

ZX135US-7H SPECIFICATIONS

HITACHI

LANDCROS

Reliable Solutions

ENGINE	
Model	Isuzu AR-4JJ1X
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC + SCR system
No. of cylinders	4
Rated power	
ISO 14396 : 2002 gross	105 HP (78.5 kW) at 2,000 min ⁻¹
ISO 9249 : 2007 net	100 HP (74.9 kW) at 2,000 min ⁻¹
Maximum torque	277 lbf (375 Nm) at 1,800 min ⁻¹
Piston displacement	183 in ³ (2.999 L)
Bore and stroke	3.8" x 4.1" (95.4 mm x 104.9 mm)
Batteries	2 x 12 V / 58 Ah

HYDRAULIC SYSTEM			
Hydraulic Pumps			
Main pumps			2 variable displacement axial piston pumps
Maximum oil flow			2 x 30.9 gal/min (117 L/min)
Pilot pump			1 gear pump
Maximum oil flow			8.9 gal/min (33.6 L/min)
Hydraulic Motors			
Travel			2 variable displacement axial piston motors
Swing			1 axial piston motor
Relief Valve Settings			
Implement circuit			4,970 psi (34.3 MPa)
Swing circuit			4,680 psi (32.3 MPa)
Travel circuit			4,970 psi (34.3 MPa)
Pilot circuit			566 psi (3.9 MPa)
Power boost			5,260 psi (36.3 MPa)
Hydraulic Cylinders			
	Quantity	Bore	Rod diameter
Boom	2	4.1" (105 mm)	2.8" (70 mm)
Arm	1	4.5" (115 mm)	3.2" (80 mm)
Bucket	1	3.9" (100 mm)	2.8" (70 mm)
Thumb	1	3.7" (95 mm)	2.4" (60 mm)

UPPERSTRUCTURE	
Revolving Frame	
D-section frame for resistance to deformation.	
Swing Device	
Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.	
Swing speed	13.3 min ⁻¹
Swing torque	25,100 lbf (34.0 kNm)

UNDERCARRIAGE	
Tracks	
Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.	
Numbers of Rollers and Shoes on Each Side	
Upper rollers	1
Lower rollers	7
Track shoes	44
Track guards	1
Travel Device	
Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.	
Travel speeds	
High	0 to 3.4 mph (0 to 5.5 km/h)
Low	0 to 2.0 mph (0 to 3.3 km/h)
Maximum traction force	26,300 lbf (117 kN)
Gradeability	70% (35 degree) continuous

SERVICE REFILL CAPACITIES	
Fuel tank	58.1 gal (220.0 L)
Engine coolant	5.5 gal (21.0 L)
Engine oil	4.5 gal (17.0 L)
Swing device	0.8 gal (3.2 L)
Travel device (each side)	1.1 gal (4.2 L)
Hydraulic system	41.0 gal (155.0 L)
Hydraulic oil tank	15.8 gal (60.0 L)
DEF/AdBlue® tank	3.4 gal (13.0 L)

ENVIRONMENT	
Engine Emissions	EPA Final Tier 4 / EU Stage IV
Sounds Level	
Sound level in cab according to ISO 6396 : 2008	LpA 71 dB(A)
External sound level according to ISO 6395 : 2008 and EU Directive 2000/14/EC	LwA 99 dB(A)

SPECIFICATIONS

ZX135US-7H

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

			ZX135US-7H *		ZX135US-7H with blade (optional) *	
Boom type			Monoblock		Monoblock	
Shoe type	Shoe width (inch (mm))	Arm length (mft-in (m))	lb (kg)	psi (kPa)	lb (kg)	psi (kPa)
Triple grouser	24" (600)	8' 3" (2.52)	31,700 (14,400)	5.5 (38)	34,300 (15,600)	6.0 (41)
		9' 11" (3.01)	32,000 (14,500)	5.5 (38)	34,500 (15,600)	6.0 (41)
	28" (700)	8' 3" (2.52)	32,300 (14,600)	4.8 (33)	34,800 (15,800)	5.1 (35)
		9' 11" (3.01)	32,500 (14,700)	4.8 (33)	34,900 (15,900)	5.2 (36)

* Including 0.68 yd³ (0.52 m³) (ISO 7451:2007 heaped) bucket weight (900 lb (410 kg)) and counterweight (7,720 lb (3,500 kg)).

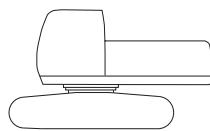
			ZX135US-7H **		ZX135US-7H with blade (optional) **	
Boom type			Monoblock		Monoblock	
Shoe type	Shoe width (inch (mm))	Arm length (mft-in (m))	lb (kg)	psi (kPa)	lb (kg)	psi (kPa)
Triple grouser	24" (600)	9' 11" (3.01)	33,300 (15,100)	5.7 (40)	35,900 (16,300)	6.2 (43)
	26" (700)	9' 11" (3.01)	33,700 (15,300)	5.0 (34)	36,300 (16,500)	5.4 (37)

** including 0.71 yd³ (0.54 m³) (ISO 7451: 2007 heaped) bucket weight (950 lb (430 kg)) with thumb weight (600 lb (270 kg)), quick coupler (440 lb (200 kg)) counterweight (7,720 lb (3,500 kg)).

BASIC MACHINE WEIGHT AND COMPONENTS WEIGHT

Basic Machine Weight and Overall Width

Excluding front end attachment, fuel, hydraulic oil and coolant etc. Including counterweight.



		ZX135US-7H		ZX135US-7H with blade (optional)	
Shoe Type	Shoe width (inch (mm))	Weight lb (kg)	Overall width (inch (mm))	Weight lb (kg)	Overall width (inch (mm))
Triple grouser	24" (600)	25,800 (11,700)	8' 6" (2,590)	28,200 (12,800)	8' 6" (2,590)
	28" (700)	26,200 (11,900)	8' 10" (2,690)	28,700 (13,000)	8' 10" (2,690)

Components Weight

Unit: lb (kg)

	ZX135US-7H
Counterweight	7,720 (3,500)
Monoblock boom (with arm cylinder and boom cylinder)	2,840 (1,290)
Arm 9' 11" (3.01 m) (with bucket cylinder)	1,610 (730)
Bucket ISO 7451 : 2007 0.68 yd ³ (0.52 m ³)	900 (410)
Bucket ISO 7451 : 2007 0.71 yd ³ (0.54 m ³)	950 (430)
Thumb (with thumb cylinder)	770 (350)
Quick coupler	440 (200)

BUCKET AND ARM DIGGING FORCE

Unit: lbf (kN)

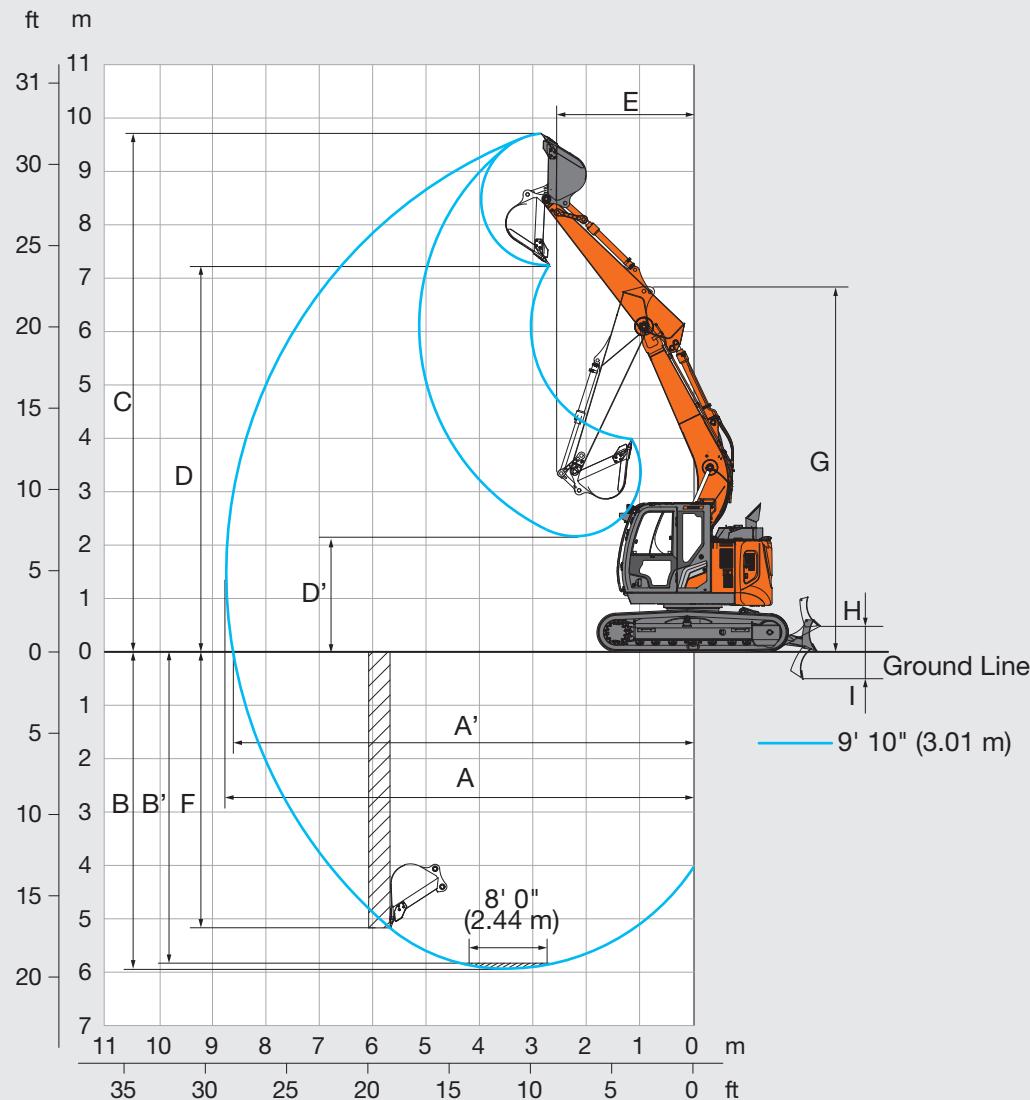
	ZX135US-7H
Arm length	9' 11" (3.01 m)
Bucket digging force ISO 6015 : 2006	23,400 (104)
Bucket with thumb digging force ISO 6015 : 2006	19,500 (86.5)
Arm crowd force ISO 6015 : 2006	13,700 (61)

Calculated value at power boost

SPECIFICATIONS

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WORKING RANGES



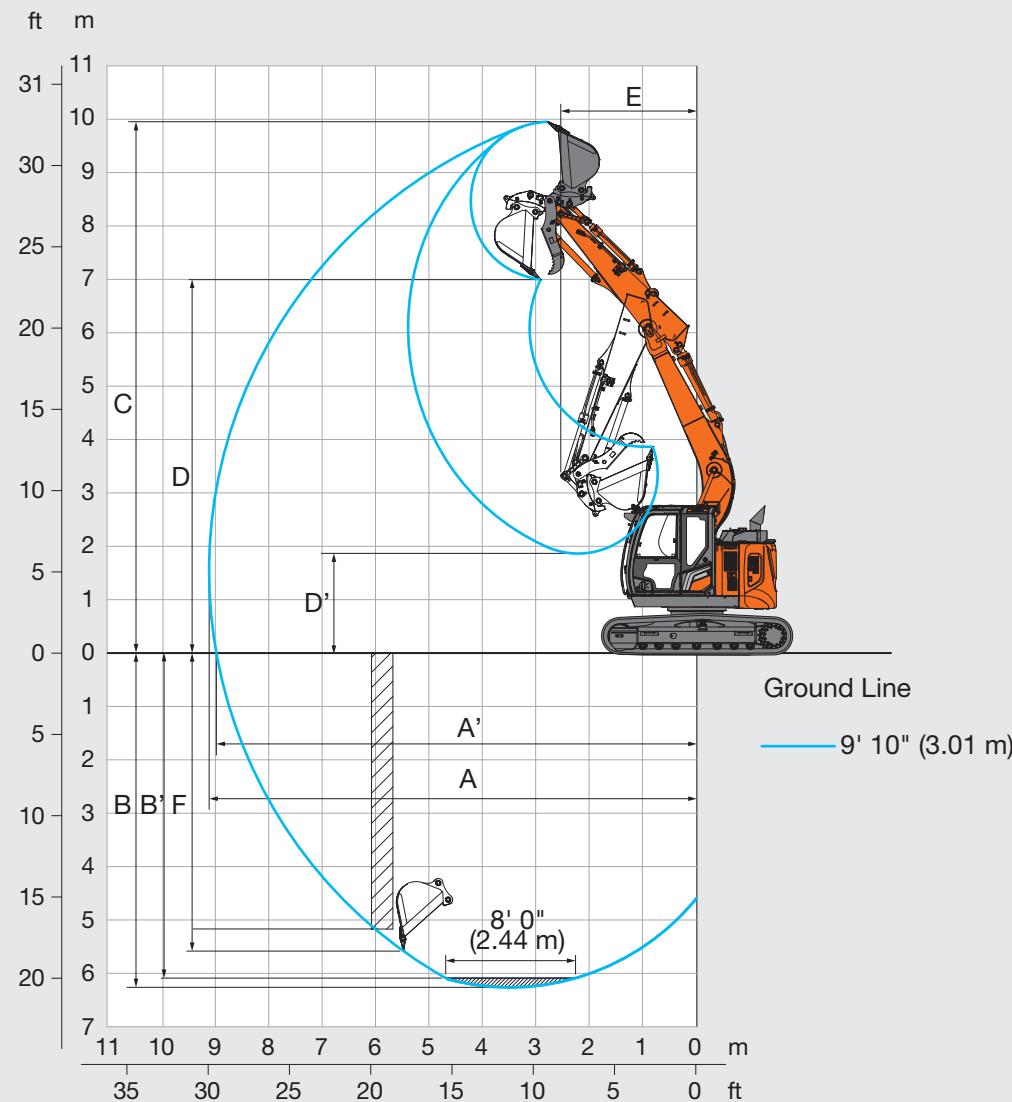
Unit: ft-in (mm)

	ZX135US-7H
Arm length	Monoblock boom
A Max. digging reach	9' 11" (3.01 m)
A' Max. digging reach (on ground)	29' 0" (8,850)
B Max. digging depth	28' 7" (8,720)
B' Max. digging depth for 8' 0" (2.44 m) level	19' 7" (5,980)
C Max. cutting height	18' 12" (5,790)
D Max. dumping height	31' 9" (9,680)
D' Min. dumping height	23' 9" (7,230)
E Min. swing radius	6' 12" (2,130)
F Max. vertical wall digging depth	8' 4" (2,540)
G Front height at Min. swing radius	16' 12" (5,170)
H Blade bottom highest position above ground	22' 5" (6,820)
I Blade bottom lowest position above ground	1' 6" (460)
Excluding track shoe lug	

SPECIFICATIONS

ZX135US-7H

WORKING RANGES



Unit: ft-in (mm)

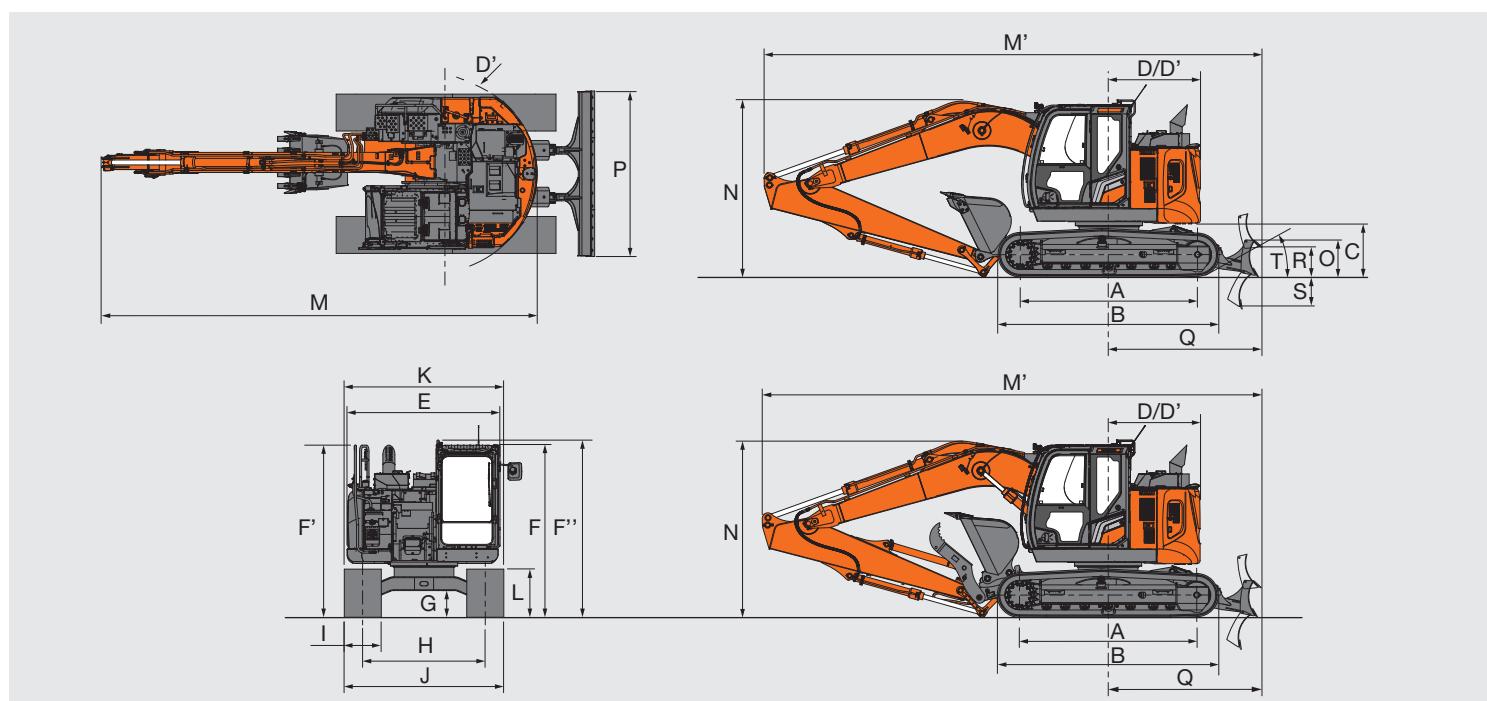
ZX135US-7H	
Monoblock boom (Bucket with thumb and quick coupler)	
Arm length	9' 11" (3.01 m)
A Max. digging reach	29' 10" (9,100)
A' Max. digging reach (on ground)	29' 5" (8,970)
B Max. digging depth	20' 5" (6,220)
B' Max. digging depth for 8' 0" (2.44 m) level	19' 10" (6,050)
C Max. cutting height	32' 7" (9,940)
D Max. dumping height	22' 11" (6,990)
D' Min. dumping height	6' 2" (1,880)
E Min. swing radius	8' 4" (2,540)
F Max. vertical wall digging depth	15' 4" (4,680)

Excluding track shoe lug

SPECIFICATIONS

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DIMENSIONS



Unit: ft-in (mm)

ZX135US-7H		
	Monoblock boom	Monoblock boom (Bucket with thumb and quick coupler)
A Distance between tumblers	9' 5" (2,880)	9' 5" (2,880)
B Undercarriage length	11' 9" (3,580)	11' 9" (3,580)
*C Counterweight clearance	2' 9" (840)	2' 9" (840)
D Rear-end swing radius	4' 11" (1,490)	4' 11" (1,490)
D' Rear-end length	4' 11" (1,490)	4' 11" (1,490)
E Overall width of upperstructure	8' 2" (2,480)	8' 2" (2,480)
F Overall height of cab	9' 2" (2,790)	9' 2" (2,790)
F'	9' 3" (2,810)	9' 3" (2,810)
F'' Overall height of handrail (on cab)	9' 5" (2,870)	9' 5" (2,870)
*G Min. ground clearance	1' 4" (410)	1' 4" (410)
H Track gauge	6' 6" (1,990)	6' 6" (1,990)
I Track shoe width	G 1' 12" (600)	G 1' 12" (600)
J Undercarriage width	8' 6" (2,590)	8' 6" (2,590)
K Overall width	8' 6" (2,590)	8' 6" (2,590)
*L Track height with triple grouser shoes	2' 7" (790)	2' 7" (790)
M Overall length		
With Arm 9' 11" (3.01 m)	24' 3" (7,390)	24' 3" (7,390)
M' Overall length (with blade)		
With Arm 9' 11" (3.01 m)	26' 4" (8,030)	26' 4" (8,030)
N Overall height of boom		
With Arm 9' 11" (3.01 m)	9' 4" (2,850)* ²	9' 4" (2,850)* ²
O Blade height	1' 12" (600)	1' 12" (600)
P Blade width	8' 2" (2,490)	8' 2" (2,490)
	8' 10" (2,690)	8' 10" (2,690)
Q Distance between the front end of blade and the axis of rotation	7' 12" (2,430)	7' 12" (2,430)
R Blade maximum lifting	1' 6" (460)	1' 6" (460)
S Blade maximum lowering	1' 9" (540)	1' 9" (540)
T Blade approach angle	26°	26°

¹ Excluding track shoe lug G: Triple grouser shoe

² Transport pin position

MACHINE CAPACITIES

ZX135US-7H

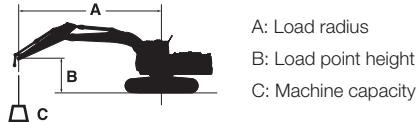
Notes:

1. Ratings are based on ISO 10567 : 2007.
2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is the center-line of the bucket pivot mounting pin on the arm.
4. *Indicates load limited by hydraulic capacity.
5. 0 ft (0 m) = Ground.

For machine capacities, subtract installed attachment and quick hitch weight from machine capacities.

To determine lifting capacities, apply "Rating over-side or 360 degrees" machine capacities from the table and deduct weight of installed attachment and quick hitch.

Optional feature may affect machine performance.



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

ZX135US-7H MONOBLOCK BOOM

Rating over-front Rating over-side or 360 degrees Unit : lb (kg)

Conditions	Load point height (ft (m))	Load radius										At max. reach		
		5 ft (1.5 m)		10 ft (3.0 m)		15 ft (4.5 m)		20 ft (6.0 m)		25 ft (7.5 m)				
														ft-in (meter)
Boom 15' 1" (4.60 m) Arm 9' 11" (3.01 m) Counterweight 7,720 lb (3,500 kg)	20' (6.0)					*6,900 (*3,110)	*6,900 (*3,110)	(*2,330)	(2,280)				*4,560 (*2,050)	*4,560 (*2,050) 19' 9" (6.11)
	15' (4.5)					*7,440 (*3,400)	*7,440 (*3,400)	*7,140 (*3,310)	4,910 (2,280)				*4,240 (*1,920)	3,860 (1,730) 22' 10" (6.99)
	10' (3.0)			*10,990 (*5,250)	*10,990 (*5,250)	*9,200 (*4,240)	7,460 (3,460)	7,080 (3,290)	4,730 (2,200)				*4,220 (*1,910)	3,350 (1,510) 24' 6" (7.47)
	5' (1.5)			*17,980 (*8,350)	12,570 (5,830)	10,620 (4,930)	6,870 (3,180)	6,810 (3,160)	4,480 (2,080)	*4,430 (2,240)	3,140 (1,460)		*4,420 (*2,000)	3,140 (1,420) 25' 0" (7.62)
	0 (Ground)			*15,300 (*6,600)	11,580 (5,380)	10,100 (4,690)	6,410 (2,970)	6,570 (3,050)	4,260 (1,970)				4,890 (2,220)	3,170 (1,440) 24' 6" (7.46)
	-5' (-1.5)	*9,240 (*4,110)	*9,240 (*4,110)	19,680 (*8,590)	11,340 (5,280)	9,860 (4,580)	6,190 (2,870)	6,450 (2,990)	4,150 (1,920)				5,370 (2,430)	3,470 (1,570) 22' 10" (6.97)
	-10' (-3.0)	*16,180 (*7,170)	*16,180 (*7,170)	*17,360 (*8,040)	11,490 (5,340)	9,890 (4,590)	6,220 (2,880)	(3,020)	(1,950)				6,630 (2,980)	4,290 (1,920) 19' 10" (6.07)
	-15' (-4.5)			*11,100 (*5,290)	*11,100 (*5,290)	(*3,190)	(3,040)						*6,930 (*3,180)	*6,930 (3,040) 14' 5" (4.50)

SPECIFICATIONS

ZX135US-7H

ZX135US-7H BUCKET SELECTION

The buckets recommended for installation on this machine are representative only. Actual weights and dimensions should be used to determine acceptability.

* Optional equipment such as Thumb and Coupler are not included.

ZX135US-7H	Bucket						Arm Length 9' 11"	
	Width		Capacity		Weight			
	in	mm	yd ³	m ³	kg	kg		
24	610	0.59	0.45	1,050	476	●	-	
30	762	0.67	0.51	1,000	454	○	-	
36	914	0.82	0.63	1,050	476	○	-	
42	1,067	1.00	0.76	1,100	499	▲	-	
Maximum load with pin-on (Bucket + Payload)				lb	3,140	-		
				kg	1,420	-		

- : Suitable for materials with density of 3,500 lb/yd³ (2,100 kg/m³) or less.
- : Suitable for materials with density of 3,000 lb/yd³ (1,800 kg/m³) or less.
- : Suitable for materials with density of 2,500 lb/yd³ (1,500 kg/m³) or less.
- ▲ : Suitable for materials with density of 2,000 lb/yd³ (1,200 kg/m³) or less.
- △ : Suitable for materials with density of 1,800 lb/yd³ (1,100 kg/m³) or less.
- : Suitable for materials with density of 1,500 lb/yd³ (900 kg/m³) or less.
- : Not applicable

Maximum load with pin-on (Bucket + Payload) complies with ISO 10567: 2007.

Using a bucket heavier or wider than recommended specifications may result in less than optimal performance, including reduced productivity, stability, reliability and component durability.

Improper use of the bucket to sweep, pry, twist or snag heavy loads will shorten the life of the boom and arm.

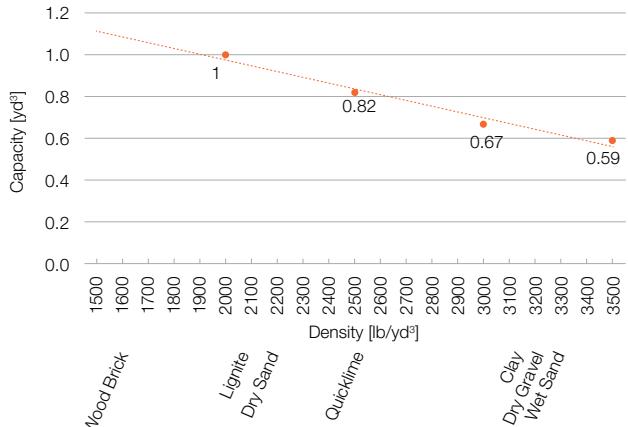
[Reference]

Example calculation for Maximum Load of 7,450 lb.

$$\begin{aligned}
 \text{Load with pin-on (Bucket + Payload)} &= \text{Bucket weight} + \text{Payload} (\text{Bucket capacity} \times \text{Material density}) \\
 &= 1,708 \text{ lb} + (1.36 \text{ yd}^3 \times 3,500 \text{ lb/yd}^3) \\
 &= 6,468 \text{ lb} < \text{Maximum Load 7,450 lb} \rightarrow \text{OK}
 \end{aligned}$$

Example calculation for Maximum Load of 7,450 lb and Attachment (Thumb and coupler etc) weight of 1,800 lb.

$$\begin{aligned}
 \text{Load with pin-on (Bucket + Payload)} &= \text{Bucket weight} + \text{Payload} (\text{Bucket capacity} \times \text{Material density}) + \text{Attachment weight} \\
 &= 1,708 \text{ lb} + (1.36 \text{ yd}^3 \times 2,800 \text{ lb/yd}^3) + 1,800 \text{ lb} \\
 &= 7,316 \text{ lb} < \text{Maximum Load 7,450 lb} \rightarrow \text{OK} (\text{Up to 2,800 material density can be used})
 \end{aligned}$$



MEMO

EQUIPMENT

ZX135US-7H

ENGINE	ZX-7H 135US
Aftertreatment device	●
Air cleaner double filters	●
Alternator 50 A	●
Auto idle system	●
Auto shut-down control	●
Cartridge-type engine oil filter	●
Cartridge-type fuel main filter	●
ConSite OIL (sensor)*	○
DEF / AdBlue® tank	●
DEF / AdBlue® tank inlet strainer and extension	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●
Dust-proof indoor net	●
ECO / PWR / HP mode control	●
Electrical fuel feed pump	●
Engine oil drain coupler	●
Expansion tank	●
Fan guard	●
Fuel cooler	●
Fuel pre-filter with water separator	●
Isolation-mounted engine	●
Maintenance free pre-cleaner	○
Oil separator	●
Radiator, oil cooler and intercooler	●

CAB	ZX-7H 135US
Auto control air conditioner	●
AUX function lever (breaker assist)	○
AUX function lever (breaker)	●
Bluetooth® integrated radio	●
Cab : All-weather sound suppressed steel	●
Cab : CRES VII (center pillar reinforced structure)	●
Cab : OPG top guard Level I (ISO 10262 : 1998) compliant	●
Cab : ROPS (ISO 12117-2 : 2008) compliant	●
Console height adjustment	●
Control lever auto-lock	●
Drink holder with hot and cool function	●
Electric double horn	●
Engine shut-off switch	●
Equipped with reinforced, tinted (green color) glass windows	●
Evacuation hammer	●
Floor mat	●
Footrest	●
Front guard : OPG Level II (ISO 10262 : 1998) compliant	○
Front window washer (1 point)**	●
Front window washer (2 points)**	○
Glove compartment	●
Hands-free calling device	●
Hot and cool box	●
Intermittent windshield wipers	●
Key cylinder light	●
LED room light	●
Magazine rack	●
Pilot shut-off lever	●
Power outlet 12 V and 24 V	●
Push button low idle	●
Rain guard (without OPG front guard)	●
Rear tray	●
Retractable seat belt 3 in. (76 mm)	●
Rubber radio antenna	●
Seat : air suspension seat with heater	●
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	●
Seat belt reminder	●
Short wrist control levers	●
Smartphone holder	●
Straight travel pedal	○
Sunscreen roller type (multi-use front or side and rear window)	●
Top guard: OPG Level II (ISO 10262 : 1998) compliant	○
Transparent roof with slide curtain	●
USB power supply	●

CAB	ZX-7H 135US
Wide view wiper	○
Windows on front, upper, lower and left side can be opened	●
2 speakers	●
4 fluid-filled elastic mounts	●
8 inch monitor	●

MONITOR SYSTEM	ZX-7H 135US
Alarm buzzers: overheat, engine oil pressure, overload, SCR system trouble, etc	●
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, SCR system trouble, etc	●
Display of meters: water temperature, hour, fuel rate, clock, DEF / AdBlue® rate, etc	●
Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc	●
35 languages selection	●

HYDRAULIC SYSTEM	ZX-7H 135US
Auto power lift	●
ConSite OIL (sensor)*	○
Control valve with main relief valve	●
Equipment package for lifting objects	○
Extra port for control valve	●
High mesh full flow filter	●
Hose rupture valve for arm	○
Hose rupture valve for boom	○
Pilot filter	●
Power boost	●
Restriction indicator for full flow filter	○
Suction filter	●
Variable reliefvalve for breaker and crusher	●
Work mode selector	●

EQUIPMENT

ZX135US-7H

LIGHTS	ZX-7H 135US
Additional boom LED light with cover	●
Additional cab roof front LED lights	●
Additional cab roof rear LED lights	●
LED lights for camera (side and rear view camera)	○
Rotating lamp	○
2 working LED lights	●

UNDERCARRIAGE	ZX-7H 135US
Blade 8' 2" (2,490 mm)	○
Blade 8' 10" (2,690 mm)	○
Bolt-on sprocket	●
Greasing type track adjuster	●
Reinforced track links with pin seals	●
Shoe: 24" (600 mm) triple grouser	●
Shoe: 28" (700 mm) triple grouser	○
Towing hole for light weight object	●
Track undercover	○
Travel direction mark on track frame	●
Travel motor covers	●
Travel parking brake	●
Upper and lower rollers	●
1 track guard (each side)	●
4 tie down brackets	●

● : Standard equipment ○ : Optional equipment

ATTACHMENTS	ZX-7H 135US
Accessories for 2 speed selector	○
Additional pump (7.9 gal (30 L)/min)	○
Assist piping	○
Breaker and crusher piping (Short piping)	○
Breaker and crusher piping	●
Pilot accumulator	○
Quick coupler piping	○

UPPER STRUCTURE	ZX-7H 135US
AERIAL ANGLE (270-degree view camera system)	●
Batteries 2 x 58 Ah	●
Body top handrail	●
Cab top handhold	●
Control pattern changer (ISO/BH)	●
Counterweight 7,720 lb (3,500 kg)	●
Electric fuel refilling pump with auto stop and filter	●
Fuel level float	●
HD undercover	○
Hydraulic oil level gauge	●
Lockable fuel refilling cap	●
Lockable machine covers	●
Lockable tool box	●
Platform handrail	●
Side view mirror (right and left)	●
Skid-resistant plates	●
Swing parking brake	●
Undercover	●
2 way battery disconnect switch	●

FRONT ATTACHMENTS	ZX-7H 135US
Arm 9' 11" (3.01 m)	●
Arm tip remote lubrication	●
Casted bucket link A	●
Centralized lubrication system	●
Dirt seal on all bucket pins	●
Flanged pin	●
HN bushing	●
Lower arm reinforcement	●
Reinforced resin thrust plate	●
WC (tungsten-carbide) thermal spraying	●

MISCELLANEOUS	ZX-7H 135US
ConSite	○
Global e-service	●
Onboard information controller	●
Satellite communication device	○
Standard tool kit	●
Travel alarm	●

QUICK LINKS	ZX135US-7H
Website's Product Page	

Standard and optional equipment may vary by country, so please consult authorized dealer for details.

* Engine oil and hydraulic oil monitoring sensor.

** Front window washer (1 point) is only when equipped with standard wiper.

Front window washer (2 points) is only when equipped with wide view wiper.