### **HITACHI**

Reliable solutions

The new generation





### HYDRAULIC EXCAVATOR

Model Code: ZH210-A / ZH210LC-A Engine Rated Power: 122 kW (164 HP)

Operating Weight: ZH210-A: 20 500 - 21 400 kg / ZH210LC-A: 21 100 - 22 000

Backhoe Bucket: ISO Heaped: 0.51 - 1.10





## **HYBRID**

New Generation Hybrid Excavator

Relentless Pursuit of High Performance Innovation is Always at Hitachi

**Fuel Consumption** and CO<sub>2</sub> Emissions

A Hitachi excavator has entered into a new era of hybrids. Here are Hitachi engineering and design feats: a hybrid hydraulic excavator that features fuel-efficient operation, excellent functionality, and high production. The ZH210 hybrid excavator incorporates cutting-edge technologies adopted from hydraulic, electric and battery-powered excavators. The combination of this technology has led to the development of the TRIAS-HX hybrid system, a fusion of hybrid and energy-saving technology. The ZH210 can reduce fuel consumption by 20% yet keep high production equivalent to a 20 ton hydraulic excavator. Hitachi will shape the future of hybrid excavators and the way hybrid excavators should be. Hitachi measurements: Vs. ZX200-3 in P mode



**HYBRID TECHNOLOGY** 

Achieving 20% Less Fuel

The TRIAS-HX system, a blend of a hybrid system remarkably



### **PRODUCTIVITY**

Basic Performance

The Hitachi hybrid excavator offers high production equivalent

## **COMFORT**

Uncompromised operator comfort Hitachi heritage – high levels of operator comfort

**Multi-Function Monitoring System** 

Total management of Machine conditions, operating

### **ECOLOGY**

Fuel consumption and

CO<sub>2</sub> emissions are down by 20% to conserve fuel

Reduced Fuel Cons



### **MAINTENANCE &** DURABILITY

Proven Durability and

### **HITACHI SUPPORT** CHAIN

Global e-Service Owner's Site

Real-time fleet

ZH 210 J777





# HYBRID TECHNOLOGY

### Relentless Pursuit of Excellence







**Heritage of Hitachi Electric Drive Prowess** 





### **Hybrid system**

### 20% reduction in Fuel Consumption and CO<sub>2</sub> Emissions (Hitachi measurements: 20% down from ZX200-3 in P mode)

The swing motor converts energy recovered from swing braking into electrical energy. This electrical energy is transmitted via the power control unit to the capacitor unit. The stored electrical energy is used to accelerate the engine and help swing the upper structure. Using swing momentum is the basis for hybrid technology which reuses energy and saves fuel.

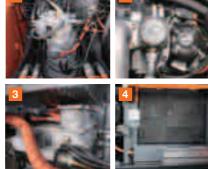
Works together with electric and hydraulic swing motors. The electric swing motor generates electricity during swing braking, and assists the hydraulic swing motor for swing acceleration. The two motors work to control the swing similar to a current hydraulic

Generates electricity by engine power and controls the amount of stored electricity in the capacitor unit to help drive the engine.

### 3. Power control unit (PCU)

Controls electricity between electric assist motor, electric swing motor and capacitor unit.

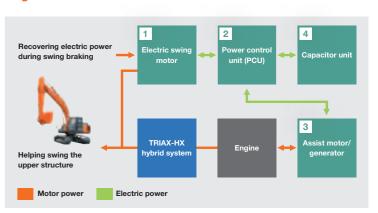
Captures electricity generated during swing braking and delivers it to the electric swing motor.



## **New Breed of Hydraulic System**

An energy-efficient TRIAS-HX system is the core technology of the ZH210 hybrid excavator. The system employs a 3-pump/3-control valve system, using more pumps and control valves than the ZX200-3. More hydraulic sources are built up with greater accuracy, helping reducing pressure loss for efficient energy use.

To increase productivity, the ZH210 employs high-efficient cylinders, which provide 1.5 times more delivery than that of the ZX200-3. The TRIAS-HX uses an electric motor to boost the power to the hydraulic system to reduce fuel consumption and downtime.





# PRODUCTIVITY

### 20% Fuel Cut Plus Proven Fundamental Performance











### **Practical Hybrid**

### **Eco-Technology**

The ZH210 has an electric power assist system and an advanced hydraulic system.

Operation is simple. It digs, loads, levels and travels, like a hydraulic excavator. Also, mounting the attachment becomes simpler to enhance operating efficiency.

### **Proven Fundamental Performance**

The TRIAS-HX system is teamed up with hydraulic boosting system, on the front, boom recirculating system and Arm Recirculation Cancel System working at high hydraulic pressure. So the ZH210 maintains digging forces, travel speed, swing torque and front speeds equivalent to the ZX200-3. In particular, power digging boost exceeds that of the ZX200-3.

### Max. digging forces (STD / Power digging)

Bucket digging force: 143 / 158 kN Arm digging force: 103 / 114 kN (comparable to ZX200-3)

Max. engine output

122 kW

(same as ZX200-3)

Travel speeds

High 5.5 km/h, low 3.5 km/h (same as ZX200-3)

### **Auto Power Lift**

The ZH210 delivers 5% more power lift force than the ZX200-3. The force is boosted automatically to raise the boom. This proves helpful in applications such as truck loading and lifting piles from retaining walls.

### **Newly-Designed Instruments**

The all-new multi-function monitoring system allows the operator to adjust the flow of an extra circuit to facilitate the installation of the attachment. 11 flow patterns can be set with registered names by type of attachment and job.



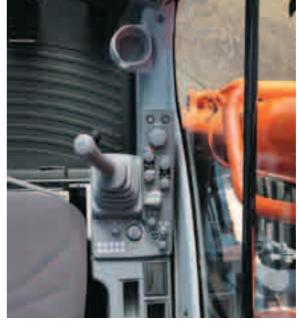




## OPERATOR COMFORT

## Uncompromised operator comfort











## Safety

### ROPS-Certified "CRES V Cab"

The CRES V cab is specifically designed by complying with the ROPS standards (ISO-12117-2). The neutral engine start allows the engine to start only when the lock lever is applied. Password protection is provided: the operator is required to enter a password to start the engine. A tenkey switch panel is also offered for convenient password entry.



CRES V Ca

# Comfortable Working Environment

### **Pursuit of Controllability**

The multi-function monitoring system displays machine conditions, operating status, and settings, using a large easy-to-read LCD screen. The control panel and levers are laid out functionally for easy handling. The air conditioner keeps the operator comfortable through a series of air outlets. The audio system includes an AM/FM radio and AUX port (optional) for mobile music players.

### Comfortable Cab

### **Spacious and Comfortable Cab**

The comfortable cab reduces operator fatigue. The compact console offers more leg room and the large door window gives a wide view of the worksite. The door pillar shifts rearward by 70 mm to enlarge door entrance area. The LED room lamp lights automatically when the door opens. Working lights have a 30-second shut-off time after engine stopping for night work. The cab is kept quiet, down by 4dB(A) from the conventional ZX200-3.

### **Comfort-Designed Seat**

The operator seat includes an armrest and headrest for improved comfort and increased fingertip controllability. The seat is easily adjustable to operator's size and preferences, and can slide reaward by 40 mm, increasing room even more.



# ICT Information and Communication Technology

Total Management of Machine Information and Settings with Multi-Function Monitoring System



### All-New Easy-to-Read Multi-Function Monitor

The intuitive multi-function, multi-language monitoring system consists of a 7-inch high-definition color display and controller. The operator can use the monitor to display oil pressure/temperature gauge, fuel gauge, work mode, full-auto air conditioner, AM/FM radio, rearview monitor camera, maintenance support and attachment flow adjustment. The operator can check and adjust machine information and settings. A combination of the "BACK" button and MENU buttons, both located at the tip of the multi-function controller, allow the operator to quickly switch the menu. A new rearview camera monitor always shows the view behind the machine.

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## **ECOLOGY**

### **Fuel-Efficient Performance**



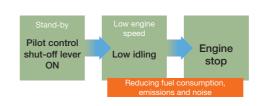
### 20% Less Fuel Consumption

The new TRIAS-HX and newly designed Hybrid system can save 20% more fuel, reducing  $CO_2$  emissions and operating costs. In addition, the ECO mode can save fuel by a further 5% as engine speed lowers and pump flow increases to generate operating speeds. This promotes eco-friendly operation.



### **Auto Idling Stop**

When the machine is not in use, the engine stops automatically to save fuel at idling, reducing noise and emissions.



### **Monitoring System**

The ZH210 always monitors and records current fuel consumption: average fuel consumption per hour (L/H) and average fuel consumption per day (L/D). This function encourages the operator to make fuel-efficient operation. After day's work, the operator can check how fuel is saved, and identify ways to save more fuel.





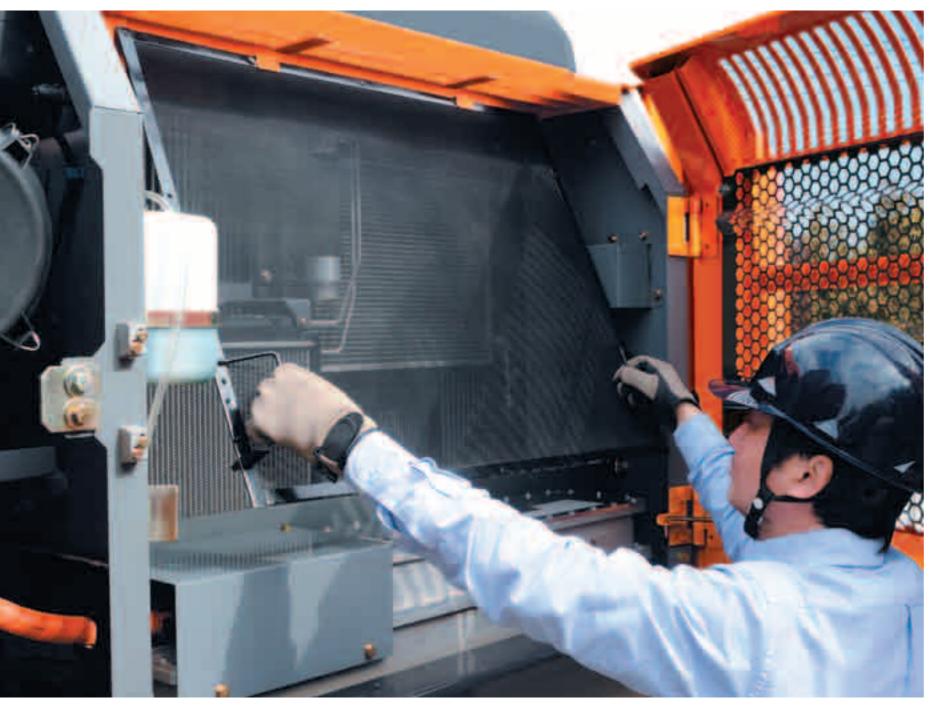
uel monitor Fuel use

Fuel monitor Average fuel use



# MAINTENANCE AND DURABILITY

## Proven Reliability and Durability







## **Simplified Maintenance**

### Simple and Easy Radiator Cleaning

A dust protective net, provided at the front of the radiator, can be removed at one touch, and cleaned easily by an air blower. The air condenser and radiator, can be easily cleaned. A fuel tank water drain, coolant line and filters are grouped inside covers for simple ground-level servicing. Self-cleaning paint on covers repels dirt: deposited dirt is washed away with rainwater, keeping covers clean. Track adjusters can be greased and serviced in areas free from mud entry.



## **Robust Body**

### **Sturdy Front Attachment**



Front joint pins are precision fitted to reduce jerking. New HN bushings, capable of holding grease for longer periods of time, therefore extending greasing intervals. At front connections, reinforced resin thrust plates are employed to reduce noise and wear.

In addition, contact surfaces of the joint between arm top and bucket are coated with WC (tungsten-carbide) thermal spraying to reduce wear. The undercarriage is built up with fewer welds. Particularly, the X-beam frame is made of monolithic plates to enhance durability against high stresses. Track adjusters, each consisting of a front idler and adjuster cylinder, absorb shocks and impact.

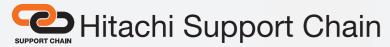
# Reliable Hybrid Components

The inverter and capacitor are kept cool with an exclusive radiator to ensure long service life. The capacitor has longer service life than nickel-metal hydride battery and lithium ion battery. Water-proof cables and connectors can transmit high electricity even under harsh operating conditions. Electric devices such as an electric motor are maintenance-free.







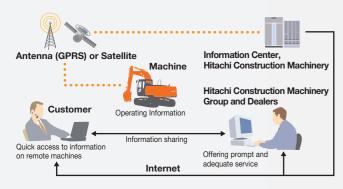


Hitachi Support Chain is a full customer support system offered after buying a Hitachi machine.

### Remote Fleet Management with Global e-Service

## Easy Access to On-Site Machines through the Internet

This on-line fleet management system allows you to access each on-site machine from a PC in your office. You can get its operating information and location to increase productivity of the fleet and reduce downtime. Operating data and log are sent to a Hitachi server for processing, and then to customer and dealers around the world. This system is available 24 hours a day, all the year around.



Note: In Some Regions, Global e-Service Is Not Available by Local Regulations.

### **Main Features of Global e-Service**

#### **Functions**

Global e-Service provides easy access to a machine on site, conveying operating information and log, including daily operating hours, fuel level, temperatures, pressures, and likes.

### Maintenance

Maintenance data and log are displayed on a easy-to-read monitor screen, suggesting recommended maintenance for efficient fleet management.





### Parts and Service

Hitachi full customer support is available every area on the globe for full customer satisfaction through Hitachi local dealers.

### Parts

Hitachi Global Online Network, a parts supply system, is linked with Japan Parts Center, overseas depots and over 150 dealers abroad to deliver on-line parts information, including in-stock parts, order receptions, shipments and delivery period of over one million parts and components.

#### **Genuine Hitachi Parts**

Genuine Hitachi parts, meeting Hitachi stringent quality standards, are guaranteed according to Hitachi warranty standards. The use of genuine Hitachi parts, including engine, fuel, hydraulic oil and filters, may slash running costs, and extend machine life.

### **Ground Engaging Tools (GETs)**

Hitachi provides an array of Hitachi Ground Engaging Tools developed and built for a variety of applications. Using high-

quality, well-maintained GETs will help you get customers' trust

Note: Some dealers do not handle Hitachi GETs.

### **Remanufactured Components**

Hitachi components are remanufactured according to the stringent remanufacturing standards at four factories around the world. They have high quality equivalent to new ones, and backed up by Hitachi warranty system.

Note: Some dealers do not handle Hitachi Remanufactured Components.

### Service

### **Extended Warranty — HELPs**

Hitachi Standard Warranty System is available on all new Hitachi machines. In addition, Hitachi offers Hitachi Extended Life Programs (HELPs) to suit customer expectations – protecting machines under tough operating conditions, avoiding unexpected downtime, and reducing repair costs.

Note: Warranty conditions vary by equipment.

### Diagnostic Tools — Maintenance Pro

Electronic control system needs quick on-site solutions, apart from mechanical repairs. Hitachi's Maintenance Pro can diagnose machine failures in a short time by plugging a PC into a failed machine.

### **Technical Training**

On-site servicing matters despite locations to keep the machine at peak performance and reduce downtime. Technical Training Center (TTC), located in Japan, educates and trains service technicians and service support personnel coming from Hitachi dealers and factories on the globe according to the international training programs.



### **SPECIFICATIONS**

 ENGINE

 Model
 Isuzu Al-4HK1XSA-07

 Type
 4-cycle water-cooled, direct injection

 Aspiration
 Turbocharged, intercooled

 No. of cylinders
 4

 Rated power
 ISO 9249, net
 122 kW (164 HP) at 2 000 min<sup>-1</sup> (rpm)

 SAE J1349, net
 122 kW (164 HP) at 2 000 min<sup>-1</sup> (rpm)

 Maximum torque
 655 Nm (67 kgfm) at 1 500 min<sup>-1</sup> (rpm)

 Piston displacement
 5 193 L

 Bore and stroke
 115 mm x 125 mm

 Batteries
 2 x 12 V / 88 Ah

### HYDRAULIC SYSTEM

### **Hydraulic Pumps**

#### **Hydraulic Motors**

### **Relief Valve Settings**

Implement circuit	34.3 MPa (350 kgf/cm²)
Swing circuit	32.4 MPa (330 kgf/cm²)
Travel circuit	34.3 MPa (350 kgf/cm²)
Pilot circuit	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost	38.0 MPa (388 kgf/cm²)

#### **Hydraulic Cylinders**

	Quantity	Quantity Bore	
Boom	2	120 mm	85 mm
Arm	1	135 mm	95 mm
Bucket	1	115 mm	80 mm

### **HYBRID SYSTEM**

### **Electric Power Devices**

Energy storage	Electric double-layer capacitor
Electric swing motor	Permanent magnet synchronous motor
Assist motor	Permanent magnet synchronous motor

### UPPERSTRUCTURE

#### **Revolving Frame**

D-section frame skirt for resistance to deformation.

Swing torque ............ 68 kNm (6 900 kgfm)

#### **Swing Device**

#### Operator's Cab

Independent spacious cab,1005mm wide by 1675mm high, conforming to the "ROPS for excavator" (ISO\* 12117-2).

\* 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	7: ZH210-A
	8: ZH210LC-A
Track shoes	46: ZH210-A
	49: ZH210LC-A
Track guard	1: ZH210-A, ZH210LC-A

#### **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 (20 714 kgf)

### SERVICE REFILL CAPACITIES

Fuel tank	400.0 L
Engine coolant	26.0 L
Electric power device coolant	5.0 L
Engine oil	23.0 L
Swing device	6.9 L
Travel device (each side)	6.8 L
Hydraulic system	240.0 L
Hydraulic oil tank	135.0 L

### **WEIGHTS AND GROUND PRESSURE**

### **Operating weight and Ground pressure**

			ZH21	IO-A <sup>*1</sup>	ZH210LC-A <sup>*1</sup>		
Shoe type	Shoe width	Arm length	kg	kPa (kgf/cm²)	kg	kPa (kgf/cm²)	
	600 mm		20 500	0.47	21 100	0.45	
Triple grouser	700 mm		20 900	0.41	21 500	0.39	
g. 0000.	800 mm	2.91 m	21 200	0.36	21 800	0.35	
Flat	Flat 600 mm		21 400	0.49	22 000	0.46	
Pat crawler	600 mm		20 900	0.47	21 800	0.45	

 $<sup>^{\</sup>star}1$ : Including 0.80 m³ (ISO heaped) bucket weight (660 kg) and counterweight (3 850 kg).

#### WEIGHT: BASIC MACHINE AND COMPONENTS

### **Basic Machine Weight and Overall width**



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

ZH210-A		
Shoe width	Weight	Overall wigth
600 mm	16 100 kg	2 860 mm
700 mm	16 400 kg	2 910 mm
800 mm	16 700 kg	3 000 mm

 ZH210LC-A
 Weight
 Overall wigth

 600 mm
 16 600 kg
 2 990 mm

 700 mm
 17 000 kg
 3 090 mm

 800 mm
 17 300 kg
 3 190 mm

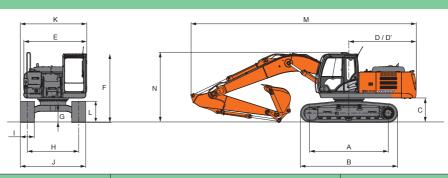
### Component weights

	ZH210-A	ZH210LC-A
Counterweight	4 250 kg	4 250 kg
Boom (with boom and arm cylinder)	2 250 kg	2 250 kg
2.91 m arm (with bucket cylinder)	920 kg	920 kg
0.80 m³ bucket	660 kg	660 kg

### **BUCKET AND ARM DIGGING FORCES**

Arm length	2.91m
Bucket digging force* ISO	158 kN (16 100 kgf)
Bucket digging force* SAE:PCSA	135 kN (13 800 kgf)
Arm crowd force* ISO	114 kN (11 600 kgf)
Arm crowd force* SAE:PCSA	107 kN (10 900 kgf)

#### DIMENSIONS



Unit: mm

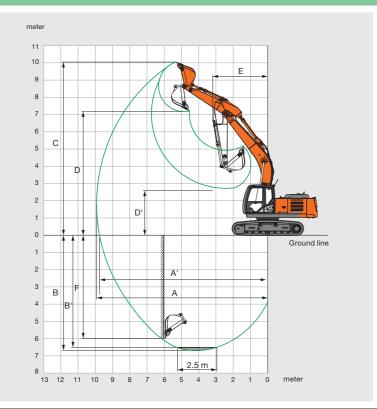
	ZH210-A	ZH210LC-A	
A Distance between tumblers	3 370	3 660	
B Undercarriage length	4 170	4 460	
* C Counterweight clearance	1 00	30	
D Rear-end swing radius	2 89	90	
D´ Rear-end length	2 89	90	
E Overall width of upperstructure	2 700		
F Overall height of cab	2 950		
* G Min. ground clearance	450		
H Track gauge	2 200	2 390	
I Track shoe width	60	0	
J Undercarriage width	2 800	2 990	
K Overall width	2 860	2 990	
* L Track height	920	920	
M Overall length	9 6	60	
N Overall height 3 010			

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<sup>\*</sup> Excluding track shoe lug

### **SPECIFICATIONS**

### **WORKING RANGES**



Unit: mm

Arm length	2.91 m
A Max. digging reach	9 920
A´ Max. digging reach (on ground)	9 750
B Max. digging depth	6 670
B' Max. digging depth for 2.5 m level	6 480
C Max. cutting height	10 040
D Max. dumping height	7 180
D´ Min. dumping height	2 650
E Min. swing radius	3 180
F Max. vertical wall digging depth	5 990

Excluding shoe lug

### **BACKHOE ATTACHMENTS**

Boom and arms are of welded, box-section design. 5.68 m boom, and 2.91 m arms are available.

Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

Capacity	Wi	dth						Recommendation	
ISO heaped	Without side cutters	With side cutters	No. Of teeth	Weight	ZH210-A	ZH210LC-A			
0.51 m³	720 mm	830 mm	3	530 kg	0	0			
0.80 m <sup>3</sup>	1 030 mm	1 140 mm	5	660 kg	0	0			
0.91 m³	1 150 mm	1 260 mm	5	700 kg	0	0			
1.10 m <sup>3</sup>	1 330 mm	1 440 mm	6	770 kg	_	0			
*1 0.80 m <sup>3</sup>	1 030 mm	1 140 mm	5	750 kg	0	0			
*1 0.91 m³	1 150 mm	1 260 mm	5	800 kg	0	0			
*2 0.80 m <sup>3</sup>	1 030 mm	1 140 mm	5	660 kg	0	0			
*3 0.80 m³	1 040 mm	1 150 mm	5	760 kg	0	0			
lope Finishing Bucket: Width 1 1	00 mm, Length 1 800 mr	n	_	590 kg	$\Diamond$	<b>♦</b>			
Shape Bucket			3	520 kg	0	0			

\* 1 Reinforced bucket

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- \* 2 Level-pin-type bucket
- O Suitable for materials with density of 1 600 kg/m³ or less
- \* 3 Super V teeth type bucket
- Slope-finishing service

 $\bigcirc$  Suitable for materials with density of 2 000 kg/m  $^{\!3}$  or less

— Not applicable

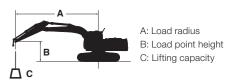
## **LIFTING CAPACITIES (Without Bucket)**

Notes: 1. Ratings are based on ISO 10567.

-4.5

- 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.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.



\* 6 240

4 830

ZH210-A									Rating	over-front	Rating	over-side or	360 degrees	Unit : kg	
Conditions	Load point height		Load radius												
		point height		1.5 m		3.0 m		4.5 m 6.0		6.0 m		m	At max. reach		
	m	ů	<b>-</b>	ů	<b>-</b>	ů	<b>-</b>	ů	<b>-</b>	ů	<b>©</b>	ů		meter	
Boom 5.68 m Arm 2.91 m	6.0							* 5 220	4 970			* 4 040	3 570	7.32	
Counterweight 3 850 kg	4.5					* 6 610	* 6 610	* 5 770	4 810	4 920	3 390	* 3 990	3 040	8.01	
Shoe 600 mm	3.0					* 8 520	6 920	* 6 640	4 580	4 810	3 290	4 060	2 770	8.37	
	1.5					10 140	6 430	6 510	4 340	4 690	3 180	3 940	2 670	8.45	
	0 (Ground)			* 4 850	* 4 850	9 830	6 170	6 330	4 180	4 600	3 090	4 020	2 720	8.25	
	-1.5	* 5 480	* 5 480	* 9 100	* 9 100	9 750	6 100	6 250	4 110	4 570	3 070	4 370	2 940	7.76	
	-3.0	* 9 970	* 9 970	* 14 370	11 690	9 820	6 160	6 290	4 140			5 180	3 470	6.90	

ZH210LC-A									Rating	over-front	Rating	over-side or	360 degrees	unit : kg
Conditions	Load point height m		Load radius  At max. reach											-la
				1.5 m 3.0 m		) m	4.5 m 6.0 m		0 m	7.5 m		At max. reach		
		ů	<b>-</b>	ů		ů	<b>-</b>	ů	<b>-</b>	ů	<b>-</b>	ů	<b>-</b>	meter
Boom 5.68 m Arm 2.91 m	6.0							* 5 220	* 5 220			* 4 040	3 940	7.32
Counterweight 3 850 kg	4.5					* 6 610	* 6 610	* 5 770	5 310	5 390	3 750	* 3 990	3 360	8.01
Shoe 600 mm	3.0					* 8 520	7 710	* 6 640	5 070	5 420	3 650	* 4 100	3 080	8.37
	1.5					* 10 250	7 210	7 390	4 830	5 290	3 530	* 4 380	2 970	8.45
	0 (Ground)			* 4 850	* 4 850	* 11 110	6 940	7 200	4 660	5 190	3 440	4 540	3 030	8.25
	-1.5	* 5 480	* 5 480	* 9 100	* 9 100	* 11 070	6 860	7 120	4 590	5 160	3 420	4 940	3 280	7.76
	-3.0	* 9 970	* 9 970	* 14 370	13 420	* 10 210	6 930	7 160	4 620			5 870	3 870	6.90
	-4.5			* 11 230	* 11 230	* 8 100	7 140					* 6 240	5 390	5.52

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

Standard	equipment	O:Optional	equipmen

ENGINE	
Air cleaner double filters	•
Auto idle system	•
Auto idling stop	•
Cartridge-type engine oil filter	•
Dry-type air filter with evacua- tor valve (with air filter restriction indicator)	•
Dust-Proof indoor net	•
ECO/PWR mode control	•
Engine warm-up device	•
Fan guard	•
Fuel main filter	•
Fuel pre-filter	•
Pre-cleaner	•
Radiator reserve tank	•
High performance water separator	0
50 A alternator	•

HYDRAULIC SYSTEM	
Anti-drift	•
Auto power lift	•
Control valve with main relief valve	•
Full flow filter	•
High mesh full flow filter with restriction indicator	0
Pilot accumulator	•
Pilot filter	•
Power boost	•
Suction filter	•
Swing dampener valve	•
Work mode selector	•

CAB	
All-weather sound suppressed steel cab	•
AM-FM radio with 2 speakers	•
Ashtray	•
Auto control air conditioner	•
AUX. terminal and storage	0
CRES V (Center pillar reinforced structure) cab	•
Cab right side guard	•
Drink holder with hot & cool	•
Electric double horn	•
Engine shut-off swich	•
Evacuation hammer	•

Fire extinguisher bracket	0
Floor mat	•
Footrest	•
Front window washer	•
Front windows on upper, lower and left side can be opened	•
Glove compartment	•
Head guard	0
Hot & cool box	•
Intermittent windshield wipers	•
Key cylinder light	•
LED room light with door courtesy	•
Lower cab front guard	0
OPG top guard Level I (ISO10262) compliant cab	•
Pilot control shut-off lever	•
Rain guard	•
Rear tray	•
Retractable seat belt	•
Rubber radio antenna	•
Seat : Fabric seat	0
Seat : Fabric seat with air suspension seat	•
Seat : Fabric seat with mechanical suspension seat	0
Short wrist control levers	•
Upper cab front guard	0
12 V Power outlet	•
24 V cigarette lighter	•
4 fluid-filled elastic mounts	•
MONITOD SYSTEM	

MONITOR SYSTEM
Alarm buzzers: overheat, engine oil pressure, overload
Alarms: overheat, engine warning, engine oil pressure,alternator, minimum fuel level, work mode, hydraulic filter restriction, air filter restriction, overload, etc
Display of meters: water temperature, hour, fuel rate, pump flow rate, clock
Other displays: energy monitor, fuel consumption monitor, work mode, auto-idle, glow, rearview monitor, operating conditions, attachment monitor, etc
32 languages selection

LIGHTS	
Additional boom light with cover	0
Additional cab roof front lights	•
Additional cab roof rear lights	0
2 working lights	•
UPPER STRUCTURE	

UPPER STRUCTURE	
Electric double-layer capacitor	•
Fuel circulation filter	0
Fuel double element	•
Fuel level float	•
Hydraulic oil level gauge	•
Rear view camera	•
Rear view mirror (right & left side)	•
Swing parking brake	•
Tool box	•
Tropical cover	•
Undercover	•
2 x 88 Ah batteries	•
3 850 kg counterweight	0
4 250 kg counterweight	•
6.0 mm reinforced undercover	0

UNDERCARRIAGE	
Bolt-on sprocket	•
Reinforced track links with pin seals	•
side step	•
Track guard (each side) and hydraulic track adjuster	•
Travel motor covers	•
Travel parking brake	•
Upper and lower rollers	•
2 track center guards	0
4 tie down hooks	•
600 mm Flat shoes	0
600 mm Padded Crawler shoes	0
600 mm triple grouser shoes	•
700 mm grouser shoes	0
800 mm grouser shoes	0
9.0 mm reinforced track undercover	0

FRONT ATTACHMENTS	
Casted bucket link A	0
Centralized lubrication system	•

Dirt seal on all bucket pins	•
Flanged pin	•
HN bushing	•
House rupture valve (arm)	•
House rupture valve (Boom)	•
LinkA	•
LinkB	•
Reinforced resin thrust plate	•
WC (tungsten-carbide) thermal spraying	•
0.80 m³ bucket (ISO heaped)	0
2.91 m arm	•
2.91 m Reinforced arm	0

ATTACHMENTS	
Attachment basic piping	•
Breaker and crusher piping	•
High mesh full flow fillter with restriction indicator	0
Line filter	0
Parts for breaker and crusher	0
2 pump combined flow for attachment basic piping	0

MISCELLANEOUS	
Global e-Service	•
Lockable fuel refilling cap	•
Lockable machine covers	•
Onboard information controller	•
Skid-resistant tapes, plates and handrails	•
Standard tool kit	•
Travel direction mark on track frame	•

Before using a machine with a satellite communication system, please make sure that the satellite communication system complies with local regulations, safety standards and legal requirements. If not so, please make modifications accordingly.

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.

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