

ZAXIS-6 series

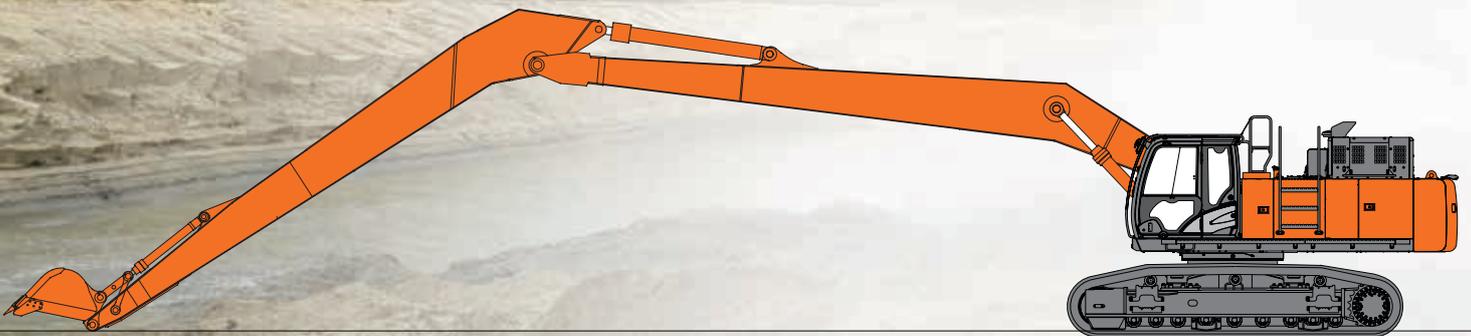
HITACHI

Reliable solutions

# SUPER LONG FRONT

## ZAXIS490LCH

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



### HYDRAULIC EXCAVATOR

Model code : ZX490LCH-6

Engine rated power : 270kW (ISO14396)

Operating weight : 52 400 – 53 100 kg

Bucket ISO heaped : 0.8 m<sup>3</sup>

# SPECIFICATIONS

## ENGINE

Model .....	Isuzu AQ-6UZ1X
Type .....	4-cycle water-cooled, common rail direct injection
Aspiration .....	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment .....	DOC and SCR system
No. of cylinders .....	6
Rated power	
ISO 14396 .....	270 kW at 2 000 min <sup>-1</sup>
SAE J1349, net .....	270 kW at 2 000 min <sup>-1</sup>
Maximum torque .....	1 435 Nm at 1 500 min <sup>-1</sup>
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 variable displacement axial piston motors
Swing .....	2 axial piston motors

### Relief Valve Settings

Implement circuit .....	28.9 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	125 mm	85 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>
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 3.9 km/h

Maximum traction force .....	329 kN
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Gradeability .....

70% (35 degree) continuous

## SOUND LEVEL

Sound level in cab according to ISO 6396 ..... LpA 71 dB(A)

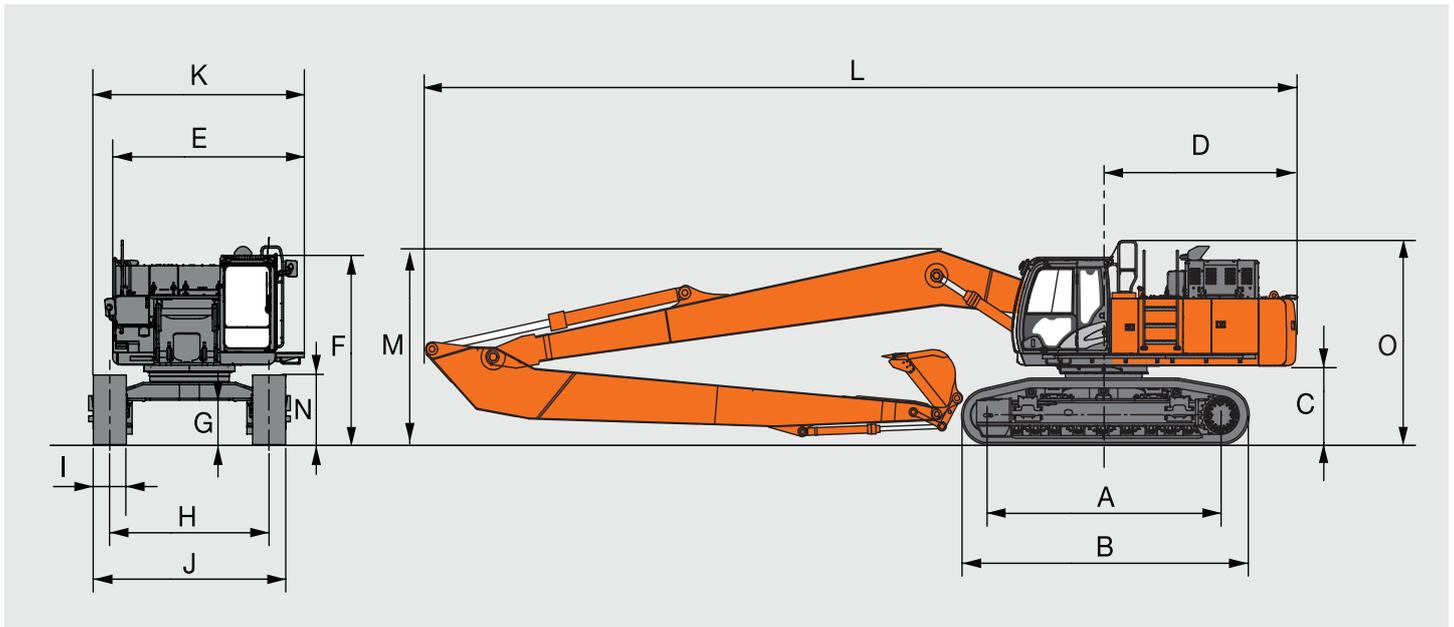
External sound level according to ISO 6395 and

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

## SERVICE REFILL CAPACITIES

Fuel tank .....	675.0 L
Engine coolant .....	62.0 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
DEF/AdBlue® tank .....	95.0 L

## DIMENSIONS



Unit: mm

ZX490LCH-6 TYPE 20			
A	Distance between tumblers		4 470
B	Undercarriage length		5 470
C	Counterweight clearance		1 360
D	Rear-end swing radius		3 670
E	Overall width of upperstructure		3 480
F	Overall height of cab		3 330
G	Min. ground clearance		737
H	Track gauge: Extended / Retracted		2 890 / 2 390
I	Track shoe width	G 750	G 900
J	Undercarriage width	Extended	3 640
		Retracted	3 140
K	Overall width	3 820	3 880
L	Overall length		16 640
M	Overall height of boom		3 560
N	Track height with triple grouser shoes		1 220
O	Overall height of handrail		3 530

\*: Excluding track shoe lug

\*\* : Triple grouser shoe

## WEIGHTS AND GROUND PRESSURE

### ZX490LCH-6 TYPE 20 SUPER LONG FRONT:

Equipped with 11.5 m Boom, 8.5 m Arm and 0.8 m<sup>3</sup> bucket (SAE, PCSA heaped)

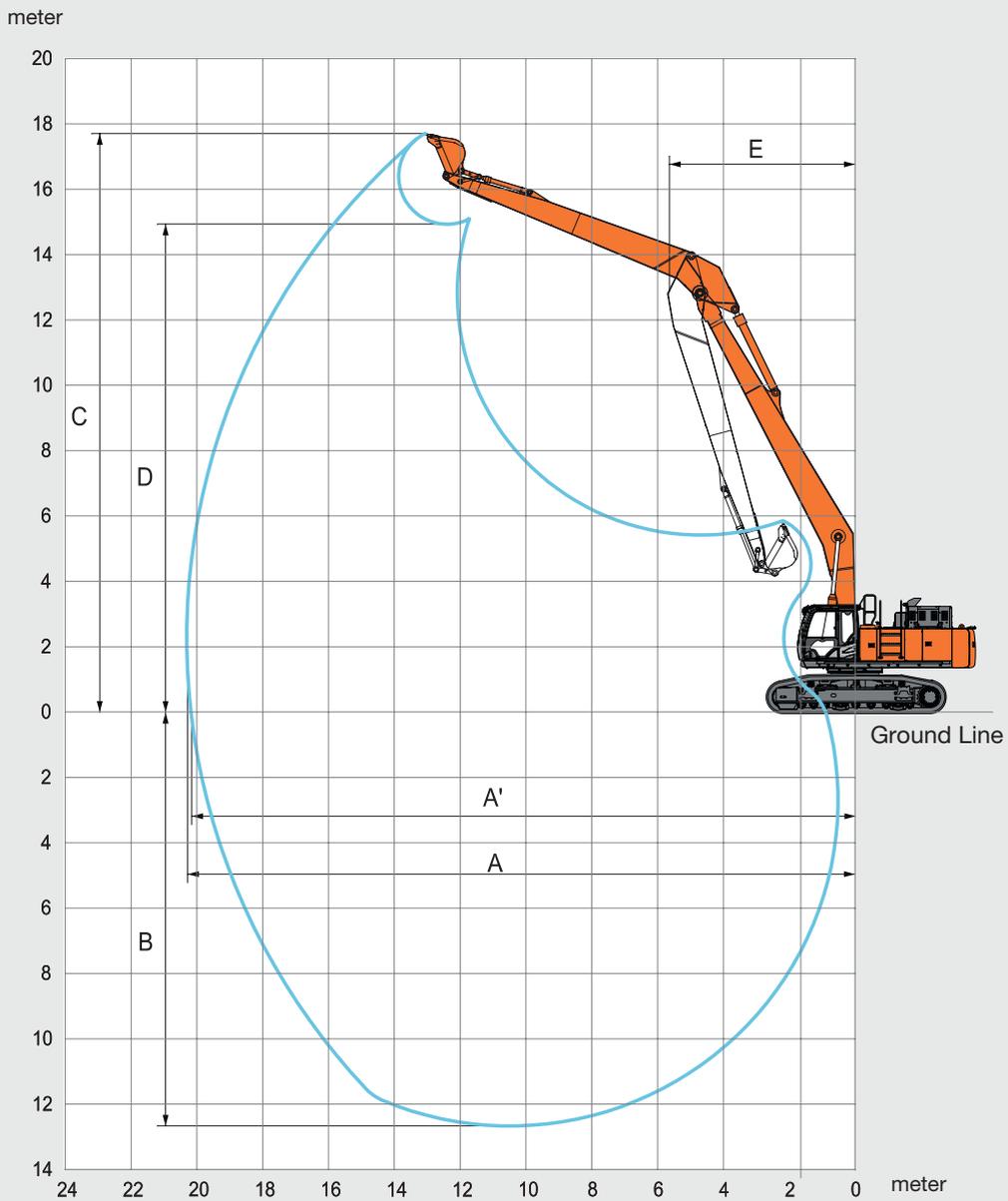
Shoe type	Shoe width	Operating weight	Ground pressure
Triple Grouser	750 mm	52 400 kg	71 kPa (0.72 kgf/cm <sup>2</sup> )
	900 mm	53 100 kg	60 kPa (0.61 kgf/cm <sup>2</sup> )

Note: Depending on the jobsites conditions, 900 mm grouser shoe may not be recommended for rock, hard surface or forestry application.

## BUCKET SPECIFICATIONS AND COMPATIBILITY

Capacity ISO heaped	Width without side cutters	Weight
0.8 m <sup>3</sup>	1 140 mm	960 kg

## WORKING RANGES



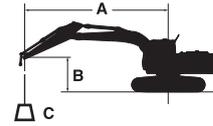
Unit: mm

	ZX490LCH-6 TYPE 20
A Max. digging reach	20 340
A' Max. digging reach (on ground)	20 200
B Max. digging depth	12 670
C Max. cutting height	17 710
D Max. dumping height	14 940
E Min. swing radius	5 700
Bucket digging force ISO	144 kN
Arm crowd force ISO	105 kN

' Excluding track shoe lug

# LIFTING CAPACITIES

- Notes: 1. Lifting capacity of the ZX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity. (ISO 10567)  
 2. \*Indicates load limited by hydraulic capacity.  
 3. Net lifting capacities are equal to the values obtained by deducting the ATT mass from the values described in the table below.



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

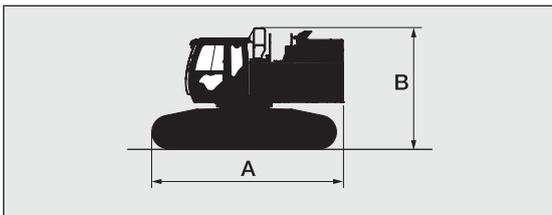
## ZX490LCH-6 Type 20 Super Long Front

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

Conditions	Load point height m	10 m		12 m		14 m		16 m		18 m		At max. reach		
														meter
Boom (H) 11.5 m	14 m					3 000	3 000					2 300	2 300	14.7
Arm 8.5 m	12 m					3 300	3 300	2 400	2 400			2 200	2 200	16.1
Counter weight 11 580 kg	10 m					3 300	3 300	3 100	3 100			2 200	2 200	17.1
Shoes 750 mm	8 m			3 900	3 900	3 400	3 400	3 100	3 100			2 200	2 200	17.9
	6 m	4 900	4 900	4 100	4 100	3 600	3 600	3 200	3 200	2 900	2 500	2 200	2 200	18.4
	4 m	5 300	5 300	4 400	4 400	3 700	3 700	3 300	3 100	2 900	2 400	2 300	2 100	18.7
	2 m	5 700	5 700	4 600	4 600	3 900	3 800	3 400	2 900	2 900	2 300	2 500	2 000	18.8
	0 m	6 000	5 800	4 800	4 400	4 000	3 500	3 400	2 700	2 900	2 100	2 700	2 000	18.7
	-2 m	6 200	5 300	4 900	4 100	4 100	3 200	3 400	2 500	2 800	2 000	2 700	2 000	18.3
	-4 m	6 100	4 900	4 900	3 800	4 000	3 000	3 300	2 400			2 700	2 000	17.7
	-6 m	5 800	4 800	4 700	3 700	3 800	3 000	3 100	2 400			2 700	2 200	16.9
	-8 m	5 300	4 800	4 300	3 700	3 400	3 000					2 600	2 500	15.7
	-10 m	4 400	4 400	3 500	3 500	2 600	2 600					2 400	2 400	14.2

# TRANSPORTATION

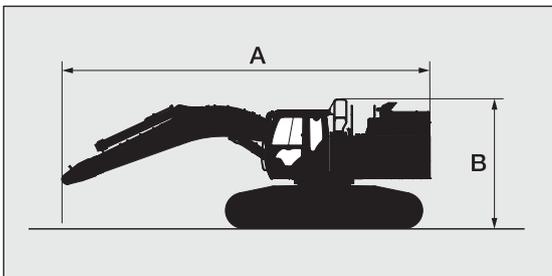
## BASIC MACHINE (WITHOUT COUNTERWEIGHT)



Shoe width	A	B	Overall width <sup>1</sup>	Weight
750 mm	5 690 mm	3 530 mm	3 140 mm	30 200 kg
900 mm			3 290 mm	30 900 kg

<sup>1</sup> Undercarriage retracted

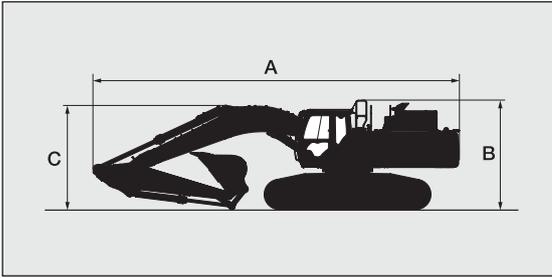
## BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



Boom length	Shoe width	A	B	Overall width <sup>1</sup>	Weight
11.5 m	750 mm	14 560 mm	3 530 mm	3 140 mm	35 800 kg
	900 mm			3 290 mm	36 500 kg

<sup>1</sup> Undercarriage retracted

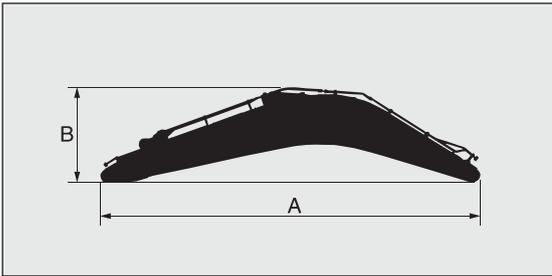
**BASIC MACHINE FITTED WITH FRONT AND SIDEWALK**



Boom length	Arm length	A	B	Shoe width	Overall width <sup>*1</sup>	Weight
11.5 m	8.5 m	16 640 mm	3 560 mm	750 mm	3 140 mm	52 400 kg
				950 mm	3 290 mm	53 100 kg

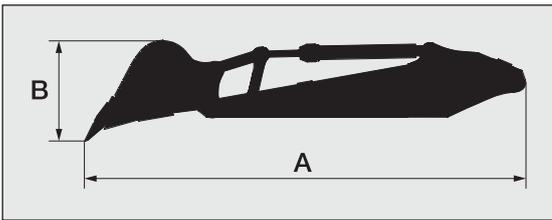
<sup>\*1</sup> Undercarriage retracted

**BOOM**



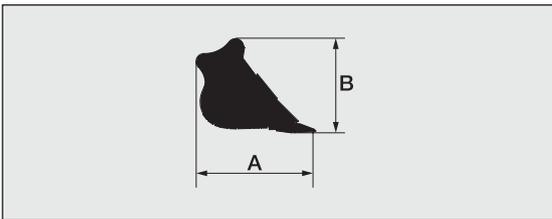
Boom	Overall width	A	B	Weight
11.5 m	1 100 mm	1 170 mm	1 600 mm	5 550 kg

**ARM**



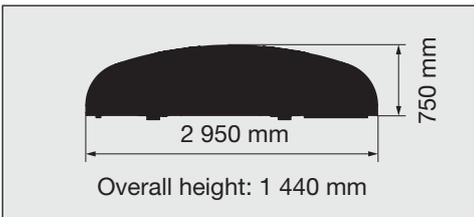
Arm	Bucket SAE heaped	A	B	Overall width	Weight
8.5 m	0.80 m <sup>3</sup>	11 270 mm	1 320 mm	1 150 mm	4 150 kg

**BUCKET**



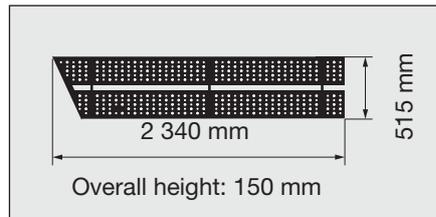
Bucket		A	B	Overall width	Weight
ISO heaped	CECE heaped				
0.80 m <sup>3</sup>	0.70 m <sup>3</sup>	1 480 mm	1 260 mm	1 140 mm	960 kg

**COUNTERWEIGHT**



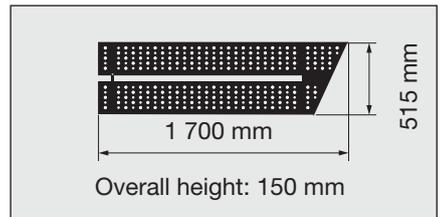
Weight: 11 580 kg

**LEFT FRONT SIDEWALK 44 kg**



Overall height: 150 mm

**LEFT REAR SIDEWALK 30 kg**



Overall height: 150 mm

# EQUIPMENT

## ZX490LCH-6 TYPE 20 SUPER LONG FRONT

● : Standard equipment

○ : Optional equipment

### ENGINE

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	●
DEF/AdBlue® tank inlet strainer and extension filter	●
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	●
Water separator	●

### HYDRAULIC SYSTEM

Auto power lift	●
Boom mode selector system	●
Control valve with main relief valve	●
Drain filter	●
Engine speed sensing system	●
Extra port for control valve	●
Full-flow filter	●
Hose rupture valve for arm	●
Hose rupture valve for boom	●
Pilot filter	●
Power boost	●
Quick warm-up system for pilot circuit	●
Shockless valve in pilot circuit	●
Suction filter	●
Work mode selector	●

### CAB

All-weather sound suppressed steel cab	●
AM-FM radio	●
Ashtray	●
Auto control air conditioner**	●
AUX terminal and storage	●
Cigarette lighter 24 V	●
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	●
Glove compartment	●
Hot & cool box	●
Intermittent windshield wipers	●
Key cylinder light	●
Laminated round glass front window	●
LED room light with door courtesy	●
OPG front guard Level II (ISO10262) compliant cab	○
OPG top guard Level I (ISO10262) compliant cab	●
OPG top guard Level II (ISO10262) compliant cab	○
Pilot control shut-off lever	●
Power outlet 12 V	○
Rain 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	●
Short wrist control levers	●
Sun visor (front window/side window)	○
Transparent roof with slide curtain	●
Windows on front, upper, lower and left side can be opened	●
2 speakers	●
6 fluid-filled elastic mounts	●

### MONITOR SYSTEM

Alarms: overheating, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, SCR system trouble, etc	●
Alarm buzzers: overheating, 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	●
32 languages selection	●

### LIGHTS

Additional boom light with cover	○
Additional cab roof front lights	○
Additional cab roof rear lights	○
Rotating lamp	○
2 working lights	●

### UPPER STRUCTURE

Batteries 2 x 170 Ah	●
Battery disconnect switch	●
Body top handrail	●
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	●
Rear view camera	●
Rear view mirror (right & left side)	●
Side view camera	●
Sidewalk (cab side)	●
Skid-resistant plates and handrails	●
Swing parking brake	●
4.5 mm thickness undercover	●
Utility space	●

### UNDERCARRIAGE

Bolt-on sprocket	●
Full track guard	○
Reinforced track links with pin seals	●
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

Centralized lubrication system	●
Damage prevention plate and square bars	●
Dirt seal on all bucket pins	●
Flanged pin	●
Monolithically cast bucket link A	●

### MISCELLANEOUS

Global e-Service	●
Oil sensors engine and hydraulic	●
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.

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

\*\* Contains fluorinated greenhouse gases, Refrigerant type: HFC-134a, GWP: 1430, Amount: 1,05 kg, CO<sub>2</sub>e: 1.50 ton.

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.

