

ZAXIS-7 series

HITACHI

Reliable solutions

ZAXIS490LCH



HYDRAULIC EXCAVATOR

Model code : ZX490LCH-7

Engine rated power : 296 kW (ISO 14396) /
295 kW (ISO 9249)

Operating weight : 50 400 – 52 200 kg

Bucket ISO heaped : 2.1 – 2.5 m³



YOU'RE IN CONTROL

You're at the heart of Hitachi's design for its latest range of excavators. To continuously improve on previous generation machines we've focused on enhancing your experience in the cab as an operator.

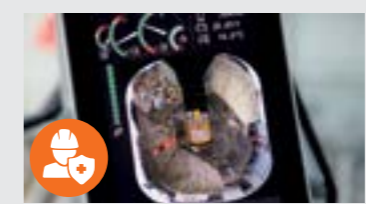
We've considered the challenges you face as the owner of a successful business. And we've zoomed in on the ways in which we can support you over the life cycle of your machine.

By putting you at the heart of the Zaxis-7 range, we invite you to take control – over your workspace and your fleet. And by working in partnership, we will help you to create your vision.

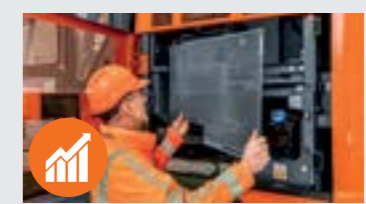
INSIDE



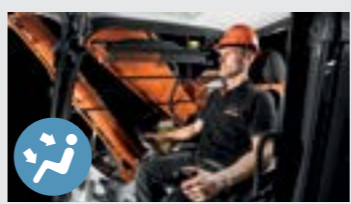
4. Complete Control
In control of your assets



6. Increase your safety
Be in control of your environment



8. Boost your uptime
Improve your profit



11. Control Zone
Feel the difference



12. Get More from your machine
In control of your performance



14. Specifications
Know your machine



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.



The expanded cab interior provides 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.



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.



Improved access to components ensures maintenance is quick and easy.



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



The ECO gauge on the monitor indicates how to lower fuel consumption and reduce costs.



INCREASE YOUR SAFETY

Your ability to work safely is vital, not only for your own wellbeing, but also for the successful completion of any project. To protect yourself and your machine from potential hazards, the new Hitachi Zaxis-7 excavators give you a superior view of your surroundings, so you can see the job site from all angles.

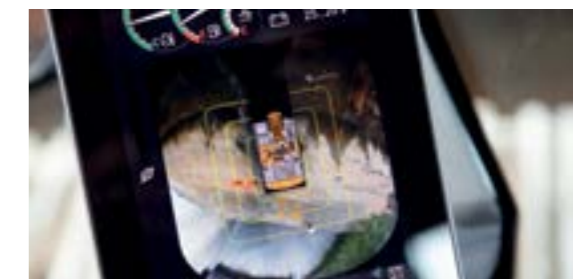
The visibility you enjoy from the cab includes an exceptional 270-degree bird's-eye view with the Aerial Angle® camera system. You can choose from six image options to view the machine's immediate environment, which enables you to control your own safety – as well as that of those around you.

To help you to work more confidently and efficiently, even in the most challenging of conditions, Zaxis-7 excavators are fitted with some impressive new features. From the LED work lights and the windscreen wiper with an increased sweeping area, to the large reflective strips on the counterweight and roller sunshades, you'll have the visibility you need when it matters most.

Attention to detail is also fundamental to a safe working environment – and the repositioning of the pilot shutoff lever is a perfect example. It is now within easy reach to prevent any unintentional actions.



The pilot shutoff lever offers enhanced safety in the cab.



Choose between different image layouts to suit your working environment.



LED work lights improve visibility in challenging conditions.

BOOST YOUR UPTIME

Completing a project on time and on budget depends on the ability of your construction equipment to perform all day, every day. That's why Hitachi owners have profited from generations of ultra-reliable and durable machinery – and the Zaxis-7 range is no exception.

The latest Hitachi large excavators have been built to last, so that you can remain in complete control of your assets. They have been tested rigorously and continuously at dedicated facilities in Japan with the goal of significantly boosting your uptime.

As a result, a wide range of durable new components have been fitted to the latest Stage-V compliant machines – even down to the detail of the rigidity of the door hinges. Now standard on our Zaxis-7 range are hydraulic and engine oil monitoring sensors that help to reduce downtime and running costs.

Downtime is prevented by the durable after-treatment system, and also minimised by the priority given to easy maintenance and cleaning – saving you time and money. Peace of mind comes from such features as the two-way disconnect switch. This makes it possible to shut down power without resetting data on the monitor and prevents the battery from discharging during welding.



Uptime is improved thanks to robust new components.



Upgraded engine parts enhance reliability.



Maintenance is easy at ground level.



The robust undercarriage of the ZX490LCH-7.



Designed for durability and easy maintenance, Zaxis-7 excavators increase uptime and reduce the total cost of ownership.



CONTROL ZONE

Enhanced comfort and safety features are at your fingertips in the refined cab of Zaxis-7 excavators, giving you the power to perform productively, with ease and reduced fatigue.

- 1 Increased sweeping area of wide view wiper enhances visibility in difficult working conditions.
- 2 Air conditioning and audio are easily controlled via the monitor.
- 3 Low-reflective colour 8" LCD monitor is easy to view and navigate.
- 4 USB power supply and smartphone holder helps you stay connected.
- 5 Drinks holder is easy to detach for cleaning.
- 6 Additional joystick controls for effortless operation.
- 7 Ergonomic design gives you convenient access to controls.
- 8 Bluetooth® for hands-free calls and DAB+ radio for music while you work.
- 9 Multifunctional control panel makes operation easier.
- 10 Improved sound isolation makes this one of the quietest cabs in the market.
- 11 User-friendly storage space keeps your workspace tidy and clutter-free.
- 12 12v and 24v outlets for your electrical devices.
- 13 One-touch adjustment lever for console so you can work comfortably in the optimum position.
- 14 Integrated console and seat suspension gives a greater sense of control and helps to reduce fatigue.
- 15 Increased legroom creates a more spacious cab.
- 16 Optimal pedal layout helps to reduce fatigue.



Operation is easy with ergonomically designed controls and switches.



Bluetooth® connection for hands-free calls while you work.

GET MORE FROM YOUR MACHINE

Designed to work in perfect harmony with your machine, Hitachi preferred durable hydraulic breakers, hydraulic hitches, buckets and Ground Engaging Tools (GET) will increase your profit by maximising productivity and uptime. Manufactured to the same high standards as all Hitachi construction equipment, they offer unrivalled reliability and exceptional performance.

Buckets

You can increase the versatility of your excavator by choosing the right bucket for the job. For loading light materials or heavy-duty work, Hitachi supplied buckets can be customised to meet your needs. You have a wide range of options to choose from Hitachi supplied buckets with different capacities and widths.

Ground engaging tools

You can enhance the digging power and productivity of your excavator or wheel loader with Hitachi GET. Quick and safe to install and replace, they fit precisely to your attachments and can be tailored to suit the task. Using Hitachi GET can reduce your maintenance costs and downtime, lower fuel consumption and enhance the overall performance of your machine.

Breakers

High-performance hydraulic breakers – approved by Hitachi – are perfectly suited to large excavators. They are easy to maintain and user-friendly, and their high-quality materials ensure a long lifetime. This means reduced maintenance costs, fewer replacement parts and minimal downtime.



Attachments can be customised to suit the application.



Breakers are lightweight with high impact energy.



Hitachi GET include teeth and reliable adapters to ensure a precise fit.
*Not available in all markets



A variety of boom and arm types are available to suit tough environments and heavy-duty tasks.



SPECIFICATIONS

ENGINE	
Model	Isuzu 6WG1
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC+CSF+SCR system
No. of cylinders	6
Rated power	
ISO 14396 : 2002 gross	296 kW at 1 800 min ⁻¹
ISO 9249 : 2007 net	295 kW at 1 800 min ⁻¹
Maximum torque	2 050 Nm at 1 300 min ⁻¹
Piston displacement	15.681 L
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V / 147 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 motor		
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	9.6 min ⁻¹
Swing torque	148 kNm

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 2-speed axial piston motor. 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
Gradeability	70% (35 degree) continuous

SERVICE REFILL CAPACITIES	
Fuel tank	675.0 L
Engine coolant	70.0 L
Engine oil	62.0 L
Swing device	6.5 L
Travel device (each side)	11 L
Hydraulic system	510.0 L
Hydraulic oil tank	310.0 L
DEF/AdBlue® tank	95.0 L

ENVIRONMENT	
Engine Emissions	EU Stage V
Sounds Level	
Sound level in cab according to ISO 6396 : 2008	70 LpA dB(A)
External sound level according to ISO 6395 : 2008 and EU Directive 2000/14/EC	107 LwA dB(A)
Air Conditioning System	
The air conditioning system contains fluorinated greenhouse gases. Refrigerant type: HFC-134a, GWP: 1430, Amount: 1.10kg, CO2e: 1.57ton.	

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

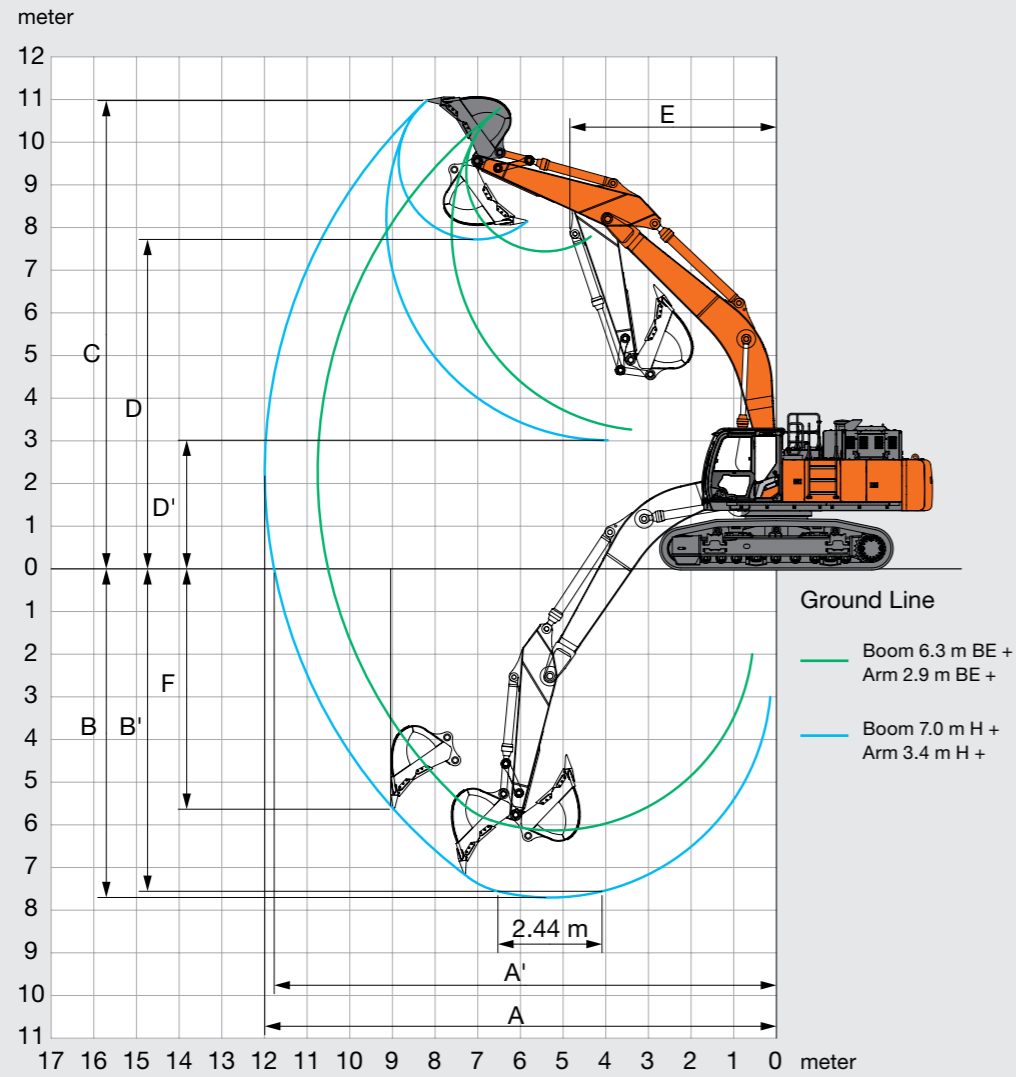
Bucket Capacity	Boom type	Arm type	Shoe grouser type	Shoe width (mm)	Operating weight (kg)	Ground pressure (kPa)
2.1 m ³ Rock bucket (ISO heaped)	7.0 m H	3.4 m H	Triple or double	600 mm	50 400	85
			Triple	750 mm	51 200	69
			Triple	900 mm	51 900	59
2.5 m ³ Rock bucket (ISO heaped)	6.3 m BE	2.9 m BE	Triple or double	600 mm	50 700	85
			Triple	750 mm	51 400	69
			Triple	900 mm	52 100	59

BUCKET AND ARM DIGGING FORCE

ZAXIS 490LCH		
Boom length	Boom 6.3 m BE	Boom 7.0 m H
Arm length	Arm 2.9 m BE	Arm 3.4 m H
Bucket Digging Force at Power Boost ISO 6015	300	302
Bucket Digging Force at Power Boost SAE : PCSA	265	267
Arm Crowd Force at Power Boost ISO 6015	265	225
Arm Crowd Force at Power Boost SAE : PCSA	257	219

* At power boost

WORKING RANGES

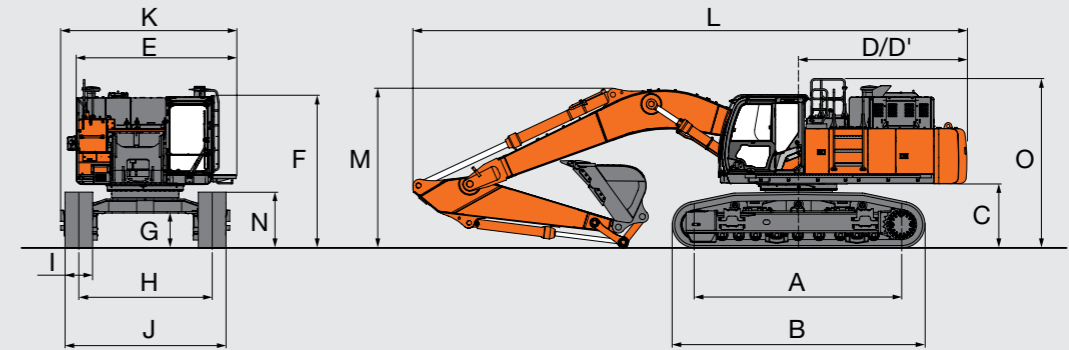


Unit: mm

	ZX490LCH-7	
	Boom 6.3 m BE Arm 2.9 m BE	Boom 7.0 m H Arm 3.4 m H
A Max. digging reach	10 750	11 990
A' Max. digging reach (on ground)	10 500	11 770
B Max. digging depth	6 130	7 700
B' Max. digging depth for 2.44 m level	5 970	7 560
C Max. cutting height	10 790	10 980
D Max. dumping height	7 440	7 720
D' Min. dumping height	3 250	3 020
E Min. swing radius	3 920	4 840
F Max. vertical wall digging depth	4 650	5 630

Excluding track shoe lug

DIMENSIONS



Unit: mm

	ZX490LCH-7		
A Distance between tumbler	4 470		
B Undercarriage length	5 470		
*C Counterweight clearance	1 360		
D Rear-end swing radius	3 680		
D' Rear-end length	3 680		
E Overall width of upperstructure	3 480		
F Overall height of cab	3 360		
*G Min. ground clearance	740		
H' Track gauge : Extended / Retracted	2 890 / 2 390		
I Track shoe width	G 600	G 750	G 900
J Undercarriage width : Extended / Retracted	3 490 / 2 990	3 640 / 3 140	3 790 / 3 290
K Overall width	3 810		
L Overall length	12 030		
M Overall height of boom	3 570		
N Track height	1 220		
O Overall height of base machine	3 680		

*1 Excluding track shoe lug G: Grouser shoe

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

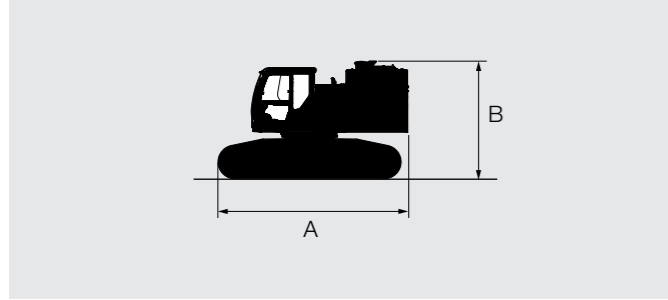
Backhoe Buckets

Bucket	Capacity (m3)		Width (mm)		No. of teeth	Weight (kg)	Recommendation	
	ISO heaped	CECE heaped	Without side cutters	With side cutters			ZX490LCH-7	
							Boom 6.3 m BE Arm 2.9 m BE	Boom 7.0 m H Arm 3.4 m H
Rock bucket	2.1	1.8	1 560	1 580	5	2 170	●	●
	2.3	2.0	1 680	1 700	5	2 260	●	—
	2.5	2.2	1 800	1 820	5	2 360	●	—
Ripper bucket	1.3	1.2	1 170	—	3	2 330	●	●
One-point ripper	—	—	—	—	1	1 260	●	●

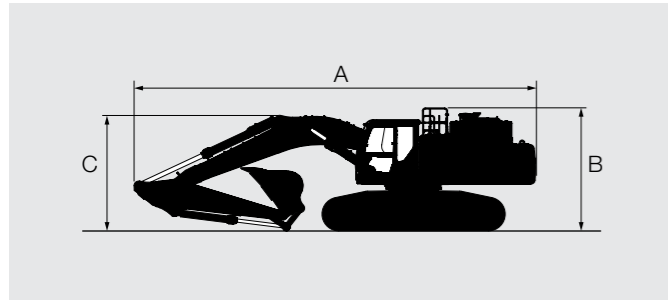
● Heavy-duty service — Not applicable

TRANSPORTATION

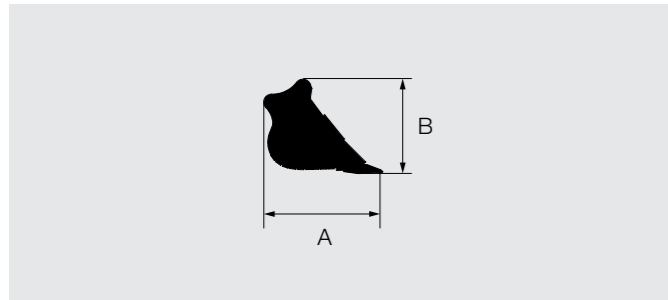
BASIC MACHINE (WITHOUT COUNTERWEIGHT)



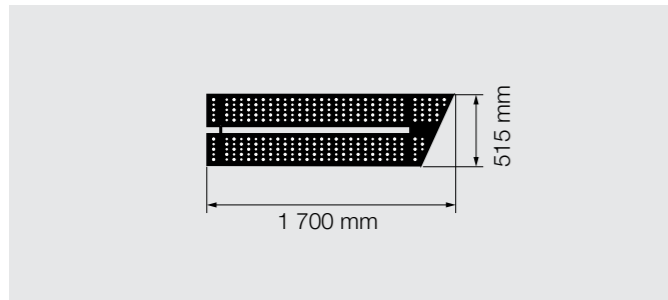
BASIC MACHINE FITTED WITH FRONT AND SIDEWALK



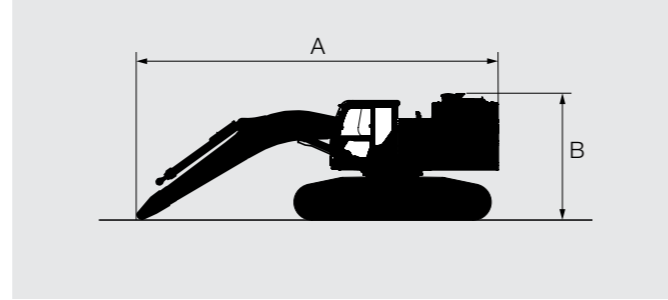
BUCKET



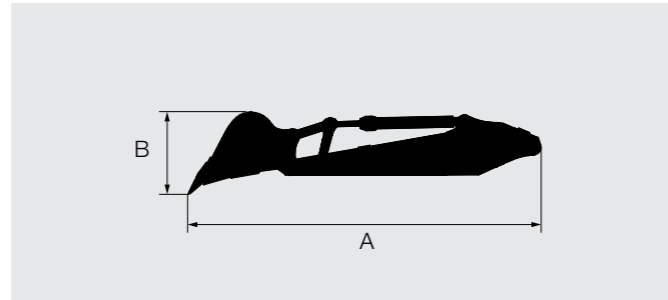
LEFT SIDEWALK (REAR) Overall height: 150 mm / Weight: 34 kg



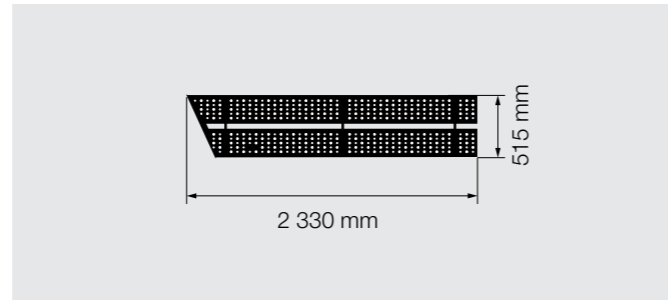
BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



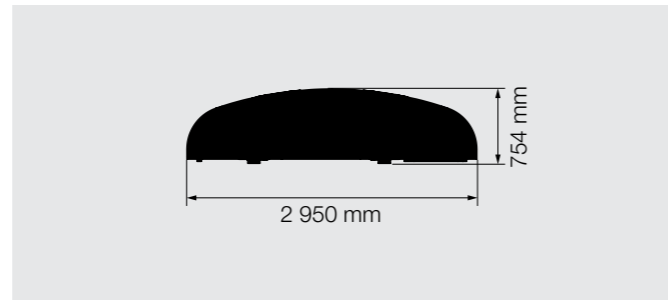
ARM



LEFT SIDEWALK (FRONT) Overall height: 195 mm / Weight: 48 kg



COUNTERWEIGHT Overall height: 1 340 mm / Weight: 9 080 kg



BASIC MACHINE (WITHOUT COUNTERWEIGHT)

	Shoe width (mm)	A (mm)	B (mm)	Overall width* ² (mm)	Weight (kg)
ZX490LCH-7	600	5 690	3 520	2 990	29 900
	750	5 690	3 520	3 140	30 700
	900	5 690	3 520	3 290	31 400

¹ Without exhaust funnel

² Undercarriage retracted without truck sidestep

BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK

	Shoe width (mm)	A: Length (mm)	B: Height (mm) ¹	Overall width (mm) ²	Weight (kg)
6.3 m BE	600	9 150	3 520	2 990	35 700
	750	9 150	3 520	3 140	36 500
	900	9 150	3 520	3 290	37 200
7.0 m H	600	9 910	3 520	2 990	35 700
	750	9 150	3 520	3 140	36 500
	900	9 910	3 520	3 290	37 100

¹ Without pre-cleaner

² Undercarriage retracted

BASIC MACHINE FITTED WITH FRONT AND SIDEWALK

Boom	Arm type	A: Length (mm)	B: Height (mm) ¹	C: Overall width (mm)
6.3 m BE	2.9 m BE	11 370	3 680	4 020
7.0 m H	3.4 m H	12 030	3 680	3 750

¹ With handrail

ARM

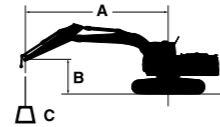
Arm	Bucket (m ³)		A (mm)	B (mm)	Overall width (mm)	Weight (kg)
	ISO heaped	CECE heaped				
2.9 BE	2.5	2.2	6 030	1 340	1 700	5 100
3.4 H	2.1	1.8	6 370	1 470	1 500	4 900

BUCKET

Bucket	Capacity (m ³)		A (mm)	B (mm)	Overall width (mm)	Weight (kg)
	ISO heaped	CECE heaped				
Rock bucket	2.1	1.8	1 950	1 650	1 580	2 170
	2.3	2.0	1 950	1 650	1 700	2 260
	2.5	2.2	1 950	1 650	1 820	2 360

MACHINE CAPACITIES

- 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 m = Ground.



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

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.

ZX490LCH-7

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 6.3 m BE Arm 2.9 m BE Counterweight 9 080 kg	7.5					*13 810	*13 810					*7 900	*7 900	7.2
	6.0					*14 660	*14 660	*13 360	11 120			*7 670	*7 670	8.1
	4.5			*20 880	*20 880	*16 350	15 280	*14 040	10 800			*7 760	*7 760	8.6
	3.0			*25 010	22 020	*18 280	14 420	*14 950	10 390			*8 140	8 010	8.9
	1.5			*27 250	20 770	*19 720	13 720	*15 690	10 010			*8 860	7 850	8.9
	0 (Ground)			*27 160	20 330	*20 180	13 310	*15 880	9 760			*10 080	8 080	8.6
	-1.5	*24 140	*24 140	*25 440	20 330	*19 400	13 190	*15 080	9 700			*12 250	8 840	8.1
	-3.0	*28 040	*28 040	*22 020	20 630	*16 980	13 360					*13 310	10 550	7.2
-4.5														
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg	7.5							*11 360	*11 360			*7 590	*7 590	8.7
	6.0							*11 960	11 180	*10 790	8 250	*7 470	*7 470	9.4
	4.5			*20 390	*20 390	*15 470	15 080	*12 980	10 730	*11 540	8 040	*7 570	6 830	9.9
	3.0			*23 470	21 350	*17 600	14 120	*14 120	10 220	*12 100	7 780	*7 890	6 440	10.1
	1.5			*15 200	*15 200	*19 160	13 370	*15 060	9 780	12 270	7 530	*8 450	6 310	10.1
	0 (Ground)			*18 240	*18 240	*19 790	12 920	*15 530	9 470	12 070	7 350	*9 360	6 440	9.9
	-1.5	*13 320	*13 320	*25 260	19 750	*19 420	12 760	*15 330	9 330	12 000	7 290	*10 840	6 870	9.4
	-3.0	*21 770	*21 770	*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	

EQUIPMENT

● : Standard equipment ○ : Optional equipment - : Not applicable

ENGINE	ZX490LCH-7
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	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●
Dust-proof indoor net	●
ECO/PWR 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	●
Radiator, oil cooler and intercooler	●
Reversible fan	●

HYDRAULIC SYSTEM	ZX490LCH-7
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	●
Hose rupture valve for arm	●
Hose rupture valve for boom	●
Pilot filter	●
Power boost	●
Shockless valve in pilot circuit	●
Suction filter	●
Variable reliefvalve for breaker and crusher	●
Work mode selector	●

* Engine oil and hydraulic oil monitoring sensor.

CAB	ZX490LCH-7
All-weather sound suppressed steel cab	●
Auto control air conditioner	●
Bluetooth® integrated DAB+radio	●
Console height adjustment	●
CRES VII (center pillar reinforced structure) cab	●
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 window washer (2 points)	●
Glove compartment	●
Hands-free calling device	●
Hot and cool box	●
Intermittent windshield wipers	●
Key cylinder light	●
Laminated round glass window	●
LED room light	●
Magazine rack	●
OPG front guard Level II (ISO10262 : 1998) compliant	○
OPG top guard Level I (ISO10262 : 1998) compliant	○
OPG top guard Level II (ISO10262 : 1998) compliant	●
Pilot shut-off lever	●
Power outlet 12 V and 24 V	●
Rain guard (without OPG front guard)	●
Rear tray	●
Retractable seat belt	●
ROPS (ISO12117-2: 2008) 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	●
Wide view wiper	●
Windows on front, upper, lower and left side can be opened	●
2 speakers	●
6 fluid-filled elastic mounts	●
8 inch monitor	●
Push button low idle	●

MONITOR SYSTEM	ZX490LCH-7
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, etc	●
Display of meters: water temperature, hour, fuel rate, clock, DEF/AdBlue® rate, etc	●
Other displays: work mode, auto-idle, glow, rearview monitor, side view monitor, operating conditions, etc	●
35 languages selection	●

LIGHTS	ZX490LCH-7
Additional boom LED light with cover	○
Additional cab roof front 2 LED lights	●
Additional cab roof front 4 LED lights	○
Additional cab roof rear LED lights	●
LED lights for camera (side and rear view camera)	●
2 working LED lights	●

UPPER STRUCTURE	ZX490LCH-7
Aerial Angle® (270-degree view camera system)	●
Batteries 2 x 147 Ah	●
Body top handrail	●
Counterweight 9 080 kg	●
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	●
2 way disconnect switch	●
Side view mirror (right and left)	●

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.