ZAXIS-6G series

HITACHI

Reliable Solutions

ZAXIS210



COMES WITH
ADVANCED TECHNOLOGIES, TOUGH DURABILITY
FOR IMPROVED PRODUCTIVITY.

HIGH PERFORMANCE

With speed, agility and power

FAST SMOOTH AND POWERFUL

Fuel consumption reduced by 9%

The new ZAXIS hydraulic excavator is a fuel saving excavator with fuel consumption reduced by 9%* when comparing with that of ZX200-3/ZX200-3F HIOS III series. In addition, the CO^2 emission is reduced while B20 fuel is compatible.

*5% when comparing with ZX200/ZX200-3G

More fuel saving with ECO mode

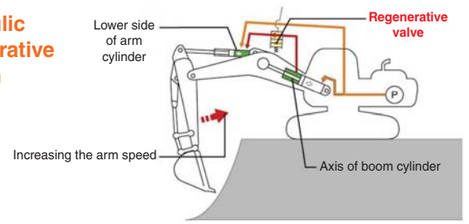
In line with operation, the new ECO mode will help to cut off the fuel supply for more 9% when comparing with Power mode without decreasing the excavation speed.

Moving forward with agility through HIOS* III hydraulic system

Increased operating speed but reduced fuel consumption with HIOS III hydraulic system. Actuator can quickly operate due to the weight of the boom. Accordingly, it is not necessary to use the regenerative circuit for the cylinder and oil pressure.

*Human & Intelligent Operation System

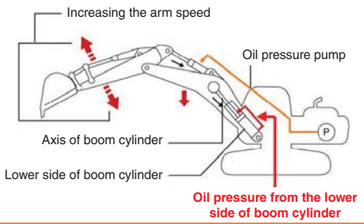
Hydraulic regenerative system



◄ Increasing speed of arm rotation

The oil from arm and boom's hydraulic cylinder will pass through the speed boost valve, providing more digging power.

Improved boom movement system



◄ Increased arm speed when lowering the boom

without any oil pressure from the pump. The oil in arm circuit will flow faster, increasing the arm speed, dumping capacity and adjusting speed of the front attachement.



Effective lifting operation

The mode that automatically provides the enhanced level of lifting power by 10% when lifting the concrete drainage pipe or heat insulating plate.

Enhancing the swing torque

Effectively trimming the wall with the bucket and providing the smooth swing on the slope.

Provides more digging force

Gives operators an improved experience with more 10% digging force by just pressing the lever button for powerful excavation.

Experiences user-friendly accessories

The operator can switch the valve, adjust the flow of hydraulic system, and check different parameters from the multifunctional display.



Setting the hydraulic breaker



The operation of the hydraulic breaker

Specification (ZX210-6G)

Engine	
Model	Isuzu CC-6BG1T
Type	Four-stroke, water-cooling, direct-injection
Compressed air system	Turbocharger, intercooler
Number of cylinder	6
Engine rated power	
ISO 9249, Net	125 kW (168 HP) at 2 100 min^{-1} (rpm)
SAE J1349, Net	125 kW (168 HP) at 2 100 min^{-1} (rpm)
Maximum torque	637 Nm (65 kgfm) at 1 800 min^{-1} (rpm)
Displacement Volume	6.494 l
Bore and stroke	105 x 125 mm
Battery	2 x 12 V / 88 Ah
Hydraulic system	
Hydraulic pump	
Master pump	Maximum flow rate of oil
Maximum flow rate of oil	2 x 212 l/min
Pilot pump	One gear pump
Maximum flow rate of oil	33.6 l/min
Hydraulic motor	
Travel motor	2 piston motors in-line with adjustable volume-type axle
Swing motor	one piston motor in-line with axle
Relief valve settings	
Implement circuit	34.3 MPa (350 kgf/cm^2)
Swing circuit	34.3 MPa (350 kgf/cm^2)
Travel circuit	34.3 MPa (350 kgf/cm^2)
Pilot circuit	3.9 MPa (40 kgf/cm^2)
Power boost circuit	38.0 MPa (388 kgf/cm^2)

Hydraulic cylinder	Quantity	Cylinder size	Connecting rod's diameter
Boom	2	120 mm	85 mm
Arm	1	135 mm	95 mm
Bucket	1	115 mm	80 mm

Upperstructure

Revolving frame

D-shaped frame for resistance of deformation

Swing motor's reduction gear

Piston swing motor on the inclined plated with planetary gear in the oil. The swing brake is spring-set/hydraulic-released disc type.

Swing speed 13.5 rpm

Swing torque 68 kNm (6900 kgfm)

Operator's cab 1 005 mm wide by 1 675 mm high conforming to ISO* standards

* International Organization for Standardization

Undercarriage

Track

Track shoe pin is heat-resistant with dust protector seal, track tensioner (grease) and rust preventive recoil spring.

Number of roller and shoe on each side	
Upper roller	2
Lower roller	7
Track shoe	46
Track guard	1

Travel Device

Each track driven by axial piston motor at 2 speed levels.
Parking brake is spring-set/hydraulic-released disc type.
Automatic transmission: High-Low

Travel speed	High : 0 to 5.5 km/hr
	Low : 0 to 3.5 km/hr
Maximum traction force	203 kN (20 700 kgf)
Gradeability	70% (35 degree) continuous

Service Refill Capacity	
Fuel tank	400.0 L
Engine coolant	23.0 L
Engine oil	25.0 L
Lubrication oil for swing reduction gear	6.2 L
Lubrication oil for travel reduction gear	6.8 L
Hydraulic system	240.0 L
Hydraulic oil tank	135.0 L

Weights and Ground Pressure

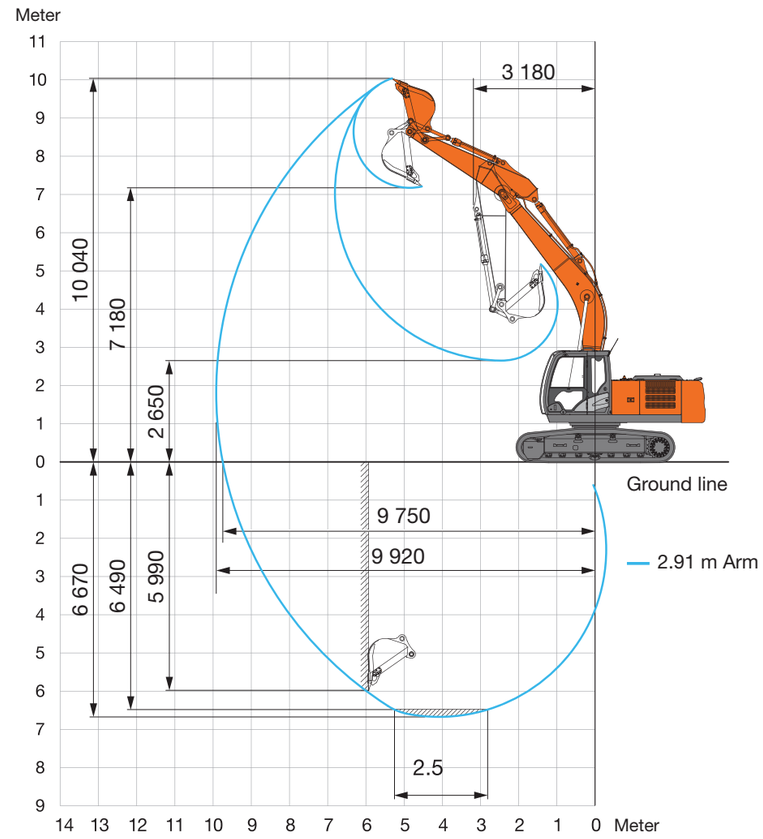
Weights and Ground Pressure

			ZX210-6G*	
Shoe type	Shoe width	Arm length	kg	kPa (kgf/cm^2)
Triple grouser	600 mm	2.91 m	19 800	44 (0.45)

*: including the weight of 1.0 m^3 reinforced bucket (ISO heaped), 810 kg weight and counterweight (4 200 kg)

Working Ranges

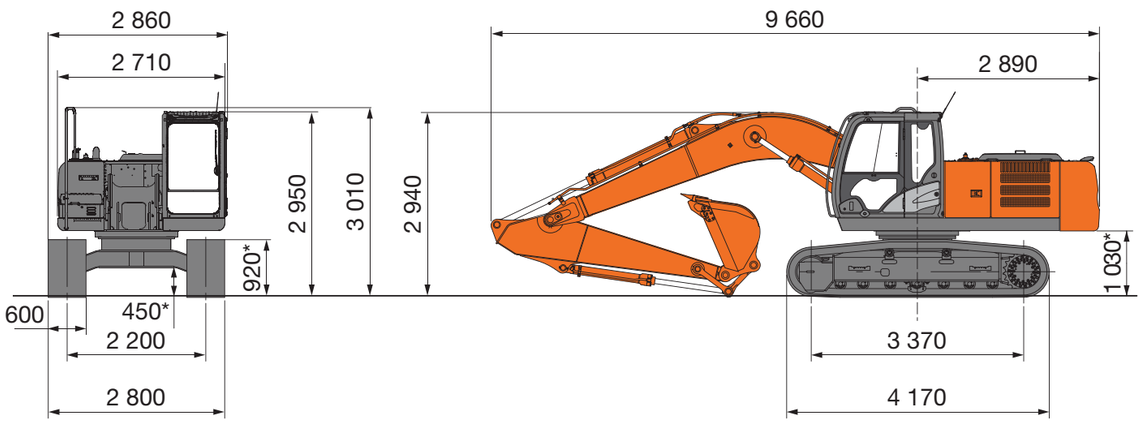
Unit: mm



Excluding track shoe lug

Dimension

Unit: mm



* Excluding track shoe lug G: Triple grouser

Weight: Machine and components

Weight of machine and overall basic width



Excluding the attachments, fuel, hydraulic oil, coolant, etc., but including the counterweight

Shoe width	Weight	Overall width
600 mm	15 400 kg	2 860 mm

Component weight

	ZX210-6G
Counterweight	4 200 kg
Boom (with boom and arm hydraulic cylinders)	2 180 kg
2.91 m arm (With bucket hydraulic cylinder)	920 kg
1.0 m^3 reinforced bucket	810 kg

Bucket and arm digging force

Arm length	2.91 m
Bucket digging force* according to ISO	158 kN (16 200 kgf)
Bucket digging force* according to SAE : PCSA	141 kN (14 400 kgf)
Arm digging force* according to ISO	114 kN (11 600 kgf)
Arm digging force* according to SAE : PCSA	110 kN (11 200 kgf)

* At power boost

Backhoe attachment

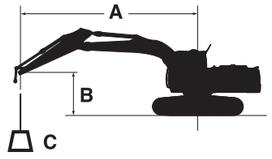
ZX210-6G

Bucket	Capacity (m^3)	Width (mm)		No. of teeth	Weight (kg)	Recommendation
	ISO7451: 2007 heaped	Without side cutters	With side cutters			Arm 2.91 m
Reinforced bucket	1.00	1 250	1 360	5	810	○

○ Suitable for materials with density of 1 800 kg/m^3 or less

Lifting capacity (without bucket)

Remark: 1. Ratings are based on ISO 10567:2007.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm level ground or 87% of full hydraulic capacity.
3. The load point is a diameter of bucket lug at the arm end.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = ground level
For the lifting capacity, deduct the weight of bucket and its lug from the lifting capacity without bucket.



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

ZX210-6G

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

Conditions	Load point height m	Load radius m 1.5		3.0		4.5		6.0		7.5		At max. reach m		
														meter
Boom 5.68 m Arm 2.91 m Counterweight 4 200 kg Shoe 600 mm	6.0							*5 220	4 670			*4 030	3 330	7.33
	4.5					*6 610	*6 610	*5 780	4 510	4 720	3 160	*3 980	2 830	8.01
	3.0					*8 530	6 480	6 500	4 270	4 610	3 060	3 880	2 570	8.37
	1.5					9 720	6 000	6 240	4 040	4 490	2 950	3 760	2 470	8.45
	0 (ground)			*4 850	*4 850	9 410	5 740	6 060	3 880	4 400	2 870	3 850	2 520	8.25
	- 1.5	*5 480	*5 480	*9 100	*9 100	9 330	5 670	5 980	3 810	4 370	2 840	4 180	2 720	7.76
	- 3.0	*9 970	*9 970	*14 390	10 890	9 400	5 730	6 020	3 840			4 960	3 220	6.90
	- 4.5			*11 250	11 250	*8 120	5 930					*6 250	4 500	5.52
	- 6.0													

Equipment

Engine	ZX210-6G
Double layer filter	●
Auto-idle system	●
Engine oil filter housing	●
First fuel filter housing	●
Main fuel filter housing	●
Dry type air filter with evacuator valve (with indicator showing when the air filter is clogged)	●
ECO/PWR mode control	●
Fan guard	●
Air filter	●
Pre-cleaner	○
Dust-proof net	●
Radiator reserve tank	●
50 A alternator	●

Hydraulic system	ZX210-6G
Automatic power boost	●
Control valve with main relief valve	●
Full-flow filter	●
Full-flow filter with indicator showing when the filter is clogged	○
Pilot filter	●
Power boost circuit	●
Suction filter	●
Extra port for control valve	●
Power mode selector	●

Cab	ZX210-6G
All weather sound-suppressed steel cab	●
AM/FM radio with 2 speakers	●
AUX. terminal and storage	○
Glove compartment	●
Ashtray	●
Automatic A/C system	●
Cabin (reinforced)	●
Cup holder	●
Hot and cold cup holder	●
Dual electric horn	●
Engine shut-off lever	●
Fire extinguisher installed	○

Cab	ZX210-6G
Fire extinguisher bracket	○
Floor mat	●
Front windshield washer	●
Windows on front, upper, lower and left side can be opened	●
Front, lower cabin guard	○
Front, upper cabin guard	○
Glove compartment	●
Cooling and heating box	●
Windshield wiper	●
Ignition key illumination light	●
LED cabin light with door light	●
OPG compliant cabin conforming to I Leve I (ISO10262)	●
Pilot control shut-off lever	●
Rear drawer	●
Retracable seat belt	●
Rubber radio antenna	●
Seat: Fabric Comfort Seat	●
Seat adjuster: Seatback, armrest, height and angle, sliding forwards/backwards	●
Control lever	●
4 points of cab rubber support	●
24 V cigarette lighter	●

Monitoring system	ZX210-6G
Warning lamps: heat, overload engine oil pressure	●
Warning lamps: Heat, engine warning, engine oil pressure, alternator, min. fuel level, air cleaner clog, operating mode, overload, etc.	●
Meters: water temperature, working hours, oil level, clock	●
Others: Auto-idle system, lighting, operating conditions, etc.	●
32 languages supported	●

Standard and optional equipment may vary by country. Please consult your Hitachi dealer for more details.

● : Standard equipment ○ : Optional equipment

Lights	ZX210-6G
Additional light on the roof, at the front cab	○
One light on boom base	●
Operating light	●

Upperstructure	ZX210-6G
Electric fuel pump	○
Fuel level float	●
Hydraulic oil level gauge	●
Rear-view camera	○
Rear-view mirror	●
Swing parking brake	●
Tool box	●
Undercover	●
6.0 mm reinforced sheet	○
Utility space	●
4 200 kg counterweight	●
Two 88 Ah batteries	●
Automatic greasing system	○
Control valve guard	○
Pedestrian Alert system installed	○

Undercarriage	ZX210-6G
Bolt-on sprocket	●
Reinforced track link with pin seal	●
Reinforced front idler frame	●
Travel motor cover	●
Automatic parking brake	●
Parking brake	●
Track guard and hydraulic track adjuster	●
Upper and lower rollers	●

Undercarriage	ZX210-6G
One Track guards	●
4 anchor point for transportation	●
600 mm triple grouser shoes	●
Guard installed	○
Full roller guard installed	○
Rubber pad installed	○
Rust preventive coating	●
Additional mud guard	○

Front attachments	ZX210-6G
Single point greasing system	●
Dust protection seal on all bucket pins	●
Joint pin	●
HN bushing	●
Reinforced resin thrust plate	●
WC thermal spray coating (tungsten-carbide)	●
1.0 m^3 bucket (ISO heaped)	● Reinforced
2.91 m arm	●
Boom 5.68 m	●

Attachments	ZX210-6G
Hydraulic piping system for attachments	●
Pipes for breaker and crusher	●

Miscellaneous	ZX210-6G
Lockable fuel tank cap	●
Lockable machine covers	●
On-board controller	●
Handrails and skid-resistant tapes	●
Standard tool box	●
Global e-Service	●

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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