

ZAXIS-6 series

HITACHI

Reliable solutions

TELESCOPIC ARM (ROPE TYPE)

21 meter

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



ZAXIS210

Model Code	ZX210LC-6
Engine Rated Power	128.4 kW (ISO 14396)
Operating Weight	27 600 kg

ZX210LC-6 CTA. NO COMPROMISE

Hitachi designs and builds its special application models in-house. They incorporate the same industry-leading technology as standard Hitachi excavators, but do not compromise on user-friendly operation.

The Zaxis-6 range of excavators with telescopic arm are the optimum solution for complex below-ground construction projects. The smallest model in the range, the ZX210LC-6, is ideal for working in confined spaces. Capable of excavating to depths of 21 metres, it offers high levels of productivity, a powerful performance and exceptional versatility.



6. EXCEPTIONAL PRODUCTIVITY



8. POWERFULL PERFORMANCE



10. ULTIMATE VERSATILITY



DEMAND PERFECTION

Manufactured to meet the challenging requirements of underground projects in Europe, the ZX210LC-6 excavator with telescopic arm has been developed to perfection. In response to customer requests, it includes various options for enhanced safety and versatility, and has been enhanced with a newly designed clamshell bucket.

An easy to operate, safe and cost-effective machine for below-ground excavation, the ZX210LC-6 CTA is built to the same high standards of durability, performance and efficiency as all Hitachi construction equipment.



Improved safety
Optional LED light and zoom camera enhance visibility.



Ultimate durability
Reinforced clamshell bucket and cylinder protection prevent damage.



Exceptional flexibility

Optional standard arm and detachable counterweight offer greater versatility.



Excellent visibility

Sliding cab and floor window provides a clear view for operators.



Enhanced productivity

Short cycle time due to exclusively designed hydraulic circuit and pressure setting.



High quality

Only the best design elements and materials.



The sliding cab enhances visibility and safety.



The telescopic arm extends and retracts smoothly with a full load.



EXCEPTIONAL PRODUCTIVITY

Hitachi Zaxis-6 CTA excavators have been designed to increase productivity on complex below-ground excavation projects. The ZX210LC-6 CTA removes soil quickly and easily from a maximum depth of 21 metres and loads trucks efficiently so the material can be transported off site. In comparison with traditional methods, such as using cranes, skips and conveyor belts, it is not only more efficient, but also safer and more cost-effective.



The clamshell bucket offers greater durability.



Smooth and safe operation

The telescopic arm of the ZX210LC-6 uses a technologically advanced combination of rope and hydraulic cylinders. It has been designed to extend and retract smoothly in seconds. For enhanced safety the twin rope system ensures that, in the unlikely event that one rope should break, the other will hold the telescopic arm firmly in place.

Exceptional visibility

The cab of the ZX210LC-6 CTA is positioned 960mm further forward than on a standard model. It can also slide a further 1,300mm to provide the operator with a better view of the digging area below. This not only enhances visibility, but also safety on the job site.



“ It has proved to be a cost-effective and user-friendly solution ”

Aurélien Bois, SGC Earthmoving Works Engineer

POWERFUL PERFORMANCE

The Hitachi ZX210LC-6 with telescopic arm is ideal for working on busy urban job sites, due to its compact size, quiet operation and exceptional visibility from the cab. It delivers a powerful performance to ensure complex underground construction projects are completed safely and efficiently.

Superior visibility

Thanks to a large polycarbonate window in the floor of the sliding cab, the operator has an excellent view of the site below. This enables the operator to work safely and precisely, ensuring a high level of performance.

Comfortable operation

Optional LED working lights are located at the front of the sliding cab to illuminate the area below ground. These give the operator an optimum view of the job site, and enables a comfortable and safe operation. The lights are adjustable and

two settings can be used at the same time: low beam and high beam.

Safety at work

In response to customer feedback, the ZX210LC-6 is available with an optional zoom camera that is installed at the end of the arm. This enhances the visibility of the operator and contributes to a safe working environment. Using the monitor screen in the cab, the operator can easily adjust the view angle, and zoom in and out of the image.



Optional zoom camera enhances visibility.



Optional LED lights highlight the working area for operators.



A window in the floor of the cab gives a better view of the site below.



“ *It is powerful and easy to manoeuvre* ”

Nir Nissim, operator, Dror Balulu

ULTIMATE VERSATILITY

Powerful, fast and stable, the Hitachi Zaxis-6 excavator with telescopic arm is simply built for the job of below-ground excavation. However, Hitachi recognises the need for versatile construction equipment and offers an optional standard arm and additional counterweight for the ZX210LC-6 CTA. This makes it easily adjustable for light excavation tasks if required.

Enhanced flexibility

To meet the needs of customers requiring greater versatility from their equipment, the ZX210LC-6 telescopic arm model can be used as a standard machine with a few simple adjustments. By changing the counterweight, boom and arm, it can also be used for light excavation projects.

Warning lights and safety alarms

The safe performance of the Zaxis-6 excavator with telescopic arm is aided by the use of warning lights and safety alarms. For instance, if either of the two ropes

were to break suddenly or extend too far, an indication light would alert the operator immediately. In addition, a warning buzzer will alert the operator if too much pressure is applied once the clamshell bucket has reached the ground and is excavating the material.

Hose rupture valve

The telescopic arm is also equipped with a hose rupture valve, which, in the unlikely event of a damaged cylinder, will prevent any other impact on the machine or the environment.



Switch between workmodes via the monitor.



- Increased work opportunity
- Easy switchover
- Save total fleet cost



The detachable counterweight enhances the machine's versatility.



SPECIFICATIONS

ZX210LC

ENGINE

Model	Isuzu AR-4HK1X
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC and SCR system
No. of cylinders	4
Rated power	
ISO 14396	128.4 kW at 2 000 min ⁻¹
ISO 9249, net	122 kW at 2 000 min ⁻¹
SAE J1349, net	122 kW at 2 000 min ⁻¹
Maximum torque	670 Nm at 1 600 min ⁻¹
Piston displacement	5.193 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V / 126 Ah

HYDRAULIC SYSTEM

Hydraulic pumps

Main pumps	3 variable displacement axial piston pumps
Maximum oil flow	2 x 212 L/min 1 x 189 L/min
Pilot pump	1 gear pump
Maximum oil flow	33.6 L/min

Hydraulic Motors

Travel	2 variable displacement axial piston motors
Swing	1 axial piston motor

Relief Valve Settings

Implement circuit	34.3 MPa
Swing circuit	32.4 MPa
Travel circuit	35.5 MPa
Pilot circuit	3.9 MPa
Power boost	38.0 MPa

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing / travel motor drain lines.

CONTROLS

Pilot controls. Hitachi's original shockless valve.	
Implement levers	2
Travel levers	2
Telescopic arm control pedal	1

UPPERSTRUCTURE

Revolving Frame

D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	11.8 min ⁻¹ (rpm)
Swing torque	68 kNm

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards.

* International Organization for Standardization

UNDERCARRIAGE

Tracks

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	2
Lower rollers	8
Track shoes	49
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 3.5 km/h
Maximum traction force	203 kN
Gradeability	26 % (15 degree) continuous

WEIGHTS AND GROUND PRESSURE

Equipped with type S-TC200R-8 and 0.80 m³ clamshell bucket (ISO heaped)

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	27 600 kg	58 kPa

SOUND LEVEL

Sound level in cab according to ISO 6396 LpA 69 dB(A)
External sound level according to ISO 6395 and
EU Directive 2000/14/EC LwA 101 dB(A); ZAXIS210LC

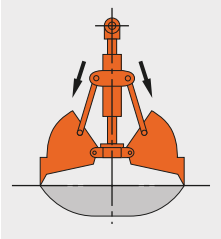
SERVICE REFILL CAPACITIES

Fuel tank	400.0 L
Engine coolant	28.0 L
Engine oil	23.0 L
Swing device	6.2 L
Travel device (each side)	6.8 L
Hydraulic system	240.0 L
Hydraulic oil tank	135.0 L
DEF/AdBlue® tank	57.0 L

CLAMSHELL BUCKET

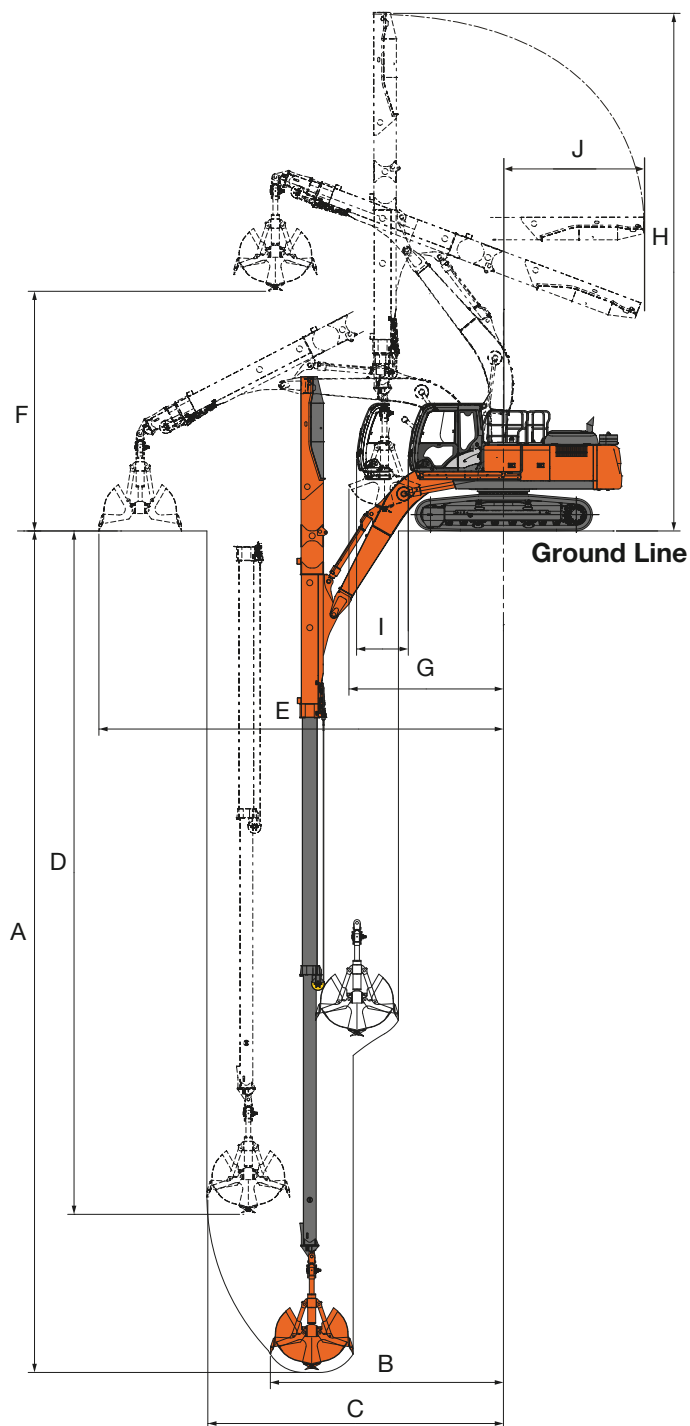
Bucket type		S-SP80-3
Bucket capacity	m ³	0.8
Max. digging force	kN (kgf)	60.3 (6 150)
Max. height	mm	2 570
Opened max. height	mm	2 180
Closed width	mm	1 800
Opened width	mm	2 080
Bucket width	mm	940
Teeth number		7
Weight	kg	1 240

Shell push type



SPECIFICATIONS

WORKING RANGES

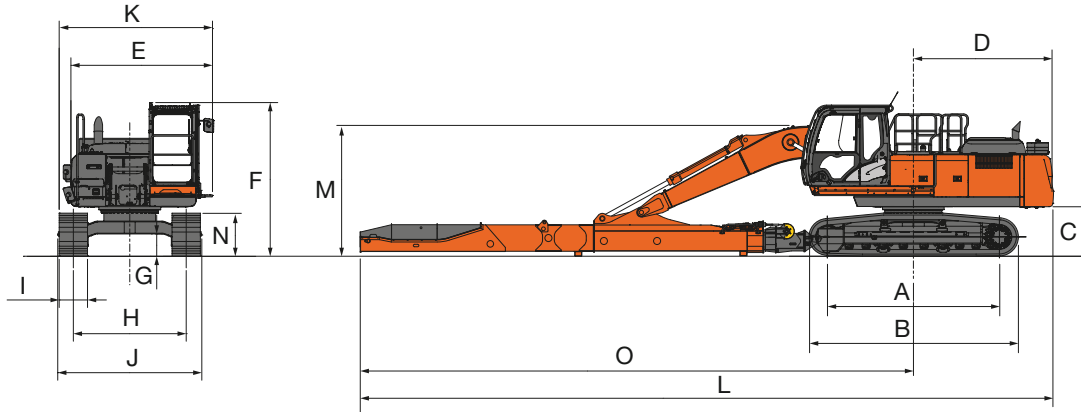


Unit: mm

Telescopic arm type	S-TC200R-8
Telescopic arm system	Hydraulic cylinder + wire rope
A Max. vertical digging depth	21 150
B Radius at max. vertical digging depth	5 860
C Max. vertical digging radius	7 450
D Depth at max. vertical digging radius	17 140
E Max. working radius	10 170
F Max. dumping height	6 050
G Min. front swing radius	3 880
H Height at min. front swing radius	13 040
I Cab sliding distance	1 300
J Front rear radius	3 610

SPECIFICATIONS

DIMENSIONS



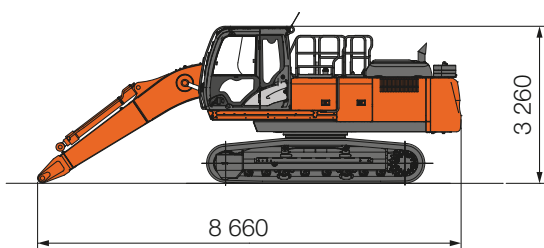
Unit: mm

A	Distance between tumblers	3 660
B	Undercarriage length	4 460
*C	Counterweight clearance	980
D	Rear-end swing radius	2 980
E	Overall width of upperstructure	3 000
F	Overall height of cab	3 260
*G	Min. ground clearance	450
H	Track gauge	2 390
I	Track shoe width	G 600
J	Undercarriage width (inc. side step)	2 990 (3 050)
K	Overall width	3 250
L	Overall length	14 740
M	Overall height of boom	2 770
N	Track height with triple grouser shoes	920
O	Swing centre to front distance	11 760

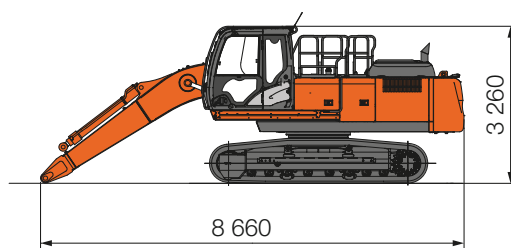
* Excluding track shoe lug G: Triple grouser shoe

TRANSPORTATION

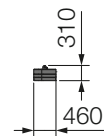
Unit: mm



Width : 3 050 mm
Weight (with Sliding cab)
: 22 900 kg



Width : 3 050 mm
Weight (with Sliding cab)
: 21 800 kg

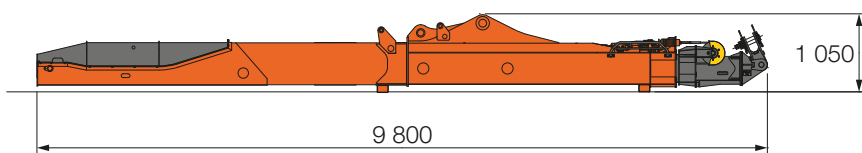


Additional counterweight
Width : 2 270 mm
Weight : 1 150 kg

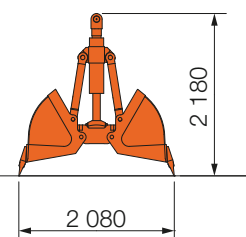
Telescopic Arm

Clamshell Bucket

Unit: mm



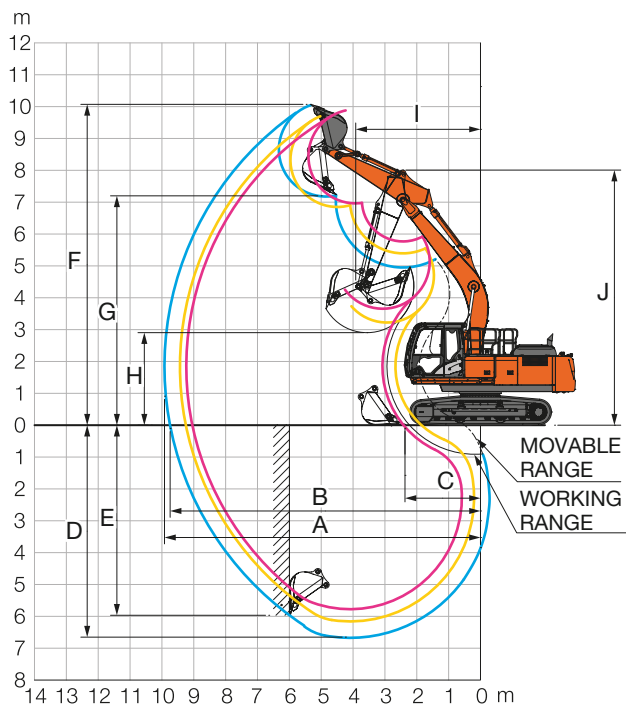
Width: 680 mm Weight: 3 330 kg



Width: 940 mm Weight: 1 240 kg

SPECIFICATIONS

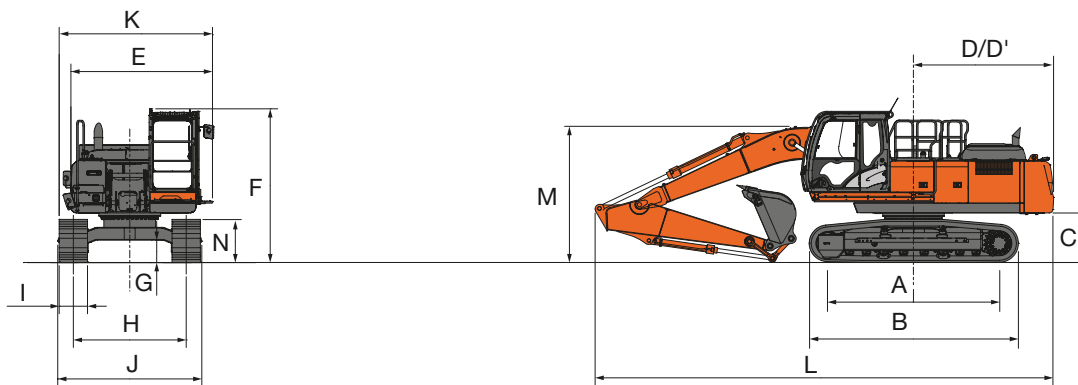
DIMENSIONS



Unit: mm

Model	ZX210LC-6		
Arm length	2.03 m	2.42 m	2.91 m
Bucket capacity	0.8 m ³	0.8 m ³	0.8 m ³
A Max. digging reach	9 230	9 430	9 920
B Max. digging reach (on ground)	9 040	9 250	9 750
C Minimum level crowding distance	3 550	3 410	2 370
D Max. digging depth	5 800	6 180	6 670
E Max. vertical wall digging depth	5 210	5 300	5 990
F Max. cutting height	9 850	9 670	10 040
G Max. dumping height	6 940	6 830	7 180
H Min. dumping height	3 660	3 220	2 910
I Min. swing radius	3 410	3 280	3 180
J Height at min. front swing radius	7 980	8 020	7 910
K Overall height	3 260	3 260	3 260
L Overall length	9 840	9 840	9 750

WORKING RANGES



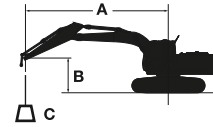
Unit: mm

Model	ZX210LC-6		
Arm length	2.03 m	2.42 m	2.91 m
A Distance between tumblers	3 660		
B Undercarriage length	4 460		
*C Counterweight clearance	980		
D Rear-end swing radius	2 980		
D' Rear-end length	2 980		
E Overall width of upperstructure	3 000		
F Overall height of cab	3 260		
*G Min. ground clearance	450		
H Track gauge	2 390		
I Track shoe width	600		
J Undercarriage width (inc. side step)	2 990 (3 050)		
K Overall width	3 250		
L Overall length	9 840	9 840	9 750
M Overall height of boom	2 770		
N Track height with triple grouser shoes	920		

* Excluding track shoe lug G: Triple grouser shoe

LIFTING CAPACITIES

- Notes: 1. Ratings are based on ISO 10567.
 2. Lifting 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: Lifting capacity

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities.

ZX210LC-6 BACKHOE FRONT WITH SLIDING CAB

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

Conditions	Load point height m	Load radius										At max. reach		meter
		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
Boom 5.68 m Arm 2.03 m Counterweight 4 850 kg Shoe 600 mm	6.0					*6 580	*6 580	*6 200	6 150			*6 290	5 400	6.50
	4.5					*7 900	*7 900	*6 590	6 020			*6 220	4 510	7.27
	3.0					*9 760	8 660	*7 340	5 810	6 320	4 240	6 160	4 110	7.67
	1.5							*8 030	5 620	6 290	4 170	6 000	3 990	7.75
	0 (Ground)					*11 310	8 160	*8 340	5 510	6 240	4 130	6 210	4 110	7.54
	-1.5					*10 750	8 180	*8 070	5 500			*6 580	4 540	6.99
	-3.0			*12 240	*12 240	*9 290	8 310	*6 570	5 630			*6 500	5 610	6.03
	-4.5													
Boom 5.68 m Arm 2.42 m Counterweight 4 850 kg Shoe 600 mm	6.0							*5 750	*5 750			*5 780	5 150	6.74
	4.5					*7 330	*7 330	*6 230	6 040			*5 810	4 330	7.48
	3.0					*9 210	8 730	*7 040	5 810	*6 060	4 230	5 790	3 950	7.87
	1.5					*10 720	8 290	*7 810	5 600	6 120	4 140	5 630	3 820	7.95
	0 (Ground)					*11 240	8 100	*8 240	5 460	6 050	4 070	5 800	3 910	7.74
	-1.5			*9 910	*9 910	*10 910	8 080	*8 130	5 430			6 390	4 290	7.21
	-3.0			*13 220	*13 220	*9 730	8 190	*7 160	5 510			*6 670	5 200	6.28
	-4.5					*6 880	*6 880					*6 450	*6 450	4.71
Boom 5.68 m Arm 2.91 m Counterweight 4 850 kg Shoe 600 mm	6.0							*5 230	*5 230			*4 040	*4 040	7.32
	4.5					*6 610	*6 610	*5 780	*5 780	*5 400	4 350	*3 990	3 920	8.01
	3.0					*8 530	*8 530	*6 650	5 860	*5 760	4 250	*4 100	3 610	8.37
	1.5					*10 260	8 380	*7 520	5 630	6 130	4 140	*4 370	3 500	8.45
	0 (Ground)			*4 850	*4 850	*11 120	8 110	*8 100	5 460	6 030	4 050	*4 880	3 570	8.25
	-1.5	*5 480	*5 480	*9 100	*9 100	*11 090	8 040	*8 200	5 390	6 000	4 020	5 740	3 860	7.76
	-3.0	*9 970	*9 970	*14 390	*14 390	*10 220	8 100	*7 590	5 420			*6 250	4 540	6.90
	-4.5			*11 250	*11 250	*8 120	8 120					*6 250	*6 250	5.52

EQUIPMENT

● : 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	●
Cold fuel resistance valve	●
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 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	●

HYDRAULIC SYSTEM

Auto power lift	●
Control valve with main relief valve	●
Full-flow filter	●
High mesh full flow filter with restriction indicator	○
Hose rupture valve for arm	●
Hose rupture valve for boom	●
Pilot filter	●
Power boost	●
Suction filter	●
Swing dampener valve	●
Two extra port for control valve	●
Work mode selector	●

CAB

All-weather sound suppressed steel cab	●
AM-FM radio	●
Ashtray	●
Auto control air conditioner	●
AUX terminal and storage	●
Cab front guard for sliding cab	●
Cigarette lighter 24 V	●
CRES V (Center pillar reinforced structure) cab	●
Drink holder with hot & 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	●
Glove compartment	●
Hot & cool box	●
Intermittent windshield wipers	●
Key cylinder light	●
Laminated round glass 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	●
Rubber radio antenna	●
Seat : air suspension seat with heater	●
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	●
Short wrist control levers	●
Sliding cab	●
Sun visor (front window/side window)	○
Transparent roof with slide curtain	●
Windows on front, upper, lower and left side can be opened	●
2 speakers	●
4 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, operating conditions, etc	●
Side view monitor	●
32 languages selection	●

LIGHTS

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

UPPER STRUCTURE

Additional Counterweight 1 150kg	●
Batteries 2 x 126 Ah	●
Battery disconnect switch	●
Body top handrail	●
Counterweight 4 850 kg	●
Electric fuel refilling pump with auto stop and filter	●
Fuel level float	●
Hydraulic oil level gauge	●
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 for sliding cab	●
Skid-resistant plates and handrails	●
Swing parking brake	●
Undercover	●
Utility space	●

UNDERCARRIAGE

Bolt-on sprocket	●
Reinforced track links with pin seals	●
Shoe: 600 mm triple grouser	●
Step for sliding cab	●
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 brackets	●

FRONT ATTACHMENTS

Backhoe front*: Casted bucket link A, Centralized lubrication system, Dirt seal on all bucket pins, Flanged pin, HN bushing, Reinforced resin thrust plate, WC(tungsten-carbide) thermal spraying	○
Clamshell bucket (0.8 m³)	●
Telescopic arm (21 m)	●

ATTACHMENTS

Telescopic arm piping	●
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MISCELLANEOUS

Abnormal rope alarm	●
Global e-Service	●
Motion alarm	●
Onboard information controller	●
Standard tool kit	●
Zoom camera	○

*When using standard arm (backhoe front):

- For light digging only.
- The hydraulic circuit is used exclusively for the telescopic arm, therefore attachments cannot be used.

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.

