

SUMITOMO

# SUMITOMO

## SH210-6 SH210LC-6

- Engine Rated Power (Net): 117.3 kW·159.5 PS
- Operating Weight:  
SH210-6 ..... 20,100 kg
- SH210LC-6 ..... 20,400 kg
- Bucket: ISO/SAE/PCSA Heaped: 0.50~1.10 m<sup>3</sup>

LEGEST  
HYDRAULIC EXCAVATOR FOR REAL PERFORMANCE



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We are constantly improving our products and therefore reserve the right to change designs and specifications without notice.  
Illustrations may include optional equipment and accessories and may not include all standard equipment.

# *Performance Refined. Evolution Defined.*



## **ENGINEERED IN JAPAN**

The world knows that Japanese designed and engineered products represent the highest quality, especially for Industrial Products. The hydraulic excavator is no exception when a totally integrated concept is required in design work involving key components, manufacturing engineering, and product quality assurance in the factory. SUMITOMO hydraulic excavators are designed and manufactured today to meet the global demands of our many customers with the concept of Performance, Reliability, and Fuel Efficiency foremost in our minds. This proven Japanese technology and quality gives SUMITOMO excavator customers total peace of mind and provide a complete solution for the demands of the construction industry.

## **Engine and Hydraulics** 04-07

- New Generation Engine System "SPACE 5+"
- New Hydraulic System "SIH:S+"
- SUMITOMO Fuel Efficiency Technology
- Dramatically Increased Productivity

## **Durability and Maintenance** 08-11

- High Rigidity Attachments
- EMS
- Ground Level Maintenance

## **Safety and Operator Comfort** 12-17

- Stylish and Spacious Cabin
- High-Definition Full Colour LCD Monitor

## **Specifications** 18-26



**Performance Refined.  
Evolution Defined.**



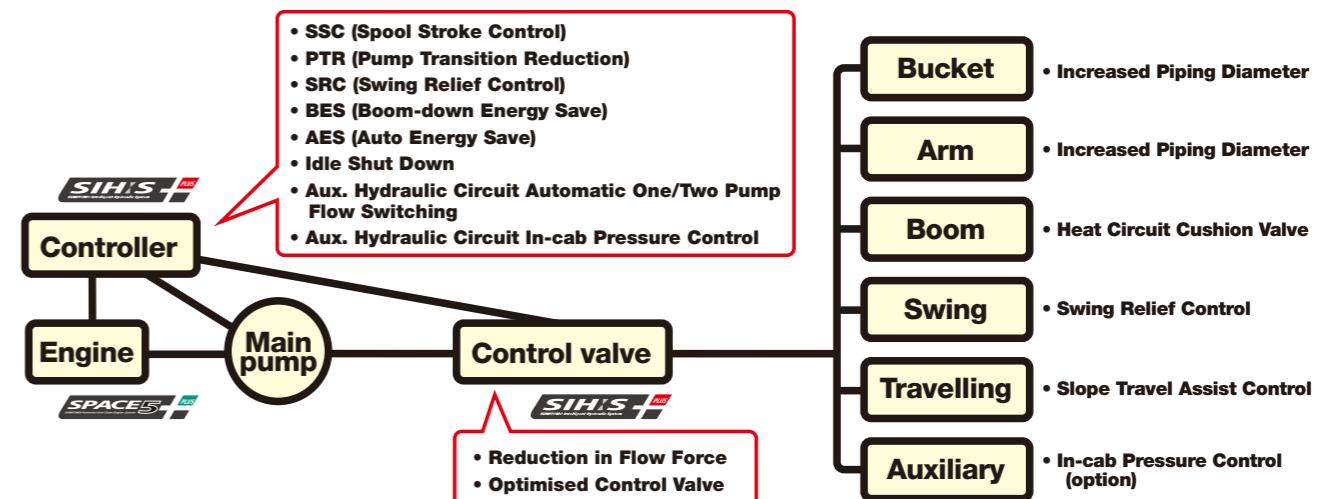
New Engine System  
**SPACE 5+<sup>PLUS</sup>** + New Hydraulic System  
**SIHIS<sup>PLUS</sup>** = **14% Reduction in Fuel Consumption**  
(as compared with SH210-5 [H mode])

#### New Generation Engine System "SPACE 5+"

The new engine system optimises fuel efficiency and environmental performance via the advanced common rail fuel injection system, cooled EGR system, and turbocharger. At the same time, excellent response times are achieved.

## Engine and Hydraulics

SH210-6 has achieved a 14% reduction in fuel consumption in comparison with our DASH 5 series, by fusing the new generation engine system "SPACE 5+" and the new hydraulic system "SIH:S+", further refining fuel efficiency. At the same time the newly developed ISUZU engine, contributes greatly to the environment.



#### Mode Selection by Throttle SUMITOMO UNIQUE DESIGN

There are three working modes available:  
SP (Super Power) for heavy duty applications,  
H (Heavy) for normal working conditions,  
A (Auto) for a wide range of operations.



#### SUMITOMO Technology for Fuel Efficiency

● **SSC (Spool Stroke Control)** SUMITOMO UNIQUE DESIGN  
Reduces engine load upon heavy duty operation.

● **BES (Boom-down Energy Save)** SUMITOMO UNIQUE DESIGN  
Lowers engine speed upon boom-down and swing operation which does not require large oil flow.

● **AES (Auto Energy Save)** SUMITOMO UNIQUE DESIGN  
Lowers engine speed accordingly when low engine load is sensed.

● **PTR (Pump Transition Reduction)**  
Decreases engine load when the pump flow requirement is reduced upon abrupt pump load.

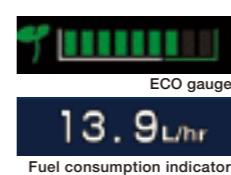
#### ● **Idle Shut Down & Auto Idle**

Upon activation, idle shut down automatically shuts the engine down when the machine is not in operation for set amount of time. Auto Idle is also available, which makes the engine begin idling approximately five seconds after the operation levers are in neutral position.



#### ECO Gauge Showing Low Energy Operation

The energy saving conditions can be seen at a glance, as well as the fuel consumption indicator shown on the monitor.





## Engine and Hydraulics



SUMITOMO's original technology Spool Stroke Control (SSC), perfectly matches the engine and hydraulic power, and further improves the operational speed whilst maintaining smooth control of the machine.

### Work Efficiency Drastically Increased SUMITOMO UNIQUE DESIGN

Spool Stroke Control (SSC) variably controls spool port flow rate, depending on the condition of operation. Improved power, speed, and smoother controls mean that work efficiency is dramatically increased.

### Real Digging Power

The true digging force can not be expressed by a maximum digging power figure listed in sales brochures. With an improved hydraulic system and with a large arm cylinder, the arm-in motion speed slowdown is minimised. The digging power when combined with the attachment speed in motion convert to the operator's "Real Digging Power".

### 4% Faster Cycle Time (SP mode)

Speed increase by 4% in cycle time has been achieved, giving further advance in productivity (as compared with SH210-5 [SP mode]).

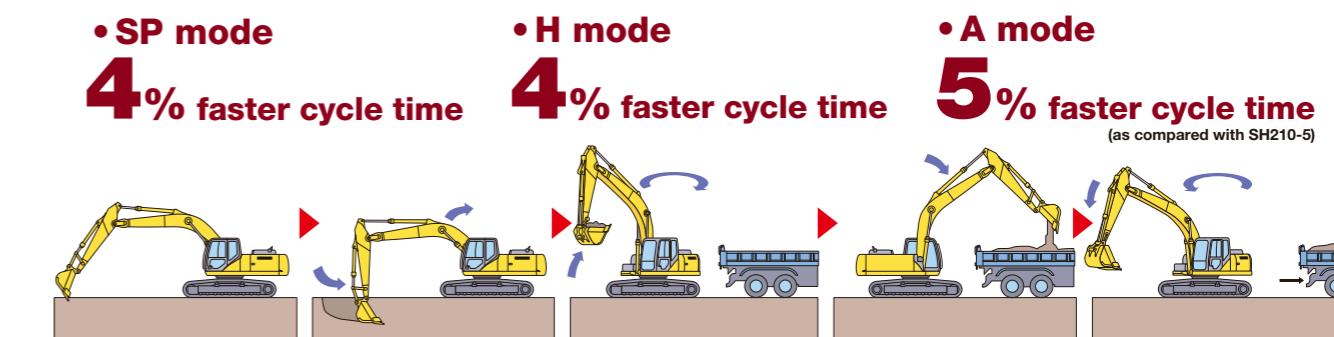
### Automatic Power Boost

The digging power increases automatically in quick response to the working conditions during heavy-duty digging work. This is a design unique to SUMITOMO, and continues for eight seconds (SP/H mode).

### Speed and Power, Dramatically Increases Productivity

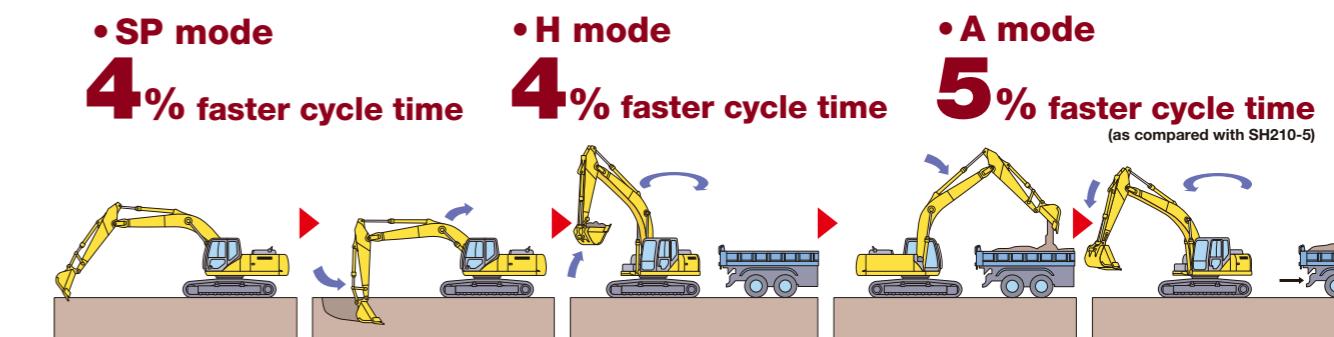
#### • SP mode

**4%** faster cycle time



#### • H mode

**4%** faster cycle time



#### • A mode

**5%** faster cycle time  
(as compared with SH210-5)

### Operating Condition Easily Viewable on Display

Various control such as working modes and auxiliary hydraulic setting can be easily selected by the universally designed switch panel, and what's being selected can be easily viewed on the 7" wide monitor.



# Durability and Maintenance



## EMS (Easy Maintenance System) as Standard

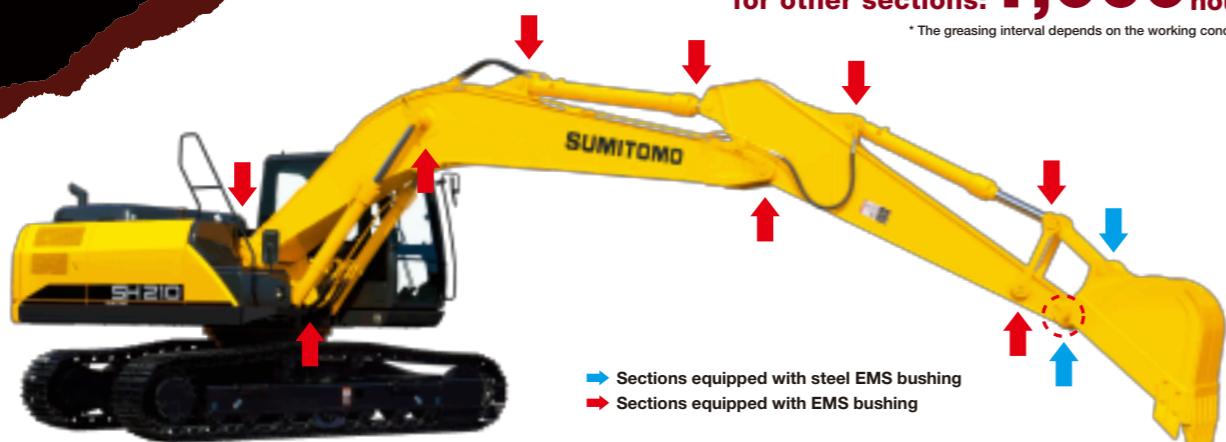
SUMITOMO's EMS keeps the pins and bushes fully lubricated at all times and prevents rattling. This system significantly extends the service life of the pins and bushes.

The lubrication interval around the bucket is 250 hours, and for the other sections is 1,000 hours, keeping the joints lubricated for a long time and extending the service life of parts by reducing abrasion and rattling.

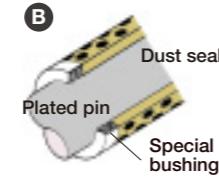
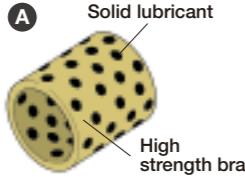
**• Bucket greasing interval: 250 hours**

**• Greasing interval for other sections: 1,000 hours**

\* The greasing interval depends on the working conditions.



### ■ EMS bushing



A A solid lubricant embedded in high strength brass forms a layer on the bushing surface to prevent contact between metals, maintaining an excellent lubricated state to reduce abrasion of joints.

B The surface of the pin is plated to increase the surface hardness and improve the wear resistance accordingly.

① Grease is enclosed, however greasing is necessary every 1000 hours or six months depending on the level of dusting conditions.

② Greasing is also necessary after any components have been submerged underwater for prolonged periods.

③ Greasing is also recommended after use with hydraulic breakers, crushers or other high impact attachments such as Rock Saws etc.

④ Bucket pins should be cleaned thoroughly when removing or attaching new buckets.

### Precautionary use of EMS

### ■ Steel EMS bushing

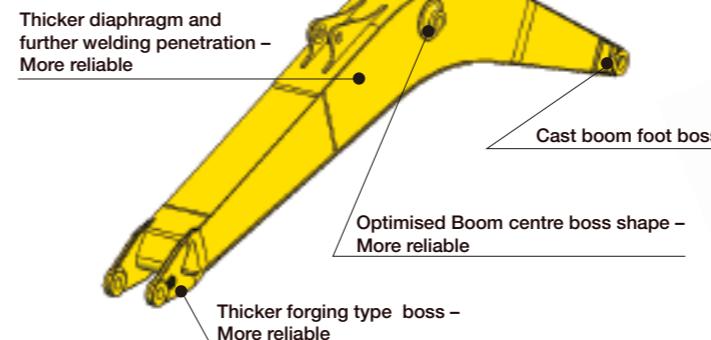


Steel EMS is installed around the bucket

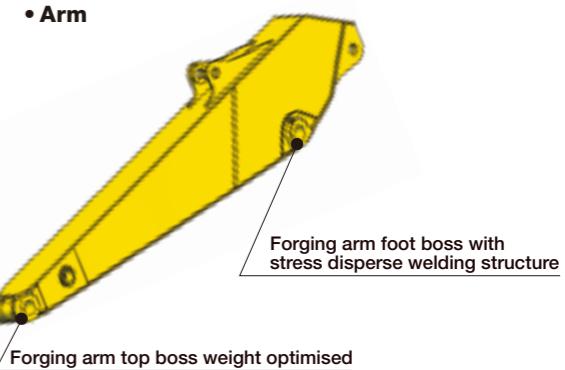
## High Rigidity Attachments

The structure of the boom and arm has been further improved, ensuring strength and durability. In addition, high strength castings are used for the boom base and arm end, improving reliability.

### • Boom

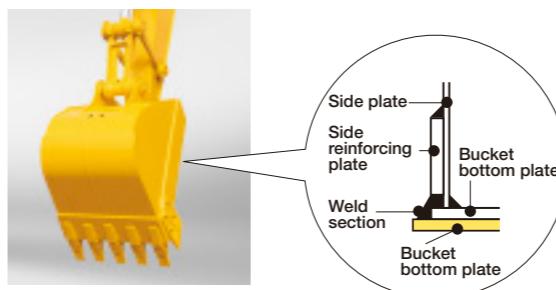


### • Arm



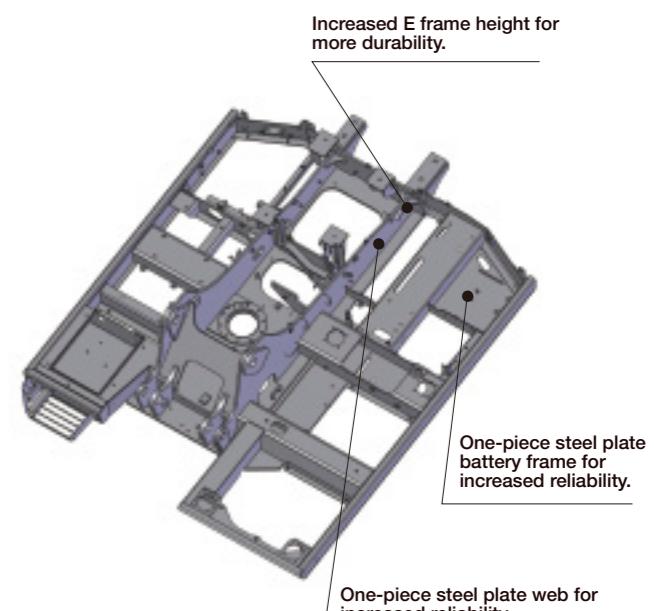
## Bucket

A one-piece wear plate covers the weld section to increase the wear life of the bucket.



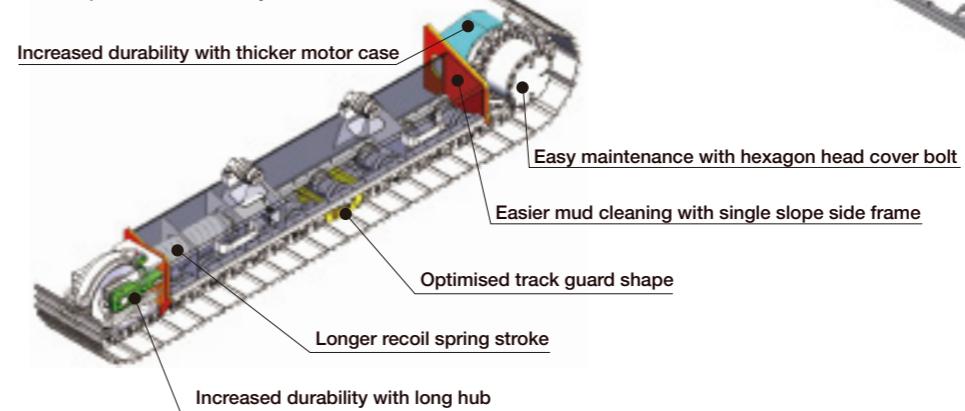
## High Rigidity Swing Frame

The swing frame has been strengthened to support the new cabin, as well as to increase durability.



## High Rigidity Undercarriage

For improved mobility, the track system has been strengthened ensuring longer wear life, performance, and improved reliability.





**Performance Refined.  
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## Durability and Maintenance

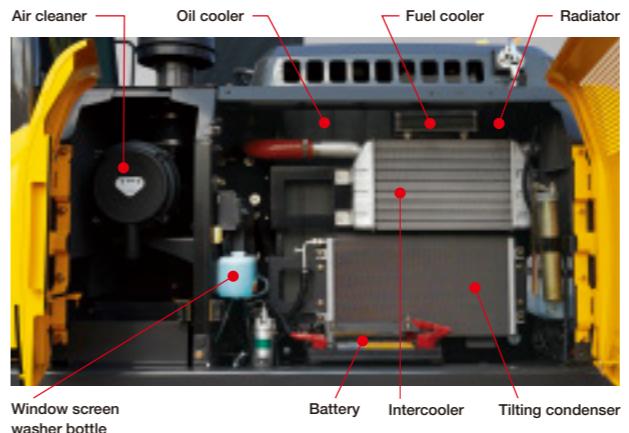
**Serviceability and durability are also important points of machine performance. Ground level access to the engine area makes daily maintenance extremely straightforward. Reliability has been further enhanced by increasing cooling capability and durability.**

### Ground Level Access to Engine Area Improves Preventative Maintenance

Parts cleaning and maintenance are possible from the ground without climbing onto the upper structure of the excavator body.

- **Increased Cooling Capability**

With the larger radiator and oil cooler, cooling capacity is increased, thus improving reliability. In addition, cleaning of the dust-proof net is simplified.



### High-Performance Return Filter

The hydraulic oil change interval is 5,000 hours, and the return filter change interval is 2,000 hours. One high performance return filter keeps the same level of filtering as a nephron.



- **Hydraulic oil change: 5,000 hours**

- **Life of filter: 2,000 hours**

\* The oil and filter change interval varies by the working conditions.

### Cab Floor Mat SUMITOMO UNIQUE DESIGN

The washable floor mat has been redesigned for ease of removing and cleaning.

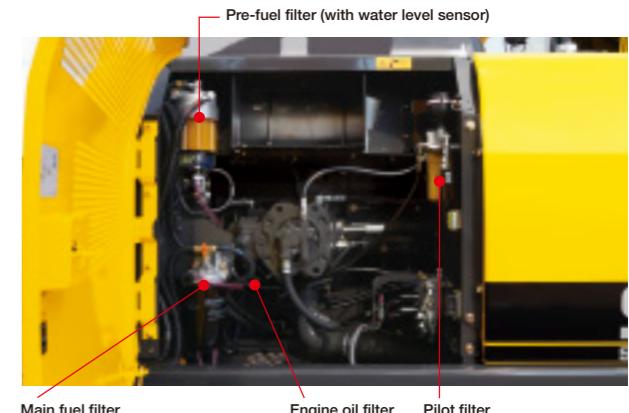


### New Side Frame Shape

The cross-sectional shape has been redesigned to make cleaning easier.

- **Easy Filter Replacement**

A fuel prefilter and main fuel filter are provided as standard equipment to reduce trouble. In addition, the fuel and oil filters are installed at ground-accessible location to facilitate replacement.



### Easy Access to A/C Filter

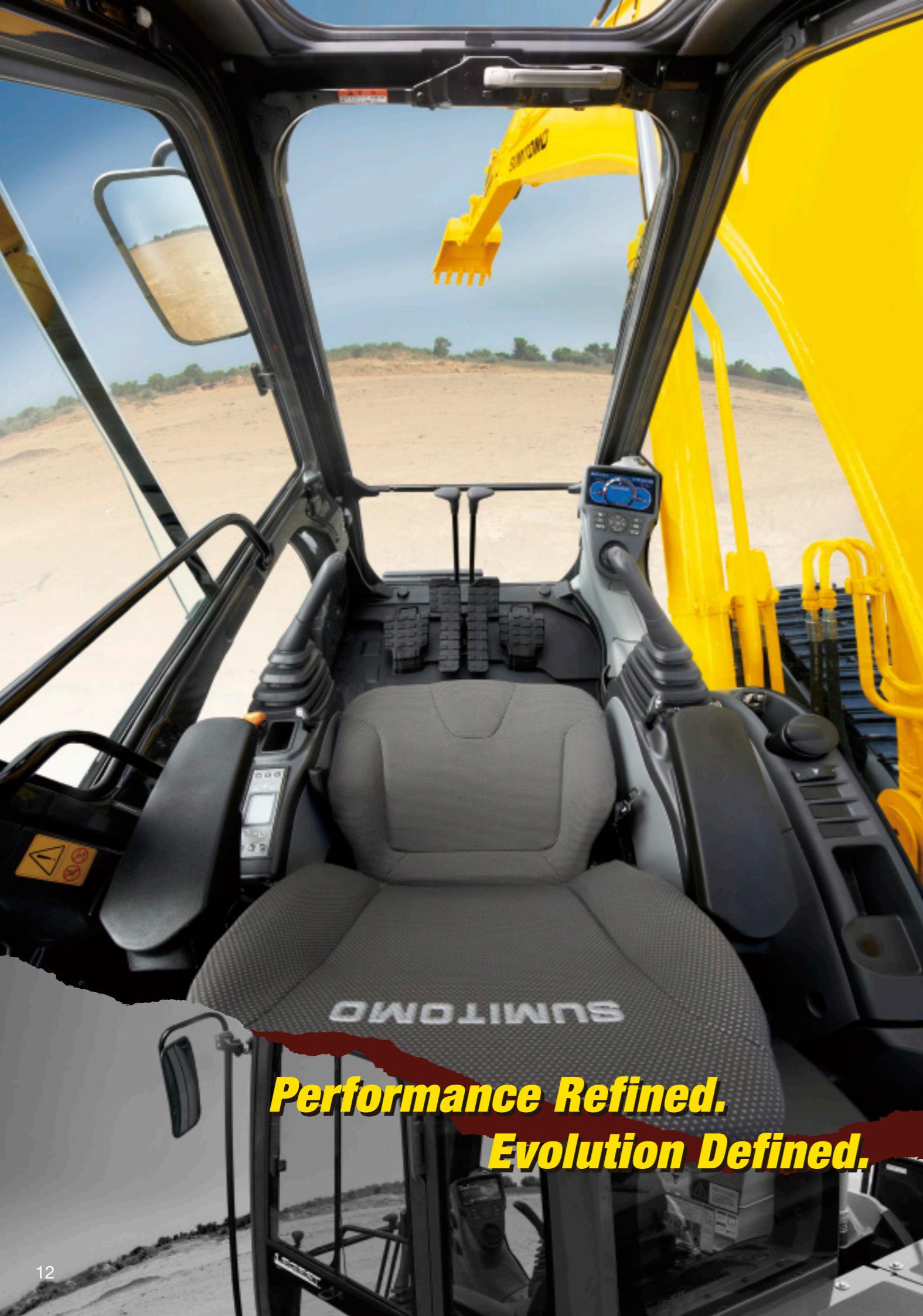
The air intake filter is located in a lockable compartment to make it easier to replace, and access to the inside cab filter has been simplified.



### Fuse Box Location

The fuse box has been located in a separate compartment behind the seat, allowing easier access.



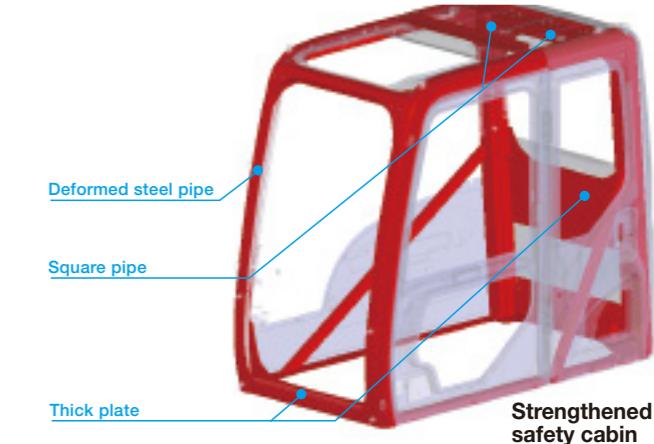


## Safety and Operator Comfort

**A new strengthened safety cabin has been provided. The reinforced cabin greatly increases operator's safety.**

### Newly Designed Safety Cabin

The optimised design and strengthened parts increase the overall cabin strength.



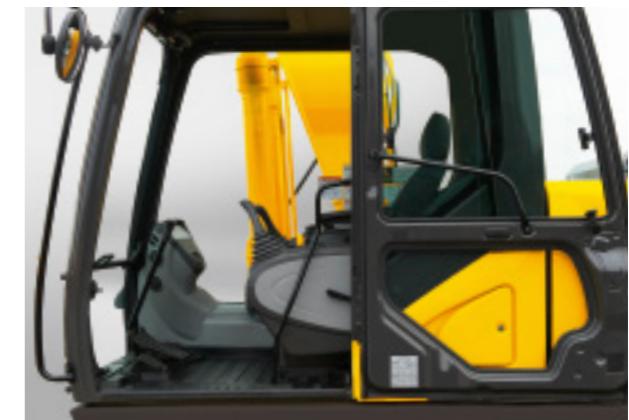
### Wide View Increases Safety of Work

In addition to the wide front view, the upper view has been widened to enhance work safety.



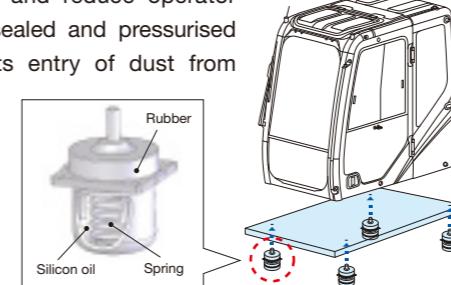
### Safe and Easy Entry into and Exit from the Cab

A large handrail for easy opening/closing of the door and increased floor space permit the operator to get in and out of the cab easily.



### New Cab Suspension Mounts

The new cab suspension mounts reduce vibration and impact transmitted to the cabin, and improve the operator's sitting quality and reduce operator fatigue. The sealed and pressurised cabin prevents entry of dust from outside.



**Performance Refined.  
Evolution Defined.**

### New OPG Level 2 Head Guard (option)

OPG Level 2 head guard is available as an option. The see-through grille has been redesigned for better protection and visibility.



### Easy Access to the Upper Structure



### Cab Front Guard (option)

The optional cab front guard increases security from flying debris during wrecking work or the like.

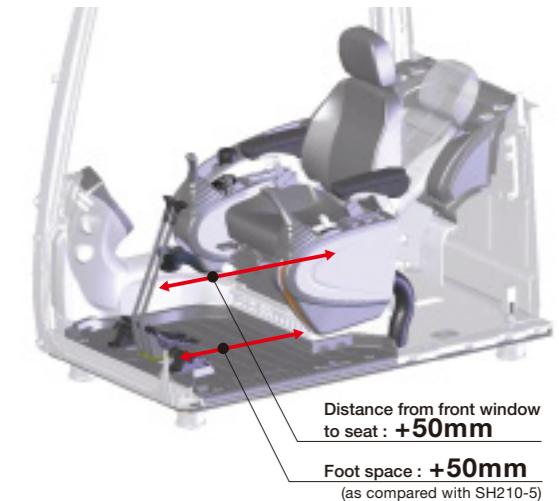


## Safety and Operator Comfort

**The spacious cab on suspension mounts and reclining suspension seat help reduce operator fatigue and provide a relaxed environment.**

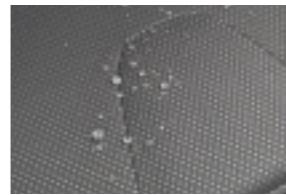
### Stylish and Spacious Cab

Wide cab space and floor space ensure more comfortable operation. In addition to the tilting console that is adjustable in four steps vertically, the increased sliding distance ensures optimum working conditions. Moreover, in cab noise level has been reduced by 2dB (as compared with SH210-5).



### Sophisticated Reclining Seat

The seat reclining system allows the operator to lay the seat flat and to rest on site without having to remove the headrest. The suspension seat eliminates vibration and fatigue. Air suspension is also available as option.



The highly water repellent seat covering is tough on dirt and water.



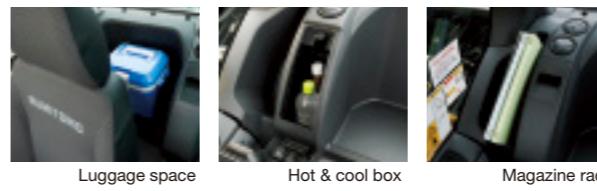
Air suspension (option)

### Auxiliary Operation Pedal

The auxiliary operation pedal is lighter to depress and the pedal angle is adjustable.



### Comfortable Equipment



### Automatic Air Conditioner

Fully automatic climate control is available through the eight vents, with an 8% stronger A/C unit, and a 24% improvement in airflow. (as compared with SH210-5)



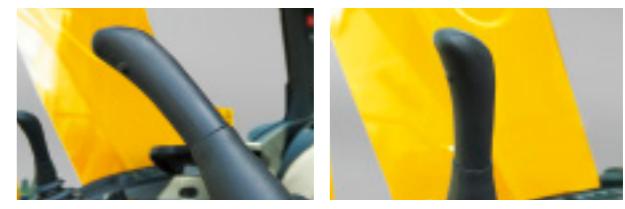
### Radio and Speaker with USB Port and MP3 Jack

In addition to the AM/FM radio and dual speaker system with improved sound quality, auxiliary audio port is provided standard for devices such as MP3 players.



### Lever Switches

One-touch idle, horn, radio mute, or one-touch wiper buttons are installed on the operation levers in consideration of improved operability while working.



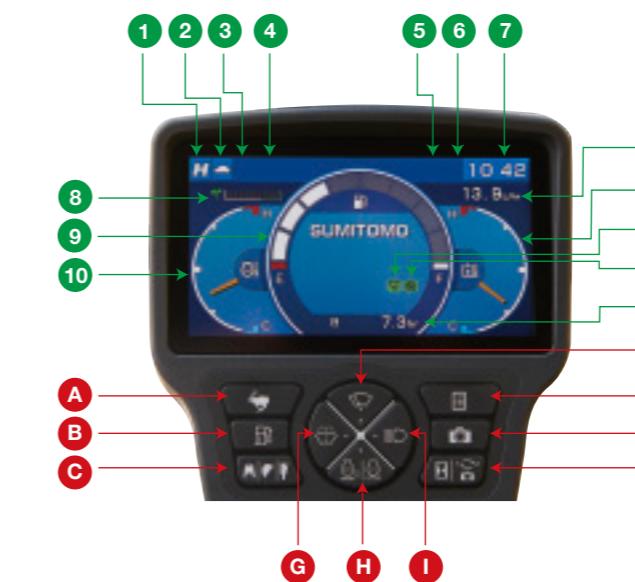


## Safety and Operator Comfort

To support the operator in the field, the DASH 6 incorporates a 7" wide full colour LCD monitor with numerous functions and universally designed switch panel. The cabin with enhanced operator comfort ensures a safe working environment.

### Large High-Definition LCD Monitor

A new large high-definition full colour LCD monitor has been introduced with better visibility and a switch panel which is easy to operate. Added functionality such as ECO gauge showing parameter of energy saving, display of operation status and warning messages, provides accurate information which improves work efficiency and safety.



#### Indicators

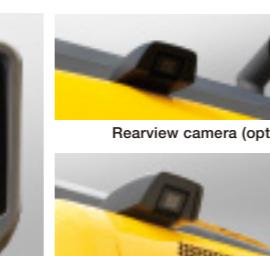
- 1 Working modes
- 2 Travel speed
- 3 Work lights
- 4 Engine idle modes
- 5 Free swing / Anti-theft
- 6 Attachment selection
- 7 Digital clock
- 8 ECO gauge
- 9 Fuel level gauge
- 10 Engine coolant temperature
- 11 Fuel consumption indicator
- 12 Hydraulic oil temperature
- 13 Power boost
- 14 Radio mute
- 15 Hour meter

#### Switch Panel

- |                            |                                     |
|----------------------------|-------------------------------------|
| A Travel speed button      | F Hour meter / Camera toggle button |
| B Fuel consumption button  | G Window washer control             |
| C Aux. hydraulics settings | H Engine idle mode button           |
| D Computer menu            | I Worklights on/off                 |
| E Camera on/off            | J Window wiper control              |

### Rearview Camera (option)

With the rearview camera, the operator can view the image on the large LCD monitor. A side camera is available as option and up to two different images can be displayed on the monitor.



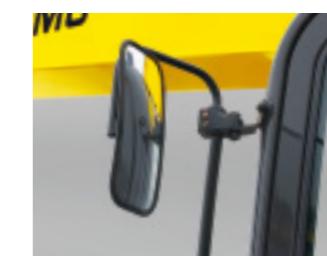
Rearview camera (option)



Side camera (option)

### Rearview Mirror

The rearview mirrors reduce blind spots during operation. ISO compliant mirrors also available as option.



Front mirror

Side mirror

# Specifications

## SH210(LC)-6 Technical Data

Electronic-controlled engine of SPACE 5+ and SH:S+ with New Hydraulic System Includes: three working modes (SP, H and A), one-touch/automatic idling system, automatic power-boost, speed assistance system, power-swing system.

### Engine

SH210(LC)-6	
Model	ISUZU GI-4HK1X
Type	Water-cooled, 4-cycle diesel, 4-cylinder in line, high pressure common rail system (electric control), turbocharger with air cooled intercooler.
Rated output	117.3 kW (159.5 PS) at 1,800 min <sup>-1</sup>
Maximum torque	606 N·m at 1,500 min <sup>-1</sup>
Piston displacement	5.19 ltr (5,193 cc)
Bore and stroke	115 mm x 125 mm
Starting system	24 V electric motor starting
Alternator	24 V, 50 A
Fuel tank	410 ltr
Air filter	Double element

### Hydraulic pumps

Two variable displacement axial piston pumps provide power for boom/arm/bucket, swing, and travel. One gear pump for pilot controls.

SH210(LC)-6	
Maximum oil flow	2 x 211 ltr/min
Pilot pump max.oil flow	18 ltr/min

### Hydraulic motors

For travel: Two variable displacement axial piston motors.  
For swing: One fixed displacement axial piston motor.

### Relief valve settings

Boom/arm/bucket ..... 34.3 MPa (350 kgf/cm<sup>2</sup>)  
Boom/arm/bucket ..... 36.8 MPa (375 kgf/cm<sup>2</sup>) with auto power-up  
Swing circuit ..... 29.4 MPa (300 kgf/cm<sup>2</sup>)  
Travel circuit ..... 34.3 MPa (350 kgf/cm<sup>2</sup>)

### Control valve

With boom/arm holding valve  
One 4-spool valve for right track travel, bucket, boom and arm acceleration  
One 5-spool valve for left track travel, auxiliary, swing, boom acceleration and arm

### Oil filtration

Return filter ..... 6 microns  
Pilot filter ..... 8 microns  
Suction filter ..... 105 microns

### Hydraulic cylinders

Cylinder	Q'ty	Bore x Rod Diameter x Stroke
Boom	2	120 mm x 85 mm x 1255 mm
Arm	1	140 mm x 100 mm x 1460 mm
Bucket	1	120 mm x 85 mm x 1010 mm

Double-acting, bolt-up type cylinder tube-end; hardened steel bushings  
Installed in cylinder tube and rods ends.

### Cabin & controls

The cabin is mounted on four fluid mountings. Features include safety glass front, rear and side windows, adjustable upholstered suspension seat with headrest and armrest, cigarette lighter, pop-up skylight window, and intermittent wiper with washer.

Front window slides upward for storage and the lower front window is removable. Control levers are located in four positions tilting control consoles. Built-in type full-colour monitor display. Membrane switch on monitor display.

### Swing

Planetary reduction powered by axial piston motor. The internal ring gear with grease cavity for pinion. Swing bearing is single-row shear type ball bearing. Dual stage relief valves for smooth swing deceleration and stops. Mechanical disc swing brake.

### SH210(LC)-6

Swing speed	0~11.5 min <sup>-1</sup>
Tail swing radius	2,750 mm
Swing torque	64 kN·m (6,526 kgf·m)

### Undercarriage

X-style carbody is integrally welded for strength and durability. Grease cylinder track adjusters with shock absorbing springs. Undercarriage with lubricated rollers and idlers.

### Type of shoe: sealed link shoe

#### Upper rollers -

Heat treated, mounted on steel bushings with leaded tin bronze casting, sealed for lifetime lubrication.

#### Lower rollers -

Heat treated, mounted on steel bushings with leaded tin bronze casting, sealed for lifetime lubrication.

#### Track adjustment -

Idler axles adjusted with grease cylinder integral with each side frame; adjustment yoke mechanism fitted with heavy duty recoil spring.

### Number of rollers and shoes on each side

	SH210-6	SH210LC-6
Upper rollers	2	2
Lower rollers	7	8
Track shoes	46	49

### Travel system

Two-speed independent hydrostatic system with compact axial motors for increased performance. Hydraulic motor powered output shaft coupled to a planetary reduction unit and track sprocket. All hydraulic components mounted within the width of side frame.  
Travel speed can be selected by the switch panel on the monitor display. Hydraulically released disc parking brake is built into each motor.

### SH210(LC)-6

Travel speed	High	5.6 km/h
	Low	3.4 km/h
Drawbar pull	188 kN (19,171 kgf)	

### Lubricant & coolant capacity

SH210(LC)-6	
Hydraulic system	240 ltr
Hydraulic oil tank	147 ltr
Fuel tank	410 ltr
Cooling system	30.8 ltr
Final drive case (per side)	5.0 ltr
Swing drive case	5.0 ltr
Engine crank case	23.1 ltr

### Auxiliary hydraulic system

SH210(LC)-6			
Auxiliary piping type (option)	For Breaker	For Double (breaker & crusher) acting	For D/A + Second option line
Arm type	STD	HD	HD
Bucket linkage type	HD	HD	HD
Auxiliary hydraulic pump flow	211 ltr/min	422 ltr/min	422+60 ltr/min

## Bucket

Model	Bucket capacity (ISO/SAE/PCSA heaped)	SH210(LC)-6							
		0.5 m <sup>3</sup>	0.8 m <sup>3</sup>		0.9 m <sup>3</sup>		1.0 m <sup>3</sup>		1.1 m <sup>3</sup>
Bucket type	STD	STD	Horizontal -pin	HD	Horizontal -pin	STD	STD	Horizontal -pin	STD
Number of teeth	4	5		5		6		6	
Width unit: mm	With side cutter	830	1130	1136	1230	1360	1260	1360	
Width unit: mm	Without side cutter	730	1030	1036	1130				
Weight unit: kg		514	645	630	727	685	665	737	807
Combination	2.40 m arm	○(○)	○(○)	○(○)	●(○)	△(●)	△(△)	△(△)	
Combination	2.94 m arm	○(○)	●(○)	●(○)	○(●)	△(△)	△(△)	△(△)	

○ Suitable for materials with density up to 2,000 kg/m<sup>3</sup> or less

● Suitable for materials with density up to 1,800 kg/m<sup>3</sup> or less

○ Suitable for materials with density up to 1,600 kg/m<sup>3</sup> or less

△ Suitable for materials with density up to 1,400 kg/m<sup>3</sup> or less

Figure in ( ) : LC type

## Weight & Ground Pressure

Model	Shoe type	SH210-6			
		Shoe width	Overall width	Operating weight	Ground pressure
	600 mm	2 800 mm		20 100 kg	45 kPa
	700 mm	2 900 mm		20 400 kg	39 kPa
	800 mm	3 000 mm		20 600 kg	35 kPa

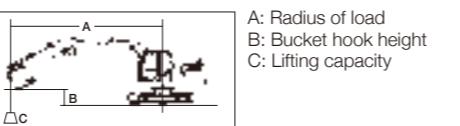
## SH210LC-6

Model	Shoe type	SH210LC-6			
		Shoe width	Overall width	Operating weight	Ground pressure
	600 mm	2 990 mm		20 400 kg	42 kPa
	700 mm	3 090 mm		20 900 kg	

## Lifting Capacity

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 a hook (not standard equipment) located on the back of the bucket.
- 4. \*Indicates load limited by hydraulic capacity.
- 5. 0 m = Ground.



**SH210-6** SHOE : 600 (mm)G  
BUCKET : SAE/PCSA 0.80 (m<sup>3</sup>) ARM LENGTH = 2.94 (m)  
MAXIMUM REACH = 9.90 (m) BOOM : 5.70 (m)

Bucket Hook Height	Radius of Load											
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m	Min. Radius
8 m	(kg) 2270*	(m) 7.33	(kg) 2270*	(m) 7.33			3140* 3140*					(kg) 2660* 6.29 (m) 6.29
7 m	2150* 8.12	2150* 8.12		2600* 2510	3690* 3320							3220* 6.24 3220* 6.24
6 m	2090* 8.71	2070 8.71		3800* 2510	4040* 3270							4080* 6.15 4010 6.15
5 m	2080* 9.12	1850 9.12	2590* 1910	3780 2470	4300* 3190	4390* 4170						4420* 5.72 4420* 5.72
4 m	2100* 9.39	1700 9.39	2970 1880	3710 2400	4600* 3080	5120* 4050	5740* 5410	6010* 6010*				5200* 3.57 5200* 3.57
3 m	2160* 9.54	1610 9.54	2920 1830	3620 2320	4570 2970	5780* 3870	6770* 5230	7460 10030* 10030*				7500* 2.11 7500* 2.11
2 m	2240* 9.56	1570 9.56	2870 1780	3530 2240	4400 2850	5750 3680	7640* 4920	10140* 6960 12580* 10970				4720* 2.42 4720* 2.42
1 m	2360* 9.48	1570 9.48	2820 1740	3450 2160	4320 2730	5550 3510	7480 4650	10890* 6510 8210* 8210*				3600* 2.28 3600* 2.28
0 m	2530* 9.28	1610 9.28	2780 1700	3380 2100	4210 2630	5390 3370	7250 4450	10620 6220	8370* 4880* 4880*			3700* 1.55 3700* 1.55
-1 m	2780 8.97	1700 8.97		3340 2060	4130 2560	5290 3270	7100 4320	10480 6120	9630* 9540 6710* 6710*	5880* 5880*	4100* 0.51 4100* 0.51	
-2 m	3020 8.54	1850 8.54		3350 2060	4110 2540	5250 3240	7070 4300	10490 6130	11560* 9750 8420* 8420*	7470* 7470*	5880* 0.30 5880* 0.30	
-3 m	3390 7.96	2100 7.96			4160 2590	5280 3280	7110 4350	10560 6200	14230* 10190 10520* 10520*	8930* 8930*	7690* 0.37 7690* 0.37	
-4 m	3980 7.23	2480 7.23			4250 2670	5390 3380	7220 4450	10590 6340	14220* 10370 14610* 14610*	10990* 10990*	10190* 0.72 10190* 0.72	
-5 m	5050 6.28	3170 6.28				5450 3490	7270 4670	9600* 6550	12390* 10600* 16950* 16950*		14800* 1.47 14800* 1.47	
-6 m	5960* 4.67	5130 4.67					7270* 6540				8280* 3.50 8050 3.50	

**SH210-6** SHOE : 600 (mm)G  
BUCKET : SAE/PCSA 0.90 (m<sup>3</sup>) ARM LENGTH = 2.40 (m)  
MAXIMUM REACH = 9.42 (m) BOOM : 5.70 (m)

Bucket Hook Height	Radius of Load											
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m	Min. Radius
8 m	(kg) 3390*	(m) 6.61	(kg) 3390*	(m) 6.61			3550* 3550*					(kg) 3100* 5.91 (m) 5.91
7 m	3190* 7.51	2750 7.51			4130* 3190	3870* 3870*						3400* 5.73 3400* 5.73
6 m	3110* 8.14	2310 8.14		3710 2400	4360* 3160	4550* 4170						4560* 5.61 4560* 5.61
5 m	3080* 8.59	2030 8.59		3680 2380	4620* 3090	4840* 4070	5340* 5340*					4780* 4.79 4780* 4.79
4 m	2960 8.89	1850 8.89		3620 2320	4590 2980	5490* 3910	6300* 5310	7300* 7300*				8010* 3.42 8010* 3.42
3 m	2820 9.05	1740 9.05	2860 1770	3540 2250	4460 2870	5790 3730	7350* 5020	8650* 7150				6380* 3.00 6380* 3.00
2 m	2770 9.08	1700 9.08	2820 1730	3460 2170	4340 2750	5600 3560	7580 4740	10090* 6640				6020* 3.23 6020* 3.23
1 m	2780 8.99	1700 8.99		3390 2110	4230 2650	5430 3400	7310 4500	10690 6280				6310* 3.12 6310* 3.12
0 m	2880 8.78	1760 8.78		3340 2060	4140 2570	5310 3290	7130 4340	10470 6100	7350* 5690* 5690*			6310* 2.11 6310* 2.11
-1 m	3060 8.45	1880 8.45		3330 2050	4100 2530	5240 3230	7060 4280	10460 6100	7350* 5690* 5690*			4420* 5.72 4420* 5.72
-2 m	3370 7.97	2080 7.97			4120 2550	5250 3240	7080 4310	10520 6160	12470* 870 9270* 9720*	7720*	6720* 0.95 6720*	
-3 m	3880 7.33	2420 7.33			4220 2640	5320 3310	7150 4390	10580 6270	14440* 10320 12110* 12110*		9690* 1.03 9690* 1.03	
-4 m	4780 6.49	2990 6.49				5460 3490	7270 4540	10100* 6440	12920* 10540	16110* 16110*	14110* 1.47 14110* 1.47	
-5 m	5470* 5.36	4130 5.36					6360* 6460	8270* 6560	10530* 10460		11850* 2.55 11850* 2.55	
-6 m	5960* 4.67	5130 4.67					7270* 6630				8280* 3.50 8270 3.50	

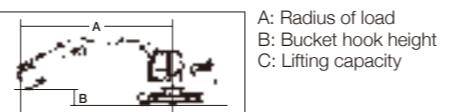
**SH210-6** SHOE : 700 (mm)G  
BUCKET : SAE/PCSA 0.80 (m<sup>3</sup>) ARM LENGTH = 2.94 (m)  
MAXIMUM REACH = 9.90 (m) BOOM : 5.70 (m)

Bucket Hook Height	Radius of Load											
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m	Min. Radius
8 m	(kg) 2270*	(m) 7.33	(kg) 2270*	(m) 7.33			3140* 3140*					(kg) 2660* 6.29 (m) 6.29
7 m	2150* 8.12	2150* 8.12		2600* 2510	3690* 3360							3220* 6.24 3220* 6.24
6 m	2090* 8.71	2090* 8.71		3800* 2510	4040* 3310							4080* 6.15 4060 6.15
5 m	2080* 9.12	1880 9.12	2590* 1940	3830 2500	4300* 3230	4390* 4220						4420* 5.72 4420* 5.72
4 m	2100* 9.39	1730 9.39	3020 1910	3760 2430	4600* 3130	5120* 4100	5740* 5470	6010* 6010*				5200* 3.57 5200* 3.57
3 m	2160* 9.54	1640 9.54	2970 1870	3680 2360	4640 3010	5780* 3920</						

## Lifting Capacity

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 a hook (not standard equipment) located on the back of the bucket.
- 4. \*Indicates load limited by hydraulic capacity.
- 5. 0 m = Ground.



Load Radius Over Front      Load Radius Over Side      Unit: kg

**SH210LC-6** SHOE : 600 (mm)G  
BUCKET : SAE/PCSA 0.90 (m<sup>3</sup>) ARM LENGTH = 2.94 (m)  
MAXIMUM REACH = 9.90 (m) BOOM : 5.70 (m)

Bucket Hook Height	Radius of Load																														
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m	Min. Radius																			
	(kg)	(m)	(kg)	(m)	(kg)	(m)	(kg)	(m)	(kg)	(m)	(kg)	(m)																			
8 m	2 250*	7.29	2 250*	7.29			3 040*	3 040*			2 670*	6.24	2 670*	6.24																	
7 m	2 120*	8.10	2 120*	8.10			2 490*	2 490*	3 670*	3 670*	3 680*	6.20	3 680*	6.20																	
6 m	2 060*	8.69	2 060*	8.69			3 750*	2 770	4 070*	3 600			4 080*	6.11	4 080*	6.11															
5 m	2 050*	9.11	2 050*	9.11	2 510*	2 130	3 970*	2 730	4 300*	3 510	4 390*	4 390*	4 440*	5.67	4 440*	5.67															
4 m	2 070*	9.38	1 910	9.38	3 360	2 100	4 180*	2 660	4 590*	3 400	5 050*	4 450	5 700*	5 700*	6 150*	6 150*															
3 m	2 120*	9.53	1 810	9.53	3 320	2 050	4 090	2 580	5 090*	3 270	5 750*	4 260	6 770*	5 760	8 540*	8 120	10 310*	10 310*													
2 m	2 210*	9.56	1 760	9.56	3 260	2 000	4 000	2 490	5 020	3 150	6 410	4 070	7 790*	5 450	10 230*	7 760	11 000*	11 000*													
1 m	2 330*	9.48	1 770	9.48	3 210	1 950	3 920	2 410	4 890	3 030	6 310	3 890	8 490	5 180	11 210*	7 310	7 690*	7 690*													
0 m	2 500*	9.28	1 810	9.28	3 370	2 350	4 780	2 940	6 160	3 760	8 350	4 980	11 740*	7 030	8 150*	4 460*	4 460*	3 660*	1.72	3 660*	1.72										
-1 m	2 750*	8.97	1 920	8.97			3 810	2 310	4 710	2 870	6 050	3 660	8 210	4 860	11 980*	6 930	9 600*	6 830*	6 830*	5 440*	5 440*	4 170*	0.62	4 170*	0.62						
-2 m	3 120*	8.52	2 100	8.52			3 810	2 320	4 700	2 860	6 020	3 640	8 180	4 850	11 880*	6 950	11 680*	11 140	8 540*	8 540*	7 820*	7 820*	6 000*	0.41	6 000*	0.41					
-3 m	3 680*	7.92	2 380	7.92										4 750	2 900	6 060	3 680	8 220	4 890	11 520*	7 030	14 510*	11 710	10 750*	10 750*	9 170*	9 170*	7 920*	0.48	7 920*	0.48
-4 m	4 630	7.14	2 850	7.14										4 830	2 990	6 160	3 790	8 260	5 000	10 760*	7 160	14 020*	11 900	15 110*	15 110*	11 310*	11 310*	10 620*	0.84	10 620*	0.84
-5 m	5 240*	6.12	3 710	6.12										5 690*	3 890	7 430*	5 210	9 390*	7 390	12 100*	11 870	16 650*	16 650*	15 800*	15 800*	15 800*	15 800*	15 800*	1.63	15 800*	1.63

**SH210LC-6** SHOE : 600 (mm)G  
BUCKET : SAE/PCSA 1.00 (m<sup>3</sup>) ARM LENGTH = 2.40 (m)  
MAXIMUM REACH = 9.42 (m) BOOM : 5.70 (m)

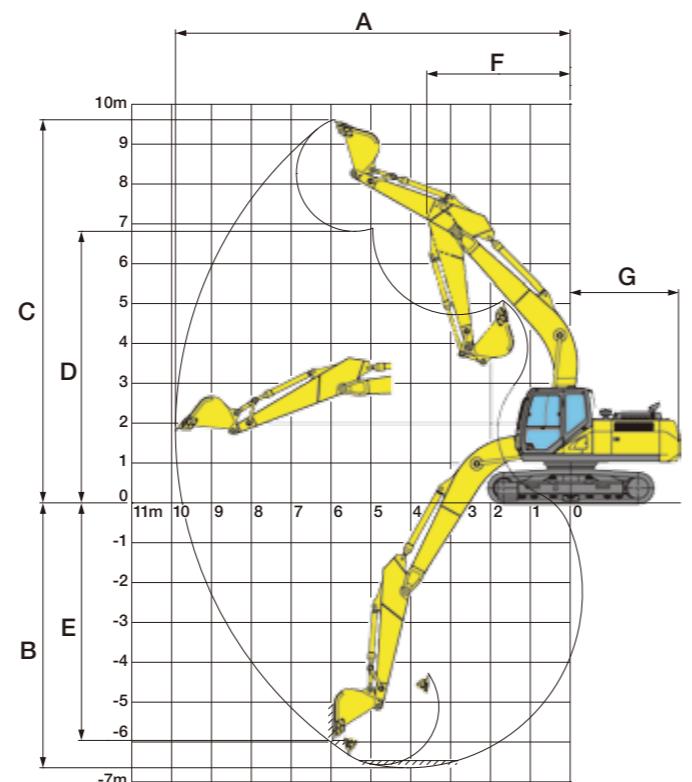
Bucket Hook Height	Radius of Load																																	
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m	Min. Radius																						
	(kg)	(m)	(kg)	(m)	(kg)	(m)	(kg)	(m)	(kg)	(m)	(kg)	(m)																						
8 m	3 340*	6.61	3 340*	6.61			3 520*	3 520*			3 070*	5.91	3 070*	5.91																				
7 m	3 150*	7.51	3 030	7.51			4 090*	3 510	3 860*	3 860*	3 400*	5.73	3 400*	5.73																				
6 m	3 070*	8.14	2 550	8.14			3 750*	2 660	4 320*	3 480	4 510*	4 490	4 520*	5.61																				
5 m	3 040*	8.59	2 250	8.59			4 150	2 630	4 650*	3 400	4 800*	4 480	5 300*	4 740*	4 740*	4 740*	4 740*	4 740*	4 740*	4 740*	4 740*													
4 m	3 060*	8.89	2 060	8.89			4 090	2 570	4 900*	3 300	5 450*	4 320	6 270*	5 830	7 260*	7 260*	7 260*	7 260*	7 260*	7 260*	7 260*													
3 m	3 140*	9.05	1 950	9.05	3 240	1 980	4 010	2 500	5 060	3 180	6 100*	4 130	7 310*	5 580	8 610*	8 010	6 330*	6 330*	6 330*	6 330*	6 330*	6 330*												
2 m	3 140	9.08	1 900	9.08	3 200	1 940	3 930	2 420	4 930	3 060	6 370	3 960	8 240*	5 290	10 050*	7 480	5 980*	5 980*	5 980*	5 980*	5 980*	5 980*												
1 m	3 170	8.99	1 910	8.99			3 860	2 360	4 810	2 960	3 800	8 430	5 050	11 230*	7 100	6 280*	3 12	6 280*	3 12	6 280*	3 12	6 280*	3 12											
0 m	3 270	8.78	1 970	8.78			3 810	2 310	4 730	2 880	6 080	3 690	8 240	4 890	11 770*	6 910	7 310*	7 310*	5 650*	5 650*	5 650*	5 650*	5 650*	5 650*										
-1 m	3 480	8.45	2 100	8.45			3 790	2 290	4 680	2 840	6 000	3 620	8 160	4 820	11 900*	6 920	9 560*	7 110*	7 110*	5 760*	5 760*	5 760*	5 760*	5 760*	5 760*									
-2 m	3 830	7.97	2 330	7.97									4 700	2 860	6 010	3 630	8 180	4 840	11 670*	6 970	12 420*	11 220	9 230*	7 680*	6 680*	0.95	6 680*	0.95	6 680*	0.95	6 680*	0.95		
-3 m	4 420	7.33	2 700	7.33									4 800	2 950	6 080	3 710	8 250	4 920	11 100*	7 080	14 400*	11 850	12 070*	12 070*	9 650*	1.03	9 650*	1.03	9 650*	1.03	9 650*	1.03		
-4 m	5 340*	6.49	3 340	6.49									6 130	3 890	8 040*	5 070	10 060*	7 250	12 880*	11 920	16 050*	16 050*	14 060*	14 060*	14 060*	14 060*	14 060*	1.47	14 060*	1.47	14 060*	1.47	14 060*	1.47
-5 m	5 430*	5.36	4 610	5.36																														

## Principle Specifications

	SH210-6 STD Specifications	SH210LC-6 STD Specifications
Base	Boom length Arm length Bucket capacity (ISO heaped) Std. operating weight	5.70 m 2.94 m 0.8 m <sup>3</sup> 20,100 kg
Engine	Make & model Rated output Displacement	ISUZU GI-4HK1X 117.3 kW (159.5 PS)/1 800 min <sup>-1</sup> 5.19 ltr
Hydraulic System	Main pump Max pressure (with auto power boost) Travel motor Parking brake type Swing motor	2 variable displacement axial piston pumps with regulating system 34.3 MPa 36.8 MPa Variable displacement axial piston motor Mechanical disc brake Fixed displacement axial piston motor 5.6/3.4 km/h 188 kN
Performance	Travel speed Drawbar pull Gradeability Ground pressure Swing speed Bucket digging force /with power boost Arm digging force /with power boost	70% <35° 45 kPa 11.5 min <sup>-1</sup> 142 kN 152 kN 103 kN 110 kN
Others	Fuel tank Hydraulic fluid tank	410 ltr 147 ltr

## Working Range

	SH210(LC)-6	
Arm length	2.40 m	2.94 m
Boom length	5.70 m	
A Max digging radius	9 420 mm	9 900 mm
B Max digging depth	6 110 mm	6 650 mm
C Max digging height	9 410 mm	9 610 mm
D Max dumping height	6 590 mm	6 810 mm
E Max vertical wall cut depth	5 500 mm	5 960 mm
F Min front swing radius	3 600 mm	3 600 mm
G Rear end swing radius	2 750 mm	



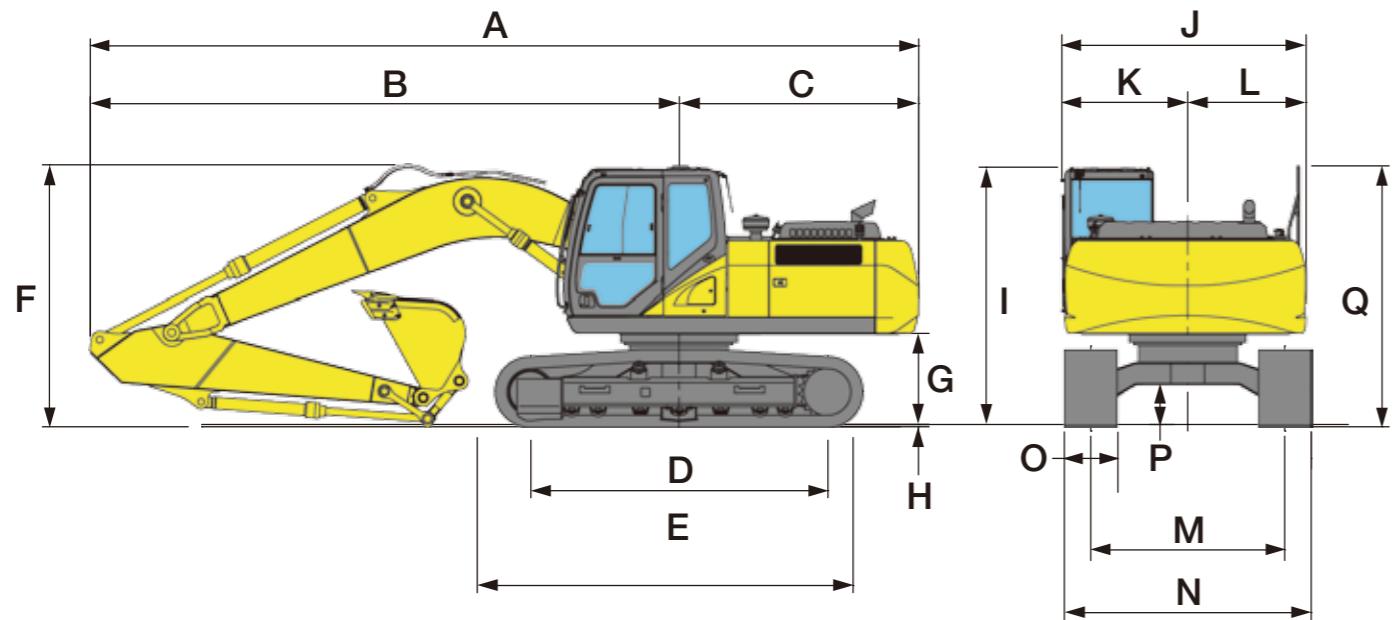
## Standard Equipment

- [Hydraulic system]
  - SIH:S+ hydraulic system
  - Operation mode (SP, H and A mode)
  - Automatic 2-speed travel
  - Automatic power boost
  - Arm/boom/bucket reactivation circuit
  - Automatic swing parking system
  - High-performance return filter
- [Safety equipment]
  - Rearview mirror (left/right)
  - Emergency escape tool
  - Retracting seat belt
  - Gate lock lever
  - Travel alarm (with on and off switch)
  - Anti-theft alarm system
  - Engine room firewall
  - Fan guard
  - Engine emergency stop switch
  - Engine neutral start
- [Cabin/interior equipment]
  - Strengthened cabin
  - Top guard OPG level 1(in cab structure)
  - Shock-less cab suspension by 4-point fluid mounts
  - Built-in type full-colour monitor display
  - Tilting console
  - Open air introducing pressurised full-automatic air conditioner
  - Defroster
  - Hot & cool box
  - Seat suspension
  - Windscreen wiper (with intermittent operation function)
  - Cup holder
  - AM/FM radio (with muting function and AUX port & USB port)
  - Radio mute/Windscreen wiper one-touch control on joystick
  - Clock
  - Magazine rack
  - Accessory case
  - Floor mat
  - Armrest & headrest
  - Ashtray & cigarette lighter
  - Cab light (Auto-OFF function)
  - Coat hook
- [Others]
  - Auto/one-touch idling
  - Auto idle shutdown system
  - EMS
  - Long-life hydraulic oil
  - Two lights (main unit and left of boom)
  - Fuel filter (with water separator)
  - Fuel prefilter (with water separator)
  - Double-element air cleaner
  - Grease-enclosed track link
  - Large tool box
  - A set of tools

## Accessories (option)

- Cab-top lights
- Rain deflector
- 12V power (DC-DC converter)
- Head guard (OPG level 2)
- Polycarbonate roof top window with sunshade
- Front guard (OPG level 1 or 2)
- Front mesh guard (full/lower)
- Precleaner
- Air suspension (KAB seat)
- Refuel pump
- Hose burst check valve (HBCV) for boom/arm cylinders
- Rear view camera
- Side camera
- ROPS Cabin
- ISO compliant mirror

Accessories and specifications may differ depending on countries and regions.



Model	SH210 (LC)-6	
Arm length	2.40 m	2.94 m
<b>A</b> Overall length	9 460 mm	9 400 mm
<b>B</b> Length from centre of machine (to arm top)	6 740 mm	6 680 mm
<b>C</b> Length from centre of machine (to rear end)	2 720 mm	
<b>D</b> Centre to centre of wheels	3 370 (3 360) mm	
<b>E</b> Overall track length	4 180 (4 470) mm	
<b>F</b> Overall height	3 200 mm	2 970 mm
<b>G</b> Clearance height under upper structure	1 040 mm	
<b>H</b> Shoe lug height	26 mm	
<b>I</b> Cab height	2 950 mm	
<b>J</b> Upper structure overall width	2 770 mm	
<b>K</b> Width from centre of machine (left side)	1 430 mm	
<b>L</b> Width from centre of machine (right side)	1 340 mm	
<b>M</b> Track gauge	2 200 (2 390) mm	
<b>N</b> Overall width	2 800 (2 990) mm	
<b>O</b> Std. shoe width	600 mm	
<b>P</b> Minimum ground clearance	440 mm	
<b>Q</b> Handrail height	2 960 mm	

Figure in ( ) : LC type