SUMITOMO

SH210/220LC-7 Hydraulic Excavator

Other Lineup

SH80BS-7
Operating Weight:
8,720 kg
Bucket Capacity (ISO Heaped):
0.28~0.34 m³
Engine Rated output:
50.7 kW/2,000 min⁻¹

SH145X-7
Operating Weight:
14,800 kg
Bucket Capacity (ISO Heaped):
0.5~0.65 m³
Engine Rated output:
76.4 kW/2,000 min⁻¹

SH360LC/380LHD-7
Operating Weight:
38,100/38,500 kg
Bucket Capacity (ISO Heaped):
1.7~1.9 m³
Engine Rated output:
200 kW/1,900 min⁻¹

SH500LHD/520LHD-7
Operating Weight:
50,800/52,100 kg
Bucket Capacity (ISO Heaped):
2.9~3.1 m³
Engine Rated output:
270 kW/2,000 min⁻¹

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SUMITOMO

EXCAVATORS

SH210-7
SH220LC-7

■Engine Rated Power (Net): 119.3 kW
■Operating Weight:
SH210-7.....22,200 kg
SH220LC-7.....22,500 kg
■Bucket Capacity (ISO Heaped): 1.0 m³

JAPANESE TECHNOLOGY

EU Stage V
English

Advances Abound. Innovation Infinite.

Setting a new bar for worksite proficiencies.

SH210/220LC-7

High fuel efficiency | **High operability** | **High durability**

JAPAN TECH

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.

Advanced Energy Efficiency and Eco-friendly Operation

The combination of the advanced clean engine “SPACE 5 α” and SUMITOMO’s proprietary hydraulic system “SIH:S α” achieves much higher operating efficiency and superior fuel economy. These features also mean the excavator is even easier on the environment and worksites.

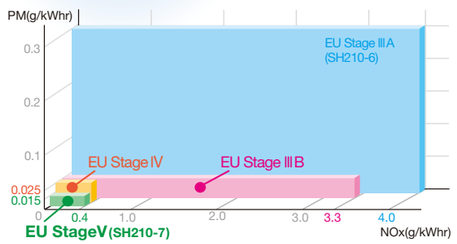
Faster Operations and Excellent Fuel Economy!

Clean engine SPACE5 α Alpha (SUMITOMO Powerful And Clean Engine System) ✖ *Innovative hydraulic system* SIH:S α (SUMITOMO Intelligent Hydraulic System)

Meets EU Stage V standards

The clean engine “SPACE 5 α” achieves significant reductions in exhaust gas emissions, meeting European Stage V non-road emission standards (EU Stage V), deemed the toughest emissions standards in the world. The SH210-7 series excavator has been designed to be even more environmentally friendly.

NOx: 90% reduction
PM: 95% reduction
(compared to SH210-6)



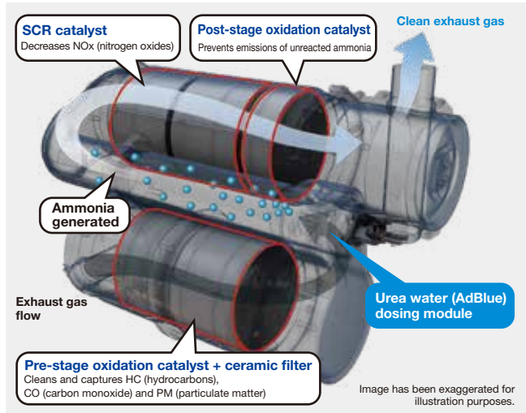
Clean and Fuel-efficient Engine “SPACE 5 α”

The SH210-7 is powered by a new engine designed for significantly improved combustion efficiency and much lower fuel consumption. In addition to a common rail fuel injection system designed for optimum fuel injection, a cooled EGR and VG turbocharger help to achieve cleaner exhaust gas emissions as well as superior power and response.

Exhaust After Treatment System (ATS)

An advanced exhaust after treatment system has been used, featuring a combination of a ceramic filter and SCR. The pre-stage ceramic filter removes PM through collection and combustion, while the post-stage SCR injects AdBlue® (urea water) into the exhaust gas, cleaning the NOx into harmless nitrogen and water through chemical reaction. Post treatment of NOx allows for high-efficiency combustion at the engine, achieving superior clean running as well as powerful and low fuel consumption operation.

AdBlue® is a registered trademark of the German Association of the Automotive Industry.



SCR System Design

The SCR system comprises an oxidation catalyst, SCR catalyst and urea water dosing module. The urea water is injected into the exhaust gas, where the NOx is reduced by the SCR catalyst and ammonia generated from the urea water and broken down into harmless nitrogen and water, resulting in clean exhaust gases.

SCR: Selective Catalytic Reduction

Advanced Energy Efficiency and Eco-friendly Operation

Innovative Hydraulic System “SIH:S α”

An innovative hydraulic system has been used to reduce fuel consumption, while a fully electronically controlled hydraulic pump ensures precision flow control. Further enhancements have also been made to SUMITOMO’s proprietary Spool Stroke Control for optimum hydraulic control to suit job conditions, thus achieving even more efficient operations and significantly lower fuel consumption.

Three Working Modes for Economic Operation or Work Efficiency

SUMITOMO UNIQUE DESIGN

Three working modes are available: SP (Super Power) for faster operations, H (Heavy) for heavy duty applications, and A (Auto) for fuel efficiency across a wide range of operations. Six levels are shown for A mode, making it easier to select the right mode for any jobsite.

Integrated Throttle Mode Selector

The throttle mode can be selected by simply turning the knob, so anyone can easilychoose the optimum working mode.

SUMITOMO Technology forFuel Efficiency

•Spool Stroke Control (SSC) α

SUMITOMO UNIQUE DESIGN

Automatically adjusts hydraulic pressure to save fuel. Better precision for identifying operating conditions and greater range of control help to reduce fuel consumption and increase operating efficiency even further.

•Fully Electronically Controlled Hydraulic Pump

Designed with ultra-sensitive hydraulic pressure sensing technology for precision flow rate control to suit any type of job. These help to achieve speed, enhance operations and reduce fuel consumption.

•Power Save Control

SUMITOMO UNIQUE DESIGN

Reduces the flow rate of the main pump when the machine is not in operation, which cuts down unnecessary fuel consumption.

•BES (Boom-down Energy Save)

SUMITOMO UNIQUE DESIGN

Increases fuel efficiency during boom-down operation.

•PTR (Pump Transition Reduction)

SUMITOMO UNIQUE DESIGN

Decreases main pump loads to reduce fuel consumption.

•Idle Shut Down & Auto Idle

Detects when the machine is not in operation, and automatically stops the engine from idling.
Also equipped with Auto Idle, which automatically switches the engine to idle when the operation levers are in neutral position.

Advanced Operator Comfort

**A comfortable cabin has been designed to reduce operator fatigue, with the aim of relieving stress during work and ensuring greater relaxation during downtime.
With features such as a spacious cabin interior, new high-definition monitor with smartphone-like usability, new air suspension seat, and unbelievably quiet operation, the cabin is both comfortable and intuitive to ensure a greater level of safety.**

Spacious, Class-leading Cabin

Just like previous models, the cabin has been designed with features that are top of its class, all of which help to ensure a comfortable and stress-free space for the operator. Superior sound insulation throughout the cabin translates to top-class levels of silence within.

Console-linked Arm Rest

SUMITOMO UNIQUE DESIGN

The arm rest is linked with movement of the tilting console. The distance between the arm rest and operations levers remains the same, regardless of the angle of the console, leading to a greater level of comfort and control.

New Air Suspension Seat

The operator’s seat features air suspension as standard for outstanding ride comfort. A new high-performance reclining seat with higher seatback has been used to ensure premium comfort. A multitude of seat adjustments and ample seat cushion width all help to significantly lower operator fatigue. The high water-repellent seat material is also easier to keep clean.

Seat air suspension

Premium Comfort with Seat Heater (OPTION)

A seat heater function is now available as an optional extra for even greater comfort in cold seasons or working early mornings. A convenient seat tilting function has also been added that allows the seat cushion to be tilted forward or back to suit the operator’s body type or particular job– now anyone can achieve the optimum seating posture for more comfortable control.

Seat heater switch

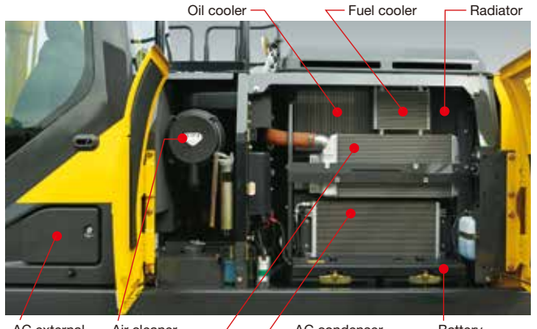
Superior Ease-of-maintenance and Durability

Easy maintenance and durability are the key to excavators that are called upon for ongoing work at job sites. With enhanced durability at every corner and proprietary EMS, outstanding reliability is standard with SUMITOMO excavators—they are designed to be easy to operate and maintain for customers, including features like ground level access and refilling AdBlue®.

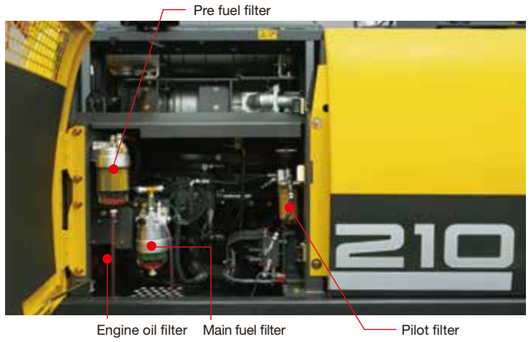
Ground Level Access for Easy Inspections and Maintenance

Components requiring inspection are all in a central location, meaning inspections and refilling can be performed without having to climb up onto the excavator.

•Increased Cooling Performance



•Designed for Easy Filter Replacement



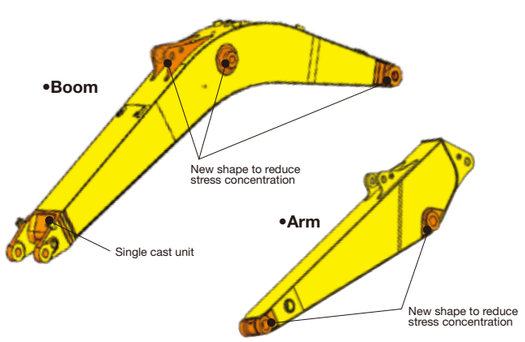
Easy-to-fill Urea Tank

The urea tank has been positioned near the front right for easy refilling, to suit the way the excavator is used. In addition to easily refilling water by climbing up on the side frame, water can also be refilled by placing the AdBlue® container in front of the tank.

Urea Tank Capacity: 120 L
Refilling frequency:
Once per 11 refuellings

A large capacity tank has been used for longer refilling intervals and lower the amount of associated work. The tank needs to be refilled around once every eleven times the fuel tank isfilled (may vary depending on usage conditions).

•Higher Rigidity Boom and Arm



EMS for Enhanced Maintenance of Joints

SUMITOMO UNIQUE DESIGN

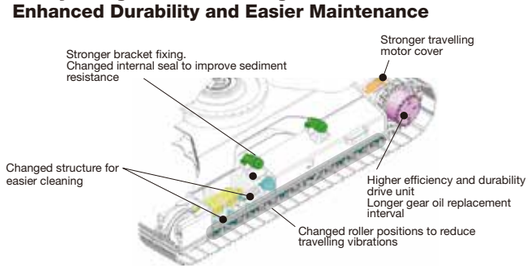
SUMITOMO's EMS (Easy Maintenance System) has been used to ensure the excavator is always at the forefront of any work site. Special bushes keep joints lubricated and prevent rattling, and help give parts like bushes and pins a longer operating life. This extends the greasing interval of joints like around the bucket and other sections, thereby reducing the amount of maintenance required.

Greasing interval for bucket: 250 hours
Greasing interval for other sections: 1,000 hours
* The greasing interval varies depending on operating conditions.

Attachment EMS bushing with self-lubricating capability

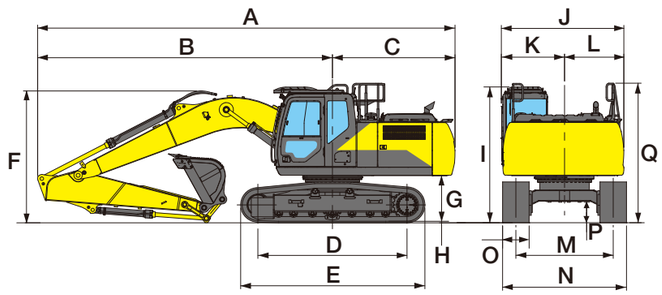
Bucket EMS bushing (steel) with excellent wear resistance

•Newly Designed Undercarriage for Enhanced Durability and Easier Maintenance



Principle Specifications

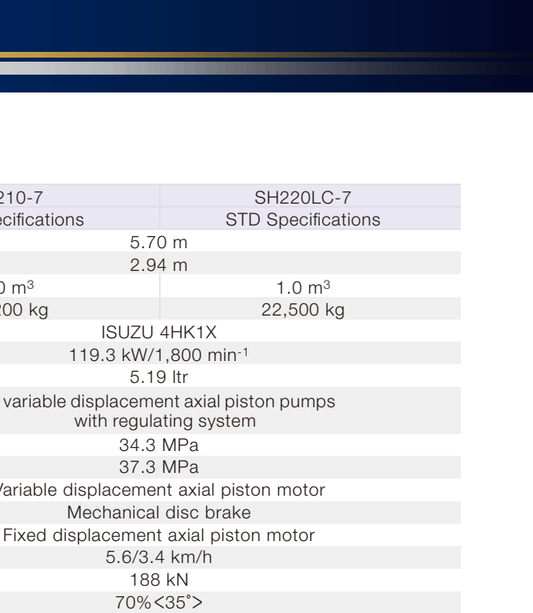
		SH210-7 STD Specifications	SH220LC-7 STD Specifications
	Boom length	5.70 m	
Base	Arm length	2.94 m	
	Bucket capacity (ISO heaped)	1.0 m^3	1.0 m^3
	Std. operating weight	22,200 kg	22,500 kg
Engine	Make & model	ISUZU 4HK1X	
	Rated output	119.3 kW/1,800 min^{-1}	
	Displacement	5.19 ltr	
Hydraulic System	Main pump	2 variable displacement axial piston pumps with regulating system	
	Max. pressure	34.3 MPa	
	(with auto power boost)	37.3 MPa	
	Travel motor	Variable displacement axial piston motor	
	Parking brake type	Mechanical disc brake	
	Swing motor	Fixed displacement axial piston motor	
Perfor mance	Travel speed (high/low)	5.6/3.4 km/h	
	Drawbar pull	188 kN	
	Gradeability	70%<35°>	
	Ground pressure	50 kPa	47 kPa
	Swing speed	7.8 min^{-1}	
	Bucket digging force	141 kN	
	/with power boost	154 kN	
Others	Arm digging force	103 kN	
	/with power boost	112 kN	
	Fuel tank	410 ltr	
	Hydraulic fluid tank	162 ltr	
	Urea water tank	120 ltr	



Dimensions

Model		SH210/220LC-7	
Arm length		2.40 m	2.94 m
A	Overall length	9,510 mm	9,430 mm
B	Length from centre of machine (to arm top)	6,740 mm	6,660 mm
C	Length from centre of machine (to rear end)	2,770 mm	
D	Centre to centre of wheels	3,370 (3,660) mm	
E	Overall track length	4,180 (4,470) mm	
F	Overall height	3,170 mm	2,980 mm
G	Clearance height under upper structure	1,040 mm	
H	Shoe lug height	26 mm	
I	Cab height	3,100 mm	
J	Upper structure overall width	2,770 mm	
K	Width from centre of machine (left side)	1,430 mm	
L	Width from centre of machine (right side)	1,340 mm	
M	Track gauge	2,200 (2,390) mm	
N	Overall width	2,800 (2,990) mm	
O	Std. shoe width	600 mm	
P	Minimum ground clearance	440 mm	
Q	Handrail height	3,150 mm	

Figure in ( ) : LC type



Working Range

		SH210/220LC-7	
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	6,640 mm
C	Max. digging height	9,400 mm	9,610 mm
D	Max. dumping height	6,580 mm	6,810 mm
E	Max. vertical wall cut depth	5,510 mm	5,950 mm
F	Min. front swing radius	3,620 mm	3,640 mm
G	Rear end swing radius	2,790 mm	