)	5,986 (2715)	3,807 (1727)		
Ground Line					9,127 (4140)	5,669 (2571)	5,758 (2612)	3,596 (1631)		
-5 ft. (-1.52 m)	7,108 (3224)	7,108 (3224)	17,499 (7938)	10,572 (4795)	8,916 (4044)	5,481 (2486)	5,641 (2559)	3,487 (1582)		
-10 ft. (-3.05 m)	13,933 (6320)	13,933 (6320)	14,588 (6617)	10,757 (4879)	8,958 (4063)	5,518 (2503)	5,713 (2591)	3,554 (1612)		

Lifting Capacities

Boldface italic type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook, machine equipped with 0.82-cu. yd. (0.63 m³), 36-in. (915 mm) wide, 1,040-lb. (472 kg) bucket; 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. Ratings are based on SAE J1097.

Load Point Height	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)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 9-ft. 11-in. (3.01 m) arm and 20-in. (500 mm) rubber crawler pad, without blade</i>										
20 ft. (6.10 m)					5,191 (2355)	5,191 (2355)	3,521 (1597)	3,521 (1597)		
15 ft. (4.57 m)					5,383 (2442)	5,383 (2442)	5,636 (2556)	4,254 (1930)		
10 ft. (3.05 m)			5,583 (2532)	5,583 (2532)	6,750 (3062)	6,750 (3062)	6,212 (2818)	4,093 (1857)	3,608 (1637)	2,586 (1173)
5 ft. (1.52 m)					9,227 (4185)	6,233 (2827)	6,021 (2731)	3,832 (1738)	4,067 (1845)	2,498 (1133)
Ground Line			12,068 (5474)	10,694 (4851)	8,803 (3993)	5,694 (2583)	5,749 (2608)	3,580 (1624)	3,957 (1795)	2,394 (1086)
-5 ft. (-1.52 m)	6,643 (3013)	6,643 (3013)	16,441 (7458)	10,420 (4727)	8,495 (3853)	5,418 (2458)	5,581 (2532)	3,424 (1553)		
-10 ft. (-3.05 m)	14,342 (6506)	14,342 (6506)	15,923 (7223)	10,519 (4771)	8,459 (3837)	5,387 (2444)	5,572 (2527)	3,416 (1549)		
-15 ft. (-4.57 m)			11,285 (5119)	10,907 (4947)	7,649 (3470)	5,603 (2542)				
<i>With 8-ft. 3-in. (2.52 m) arm and 20-in. (500 mm) rubber crawler pad, blade on ground</i>										
20 ft. (6.10 m)					6,293 (2855)	6,293 (2855)				
15 ft. (4.57 m)					6,364 (2887)	6,364 (2887)	5,875 (2665)	4,529 (2054)		
10 ft. (3.05 m)			9,103 (4129)	9,103 (4129)	7,872 (3571)	7,209 (3270)	6,819 (3093)	4,400 (1996)		
5 ft. (1.52 m)					10,057 (4562)	6,639 (3011)	7,675 (3481)	4,170 (1892)		
Ground Line					11,588 (5256)	6,189 (2807)	8,356 (3790)	3,958 (1795)		
-5 ft. (-1.52 m)	7,108 (3224)	7,108 (3224)	17,499 (7938)	11,491 (5212)	11,696 (5305)	6,001 (2722)	8,331 (3779)	3,849 (1746)		
-10 ft. (-3.05 m)	13,933 (6320)	13,933 (6320)	14,588 (6617)	11,676 (5296)	10,208 (4630)	6,038 (2739)	6,701 (3040)	3,917 (1777)		
<i>With 9-ft. 11-in. (3.01 m) arm and 20-in. (500 mm) rubber crawler pad, blade on ground</i>										
20 ft. (6.10 m)					5,191 (2355)	5,191 (2355)	3,521 (1597)	3,521 (1597)		
15 ft. (4.57 m)					5,383 (2442)	5,383 (2442)	5,636 (2556)	4,616 (2094)		
10 ft. (3.05 m)			5,583 (2532)	5,583 (2532)	6,750 (3062)	6,750 (3062)	6,212 (2818)	4,455 (2021)	3,608 (1637)	2,865 (1300)
5 ft. (1.52 m)					9,227 (4185)	6,752 (3063)	7,192 (3262)	4,195 (1903)	5,204 (2361)	2,776 (1259)
Ground Line			12,068 (5474)	11,614 (5268)	11,128 (5048)	6,214 (2819)	8,068 (3660)	3,943 (1789)	5,531 (2509)	2,672 (1212)
-5 ft. (-1.52 m)	6,643 (3013)	6,643 (3013)	16,441 (7458)	11,340 (5144)	11,713 (5313)	5,938 (2693)	8,352 (3788)	3,787 (1718)		
-10 ft. (-3.05 m)	14,342 (6506)	14,342 (6506)	15,923 (7223)	11,439 (5189)	10,788 (4893)	5,906 (2679)	7,506 (3405)	3,779 (1714)		
-15 ft. (-4.57 m)			11,285 (5119)	11,285 (5119)	7,649 (3470)	6,123 (2777)				

Buckets

A full line of buckets is offered to meet a wide variety of applications. Replaceable cutting edges are available through Hitachi parts. Optional side cutters add 6 inches (150 mm) to bucket widths.

Type Bucket	Bucket Width		Bucket Capacity*		Weight		Bucket Dig Force		Arm Dig Force 8 ft. 3 in. (2.52 m)		Arm Dig Force 9 ft. 11 in. (3.01 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	18	460	0.35	0.27	727	330	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	3
	24	610	0.50	0.38	891	404	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	4
	30	760	0.66	0.50	996	452	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	4
	36	915	0.82	0.63	1,040	472	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	5
	42	1065	0.98	0.75	1,239	562	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	5
48	1220	1.15	0.88	1,493	672	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	6	
Heavy-Duty Plate Lip	18	460	0.35	0.27	829	376	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	3
	24	610	0.50	0.38	931	422	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	4
	30	760	0.66	0.50	1,093	496	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	4
	36	915	0.82	0.63	1,275	578	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	5
	42	1065	0.98	0.75	1,359	616	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	5
48	1220	1.15	0.88	1,564	709	19,400	86.3	14,100	63.0	12,800	57.0	48.5	1230	6	
Ditching	48	1220	0.67	0.51	810	367	25,430	113.1	15,292	68.0	13,760	61.2	37.0	940	0
	60	1525	0.90	0.69	951	432	25,430	113.1	15,292	68.0	13,760	61.2	37.0	940	0
	72	1829	1.06	0.81	1,069	485	25,430	113.1	15,292	68.0	13,760	61.2	37.0	940	0

*All capacities are SAE heaped ratings and with side cutters.

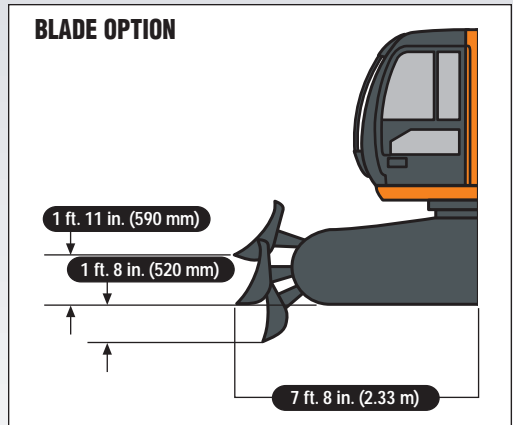
Bucket Selection Guide*

Recommended Bucket Size*	General-Purpose Bucket	Heavy-Duty Bucket
Material (loose weight)		
Wood chips – 700 lb./cu. yd. (420 kg/m ³)	3.25 cu. yd. (2.5 m ³)	—
Peat, dry – 750 lb./cu. yd. (440 kg/m ³)	2.75 cu. yd. (2.1 m ³)	—
Cinders – 950 lb./cu. yd. (560 kg/m ³)	2.00 cu. yd. (1.5 m ³)	—
Peat, wet – 1,170 lb./cu. yd. (690 kg/m ³)	1.75 cu. yd. (1.3 m ³)	—
Topsoil – 1,600 lb./cu. yd. (950 kg/m ³)	1.38 cu. yd. (1.1 m ³)	—
Coal – 1,780 lb./cu. yd. (1050 kg/m ³)	1.25 cu. yd. (1.0 m ³)	—
Caliche – 2,100 lb./cu. yd. (1250 kg/m ³)	0.63–0.88 cu. yd. (0.5–0.7 m ³)	0.50–0.75 cu. yd. (0.4–0.6 m ³)
Earth, loam – 2,100 lb./cu. yd. (1250 kg/m ³)	0.88 cu. yd. (0.7 m ³)	0.75 cu. yd. (0.6 m ³)
Shale – 2,250 lb./cu. yd. (1330 kg/m ³)	0.88 cu. yd. (0.7 m ³)	0.75 cu. yd. (0.6 m ³)
Sand, dry – 2,400 lb./cu. yd. (1420 kg/m ³)	0.88 cu. yd. (0.7 m ³)	0.75 cu. yd. (0.6 m ³)
Clay, dry – 2,500 lb./cu. yd. (1480 kg/m ³)	0.63–0.88 cu. yd. (0.5–0.7 m ³)	0.75 cu. yd. (0.6 m ³)
Earth, dry – 2,550 lb./cu. yd. (1510 kg/m ³)	0.63–0.75 cu. yd. (0.5–0.6 m ³)	0.63 cu. yd. (0.5 m ³)
Limestone, broken or crushed – 2,600 lb./ cu. yd. (1540 kg/m ³)	0.50–0.75 cu. yd. (0.4–0.6 m ³)	0.50–0.63 cu. yd. (0.4–0.5 m ³)
Earth, wet – 2,700 lb./cu. yd. (1600 kg/m ³)	0.75 cu. yd. (0.6 m ³)	0.63 cu. yd. (0.5 m ³)
Clay, wet – 2,800 lb./cu. yd. (1660 kg/m ³)	0.75 cu. yd. (0.6 m ³)	0.63 cu. yd. (0.5 m ³)
Rock, granite, blasted and broken – 2,800 lb./ cu. yd. (1660 kg/m ³)	0.63–0.88 cu. yd. (0.5–0.7 m ³)	0.50–0.75 cu. yd. (0.4–0.6 m ³)
Sand, moist – 2,850 lb./cu. yd. (1690 kg/m ³)	0.75 cu. yd. (0.6 m ³)	0.63 cu. yd. (0.5 m ³)
Sand and gravel, dry – 2,900 lb./cu. yd. (1720 kg/m ³)	0.75 cu. yd. (0.6 m ³)	0.63 cu. yd. (0.5 m ³)
Sand, wet – 3,100 lb./cu. yd. (1840 kg/m ³)	0.63 cu. yd. (0.5 m ³)	0.50 cu. yd. (0.4 m ³)
Sand and gravel, wet – 3,400 lb./cu. yd. (2020 kg/m ³)	0.63 cu. yd. (0.5 m ³)	0.50 cu. yd. (0.4 m ³)

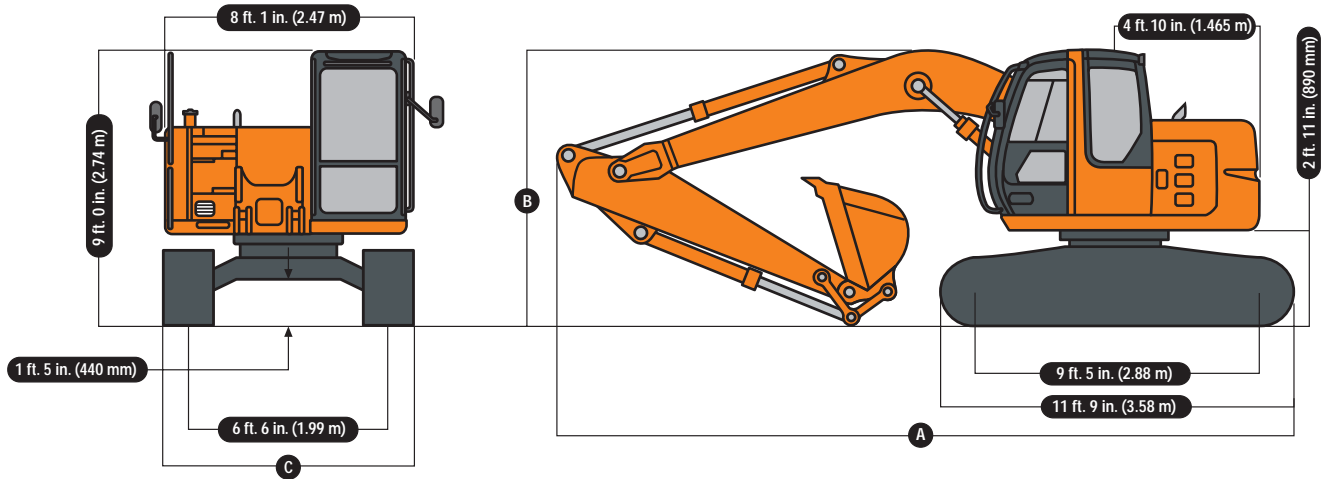
*Contact your Hitachi dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Larger buckets may be possible when using light buckets; and for flat and level operations, less compacted materials, and volume loading applications such as mass excavation in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications and uneven surfaces. Bucket capacity indicated is SAE heaped.

Dimensions

A With 8-ft. 3-in. (2.52 m) arm	23 ft. 11 in. (7.29 m)
With 9-ft. 11-in. (3.01 m) arm	24 ft. 0 in. (7.31 m)
B With 8-ft. 3-in. (2.52 m) arm	9 ft. 4 in. (2.84 m)
With 9-ft. 11-in. (3.01 m) arm	9 ft. 4 in. (2.84 m)
C With 20-in. (500 mm) rubber crawler pad	8 ft. 2 in. (2.49 m)
With 24-in. (600 mm) triple semi-grouser shoes	8 ft. 6 in. (2.59 m)
With 28-in. (700 mm) triple semi-grouser shoes	8 ft. 10 in. (2.69 m)
Blade height	18.9 in. (480 mm)
Blade width	
With 20-in. (500 mm) rubber crawler pads	8 ft. 2 in. (2.49 m)
With 24-in. (600 mm) shoes	8 ft. 2 in. (2.49 m)
With 28-in. (700 mm) shoes	8 ft. 10 in. (2.69 m)

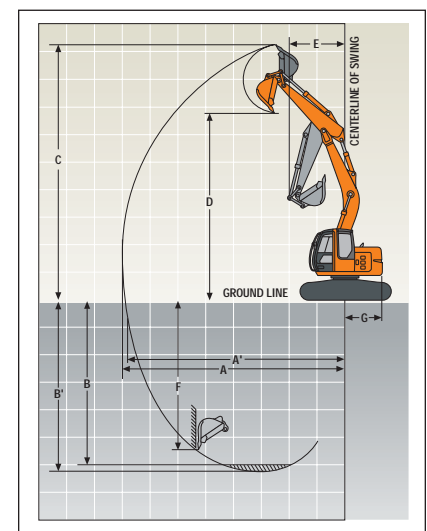


ZAXIS 135US



Operating Information

	Arm Length 8 ft. 3 in. (2.52 m)	Arm Length 9 ft. 11 in. (3.01 m)
Arm force with 36-in. (915 mm), 0.82-cu.-yd. (0.63 m ³) general-purpose bucket.....	14,100 lb. (62.7 kN)	12,800 lb. (56.9 kN)
Bucket digging force with 36-in. (915 mm), 0.82-cu.-yd. (0.63 m ³) general-purpose bucket ..	19,400 lb. (86.3 kN)	19,400 lb. (86.3 kN)
Lifting capacity over front @ ground level		
20-ft. (6.1 m) reach, without blade	6,966 lb. (3160 kg)	5,830 lb. (2644 kg)
A Maximum reach	27 ft. 3 in. (8.30 m)	28 ft. 9 in. (8.76 m)
A' Maximum reach @ ground level	26 ft. 9 in. (8.16 m)	28 ft. 4 in. (8.64 m)
B Maximum digging depth	18 ft. 2 in. (5.53 m)	19 ft. 9 in. (6.02 m)
B' Maximum digging depth @		
8-ft. (2.44 m) flat bottom	17 ft. 5 in. (5.32 m)	19 ft. 2 in. (5.84 m)
C Maximum cutting height	30 ft. 3 in. (9.22 m)	31 ft. 6 in. (9.61 m)
D Maximum dumping height	22 ft. 2 in. (6.76 m)	23 ft. 5 in. (7.15 m)
E Minimum swing radius	6 ft. 9 in. (2.06 m)	7 ft. 10 in. (2.40 m)
F Maximum vertical wall	16 ft. 4 in. (4.97 m)	17 ft. 11 in. (5.46 m)
G Tail swing radius	4 ft. 10 in. (1.465 m)	4 ft. 10 in. (1.465 m)



Equipment

Key ● Standard Equipment ▲ Optional or Special Equipment

Engine

- Auto-idle system
- Batteries (two 12 volt), 180-min. (1,250 CCA) reserve capacity
- Charge air cooler
- Dual element dry-type air filter
- Enclosed fan guard (conforms to SAE J1308)
- Engine coolant to -34°F (-37°C)
- Fuel filter with water separator
- Full-flow oil filter
- Radiator trash screen
- Meets EPA Tier II non-road emissions regulations
- Turbocharger
- Underhood muffler with vertical curved end exhaust stack

Hydraulic System

- Auxiliary valve section
- Hydraulic pilot controls
- Reduced-drift valve for boom down, arm in
- Spring-applied, hydraulically released automatic swing brake
- ▲ Auxiliary hydraulic and electric pilot controls
- ▲ Hydraulic filter restriction indicator kit
- ▲ Load-lowering control device
- ▲ Single pedal propel control Undercarriage

Undercarriage

- Planetary final drive with axial piston motors
- Propel motor shields
- Track guides, front idler
- ▲ Rubber crawler pad, 20 in. (500 mm)
- ▲ Triple semi-grouser shoes, 24 in. (600 mm)
- ▲ Triple semi-grouser shoes, 28 in. (700 mm)
- Two-speed propel with automatic shift
- Upper carrier roller (1)
- ▲ Undercarriage with blade

Upperstructure

- Counterweight, 8,047 lb. (3650 kg)
- Right- and left-hand mirrors
- Toolbox
- Vandal locks with ignition key: Cab door / Engine hood / Fuel cap / Service doors / Toolbox

Front Attachments

- Centralized lubrication system
- Dirt seals on all bucket pins
- No-boom-arm
- ▲ Arm, 8 ft. 3 in. (2.52 m)
- ▲ Arm, 9 ft. 11 in. (3.01 m)
- ▲ Attachment quick couplers
- ▲ Auxiliary hydraulic lines with shutoff valve
- ▲ Boom cylinder with plumbing to mainframe
- ▲ 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

Operator's Station

- Adjustable seat with independent control positions (seat-to-pedals)
- AM/FM stereo
- Auto climate control/air conditioner, 20,000 Btu/hr. (5.9 kW), heater and pressurizer
- Cell-phone power outlet, 12 volt, 60 watt, 5 amp
- Coat hook
- Deluxe suspension cloth seat with 4-in. (100 mm) adjustable armrests and lumbar support
- Front windshield wiper with intermittent speed
- Gauges (illuminated): Engine coolant / Fuel
- Horn, electric on left control lever
- Hot/cool-box compartment
- Hourmeter, electric
- Hydraulic shutoff lever, all controls
- Interior light

- Large cup holder
- Machine Information Center (MIC)
- Mode selectors (illuminated): Power modes – three / Travel modes – two with automatic shift / Work modes – two
- Monitor system with alarm features: Auto-idle/auto-acceleration indicator light / Engine air cleaner restriction indicator light / Engine coolant temperature indicator light with audible alarm / Engine oil pressure indicator light with audible alarm / Fluid level: Engine coolant level indicator light, engine oil level indicator light, and hydraulic oil level indicator light / Low alternator charge indicator light / Low fuel indicator light / Wiper-mode indicator / Work-lights-on indicator / Work-mode indicator
- Motion alarm with cancel switch (conforms to SAE J994)
- Propel pedals and levers
- Seat belt, 2 in. (51 mm), retractable
- ▲ Seat belt, 3 in. (76 mm), non-retractable
- Tinted glass
- Transparent tinted overhead hatch
- ▲ Control pattern change valve
- ▲ Circulation fan
- ▲ Protection screens for cab front, rear, and side
- ▲ Window vandal protection covers
- ▲ 24- to 12-volt D.C. radio convertors, 10 amp

Electrical

- 50-amp alternator
- Blade-type multi-fused circuits
- By-pass start safety cover on starter
- Positive terminal battery covers

Lights

- Halogen work lights: One mounted on boom / One mounted on frame

Control Owning and Operating Costs

Customer Personal Service (CPS) is part of Hitachi's proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

Fluid analysis program – tells you what's going on inside all of your machine's major components so you'll know if there's a problem before you see a decline in performance. Fluid analysis is included in most extended coverage and preventive-maintenance agreements.

Preventive Maintenance (PM) agreements – give you a fixed cost for maintaining a machine for a given period of time. They also help you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

Extended coverage – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage expenses. Whether you work in a severe-service setting, or you just want to spread the risk

of doing business, this is a great way to custom-fit coverage to your operation. An extended coverage contract also travels well because it's backed by the company and is honored by all Hitachi dealers.

Customer Support Advisors (CSAs) – the CSA program lends a personal quality to Customer Personal Service (CPS). Certified CSAs have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that's right for your business and take the burden of machine maintenance off your shoulders.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO9249. No derating is required up to 10,000-ft. (3050 m) 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 a unit with 36-in. (915 mm) bucket, 28-in. (700 mm) triple semi-grouser shoes, full fuel tank, and 175-lb. (79 kg) operator, with 8,047-lb. (3650 kg) counterweight.