

ZAXIS-7 series

HITACHI

Reliable solutions

# SUPER LONG FRONT

A P P L I C A T I O N   &   A T T A C H M E N T



## ZAXIS 490LCH

Model Code	ZX490LCH-7
Engine Rated Power	296 kW (ISO14396)
Operating Weight	51 500 - 52 900 kg

# SPECIFICATIONS

## ZX490LCH-7 TYPE HE16LD SUPER LONG FRONT

### ENGINE

Model .....	Isuzu AL-6UZ1XZSA-01
Type .....	4-cycle water-cooled, common rail direct injection
Aspiration .....	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment .....	Muffler filter
No. of cylinders .....	6
Rated power	
ISO 9249, net .....	H/P mode: (Without Fan) 270 kW (362 HP) at 2 000 min <sup>-1</sup> (rpm)
EEC 80/1269, net .....	H/P mode: (Without Fan) 270 kW (362 HP) at 2 000 min <sup>-1</sup> (rpm)
SAE J1349, net .....	H/P mode: (Without Fan) 270 kW (362 HP) at 2 000 min <sup>-1</sup> (rpm)
Maximum torque .....	1 435 Nm at 1 500 min <sup>-1</sup> (rpm)
Piston displacement .....	9.839 L
Bore and stroke .....	120 mm x 145 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 400 L/min
Pilot pump .....	1 gear pump
Maximum oil flow .....	34 L/min

#### Hydraulic Motors

Travel .....	2 axial piston motors with parking brake
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

#### Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	170 mm	115 mm
Arm	1	190 mm	130 mm
Bucket	1	140 mm	95 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<sup>-1</sup> (rpm)

#### Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high

### 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 guard .....	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 3.9 km/h

Maximum traction force ... 329 kN

Gradeability ..... 58% (30 degree) continuous

### SOUND LEVEL

Sound level in cab according to ISO 6396 ..... LpA 75 dB(A)

External sound level according to ISO 6395 and

EU Directive 2000/14/EC ..... LwA 107 dB(A)

### SERVICE REFILL CAPACITIES

Fuel tank .....	725 L
Engine coolant .....	52 L
Engine oil .....	41.0 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

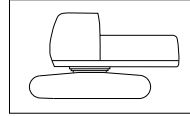
## WEIGHTS AND GROUND PRESSURE

### ZAXIS 490LCH TYPE HE16LD SUPER LONG FRONT:

Equipped with 9.50 m monoblock boom, 6.40 m arm and 1.15 m<sup>3</sup> bucket (SAE, PCSA heaped), 9 780 kg counterweight.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	51 500 kg	86 kPa (0.88 kgf/cm <sup>2</sup> )
	750 mm	52 300 kg	70 kPa (0.71 kgf/cm <sup>2</sup> )
	900 mm	52 900 kg	59 kPa (0.60 kgf/cm <sup>2</sup> )

## Basic Machine Weight and Overall width



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

### ZX490LCH-7

Shoe width	Weight	Overall width (Retracted/Extended)
600 mm	41 500 kg	2 990 / 3 490 mm
750 mm	42 300 kg	3 140 / 3 640 mm
900 mm	43 000 kg	3 290 / 3 790 mm

## BUCKET SPECIFICATIONS AND COMPATIBILITY

### ZX490LCH-6

	Capacity ISO heaped	Width Without side cutters	Weight	Recommendation
				ZX490LCH-7
				HE16LD
Bucket radius 1 060 mm	0.15 m <sup>3</sup>	1 100 mm	1 080 kg	◎
	1.40 m <sup>3</sup>	1 280 mm	1 170 kg	□
	1.62 m <sup>3</sup>	1 460 mm	1 260 kg	□
Max. weight				3 200 kg

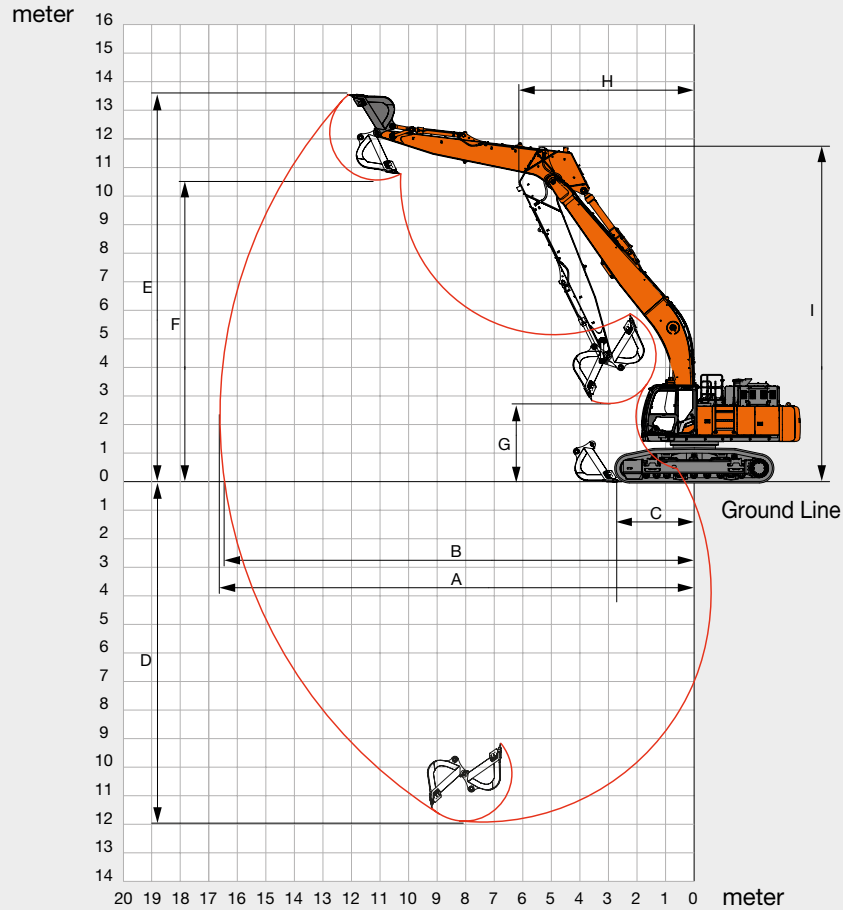
◎ Suitable for materials with density of 1 800 kg/m<sup>3</sup> or less

□ Suitable for materials with density of 1 100 kg/m<sup>3</sup> or less

# SPECIFICATIONS

## ZX490LCH-7 TYPE HE16LD SUPER LONG FRONT

### WORKING RANGES

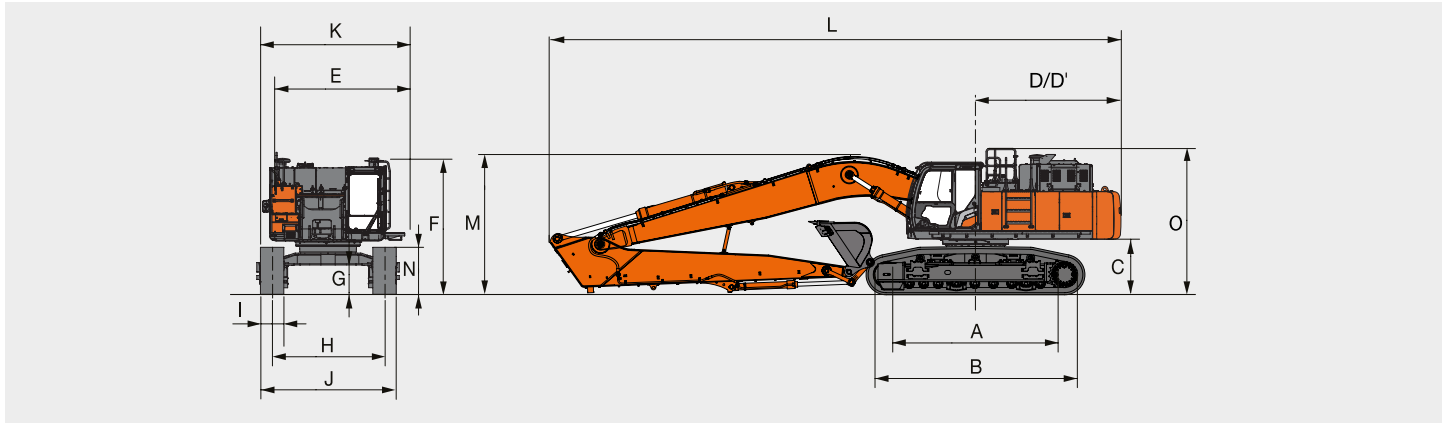


Unit: mm

	490LCH-7 TYPE HE16LD
A Max. digging reach	16 570
B Max. digging reach (on ground)	16 410
C Min. level crowding distance	2 510
D Max. digging depth	11 910
E Max. cutting height	13 540
F Max. dumping height	2 730
G Min. dumping height	10 550
H Min. swing radius	6 170
I Min. swing radius height	11 710
Bucket digging force ISO	178 kN
Arm crowd force ISO	124 kN

- Excluding track shoe lug

## DIMENSIONS



Unit: mm

		ZAXIS 490LCH <sup>*2</sup>		
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 3 490 / 2 990	G 750 3 640 / 3 140	G 900 3 790 / 3 290
K	Overall width	3 820		
L	Overall length	14 580		
M	Overall height of boom	3 560		
N	Track height	1 220		
O	Overall height of base machine	3 710		

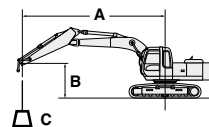
\*1 Excluding track shoe lug G: Grouser shoe

\*2 Equipped with Boom 9.5 m and Arm 6.4 m

# LIFTING CAPACITIES

## Metric measure

- Notes: 1. Ratings are based on ISO 10567.  
 2. Lifting capacity of the ZAXIS series 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. 0m = Ground.  
 For lifting capacities, subtract bucket and quick hitch weight from lifting capacities.



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

### ZAXIS 490LCH HE16LD SUPER LONG FRONT



Rating over-front



Rating over-side or 360 degrees

Unit: kg

Conditions	Load point height m	Load radius												At max. reach			
		4 m		6 m		8 m		10 m		12 m		14 m		Meters			
Boom: 9.5 m Arm: 6.4 m Counterweight: 9.8 t	12																
	10									4.40*	4.40*			11.2	3.28*	3.28*	
	8									4.67*	4.67*			12.7	3.15*	3.15*	
	6									4.93*	4.93*			13.7	3.14*	3.14*	
	4	16.30*	16.30*	10.21*	10.21*	7.61*	7.61*	5.58*	5.58*	4.93*	4.93*	4.28*	3.95	14.4	3.22*	3.22*	
	2	7.03*	7.03*	12.15*	12.15*	8.65*	8.65*	6.18*	6.18*	5.27*	5.06	4.66*	3.81	14.8	3.43*	3.43*	
	0 (Ground)	7.03*	7.03*	13.30*	11.88	9.42*	8.07	7.26*	5.92	5.91*	4.51	4.96*	3.53	14.9	3.72*	3.26	
	-2	9.23*	9.23*	13.53*	11.44	9.76*	7.68	7.51*	5.65	6.04*	4.35	4.93*	3.46	14.7	4.14*	3.24	
	-4	12.17*	12.17*	13.01*	11.44	9.61*	7.57	7.43*	5.55	5.89*	4.31			14.2	4.79*	3.36	
	-6	15.77*	15.77*	11.77*	11.72	8.89*	7.69	6.88*	5.63	5.28*	4.41			13.5	4.92*	3.67	
	-8	12.78*	12.78*	9.66*	9.66*	7.42*	7.42*	5.58*	5.58*					12.3	4.99*	4.25	
	-10			6.17*	6.17*	4.58*	4.58*							10.7	4.91*	4.91*	
														8.3	4.26*	4.26*	

\* Indicates load limited by hydraulic capacity

# EQUIPMENT

ENGINE	ZAXIS 490LCH
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	●
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	●
Radiator, oil cooler and intercooler	●
Reversible fan	●

HYDRAULIC SYTEM	
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	●
Shockless valve in pilot circuit	●
Suction filter	●
Work mode selector	●

CAB	ZAXIS 490LCH
All-weather sound suppressed steel cab	●
Auto control air conditioner	●
Bluetooth® integrated DAB+ radio	●
Console height adjustment	●
CRES VII (center pillar reinforced structure) cab	●
Demolition cab with P5A glass and improved visibility	○
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	●

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

CAB	ZAXIS 490LCH
Hands-free calling device	●
Hot and cool box	●
Intermittent windshield wiper	●
Key cylinder light	●
Laminated round glass front window	●
Laminated straight glass front window	—
LED room light	●
Magazine rack	●
OPG front guard Level II (ISO10262) compliant	○
OPG top guard Level I (ISO10262) compliant	●
OPG top guard Level II (ISO10262) 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) 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 and lower side can be opened	●
Windows on leftside can be opened	●
2 speakers	●
6 fluid-filled elastic mounts	●
8 inch monitor	●

MONITOR SYSTEM	ZAXIS 490LCH
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, rear view monitor, side view monitor, operating conditions, etc	●
35 languages selection	●

LIGHTS	
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)	○
Rotating lamp	○
2 working LED lights	●

UPPER STRUCTURE	
Aerial Angle® (side and rear view camera)	●
Auto-grease lubricator (without bucket and link pins)	●
Batteries 2 x 170 Ah	●
Body top handrail	●
Counterweight 9 080 kg	—
Counterweight 9 780 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	●
2 way disconnect switch	●

UNDERCARRIAGE	ZAXIS 490LCH
Bolt-on sprocket	●
Full track guard and hydraulic track adjuster	—
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	●

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

FRONT ATTACHMENTS	
Arm 6.4 m	●
Boom 9.5 m	●
Centralized lubrication system	●
Cylinder hose protectors arm	●
Cylinder hose protectors boom	●
Cylinder hose protectors bucket	●
Damage prevention plate and square bars	●
Dirt seal on all bucket pins	●
Flanged pin	●
Casted bucket link A	●
Reinforced link B	●

ATTACHMENTS	
Pilot accumulator	●
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.

