

HYDRAULIC EXCAVATOR

ENGINE

Brand	ISUZU
Model	GI-4HK1X
Type	4-stroke engine, water-cooled, 4 cylinder – common rail injection system, turbocharged with air-cooled intercooler, with tier 3 emission certification.
Rating power	
Net (SAE J1349, ISO 9249)	157 hp (117,3 kW) @ 1800 (rpm)
Gross (ISO 14396)	163,6 hp (122 kW) @ 1800 (rpm)
Piston displacement	5193 cc
Maximum torque	
Net (SAE J1349, ISO 9249)	448.43 lbf.ft (608 Nm) @ 1600 rpm
Gross (ISO 14396)	460.23 lbf.ft (624 Nm) @ 1600 rpm
Bore and stroke	4.5 x 4.9 in (115 x 125 mm)
Voltage	24 V
Alternator	50 A
Starter	24 V 5,0 kW

ELECTRICAL SYSTEM

Engine control	
1 - Dial type throttle control	
2 - One Touch Idle / Automatic deceleration / Automatic stop and shutdown system	
3 - Emergency stop	
Lights	
1 - Working lights	
Top	24V 70W x 1
Boom	24V 70W x 2
Cab	24V 70W x 2
2 - Operator's cabin compartment	24V 10W x 1
Battery	2 x 12V 92 Ah/5hr
Safety	
1 - Travel alarm	
2 - Double horn	
Wire harness	Waterproof connectors

HYDRAULIC SYSTEM

Main pumps	2 axial piston pumps and variable flow with adjustment system
1 - Max. oil flow @ 1800 rpm	2 x 55.7 gpm (211 l/min)
2 - Work circuit pressure	
Boom/Arm/Bucket	4974 psi (34.3 MPa)
5337 psi (36.8 MPa) with auto power-up	
Swing circuit	4264 psi (29.4 MPa)
Travel circuit	4974 psi (34.3 MPa)
Pilot pump	1 gear pump
1 - Max. oil flow	4.7 gpm (18 l/min)
2 - Work circuit pressure	566 psi (3.9 MPa)
Control valves	
	With boom and arm retention valve. One 4-spool valve for the acceleration of the arm, boom, bucket and movement of the right track. One 5-spool valve for the movement of the left track, auxiliary, oscillation, arm, and tow bar acceleration
Swing device	
1 - Motor	Axial piston motor and fixed displacement
2 - Brake	Mechanical brake disk
3 - Final drive	Planetary gear reduction
4 - Turn table bushing	Ball bearing type with internal gear
5 - Max. swing speed	11.5 rpm
6 - Swing torque	47.20 lbf.ft (64 Nm)
Cylinder Qty Diam.Bore x Diam.Rod x Stroke	
Boom 2 4.7 in x 3.3 in x 4 ft 1.4 in	
(120 mm) (85 mm) (1255 mm)	
Arm 1 5.5 in x 3.9 in x 4 ft 10 in	
(140 mm) (100 mm) (1460 mm)	
Bucket 1 4.7 in x 3.3 in x 3 ft 1.6 in	
(120 mm) (85 mm) (1010 mm)	
Filters	
Suction filter	105 µm
Return filter	6 µm
Pilot line filter	8 µm

HYDRAULIC CONTROLS

Boom/Arm/Bucket/Swing	Command pressure control system (ISO control pattern)
Travel	Command pressure control system
Work mode selection	
1 - SP – mode	
2 - H – mode	
3 - Mode Auto	
Travel mode selection(2 speeds)	
Attachment cushion control	
Hydraulic lock(door block, left side tilt console)	

MONITOR SYSTEM

1 - Message display (warning, condition, etc...)
2 - Work mode display (SP, H, Auto)
3 - Machine state (power multiplier, etc...)
4 - Alarm and buzzer display
5 - Water temperature
6 - Hydraulic oil temperature
7 - Fuel level
8 - Diagnose System

OPERATOR'S ENVIRONMENT

Operator's cabin

- 1 - Round shaped cabin with a smooth design
- 2 - Safety glass on all windows
- 3 - Impact-proof cabin suspension for 4 point fluid mounting
- 4 - Sliding front window with automatic lock
- 5 - Full color LCD screen included
- 6 - Windscreen wipers and washer
- 7 - AM/FM radio with automatic tuner
- 8 - Floor carpet
- 9 - Ceiling hatch of polycarbonate and sun protective
- 10 - Automatic air conditioning
- 11 - Top FOPS defense level 1 (on the cabin's structure)
- 12 - Rollover protection structure (ROPS)
- 13 - Noise level
 - Internal 70 dBA (According to ISO 6396)
 - External 102 dBA (According to ISO 6395)

OPERATOR'S SEAT

Low frequency mechanic suspension with helical spring and double acting hydraulic damper.

With the following characteristics:

- 1 - Manual weight adjustment
- 2 - Backrest angle adjustment
- 3 - Seat height adjustment, adjustable armrest attached to the consoles
- 4 - Adjustable headrest
- 5 - Retractable seatbelt
- 6 - Adjustable back support
- 7 - The control consoles are adjusted independently from the seat

Other

- 1 - Rear view mirror (cabin side and right side)

UNDERCARRIAGE

Travel motor	Axial piston motor with variable piston displacement
Brake	Mechanical disk brake
Hydraulic service brake	Brake valve
Final drive	Planetary gear reduction
Travel speeds	
High	3.4 mph (5,6 km/h) (automatic speed change)
Low	2.1 mph (3,4 km/h)
Drawbar push	42264 lbf (188 kN)
Number of upper rollers	2 (on each side)
Number of lower rollers	8 (on each side)
Number of shoes	49 (on each side)
Type of shoes	Triple grousers
Link pitch	7.5 in (190 mm)
Shoes width - STD	1' 11" (600 mm)
Grade-ability	70 % (35 °)

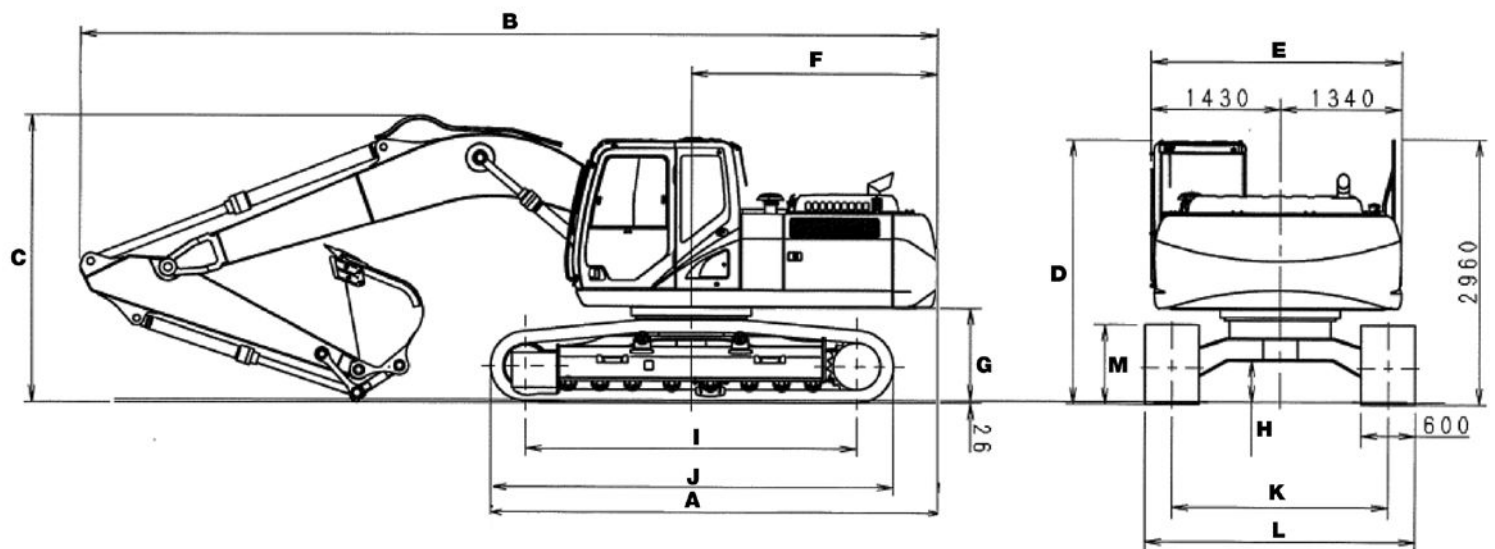
OPERATING WEIGHT

Operating weight	47178 lb (21.400 kg)
With 7' 10" (2,4 m) arm, 1.3 yd ³ (1,0 m ³) bucket, 1' 11" (600 mm) shoes, operator, lubricant, coolant and full fuel tank	
Shipping weight	44753 lb (20.300 kg)
Operating weight – Operator's weight 165 lb (75kg) + 90 % of fuel weight + bucket weight 1653 (750kg)	
Counterweight	9457 lb (4.250 kg)
Ground pressure	6.40 psi (0,45 kg/cm ²)
With 7' 10" (2,4 m arm), 1.3 yd ³ (1,0 m ³) bucket, 1' 11" (600 mm) shoes	

DIGGING FORCE WITH 1.3 YD³ (1,0 M³) BUCKET

ISO 6015	9 ft 7 in (2,94 m)	7 ft 10 in (2,40 m)
Arm	23155 lbf (103 kN)	27651 lbf (123 kN)
Digging Force		
With auto power- up	24728 lbf (110 kN)	29674 lbf (132 kN)
Bucket	31922 lbf	31922 lbf
Digging Force	(142 kN)	(142 kN)
With auto power-up	34170 lbf (152 kN)	34170 lbf (152 kN)

TRANSPORT DIMENSIONS

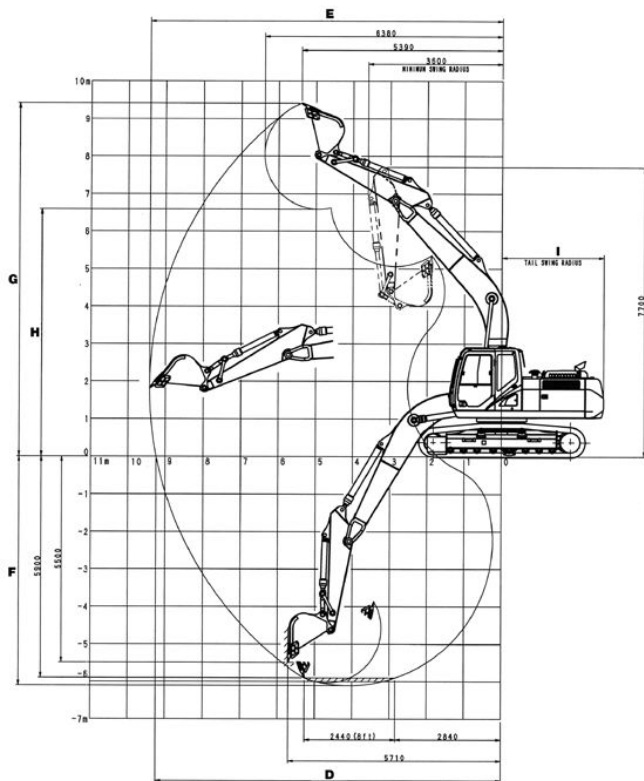


DIMENSIONS

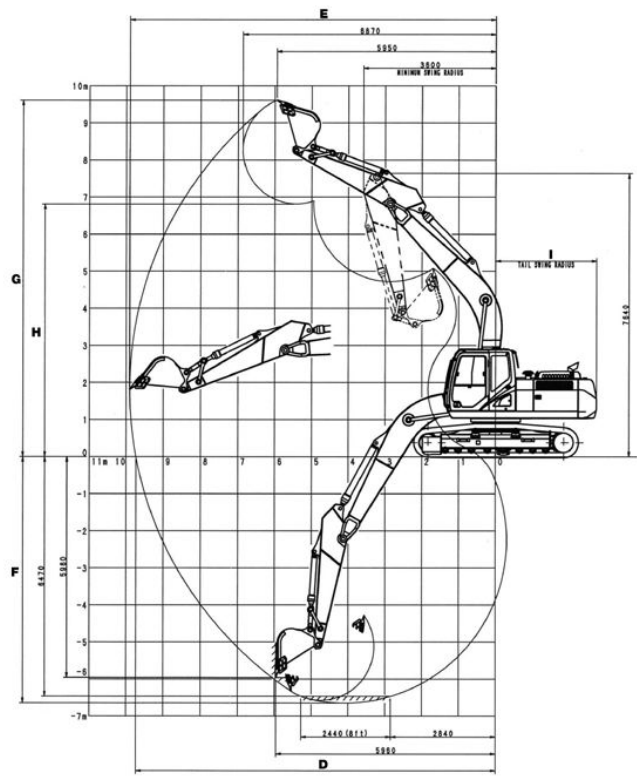
Arm	9 ft 7 in (2,94 m)	7 ft 10 in (2,40 mm)
A. Total length (without accessory)	16' 2.8" (4950 mm)	16' 2.8" (4950 mm)
B. Total length (with accessory)	30' 10" (9400 mm)	31' 1.2" (9480 mm)
C. Total height (with accessory)	9' 8.9" (2970 mm)	10' 5.5" (3190 mm)
D. Cabin height	9' 8.1" (2950 mm)	9' 8.1" (2950 mm)
E. Upper structure total width	9' 1" (2770 mm)	9' 1" (2770 mm)
F. Swing radius	9' (2750 mm)	9' (2750 mm)
G. Clearance height under upper structure	3' 4.9" (1040 mm)	3' 4.9" (1040 mm)
H. Minimum distance to ground	1' 5.3" (440 mm)	1' 5.3" (440 mm)
I. Distance between shafts (from center to center of the wheels)	12' (3660 mm)	12' (3660 mm)
J. Full track length	14' 7.9" (4470 mm)	14' 7.9" (4470 mm)
K. Track gauge	7' 10" (2390 mm)	7' 10" (2390 mm)
L. Undercarriage overall width with 1' 11" (600 mm) shoes	9' 9.7" (2990 mm)	9' 9.7" (2990 mm)
M. Crawler track height	3' (920 mm)	3' (920 mm)

WORK RANGE CHART

LEVEL EXCAVATION WITH 9' 7" (2,94 M) ARM



LEVEL EXCAVATION WITH 7' 10" (2,40 M) ARM



WORK RANGE

	9 ft 7 in (2,94 m)	7 ft 10 in (2,40 m)
A. Boom	18' 8.4" (5700 mm)	18' 8.4" (5700 mm)
B. Bucket radius	4' 9" (1450 mm)	4' 9" (1450 mm)
C. Bucket pivot action	177°	177°
D. Maximum reach at ground level	31' 11" (9730 mm)	30' 3.7" (9240 mm)
E. Max. reach	32' 5.7" (9900 mm)	30' 10" (9420 mm)
F. Max. digging depth	21' 9.8" (6650 mm)	20' 0.5" (6110 mm)
G. Max. digging height	31' 6.3" (9610 mm)	30' 10" (9410 mm)
H. Max. dumping height	22' 4.1" (6810 mm)	21' 7.4" (6590 mm)
I. Swing radius (back end)	9' (2750 mm)	9' (2750 mm)

SYSTEM FLUIDS CAPACITIES AND SPECIFICATIONS

	Capacities	Specifications
Hydraulic system	63.4 gal (240 l)	ISO VG 46
Hydraulic tank	38.8 gal (147 l)	ISO VG 46
Fuel tank	108.3 gal (410 l)	(Diesel)
Cooling system	8.13 gal (30,8 l)	Coolant 55 %, Water 45 %
Final drive case (on each side)	1.32 gal (5,0 l)	API GL-4 90
Swing drive case	1.32 gal (5,0 l)	API GL-5 90
Engine housing (with remote oil filter)	6.10 gal (23,1 l)	API CD SAE 10W-30

NOTE:

- 1 - Case Construction is constantly improving its products and therefore it reserves the right to modify its design and specifications at any time.
- 2 - The graphics may include optional units and may not include all the standard units.
- 3 - These specifications refer to the ISO 7135 standard (Land machinery – hydraulic excavators – Terminology and commercial specifications) second edition date 12/15/2009

LIFT CAPACITY

Arm 9 ft 7 in (2.94 m), Bucket 1.2 yd³ (0.90 m³)

	0 ft (0 m)		5 ft (1.5 m)		10 ft (3 m)		15 ft (4.5 m)		20 ft (6 m)		25 ft (7.5 m)		30 ft (9 m)		MAXIMUM REACH		
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	ft (m)
25 ft (7.5 m)											6106 lb (2770 kg)*	6106 lb (2770 kg)*			4585 lb (2080 kg)*	4585 lb (2080 kg)*	25 ft 4 in (7.73 m)
20 ft (6 m)											8135 lb (3690 kg)*	6525 lb (2960 kg)			4343 lb (1970 kg)*	4343 lb (1970 kg)*	28 ft 6 in (8.69 m)
15 ft (4.5 m)									9898 lb (4490 kg)*	9435 lb (4280 kg)*	9259 lb (4200 kg)*	6261 lb (2840 kg)	6569 lb (2980 kg)*	4254 lb (1930 kg)	4321 lb (1960 kg)*	3946 lb (1790 kg)	30 ft 4 in (9.26 m)
10 ft (3 m)					22222 lb (10080 kg)*	22222 lb (10080 kg)*	16203 lb (7350 kg)*	14219 lb (6450 kg)	12279 lb (5570 kg)*	8796 lb (3990 kg)	9237 lb (4190 kg)	5908 lb (2680 kg)	6613 lb (3000 kg)	4078 lb (1850 kg)	4453 lb (2020 kg)*	3571 lb (1620 kg)	31 ft 3 in (9.53 m)
5 ft (1.5 m)					18342 lb (8320 kg)*	18342 lb (8320 kg)*	20106 lb (9120 kg)*	12830 lb (5820 kg)	12874 lb (5840 kg)	8135 lb (3690 kg)	8840 lb (4010 kg)	5555 lb (2520 kg)	6415 lb (2910 kg)	3902 lb (1770 kg)	4784 lb (2170 kg)*	3439 lb (1560 kg)	31 ft 3 in (9.53 m)
0 ft (0 m)					17791 lb (8070 kg)*	17791 lb (8070 kg)*	19819 lb (8990 kg)	11882 lb (5390 kg)	12279 lb (5570 kg)	7605 lb (3450 kg)	8509 lb (3860 kg)	5555 lb (2520 kg)	6261 lb (2840 kg)	3902 lb (1770 kg)	5313 lb (2410 kg)*	3549 lb (1610 kg)	30 ft 5 in (9.28 m)
- 5 ft (-1.5 m)			16292 lb (7390 kg)*	16292 lb (7390 kg)*	23104 lb (10480 kg)*	22046 lb (10000 kg)	19444 lb (8820 kg)	11596 lb (5260 kg)	11993 lb (5440 kg)	7341 lb (3330 kg)	8355 lb (3790 kg)	5114 lb (2320 kg)			6217 lb (2820 kg)*	3924 lb (1780 kg)	28 ft 8 in (8.76 m)
- 10 ft (-3 m)			21318 lb (9670 kg)*	21318 lb (9670 kg)*	31746 lb (14400 kg)*	23479 lb (10650 kg)	19577 lb (8880 kg)	11750 lb (5330 kg)	12059 lb (5470 kg)	7429 lb (3370 kg)	8509 lb (3860 kg)	5246 lb (2380 kg)			7738 lb (3510 kg)	4739 lb (2150 kg)	
- 15 ft (-4.5 m)			30071 lb (13640 kg)*	30071 lb (13640 kg)*	28241 lb (12810 kg)*	24250 lb (11000 kg)	19356 lb (8780 kg)*	12235 lb (5550 kg)	12389 lb (5620 kg)	7958 lb (3610 kg)					10405 lb (4720 kg)	6481 lb (2940 kg)	

Short arm 7 ft 10 in (2.40 m), Bucket 1.3 yd³ (1 m³)

	0 ft (0 m)		5 ft (1.5 m)		10 ft (3 m)		15 ft (4.5 m)		20 ft (6 m)		25 ft (7.5 m)		30 ft (9 m)		MAXIMUM REACH		
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	ft (m)
25 ft (7.5 m)									7605 lb (3450 kg)*	7605 lb (3450 kg)*					7429 lb (3370 kg)*	6966 lb (3160 kg)	23 ft 5 in (7.15 m)
20 ft (6 m)									9700 lb (4400 kg)*	9457 lb (4290 kg)	9149 lb (4150 kg)*	6327 lb (2870 kg)			6988 lb (3170 kg)*	5202 lb (2360 kg)	26 ft 10 in (8.19 m)
15 ft (4.5 m)							13382 lb (6070 kg)*	13382 lb (6070 kg)*	10979 lb (4980 kg)*	9215 lb (4180 kg)	9435 lb (4280 kg)	6106 lb (2770 kg)			6900 lb (3130 kg)*	4321 lb (1960 kg)	28 ft 10 in (8.80 m)
10 ft (3 m)							16799 lb (7620 kg)*	13778 lb (6250 kg)	13139 lb (5960 kg)*	8598 lb (3900 kg)	9105 lb (4130 kg)	5798 lb (2630 kg)	6503 lb (2950 kg)	3990 lb (1810 kg)	6371 lb (2890 kg)	3902 lb (1770 kg)	29 ft 9 in (9.08 m)
5 ft (1.5 m)							20282 lb (9200 kg)*	12522 lb (5680 kg)	12720 lb (5770 kg)	8002 lb (3630 kg)	8752 lb (3970 kg)	5467 lb (2480 kg)	6371 lb (2890 kg)	3858 lb (1750 kg)	6239 lb (2830 kg)	3791 lb (1720 kg)	29 ft 9 in (9.09 m)
0 ft (0 m)					15101 lb (6850 kg)*	15101 lb (6850 kg)*	19709 lb (8940 kg)*	11794 lb (5350 kg)	12235 lb (5550 kg)	7561 lb (3430 kg)	8487 lb (3850 kg)	5224 lb (2370 kg)			6503 lb (2950 kg)	3924 lb (1780 kg)	28 ft 11 in (8.82 m)
- 5 ft (-1.5 m)			16159 lb (7330 kg)*	16159 lb (7330 kg)*	23082 lb (10470 kg)*	22288 lb (10110 kg)	19577 lb (8880 kg)	11728 lb (5320 kg)	12037 lb (5460 kg)	7407 lb (3360 kg)	8421 lb (3820 kg)	5180 lb (2350 kg)			7231 lb (3280 kg)	4409 lb (2000 kg)	27 ft 1 in (8.27 m)
- 10 ft (-3 m)			23655 lb (10730 kg)*	23655 lb (10730 kg)*	31195 lb (14150 kg)*	24008 lb (10890 kg)	19819 lb (8990 kg)*	11971 lb (5430 kg)	12213 lb (5540 kg)	7583 lb (3440 kg)					8796 lb (3990 kg)	5445 lb (2470 kg)	24 ft 2 in (7.38 m)
- 15 ft (-4.5 m)					25551 lb (11590 kg)*	24250 lb (11000 kg)	17813 lb (8080 kg)*	12588 lb (5710 kg)	11618 lb (5270 kg)*	7914 lb (3590 kg)					11133 lb (5050 kg)*	7826 lb (3550 kg)	19 ft 9 in (6.02 m)

BUCKET INFORMATION

CX210C – ISO

BUCKET	CAPACITY jd ³ (m ³)	WIDTH ft in (mm)	WEIGHT lb (kg)	NUMBER OF TEETH	CNHI NUMBER
HD (SC)	1.41 (1,08)	4' 2" (1270,00)	2275 (1032)	6	84405214
HD (SC)	1.59 (1,22)	4' 8" (1422,40)	2449 (1111)	6	84405215
HD (HC)	1.25 (0,96)	3' 2" (965,20)	2250 (1021)	5	84404178
HD (HC)	1.47 (1,13)	3' 8" (1117,60)	2425 (1100)	5	84404179
HD (HC)	1.72 (1,32)	4' 2" (1270,00)	2649 (1202)	6	84404180
HD (HC)	1.96 (1,50)	4' 8" (1422,40)	2874 (1304)	6	84405216

Note: HD (Heavy Duty)
SC (Standard Capacity)
HC (High Capacity)

SERIES EQUIPMENT

Operator's compartment

Pressurized cabin with round shape and smooth design
Safety glass on all windows
Impact-proof cabin suspension for 4 cushion hydraulic mounting
Sliding front window with automatic block
Full color LCD screen included
Windscreen wipers and washer
AM/FM radio with automatic tuner
Floor carpet
Ceiling hatch of polycarbonate and sun protection
Automatic air conditioning
Top FOPS defense level 1 (on the cabin's structure)
Rollover protection structure (ROPS)
Operator's seat with low frequency mechanical suspension with helical dumper and double acting hydraulic dumper, manual weight adjustment, back angle adjustment, adjustable armrest height attached to the consoles, adjustable headrest, retractable seatbelt and adjustable back support.
The control consoles are adjusted independently from the seat
Rear mirror
Double horn
Travel alarm
Joystick-like levers to control hydraulic functions
Safety levers to neutralize hydraulic functions and star the engine
Telematics (Sitewatch) on board with 3 years advanced subscription as standard, on machine manufactured from January, 2018

Engine

4-stroke engine, water-cooled, 6 cylinder – common rail injection system, turbocharged with air-cooled intercooler, with tier 3 emission certification.

Electrical System

Wiring with waterproof connectors
Battery 2 x 12V 92 Ah/5HR
Voltage 24 V
Alternator 50 A
Starter engine 5,0 kW

Hydraulic System

With ISO control pattern
Work mode selection Auto, H and SP
Auxiliary accessory mode
Auto power up
2 variable flow pumps
Electronic flow control
Cylinders with end cushioning
1 pump for the pilot system
7' 10" (2,40 m) long arm

Undercarriage

Travel speeds
High 3.4 mph (5,6 km/h)
Automatic speed change
Low 2.1 mph (3,4 km/h)
Quantity of transport rollers:
Quantity of upper rollers 2 (on each side)
Quantity of lower rollers 8 (on each side)
Number of shoes 49 (on each side)
Shoes width 1' 11" (600 mm)
Type of shoes Triple grousers
Track length 14' 7" (4470 mm)
Track gauge 7' 10" (2390 mm)
Track guide Simple
Sealed and lubricated chains

OPTIONAL EQUIPMENT

Cabin

Seat with air suspension
2 options for front stone protection
Level 2 FOPS superior protection
Rain deflector
Sun screen

Accessories

9' 7" (2,94 m) long arm
Heavy Duty bucket and link with hook
Tropical cooling
Six options for auxiliary accessory
Rubber fender protector
Additional handrails Rh + Lh
Safety valve for the boom

Undercarriage

2' 3.5" (700 mm), 2' 7.5" (800 mm), and 2' 11" (900 mm) shoes
Triple track guide

Other

Back camera
Side view camera
Refueling pump
Aux. Hydraulic
Aux. Low fluid hydraulic



Fleet monitoring and management system by satellite or cel phone tracking.

CASE Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold. The specifications, descriptions, and illustrative materials contained here reflect correctly the data known up to the publication date, but are subject to changes with no previous notice. The illustrations may include optional equipment and accessories and may not include all standard equipment.

CASE Construction equipments and CASE/FPT engines are manufactured by the same company: CNH Industrial

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