

ZAXIS-7 series

HITACHI

Reliable solutions

ZAXIS490



HYDRAULIC EXCAVATOR

Model code : ZX490LCH-7

Engine rated power : 296 kW (ISO14396)

Operating weight : 49 500 – 51 200 kg

Bucket ISO heaped : 2.10 – 2.50 m³

Complete control

The new Zaxis-7 range of large excavators puts you firmly in control, so you can feel assured of your machine's performance, and supported by the technological expertise and services that Hitachi provides.



Reduced noise and vibration levels in the cab provide a more comfortable working environment.



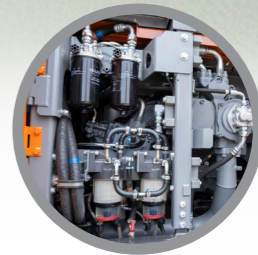
Integrated console and seat suspension gives a greater sense of control, and helps to reduce fatigue.



Visibility of the job site is excellent thanks to the Aerial Angle camera system and new LCD monitor.



Sensors monitor oil continuously and contribute to preventative maintenance, helping to reduce downtime.



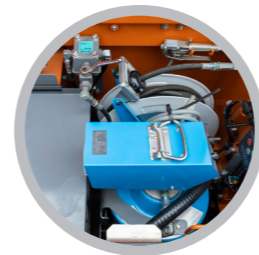
Fuel consumption has been reduced by 10% (PWR mode), saving running costs.



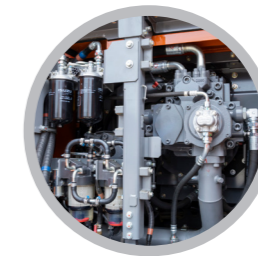
ConSite Pocket app allows you to manage and monitor your fleet remotely.



Options such as Hitachi ground engaging tools enable you to enhance the performance of your excavator.



Increased engine output has improved workload by 3% (HP mode), resulting in higher productivity.



The new HIOS-V hydraulic system reduces fuel consumption and increases arm crowd speed to enhance productivity.

SPECIFICATIONS

Preliminary specifications – subject to change

ENGINE

Model	Isuzu 6WG1
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC ,CSF and SCR system
No. of cylinders	6
Rated power	
ISO 14396	296 kW at 1800 min ⁻¹
SAE J1349, net	295 kW at 1800 min ⁻¹
Maximum torque	1 707 Nm at 1 450 min ⁻¹
Piston displacement	15.681 L
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 385 L/min
Pilot pump	1 gear pump
Maximum oil flow	30 L/min

Hydraulic Motors

Travel	2 variable displacement axial piston motors
Swing	2 axial piston motors

Relief Valve Settings

Implement circuit	31.9 Mpa
Swing circuit	28.4 Mpa
Travel circuit	35.3 Mpa
Pilot circuit	3.9 Mpa
Power boost	35.3 Mpa

Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	170 mm	115 mm
Arm	1	190 mm	130 mm
Bucket	1	170 mm	120 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 parking brake is spring-set/hydraulic-released disc type.

Swing speed	9.5 min ⁻¹
Swing torque	148 kNm

Operator's Cab

Independent spacious cab, 1 025 mm wide by 1 675 mm high, conforming to ISO* Standards.
* International Organization for Standardization

UNDERCARRIAGE

Tracks

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.

Numbers of Rollers and Shoes on Each Side

Upper rollers	3
Lower rollers	9
Track shoes	53
Track guards	2

Travel Device

Each track driven by axial piston motor through reduction gear for counterrotation of the tracks. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.

Travel speeds	High : 0 to 5.5 km/h
	Low : 0 to 3.7 km/h

Maximum traction force

	329 kN
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Gradeability

	70% (35 degree) continuous
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ENVIRONMENT

Engine Emissions

EU Stage V

Sound Level

Sound level in cab according to ISO 6396 LpA 70 dB(A)
External sound level according to ISO 6395 and EU Directive 2000/14/EC LwA 105 dB(A)

Air Conditioning System

The air conditioning system contains fluorinated greenhouse gases. Refrigerant type : HFC-134a, GWP: 1430, Amount:1.10 kg, CO₂e: 1.57 ton.

SERVICE REFILL CAPACITIES

Fuel tank	675.0 L
Engine coolant	62.0 L
Engine oil	57.0 L
Swing device (each side)	6.5 L
Travel device (each side)	11.0 L
Hydraulic system	510.0 L
Hydraulic oil tank	310.0 L
DEF/AdBlue® tank	95.0 L

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.0 m H	3.4 m H	Triple or double	600 mm	49 500 kg	84 kPa
		Triple	750 mm	50 300 kg	68 kPa
		Triple	900 mm	50 900 kg	58 kPa

Including 2.1 m³ rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.0 m H	2.9 m BE	Triple or double	600 mm	49 500 kg	84 kPa
		Triple	750 mm	50 300 kg	68 kPa
		Triple	900 mm	50 900 kg	57 kPa

Including 2.1 m³ rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
6.3 m BE	2.5 m BE	Triple or double	600 mm	49 800 kg	84 kPa
		Triple	750 mm	50 600 kg	69 kPa
		Triple	900 mm	51 300 kg	58 kPa

Including 2.5 m³ rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
6.3 m BE	2.9 m BE	Triple or double	600 mm	49 700 kg	84 kPa
		Triple	750 mm	50 500 kg	69 kPa
		Triple	900 mm	51 200 kg	58 kPa

Including 2.5 m³ rock bucket (ISO heaped)

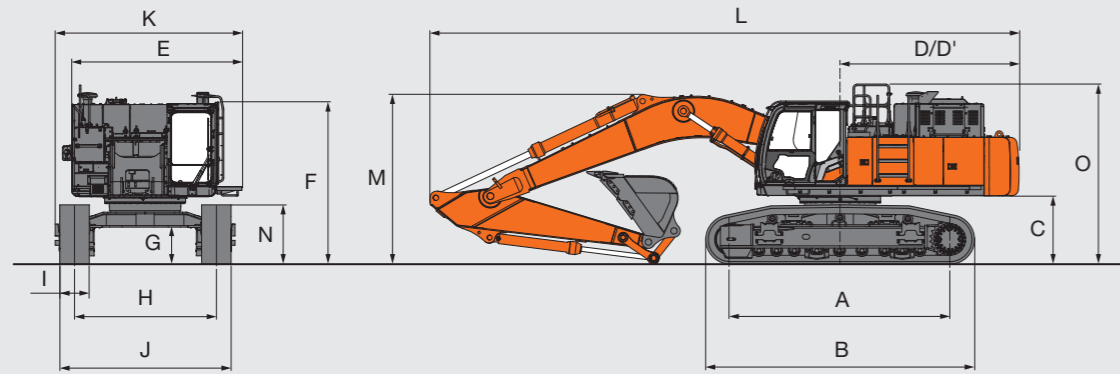
BUCKET AND ARM DIGGING FORCE

	ZAXIS 490LCH			
	Boom 6.3 m BE		Boom 7.0 m H	
Arm length	Arm 2.5 m BE	Arm 2.9 m BE	Arm 2.9 m BE	Arm 3.4 m H
Bucket digging force* ISO	300 kN		302 kN	
Bucket digging force* SAE : PCSA	265 kN		267 kN	
Arm crowd force* ISO	304 kN	265 kN		225 kN
Arm crowd force* SAE : PCSA	294 kN	257 kN		219 kN

* At power boost

SPECIFICATIONS

DIMENSIONS



Unit: mm

		ZAXIS 490LCH ^{*2}		
A	Distance between tumblers	4 470		
B	Undercarriage length	5 470		
*1 C	Counterweight clearance	1 360		
D	Rear-end swing radius	3 670		
D'	Rear-end length	3 660		
E	Overall width of upperstructure	3 480		
F	Overall height of cab	3 330		
*1 G	Min. ground clearance	737		
H	Track gauge : Extended / Retracted	2 890 / 2 390		
I	Track shoe width	G 600		
J	Undercarriage width : Extended / Retracted	G 600	G 750	G 900
		3 490 / 2 990	3 640 / 3 140	3 790 / 3 290
K	Overall width	3 820		
L	Overall length	12 010		
M	Overall height of boom	3 480		
N	Track height	1 220		
O	Overall height of base machine	3 380		

*1 Excluding track shoe lug G: Grouser shoe

*2 Equipped with H-boom 7.8 m and H-arm 3.4 m

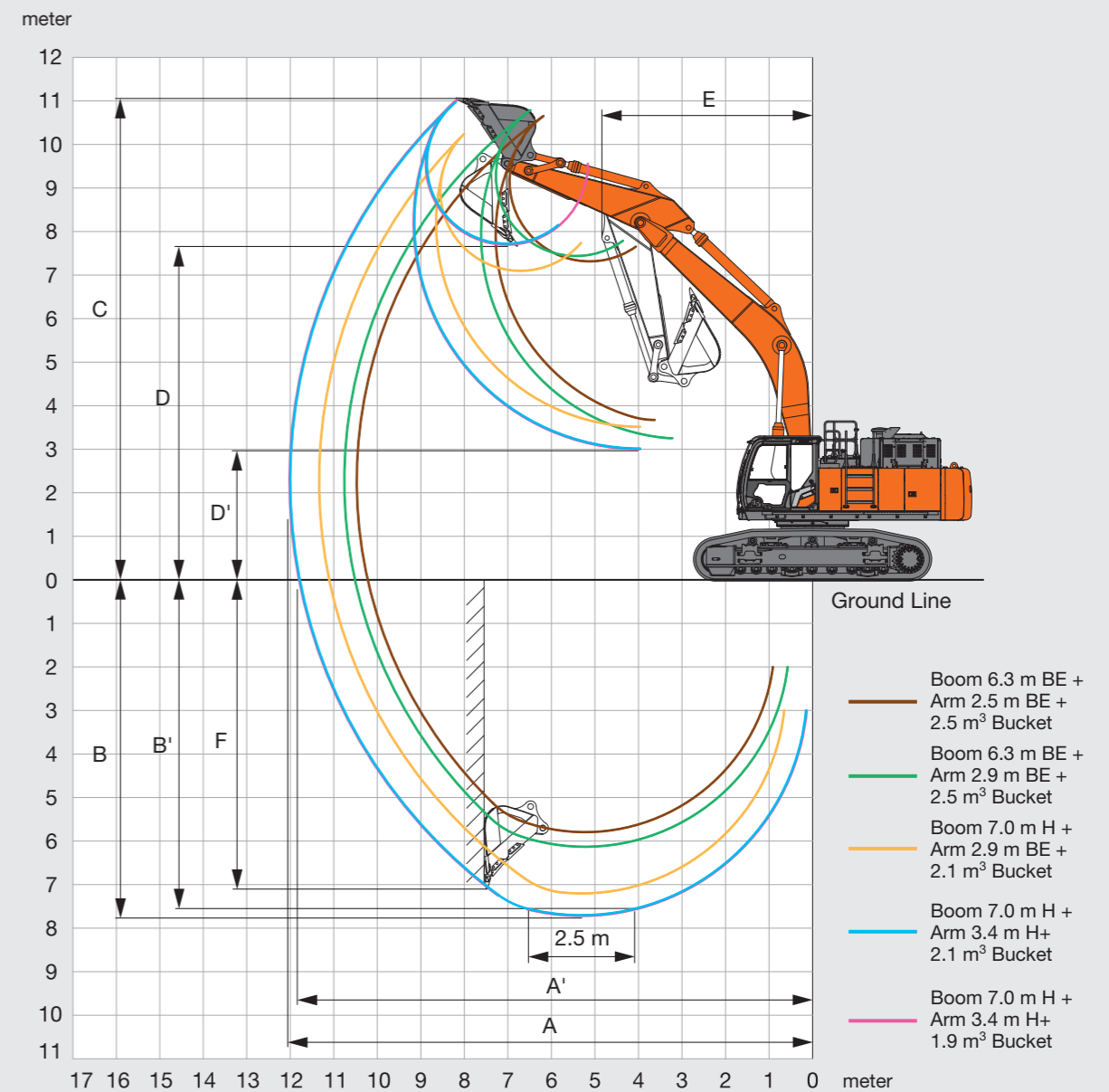
Backhoe Buckets

Capacity		Width		No. of teeth	Weight	Recommendation			
ISO heaped	CECE heaped	Without side cutters	With side cutters			ZAXIS 490LCH			
						Boom 6.3 m BE		Boom 7.0 m H	
				Arm 2.5 m BE	Arm 2.9 m BE	Arm 2.9 m BE	Arm 3.4 m H		
*1 1.9 m ³	1.7 m ³	1 480 mm	1 500 mm	5	2 070 kg	●	●	●	●
*1 2.1 m ³	1.8 m ³	1 560 mm	1 580 mm	5	2 170 kg	●	●	●	●
*1 2.3 m ³	2.0 m ³	1 680 mm	1 700 mm	5	2 260 kg	●	●	-	-
*1 2.5 m ³	2.2 m ³	1 800 mm	1 820 mm	5	2 360 kg	●	●	-	-
*2 1.3 m ³	1.2 m ³	1 170 mm	-	3	2 330 kg	●	●	●	●
One-point ripper				1	1 260 kg	●	●	●	●

*1 Rock bucket ● Heavy-duty service

*2 Ripper bucket - Not applicable

WORKING RANGES



Unit: mm

Arm length	ZAXIS 490LCH					
	Boom 6.3 m BE		Boom 7.0 m H			
	Arm 2.5 m BE	Arm 2.9 m BE	Arm 2.9 m BE	Arm 3.4 m H		
Bucket	2.5 m ³		2.1 m ³	1.9 m ³		
A	Max. digging reach	10 460	10 750	11 330	11 990	12 020
A'	Max. digging reach (on ground)	10 210	10 500	11 100	11 770	11 800
B	Max. digging depth	5 790	6 130	7 200	7 700	7 730
B'	Max. digging depth for 2.5 m level	5 620	5 960	6 980	7 550	7 570
C	Max. cutting height	10 660	10 790	10 170	10 980	11 030
D	Max. dumping height	7 320	7 440	7 100	7 720	7 700
D'	Min. dumping height	3 670	3 250	3 520	3 010	2 990
E	Min. swing radius	4 070	3 920	5 020	4 840	4 840
F	Max. vertical wall	4 260	4 650	4 270	5 630	7 040

Excluding track shoe lug

MACHINE CAPACITIES

Notes: 1. Ratings are based on ISO 10567.

2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.

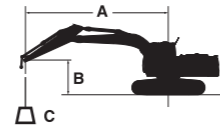
3. The load point is the center-line of the bucket pivot mounting pin on the arm.

4. *Indicates load limited by hydraulic capacity.

5. 0 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.



A: Load radius

B: Load point height

C: Machine capacity

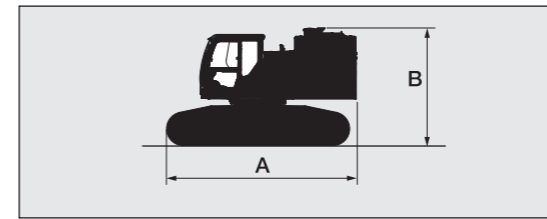
ZAXIS 490LCH

Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height m	Load radius										At max. reach		
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		meter		
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg	7.5							*11 360	*11 360			*8 530	*8 530	8.7
	6.0							*11 960	11 180	*11 120	8 250	*8 390	7 570	9.4
	4.5			*20 390	*20 390	*15 470	15 080	*12 980	10 730	*11 540	8 040	*8 510	6 830	9.9
	3.0			*24 760	21 350	*17 600	14 120	*14 120	10 220	*12 100	7 780	*8 860	6 440	10.1
	1.5			*16 940	*16 940	*19 160	13 370	*15 060	9 780	12 270	7 530	*9 490	6 310	10.1
	0 (Ground)			*20 310	19 750	*19 790	12 920	*15 530	9 470	12 070	7 350	*10 500	6 440	9.9
	-1.5	*14 870	*14 870	*25 420	19 750	*19 420	12 760	*15 330	9 330	12 000	7 290	11 270	6 870	9.4
	-3.0	*24 230	*24 230	*23 030	19 960	*18 000	12 830	*14 200	9 370			*11 500	7 780	8.7
-4.5	*23 890	*23 890	*19 140	*19 140	*15 100	13 120	*11 160	9 680			*11 100	9 650	7.5	
Boom 7.0 m H Arm 2.9 m BE Counterweight 9 080 kg	7.5													
	6.0					*14 280	*14 280	*12 540	10 960			*11 770	8 520	8.7
	4.5			*22 020	*22 020	*16 250	14 760	*13 480	10 530	*11 940	7 900	*11 780	7 580	9.2
	3.0					*18 230	13 860	*14 510	10 070	*12 390	7 670	11 480	7 090	9.5
	1.5					*19 520	13 200	*15 300	9 670	12 190	7 460	11 310	6 930	9.5
	0 (Ground)			*21 720	19 800	*19 800	12 870	*15 570	9 420	12 040	7 320	11 640	7 090	9.2
	-1.5	*17 700	*17 700	*24 390	19 900	*19 070	12 790	*15 100	9 340			*12 530	7 660	8.7
	-3.0	*25 930	*25 930	*21 640	20 180	*17 240	12 920	*13 490	9 450			*12 570	8 890	7.9
-4.5			*17 180	*17 180	*13 620	13 310					*12 050	11 690	6.6	
Boom 6.3 m BE Arm 2.9 m BE Counterweight 9 080 kg	7.5					*13 690	*13 690					*8 680	*8 680	7.2
	6.0					*14 550	*14 550	*13 240	11 000			*8 430	*8 430	8.1
	4.5			*20 790	*20 790	*16 240	15 150	*13 920	10 680			*8 540	8 470	8.6
	3.0			*24 930	21 910	*18 180	14 300	*14 830	10 260			*8 960	7 880	8.9
	1.5			*27 170	20 670	*19 620	13 600	*15 570	9 880			*9 760	7 720	8.9
	0 (Ground)			*27 070	20 220	*20 070	13 190	*15 760	9 630			*11 120	7 950	8.6
	-1.5	*26 670	*26 670	*25 340	20 200	*19 290	13 070	*14 950	9 570			*13 420	8 700	8.1
	-3.0	*27 940	*27 940	*21 910	20 490	*16 850	13 220					*13 180	10 400	7.2
-4.5														
Boom 6.3 m BE Arm 2.5 m BE Counterweight 9 080 kg	7.5					*14 290	*14 290					*13 300	12 720	6.8
	6.0					*15 030	*15 030	*13 640	10 750			*12 870	10 090	7.8
	4.5			*21 680	*21 680	*16 660	14 860	*14 190	10 470			*13 030	8 790	8.3
	3.0					*18 480	14 040	*14 990	10 080			*13 270	8 150	8.6
	1.5					*19 720	13 400	*15 600	9 730			13 080	7 980	8.6
	0 (Ground)			*26 590	20 090	*19 910	13 050	*15 580	9 520			13 620	8 250	8.3
	-1.5			*24 470	20 170	*18 810	12 990	*14 400	9 520			*13 660	9 130	7.7
	-3.0			*20 600	20 520	*15 860	13 220					*13 170	11 170	6.8
-4.5														

TRANSPORTATION

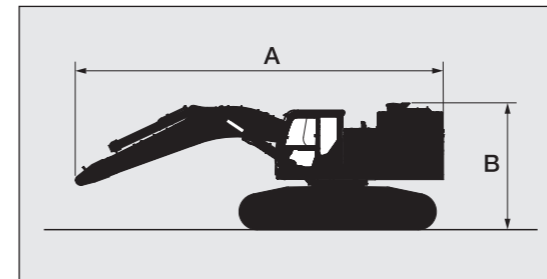
BASIC MACHINE (WITHOUT COUNTERWEIGHT)



Shoe width	A	B	Overall width ¹	Weight
600 mm			2 990 mm	29 200 kg
750 mm	5 690 mm	3 530 mm	3 140 mm	30 000 kg
900 mm			3 290 mm	30 600 kg

¹ Undercarriage retracted

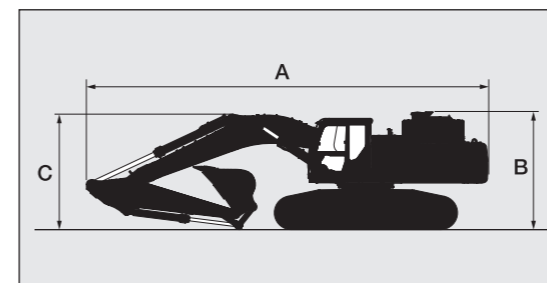
BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



Boom length	Shoe width	A	B	Overall width ¹	Weight
6.3 m BE	600 mm			2 990 mm	35 500 kg
	750 mm	9 150 mm	3 530 mm	3 140 mm	36 200 kg
	900 mm			3 290 mm	36 900 kg
7.0 m H	600 mm			2 990 mm	35 400 kg
	750 mm	9 910 mm	3 140 mm	36 200 kg	
	900 mm		3 290 mm	36 900 kg	

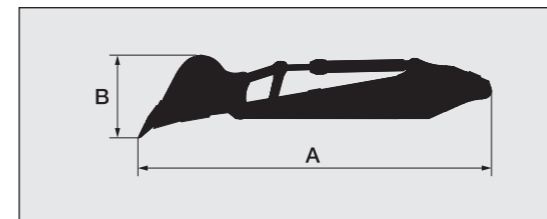
¹ Undercarriage retracted

BASIC MACHINE FITTED WITH FRONT AND SIDEWALK



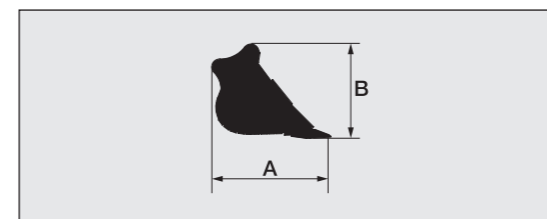
Boom length	6.3 m BE		7.0 m H	
	Arm length	2.5 m BE	2.9 m BE	2.9 m BE
A	11 660 mm	11 320 mm	12 100 mm	12 010 mm
B	3 530 mm			
C	4 300 mm	3 740 mm	3 600 mm	3 480 mm

ARM AND BUCKET



Arm	Bucket		A	B	Overall width	Weight
	ISO heaped	CECE heaped				
2.5 BE	2.5 m ³	2.2 m ³	5 650 mm	1 470 mm	1 820 mm	5 200 kg
2.9 BE	2.5 m ³	2.2 m ³	6 030 mm	1 340 mm	1 700 mm	5 100 kg
3.4 H	2.1 m ³	1.8 m ³	6 370 mm	1 470 mm	1 500 mm	4 900 kg

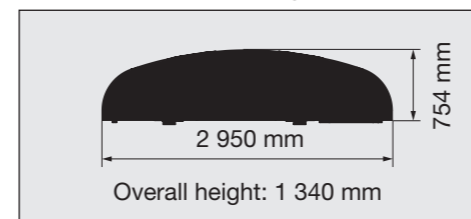
BUCKET



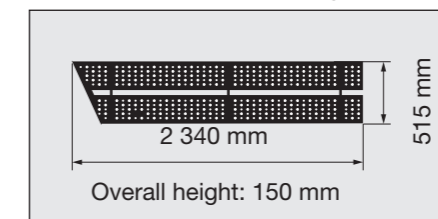
Rock bucket

Bucket	A	B	Overall width	Weight
1.9 m ³	2 030 mm	1 480 mm	1 500 mm	2 070 kg
2.1 m ³	1 950 mm	1 650 mm	1 580 mm	2 170 kg
2.3 m ³	1 950 mm	1 650 mm	1 700 mm	2 260 kg
2.5 m ³	1 950 mm	1 650 mm	1 820 mm	2 360 kg

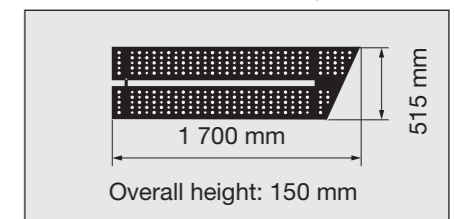
COUNTERWEIGHT 9 080 kg



LEFT FRONT SIDEWALK 44 kg



LEFT REAR SIDEWALK 30 kg



EQUIPMENT

ENGINE

Aftertreatment device	●
Air cleaner double filters	●
Alternator 90 A	●
Auto idle system	●
Auto shut-down control	●
Cartridge-type engine oil filter	●
Cartridge-type fuel main filter	●
ConSite OIL (Sensor)*	●
DEF/AdBlue® tank inlet strainer and extension filler	●
DEF/AdBlue® tank with ISO magnet adapter	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●
Dust-proof net	●
Electrical fuel feed pump	●
Engine oil drain coupler	●
Expansion tank	●
Fan guard	●
Fuel cooler	●
Fuel pre-filter	●
Isolation-mounted engine	●
Maintenance free pre-cleaner	○
Power mode control [H/P (High Power) PWR (Power) ECO (Economy)]	●
Radiator, oil cooler and intercooler	●

HYDRAULIC SYSTEM

Auto power lift	●
Boom mode selector system	●
ConSite OIL (Sensor)*	●
Control valve with main relief valve	●
Drain filter	●
Engine speed sensing system	●
Extra port for control valve	●
High mesh full flow filter	●
Hose rupture valve for arm	●
Hose rupture valve for boom	●
Pilot filter	●
Power boost	●
Shockless valve in pilot circuit	●
Suction filter	●
Work mode selector	●

CAB

All-weather sound suppressed steel cab	●
Auto control air conditioner	●
Bluetooth integrated DAB+ radio	●
Console height adjustment	●
Drink holder with hot & cool function	●
Electric double horn	●
Engine shut-off switch	●
Equipped with reinforced, tinted (green color) glass windows	●
Evacuation hammer	●
Fire extinguisher bracket	○
Floor mat	●
Footrest	●
Front window washer (2 points)	●
Glove compartment	●
Hands-free calling device	●
Hot & cool box	●
Key cylinder light	●
Laminated round glass front window	●
LED room light with door courtesy	●
Magazine rack	●
OPG front guard Level II (ISO10262) compliant	○
OPG top guard Level I (ISO10262) compliant cab	●
OPG top guard Level II (ISO10262) compliant	○
Pilot shut-off lever	●
Power outlet 12 V, 24 V	●
Rain guard (without OPG front guard)	●
Rear tray	●
Retractable seat belt	●
ROPS (ISO12117-2) compliant cab	●
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	●
Sunscreen roller type (multi-use front or side and rear window)	○
Transparent roof with slide curtain	●
USB power supply	●
Parallel link wiper	●
Windows on front, upper, lower and left side can be opened	●
2 speakers	●
6 fluid-filled elastic mounts	●

MONITOR SYSTEM

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

LIGHTS

Additional boom LED light with cover	○
Additional cab roof front LED lights	○
Additional cab roof rear LED light	○
LED lights for camera (side & rear view camera)	○
Rotating lamp	○
2 working LED lights	●

UPPER STRUCTURE

Aerial Angle ® (side & rear view camera)	●
Batteries 2 x 170 Ah	●
Body top handrail	●
Counterweight 9 080 kg	●
Electric fuel refilling pump with auto stop and filter	●
Electrical grease pump with hose-reel	●
Fuel level float	●
Hydraulic oil level gauge	●
Ladder	●
Lockable fuel refilling cap	●
Lockable machine covers	●
Lockable tool box	●
Platform handrail	●
Sidewalk (cab side)	●
Skid-resistant plates and handrails	●
Swing parking brake	●
Undercover	●
Utility space	●
2way disconnect switch	●

● : Standard equipment

○ : Optional equipment

UNDERCARRIAGE

Bolt-on sprocket	●
Reinforced track links with pin seals	●
Shoe: 600 mm double grouser	○
Shoe: 600 mm triple grouser	●
Shoe: 750 mm triple grouser	○
Shoe: 900 mm triple grouser	○
Track undercover	●
Travel direction mark on track frame	●
Travel motor covers	●
Travel parking brake	●
Upper and lower rollers	●
2 track guards (each side) and hydraulic track adjuster	●
4 tie down hooks	●

FRONT ATTACHMENTS

Arm tip remote lubrication	●
Arm 2.5 m BE	○
Arm 2.9 m BE	○
Arm 3.4 m H	●
Boom 6.3 m BE	○
Boom 7.0 m H	●
Centralized lubrication system	●
Lower arm reinforcement	●
Dirt seal on all bucket pins	●
Flanged pin	●
Reinforced welded link A	●
Reinforced link B	●

ATTACHMENTS

Accessories for breaker	●
Accessories for breaker & crusher	●
Accessories for 2 speed selector	●

MISCELLANEOUS

ConSite	○
Global e-Service	●
Onboard information controller	●
Standard tool kit	●
Theft prevention system**	○

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

* Engine oil and hydraulic oil monitoring sensor.

** Hitachi Construction Machinery cannot be held liable for theft, any system will just minimize the risk of theft.

Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

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. Before use, read and understand the Operator's Manual for proper operation.

