

SUMITOMO

SH300-6

- Engine Rated Power (Net): 202 kW-274 PS
- Operating Weight:
 - SH300-6 29,300~31,300 kg
- Bucket: ISO/SAE/PCSA Heaped: 1.0~1.3 M3



SUMITOMO



 **SUMITOMO CONSTRUCTION
MACHINERY CO., LTD.**

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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
- Drastically Increased Productivity

Durability and Maintenance 08-11

- High Rigidity Attachments
- EMS
- Ground Level Maintenance

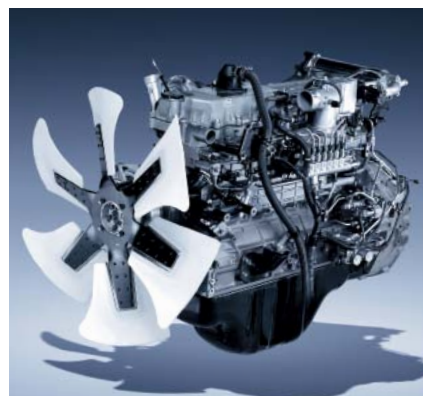
Safety and Operator Comfort 12-17

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

Specifications 18-27



**Performance Refined.
Evolution Defined.**



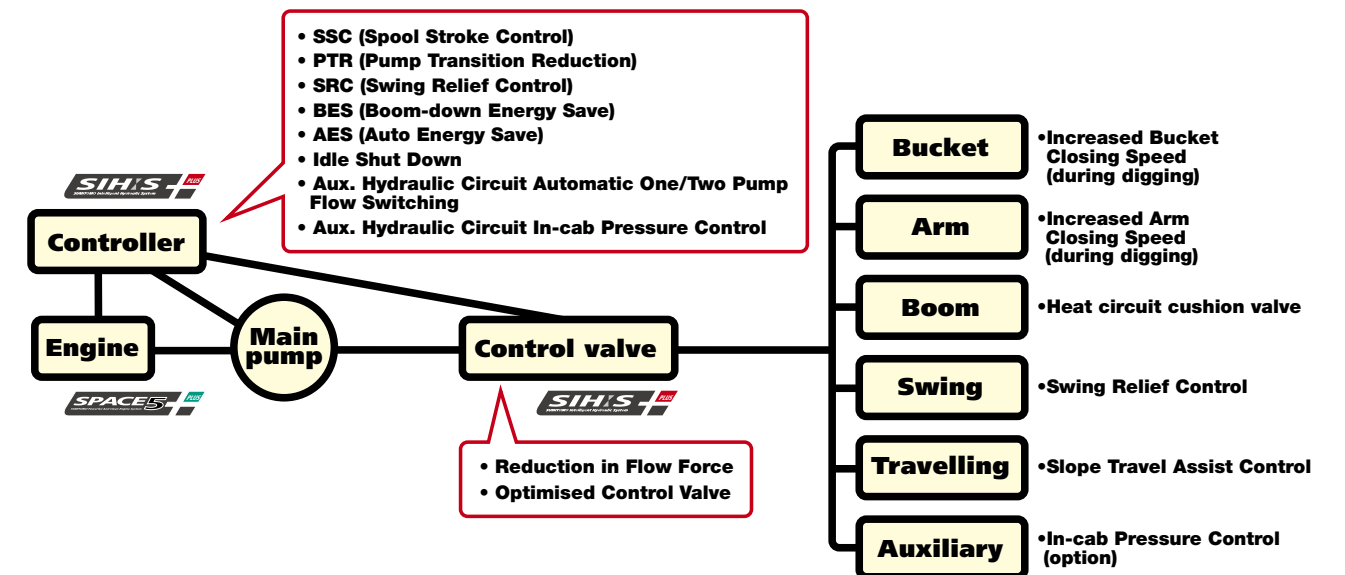
New Engine System **SPACE 5+** + New Hydraulic System **SIH:S+** = **10% Reduction in Fuel Consumption**
(as compared with SH300-5 [H mode])

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 with W/G (Waste Gate). At the same time, excellent response times are achieved.

Engine and Hydraulics

SH300-6 has achieved a 10% fuel saving 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.



Further Improvement of Fuel Consumption

The new technology has improved operations and reduced fuel consumption on each working mode.

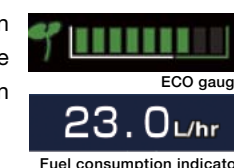
• H mode **10% Reduction in Fuel Consumption**

• A mode **5% Reduction in Fuel Consumption**
(as compared with SH300-5)

*Fuel consumption may vary from time to time depending on site and working conditions, operator skill and other circumstances.

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.



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.





**Performance Refined.
Evolution Defined.**

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

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 cannot 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".

12% Faster Cycle Time (SP mode)

Speed increase by 12% in cycle time has been achieved, giving further advance in productivity (as compared with SH300-5 [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, Increases Productivity Drastically

• SP mode

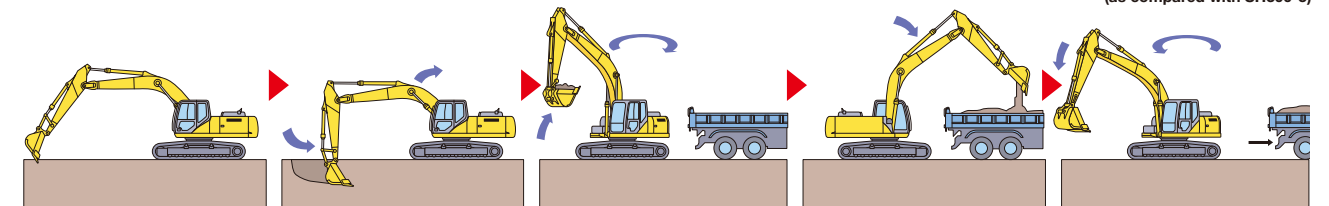
12% faster cycle time

• H mode

10% faster cycle time

• A mode

15% faster cycle time
(as compared with SH300-5)



*Based on SUMITOMO's testing condition and results.

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 is being selected can be easily viewed on the 7" wide monitor.



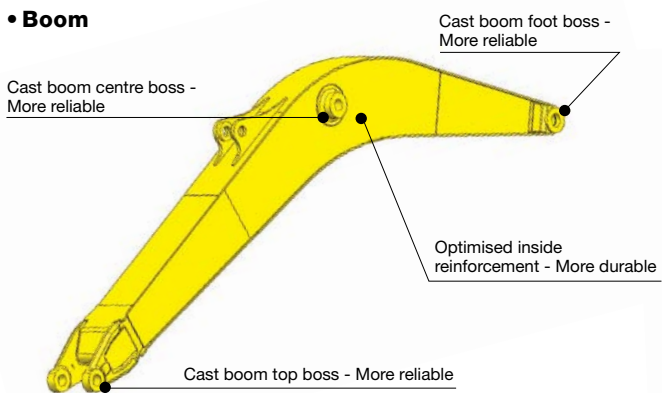


Durability and Maintenance

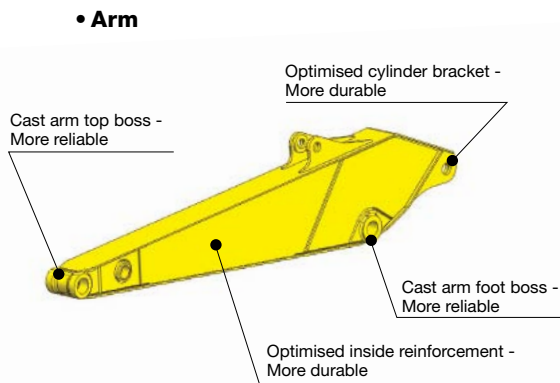
High Rigidity Attachments

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



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.

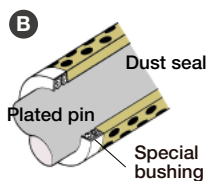
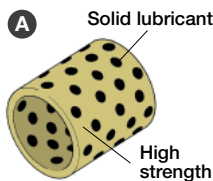


- ➡ Sections equipped with steel EMS bushing
- ➡ Sections equipped with EMS bushing

■ 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.

■ Steel EMS bushing



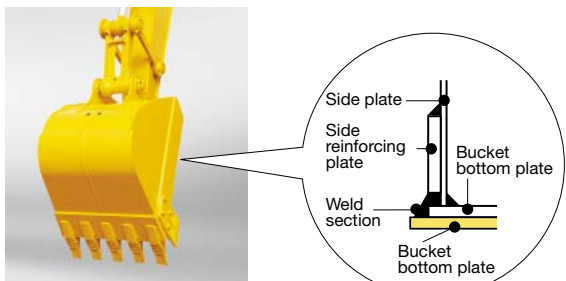
Steel EMS is installed around the bucket

Precautionary use of EMS

- 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.

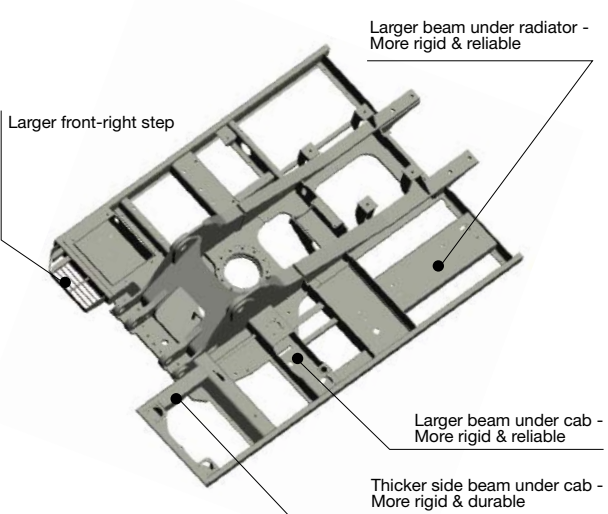
Bucket

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



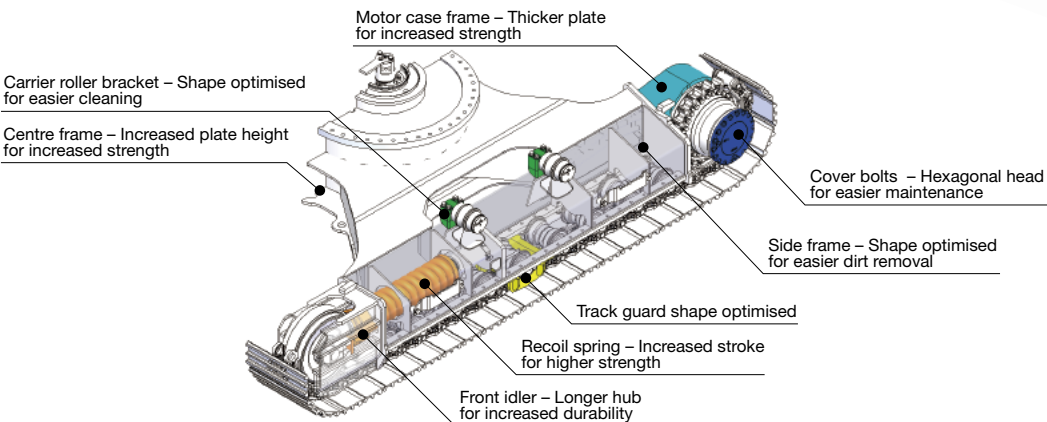
High Rigidity Swing Frame

The swing frame has been strengthened to support the new ROPS 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

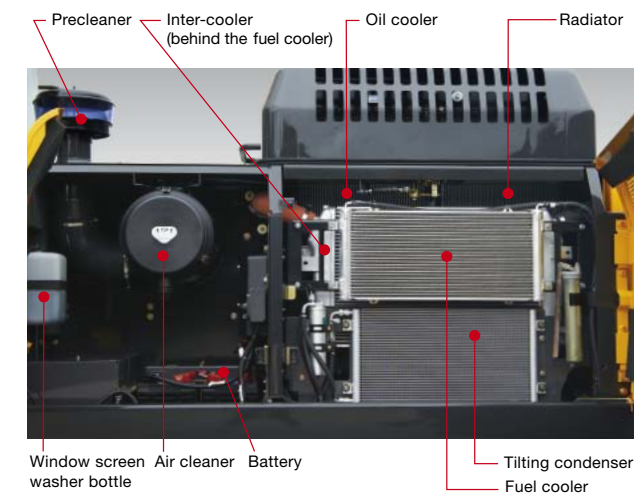
Serviceability and durability are also important points of machine performance. Ground level access to the engine area makes daily maintenance extremely straightforward. Reliability has been further enhanced by increasing cooling capability and durability.

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.



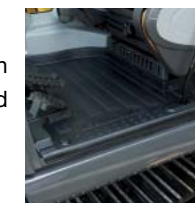
• Hydraulic oil change: **5,000** hours

• Life of filter: **2,000** hours

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

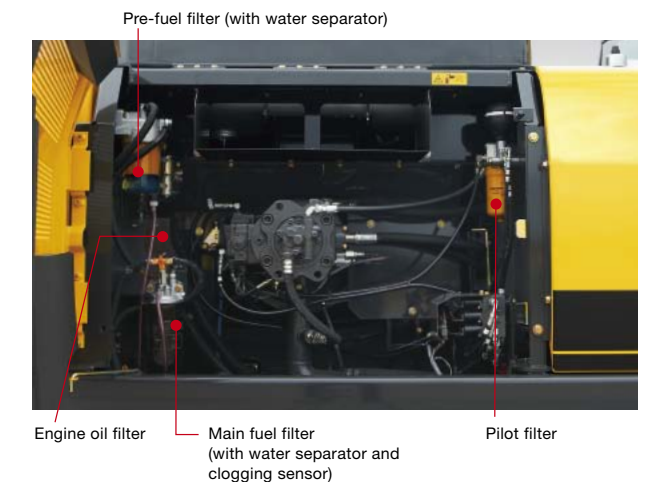
Cab Floor Mat **SUMITOMO** UNIQUE DESIGN

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



• Easy Filter Replacement

A fuel prefilter with water separator and water level sensor are provided as standard equipment to reduce maintenance trouble. In addition, the fuel and oil filters are installed at ground-accessible location to facilitate replacement.



Pre-air Cleaner (option)

An automatic exhaust type pre air cleaner option is available. The air cleaner cleaning frequency is minimised, even when operating in dusty conditions.



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.





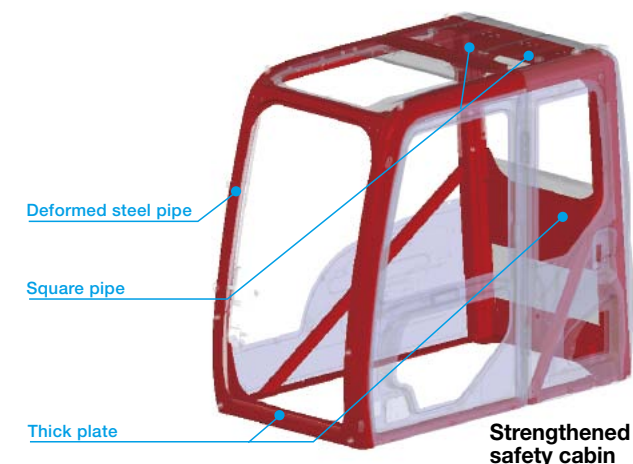
**Performance Refined.
Evolution Defined.**

Safety and Operator Comfort

Planning for safety in the event of a roll accident, a new strengthened safety cabin has been provided. The reinforced cabin greatly increases the operator's safety.

Newly Designed Strengthened Safety Cabin

The optimised design and strengthened parts increase the overall cabin strength. Even if the shovel were to tip over, the safety of the operator is ensured by keeping cabin deformation to a minimum.



Wide View Increases Safety of Work

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



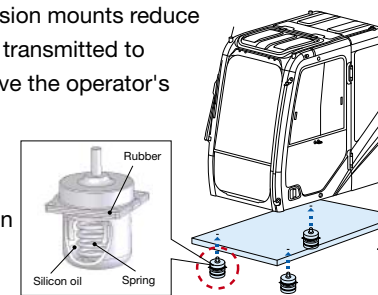
Safe and Easy Entry into and Exit from the Cab

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.



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



New larger front-right step



Non-slip plate



ISO-compliant large handrail

Cab Front Guard (option)

Optional cab front guard improves operator's safety from job site hazards.



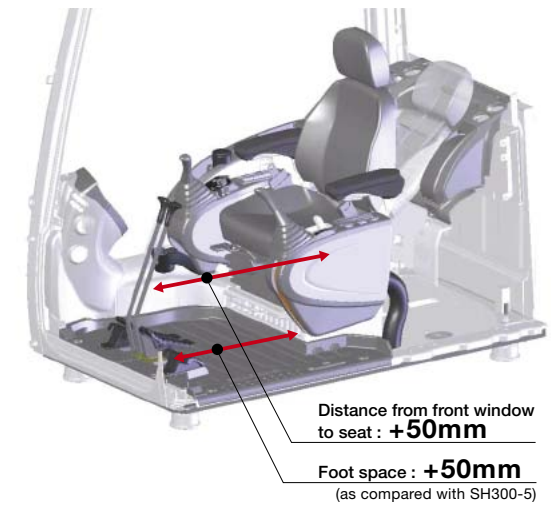
**Performance Refined.
Evolution Defined.**

Safety and Operator Comfort

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

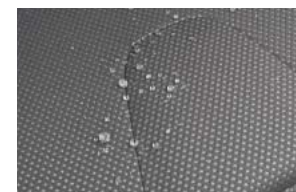
Stylish and Spacious Cab

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 2 dB (as compared with SH300-5).



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.



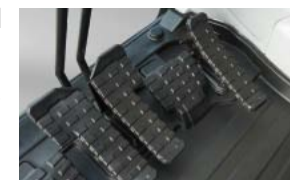
The highly water repellant seat covering is tough on dirt and water.



Air suspension (option)

Auxiliary Operation Pedal

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



Comfortable Equipment



Luggage space



Hot & cool box



Magazine rack

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 SH350HD-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.



Radio mute switch (left lever)



One-touch wiper switch (right lever)

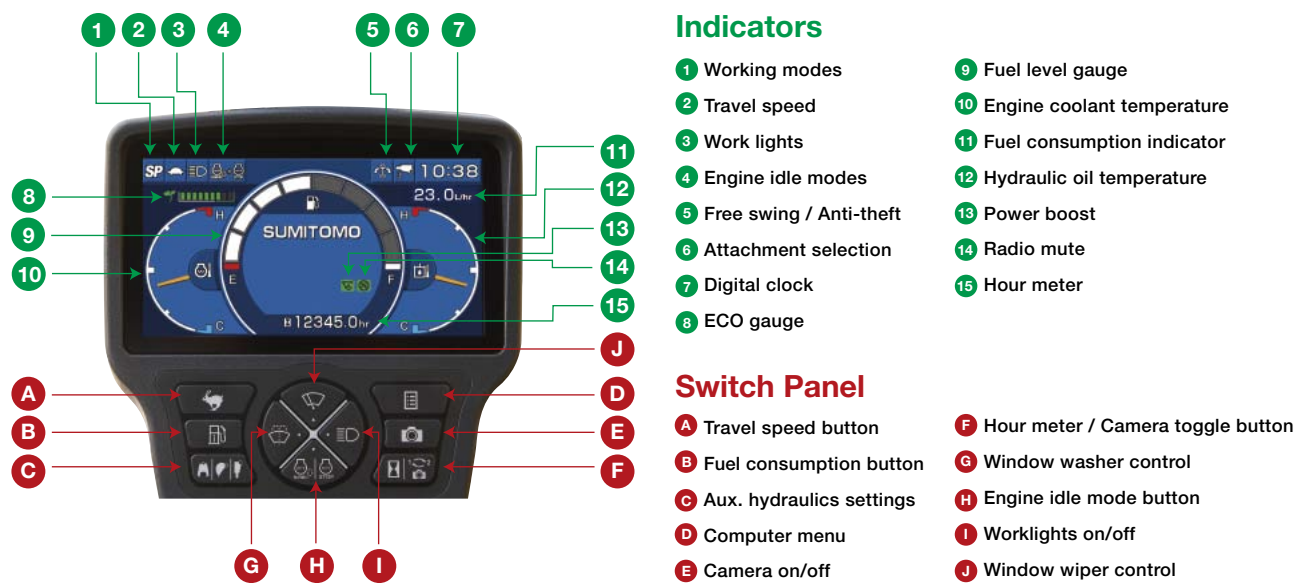


Safety and Operator Comfort

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.



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 Mirror

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



Specifications

SH300-6 Technical Data

Electronic-controlled engine of SPACE 5+ and SIH: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	
SH300-6	
Model	ISUZU GH-6HK1X
Type	Water-cooled, 4-cycle diesel, 6-cylinder in line, high pressure common rail system (electric control) , Turbocharger with air cooled intercooler.
Rated output	202 kW (274 PS) at 2,000 min ⁻¹ (rpm)
Maximum torque	989 N·m at 1,500 min ⁻¹ (rpm)
Piston displacement	7.79 ltr
Bore and stroke	115 mm x 125 mm
Starting system	24 V electric motor starting
Alternator	24 V, 50 A
Fuel tank	450 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.

SH300-6	
Maximum oil flow	2 x 243 ltr/min
Pilot pump max. oil flow	27 ltr/min

Hydraulic motors

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

Working circuit pressure

Boom/arm/bucket34.3 MPa (350 kgf/cm²)
Boom/arm/bucket37.3 MPa (380 kgf/cm²) with auto power-up
Swing circuit30.4 MPa (310 kgf/cm²)
Travel circuit34.3 MPa (350 kgf/cm²)

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	140 mm x 95 mm x 1369 mm
Arm	1	150 mm x 105 mm x 1569 mm
Bucket	1	135 mm x 90 mm x 1078 mm

Double-acting, bolt-up-type cylinder tube-end; hardened steel bushings are installed in the 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.
The 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 is powered by an axial piston motor. The internal ring gear with has a grease cavity for pinion. The swing bearing is a single-row shear type ball bearing. Dual stage relief valves are used for smooth swing deceleration and stops. A mechanical disc swing brake is included.

SH300-6	
Swing speed	0~11.0 rpm
Tail swing radius	3,160 mm
Swing torque	92.1 kN·m (9,391 kgf·m)

Undercarriage

An X-style carbody is integrally welded for strength and durability. The grease cylinder track adjusters have shock absorbing springs. The undercarriage has lubricated rollers and idlers.

Type of shoe: sealed link shoe

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

Lower rollers -
Heat treated, mounted on steel bushings with leaded 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

SH300-6	
Upper rollers	2
Lower rollers	9
Track shoes	50

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.

SH300-6		
Travel speed	High	5.7 km/h
	Low	3.3 km/h
Drawbar pull	233 kN (23,760kgf)	

Lubricant & coolant capacity

SH300-6	
Hydraulic system	300 ltr
Hydraulic oil tank	147 ltr
Fuel tank	450 ltr
Cooling system	30.8 ltr
Final drive case (per side)	9.1 ltr
Swing drive case	7.9 ltr
Engine crank case	38 ltr

Auxiliary hydraulic system

SH300-6			
Auxiliary piping type (option)	For Breaker	For Double (breaker & crusher) acting	For D/A + Second option line
Arm type	STD	STD with Reinforcement plate	STD with Reinforcement plate
Bucket linkage type	HD	HD	HD
Auxiliary hydraulic pump flow	257 ltr/min	513 ltr/min	513+63 ltr/min

Bucket

Options and specifications may differ depending on countries and regions

Model		SH300-6							
Bucket capacity (ISO/SAE/PCSA heaped)		1.0 M3	1.1 M3			1.2 M3	1.3 M3		
Bucket type		STD	STD	STD Horizontal-pin	HD Horizontal-pin	HD Horizontal-pin	STD	STD Horizontal-pin	HD Horizontal-pin
Number of teeth		5	5	5	5	5	5	5	5
Width unit: mm	With side cutter	1 276	1 360	1 360	1 360	1 360	1 560	1 560	1 560
	Without side cutter	1 175	1 260	1 260	1 260	1 260	1 460	1 460	1 460
Weight unit: kg		837	868	871	953	1 000	941	945	1 037
Combination	2.65 m arm	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	3.18 m arm	⊙	⊙	⊙	⊙	⊙	●	●	●
	3.66 m arm	⊙	●	●	●	●	○	○	○

⊙ Suitable for materials with density up to 2,000 kg/m³ or less
● Suitable for materials with density up to 1,800 kg/m³ or less
○ Suitable for materials with density up to 1,600 kg/m³ or less

Weight & Ground Pressure

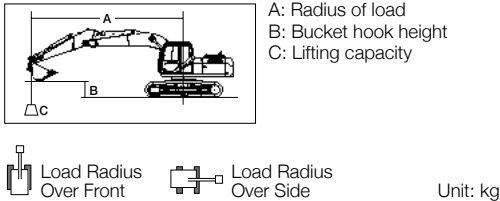
Model		SH300-6			
Shoe type		Shoe width	Overall width	Operating weight	Ground pressure
Triple grouser shoe		600 mm	3 200 mm	29 300 kg	56 kPa
		700 mm	3 300 mm	29 700 kg	48 kPa
		800 mm	3 400 mm	30 000 kg	43 kPa

Digging Force

Model		SH300-6		
Arm length		2.65 m	3.18 m	3.66 m
Bucket digging force (with auto power up)	ISO 6015	175 kN (190 kN)	175 kN (190 kN)	175 kN (190 kN)
	SAE: PCSA	156 kN (169 kN)	156 kN (169 kN)	156 kN (169 kN)
Arm digging force (with auto power up)	ISO 6015	140 kN (153 kN)	122 kN (132 kN)	110 kN (119 kN)
	SAE: PCSA	135 kN (148 kN)	118 kN (128 kN)	107 kN (116 kN)

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.



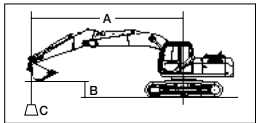
SH300-6				SHOE : 600 (mm)G BUCKET : SAE/PCSA 1.30 (m³)				ARM LENGTH : 2.65 (m) MAXIMUM REACH : 10.20 (m)				BOOM : 6.15 (m)												
Bucket Hook Height	Max. Radius		9 m		8 m		7 m		6 m		5 m		4 m		3 m		2 m		Min. Radius					
																								
	(kg)	(m)	(kg)	(m)																(kg)	(m)	(kg)	(m)	
8 m	4 200*	7.76	4 200*	7.76				5 620*	5 620*											4 320*	6.34	4 320*	6.34	
7 m	4 060*	8.51	4 060*	8.51			5 560*	4 860	6 260*	6 210										6 510*	6.27	6 510*	6.27	
6 m	3 990*	9.06	3 760	9.06	4 330*	3 820	6 390*	4 810	7 230*	6 120										7 600*	6.01	7 600*	6.01	
5 m	4 000*	9.46	3 420	9.46	5 790*	3 790	6 920*	4 720	7 610*	5 970	8 190*	7 720*	7 140*	7 140*						5 210*	4.71	5 210*	4.71	
4 m	4 060*	9.71	3 200	9.71	5 800	3 720	7 120	4 610	8 170*	5 790	9 180*	7 480	10 710*	10 030	12 480*	12 480*	10 610*	10 610*		11 430*	2.50	11 430*	2.50	
3 m	4 180*	9.84	3 070	9.84	5 720	3 640	6 990	4 480	8 670	5 600	10 140*	7 190	12 260*	9 600	14 630*	13 730				9 310*	3.09	9 310*	3.09	
2 m	4 330*	9.86	3 010	9.86	5 630	3 560	6 850	4 360	8 530	5 420	10 900	6 900	13 580*	9 130	16 660*	12 890				7 120*	3.28	7 120*	3.28	
1 m	4 550*	9.77	3 030	9.77	5 550	3 490	6 720	4 240	8 350	5 250	10 730	6 660	14 410*	8 760	14 560*	12 280				5 710*	3.14	5 710*	3.14	
0 m	4 870*	9.57	3 110	9.57	5 490	3 440	6 630	4 150	8 200	5 120	10 520	6 470	14 320	8 520	14 200*	11 970	7 530*	7 530*		5 320*	2.62	5 320*	2.62	
-1 m	5 250	9.25	3 270	9.25	5 480	3 420	6 570	4 100	8 100	5 030	10 400	6 360	14 200	8 430	15 810*	11 920	9 840*	9 840*	7 480*	7 480*	5 570*	1.38	5 570*	1.38
-2 m	5 670	8.82	3 540	8.82			6 580	4 120	8 100	5 030	10 380	6 360	14 160	8 450	17 910*	12 200	12 400*	12 400*	10 080*	10 080*	6 640*	1.01	6 640*	1.01
-3 m	6 330	8.24	3 970	8.24			6 680	4 210	8 160	5 100	10 440	6 430	13 640*	8 530	16 850*	12 320	15 670*	15 670*	12 390*	12 390*	9 500*	1.05	9 500*	1.05
-4 m	6 940*	7.50	4 640	7.50					8 160	5 290	10 210*	6 570	12 410*	8 680	15 190*	12 510	18 990*	18 990*	15 640*	15 640*	13 300*	1.40	13 300*	1.40
-5 m	6 770*	6.54	5 810	6.54							8 270*	6 710*	10 390*	8 820	12 720*	12 440	15 630*	15 630*			19 010*	2.17	19 010*	2.17

SH300-6				SHOE : 600 (mm)G BUCKET : SAE/PCSA 1.30 (m³)				ARM LENGTH : 3.18 (m) MAXIMUM REACH : 10.70 (m)				BOOM : 6.15 (m)																	
Bucket Hook Height	Max. Radius				10 m		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)	
8 m	3 230*	8.35	3 230*	8.35					4 100*	4 100*	4 220*	4 220*														4 170*	6.72	4 170*	6.72
7 m	3 120*	9.04	3 120*	9.04			3 280*	3 280*	4 950*	4 950*	5 370*	5 370*														5 590*	6.78	5 590*	6.78
6 m	3 080*	9.56	3 080*	9.56			4 580*	3 940	5 450*	4 930	6 330*	6 130														6 760*	6.56	6 760*	6.56
5 m	3 100*	9.93	3 100*	9.93			5 320*	3 890	6 060*	4 830	7 130*	6 110	7 580*	7 580*												7 590*	5.99	7 590*	5.99
4 m	3 150*	10.17	2 990	10.17	3 890*	3 100	5 880	3 810	6 990*	4 710	7 710*	5 930	8 410*	7 660	9 550*	9 550*	9 570*	9 570*								9 430*	3.92	9 430*	3.92
3 m	3 250*	10.30	2 870	10.30	4 530*	3 050	5 800	3 720	7 090	4 580	8 430*	5 730	9 640*	7 370	11 490*	9 890	14 400*	14 000	18 360*	18 360*						9 140*	2.46	9 140*	2.46
2 m	3 380*	10.31	2 820	10.31	4 760	3 000	5 700	3 630	6 940	4 440	8 660	5 540	10 590*	7 070	12 960*	9 400	16 350*	13 370	8 630*	8 630*						5 040*	2.70	5 040*	2.70
1 m	3 570*	10.22	2 830	10.22	4 710	2 950	5 610	3 550	6 810	4 320	8 460	5 360	10 900	6 800	14 050*	9 890	17 390*	12 690	6 970*	6 970*						3 920*	2.52	3 920*	2.52
0 m	3 830*	10.03	2 890	10.03	4 040*	2 910	5 540	3 480	6 690	4 220	8 290	5 210	10 660	6 590	14 490	8 690	15 810*	12 280	8 160*	8 160*	4 490*	4 490*				3 890*	1.81	3 890*	1.81
-1 m	4 180*	9.73	3 030	9.73			5 490	3 430	6 610	4 140	8 170	5 100	10 490	6 450	14 310	8 510	16 180*	12 100*	9 800*	9 800*	7 570*	7 570*	5 920*	5 920*	3 980*	0.69	3 980*	0.69	
-2 m	4 680*	9.32	3 250	9.32			5 500	3 440	6 580	4 120	8 120	5 050	10 420	6 390	14 250	8 480	18 100*	12 210	11 830*	11 830*	9 300*	9 300*	8 910*	8 910*	6 040*	0.48	6 040*	0.48	
-3 m	5 420*	8.78	3 590	8.78					6 630	4 160	8 140	5 080	10 440	6 420	14 130*	8 530	17 690*	12 290	14 410*	14 410*	11 290*	11 290*	10 140*	10 140*	8 060*	0.51	8 060*	0.51	
-4 m	6 550*	8.08	4 120	8.08					6 680	4 220	8 210	5 190	10 460	6 520	13 210*	8 640	16 350*	12 440	18 200*	18 200*	14 270*	14 270*	12 000*	12 000*	10 680*	0.81	10 680*	0.81	
-5 m	6 890*	7.19	5 000	7.19							7 470*	5 290	9 490*	6 710	11 640*	8 830	14 320*	12 600	18 040*	18 040*	17 300*	17 300*				14 910*	1.43	14 910*	1.43
-6 m	6 470*	6.04	6 470*	6.04									6 750*	6 690	9 030*	8 810	11 250*	11 250*	13 950*	13 950*						14 990*	2.68	14 990*	2.68

SH300-6				SHOE : 600 (mm)G BUCKET : SAE/PCSA 1.10 (m³)				ARM LENGTH : 3.66 (m) MAXIMUM REACH : 11.20 (m)				BOOM : 6.15 (m)																		
Bucket Hook Height	Max. Radius				10 m		9 m		8 m		7 m		6 m		5 m		4 m		3 m		2 m		1 m		0 m		Min. Radius			
																														
	(kg)	(m)	(kg)	(m)																							(kg)	(m)	(kg)	(m)
9 m	2 870*	8.11	2 870*	8.11					3 140*	3 140*																	3 050*	7.57	3 050*	7.57
8 m	2 710*	8.96	2 710*	8.96					3 990*	3 990*																	3 920*	7.19	3 920*	7.19
7 m	2 620*	9.60	2 620*	9.60				3 860*	3 860*	4 460*	4 460*																4 870*	7.25	4 870*	7.25
6 m	2 590*	10.09	2 590*	10.09	2 880*	2 880*	4 420*	4 020	4 850*	4 850*																	5 670*	7.06	5 670*	7.06
5 m	2 590*	10.43	2 590*	10.43	3 800*	3 210	4 900*	3 960	5 590*	4 920	6 430*	6 080															6 640*	6.57	6 640*	6.57
4 m	2 630*	10.66	2 630*	10.66	4 390*	3 160	5 460*	3 870	6 460*	4 790	7 180*	6 030	7 800*	7 610	6 130*	6 130*											5 310*	4.84	5 310*	4.84
3 m	2 700*	10.78	2 650	10.78	4 850	3 090	5 860	3 770	7 090	4 650	8 030*	5 820	9 100*	7 510	10 680*	9 980	13 230*	13 230*	10 500*	10 500*							9 300*	2.11	9 300*	2.11
2 m	2 800*	10.79	2 600	10.79	4 800	3 030	5 750	3 670	7 000	4 500	8 650	5 610	10 120*	7 190	12 240*	9 590	15 900*	13 720	13 980*	13 980*							4 860*	2.38	4 860*	2.38
1 m	2 950*	10.71	2 600	10.71	4 730	2 960	5 640	3 570	6 850	4 360	8 530	5 410	10 890	6 890	13 520*	9 120	16 770*	12 920	8 220*	8 220*							3 300*	2.18	3 300*	2.18
0 m	3 140*	10.53	2 660	10.53	4 670	2 910	5 550	3 490	6 720	4 230	8 330	5 240	10 710	6 640	14 330*	8 760	17 050*	12 390	8 280*	8 280*	4 620*	4 620*					3 190*	1.28	3 190*	1.28
-1 m	3 410*	10.25	2 770	10.25	4 640	2 880	5 480	3 420	6 610	4 140	8 180	5 100	10 510	6 460	14 330	8 520	16 180*	12 110*	9 430*	9 430*	6 810*	6 810*	5 340*	5 340*			3 520*	0.19	3 520*	0.19
-2 m	3 780*	9.85	2 950	9.85			5 460	3 400	6 550	4 090	8 090	5 020	10 390	6 360	14 200	8 430	17 290*	12 090	11 070*	11 070*	8 440*	8 440*	7 710*	7 710*	5 250*	5 250*	5 250*	0	5 250*	0
-3 m	4 310*	9.34	3 220	9.34			5 490	3 440	6 570	4 100	8 090	5 030	10 380	6 360	14 170	8 440	18 100*	12 150	13 180*	13 180*	10 200*	10 200*	9 050*	9 050*			6 730*	0.03	6 730*	0.03
-4 m	5 100*	8.69	3 640	8.69					6 660	4 190	8 150	5 090	10 430	6 420	13 670*	8 520	17 070*	12 270	15 970*	15 970*	12 380*	12 380*	10 660*	10 660*			8 780*	0.29	8 780*	0.29
-5 m	6 380*	7.86	4 300	7.86							8 150	5 270	10 200*	6 570	12 440*	8 680	15 400*	12 470	19 610*	19 610*	16 690*	16 690*	12 810*	12 810*			11 700*	0.82	11 700*	0.82
-6 m	6 360*	6.82	5 430	6.82									8 310*	6 700	10 400*	8 820	12 980*	12 450	16 250*	16 250*	18 990*	18 990*					17 690*	1.79	17 690*	1.79

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.



A: Radius of load
B: Bucket hook height
C: Lifting capacity



Load Radius
Over Front



Load Radius
Over Side

Unit: kg

SH300-6

SHOE : 800 (mm)G
BUCKET : SAE/PCSA 1.30 (m³)

ARM LENGTH : 2.65 (m)
MAXIMUM REACH : 10.20 (m)

BOOM : 6.15 (m)

Bucket Hook Height	Max. Radius		Radius of Load																Min. Radius			
			9 m		8 m		7 m		6 m		5 m		4 m		3 m		2 m					
8 m	(kg)	(m)	(kg)	(m)															(kg)	(m)	(kg)	(m)
	4 200*	7.76	4 200*	7.76				5 620*	5 620*										4 320*	6.34	4 320*	6.34
7 m	4 060*	8.51	4 060*	8.51			5 560*	4 960	6 260*	6 260*									6 510*	6.27	6 510*	6.27
6 m	3 990*	9.06	3 850	9.06	4 330*	3 910	6 390*	4 920	7 230*	6 240									7 600*	6.01	7 600*	6.01
5 m	4 000*	9.46	3 510	9.46	5 790*	3 880	6 920*	4 830	7 610*	6 100	8 190*	7 830	7 140*	7 140*					5 210*	4.71	5 210*	4.71
4 m	4 060*	9.71	3 280	9.71	5 950	3 820	7 270	4 720	8 170*	5 920	9 180*	7 640	10 710*	10 190	12 480*	12 480*	10 610*	10 610*				
3 m	4 180*	9.84	3 150	9.84	5 860	3 740	7 160	4 590	8 780*	5 730	10 140*	7 350	12 260*	9 800	14 630*	14 010						
2 m	4 330*	9.86	3 100	9.86	5 780	3 660	7 020	4 460	8 740	5 550	10 990*	7 060	13 580*	9 330	16 660*	13 160						
1 m	4 550*	9.77	3 110	9.77	5 700	3 580	6 900	4 350	8 550	5 380	10 990	6 810	14 410*	8 960	14 560*	12 550						
0 m	4 870*	9.57	3 200	9.57	5 640	3 530	6 800	4 260	8 400	5 250	10 780	6 630	14 640*	8 720	14 200*	12 240	7 530*	7 530*				
-1 m	5 330*	9.25	3 370	9.25	5 620	3 510	6 740	4 210	8 310	5 160	10 650	6 520	14 540	8 630	15 810*	12 190	9 840*	9 840*	7 480*	7 480*	5 570*	1.38
-2 m	5 820	8.82	3 640	8.82			6 750	4 230	8 300	5 160	10 640	6 520	14 330*	8 650	17 910*	12 470	12 400*	12 400*	10 080*	10 080*	6 640*	1.01
-3 m	6 490	8.24	4 070	8.24			6 830	4 310	8 360	5 230	10 680	6 580	13 640*	8 730	16 850*	12 590	15 670*	15 670*	12 390*	12 390*	9 500*	1.05
-4 m	6 940*	7.50	4 760	7.50					8 270*	5 420	10 210*	6 720	12 410*	8 880	15 190*	12 780	18 990*	18 990*	15 640*	15 640*	13 300*	1.40
-5 m	6 770*	6.54	5 950	6.54							8 270*	6 850*	10 390*	9 000	12 720*	12 650*	15 630*	15 630*			19 010*	2.17

SH300-6

SHOE : 800 (mm)G
BUCKET : SAE/PCSA 1.30 (m³)

ARM LENGTH : 3.18 (m)
MAXIMUM REACH : 10.70 (m)

BOOM : 6.15 (m)

Bucket Hook Height	Max. Radius		Radius of Load																Min. Radius			
			10 m		9 m		8 m		7 m		6 m		5 m		4 m		3 m		2 m		1 m	
8 m	(kg)	(m)	(kg)	(m)																		
	3 230*	8.35	3 230*	8.35				4 100*	4 100*	4 220*	4 220*											
7 m	3 120*	9.04	3 120*	9.04			3 280*	3 280*	4 950*	4 950*	5 370*	5 370*										
6 m	3 080*	9.56	3 080*	9.56			4 580*	4 030	5 450*	5 040	6 330*	6 220										
5 m	3 100*	9.93	3 100*	9.93			5 320*	3 980	6 060*	4 940	7 130*	6 230	7 580*	7 580*								
4 m	3 150*	10.17	3 070	10.17	3 890*	3 180	6 010	3 900	6 990*	4 820	7 710*	6 050	8 410*	7 820	9 550*	9 550*	9 570*	9 570*				
3 m	3 250*	10.30	2 950	10.30	4 530*	3 140	5 950	3 820	7 260	4 690	8 430*	5 860	9 640*	7 530	11 490*	10 090	14 400*	14 210	18 360*	18 360*		
2 m	3 380*	10.31	2 900	10.31	4 850*	3 080	5 850	3 720	7 110	4 550	8 830	5 660	10 590*	7 230	12 960*	9 600	16 350*	13 650	8 630*	8 630*		
1 m	3 570*	10.22	2 910	10.22	4 780*	3 030	5 760	3 640	6 980	4 430	8 670	5 480	11 110	6 960	14 050*	9 190	17 390*	12 970	6 970*	6 970*		
0 m	3 830*	10.03	2 980	10.03	4 040*	2 990	5 680	3 570	6 860	4 320	8 500	5 330	10 910	6 750	14 630*	8 880	15 810*	12 550	8 160*	8 160*	4 490*	4 490*
-1 m	4 180*	9.73	3 110	9.73			5 630	3 530	6 780	4 250	8 380	5 220	10 740	6 600	14 650	8 710	16 180*	12 370	9 800*	9 800*	7 570*	7 570*
-2 m	4 680*	9.32	3 340	9.32			5 640	3 530	6 750	4 220	8 320	5 180	10 680	6 550	14 560*	8 680	18 100*	12 480	11 830*	11 830*	9 300*	9 300*
-3 m	5 420*	8.78	3 690	8.78					6 800	4 270	8 340	5 210	10 690	6 580	14 140*	8 730	17 690*	12 560	14 410*	14 410*	11 290*	11 290*
-4 m	6 570*	8.08	4 230	8.08					6 830	4 330	8 390	5 310	10 690	6 670	13 210*	8 830	16 350*	12 710	18 200*	18 200*	14 270*	14 270*
-5 m	6 890*	7.19	5 120	7.19							7 470*	5 420	9 490*	6 860	11 640*	9 020	14 320*	12 840	18 040*	18 040*	17 300*	17 300*
-6 m	6 470*	6.04	6 470*	6.04									6 750*	6 750*	9 030*	8 970	11 250*	11 250*	13 950*	13 950*		

SH300-6

SHOE : 800 (mm)G
BUCKET : SAE/PCSA 1.10 (m³)

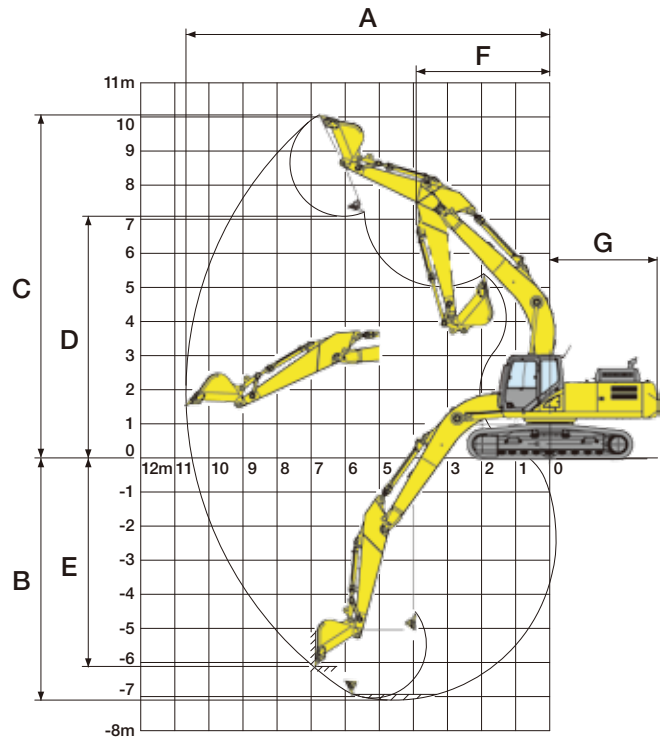
ARM LENGTH : 3.66 (m)
MAXIMUM REACH : 11.20 (m)

BOOM : 6.15 (m)

Bucket Hook Height	Radius of Load																															
	Max. Radius				10 m		9 m		8 m		7 m		6 m		5 m		4 m		3 m		2 m		1 m		0 m		Min. Radius					
																																
9 m	(kg)	(m)	(kg)	(m)					3 140*	3 140*																			(kg)	(m)	(kg)	(m)
8 m	2 870*	8.11	2 870*	8.11					3 140*	3 140*																			3 050*	7.57	3 050*	7.57
7 m	2 710*	8.96	2 710*	8.96					3 990*	3 990*																			3 920*	7.19	3 920*	7.19
6 m	2 620*	9.60	2 620*	9.60			3 860*	3 860*	4 460*	4 460*																			4 870*	7.25	4 870*	7.25
5 m	2 590*	10.09	2 590*	10.09	2 880*	2 880*	4 420*	4 120	4 850*	4 850*																			5 670*	7.06	5 670*	7.06
4 m	2 590*	10.43	2 590*	10.43	3 800*	3 290	4 900*	4 050	5 590*	5 030	6 430*	6 190*																	6 640*	6.57	6 640*	6.57
3 m	2 630*	10.66	2 630*	10.66	4 390*	3 240	5 460*	3 970	6 460*	4 900	7 180*	6 150	7 800*	7 720	6 130*	6 130*													5 310*	4.84	5 310*	4.84
2 m	2 700*	10.78	2 700*	10.78	4 870*	3 180	5 990	3 870	7 170*	4 750	8 030*	5 950	9 100*	7 670	10 680*	10 170	13 230*	13 230*	10 500*	10 500*									9 300*	2.11	9 300*	2.11
1 m	2 800*	10.79	2 680	10.79	4 930	3 110	5 900	3 760	7 170	4 610	8 720*	5 740	10 120*	7 340	12 240*	9 790	15 900*	13 990	13 980*	13 980*									4 860*	2.38	4 860*	2.38
0 m	2 950*	10.71	2 680	10.71	4 860	3 050	5 790	3 670	7 020	4 470	8 730	5 540	10 980*	7 040	13 520*	9 320	16 770*	13 200	8 220*	8 220*									3 300*	2.18	3 300*	2.18
-1 m	3 140*	10.53	2 740	10.53	4 800	2 990	5 700	3 580	6 890	4 340	8 540	5 360	10 970	6 790	14 330*	8 950	17 050*	12 670	8 280*	8 280*	4 620*	4 620*							3 190*	1.28	3 190*	1.28
-2 m	3 410*	10.25	2 850	10.25	4 730*	2 960	5 630	3 520	6 780	4 250	8 390	5 230	10 760	6 610	14 640*	8 720	16 180*	12 380	9 430*	9 430*	6 810*	6 810*	5 340*	5 340*					3 520*	0.19	3 520*	0.19
-3 m	3 780*	9.85	3 030	9.85			5 600	3 490	6 720	4 190	8 300	5 150	10 650	6 510	14 540	8 630	17 290*	12 370	11 070*	11 070*	8 440*	8 440*	7 710*	7 710*	5 250*	5 250*			5 250*	0	5 250*	0
-4 m	4 310*	9.34	3 310	9.34			5 640	3 540	6 740	4 210	8 290	5 150	10 630	6 520	14 350*	8 640	18 100*	12 420	13 180*	13 180*	10 200*	10 200*	9 050*	9 050*					6 730*	0.03	6 730*	0.03
-5 m	5 100*	8.69	3 740	8.69					6 820	4 300	8 350	5 220	10 670	6 580	13 670*	8 720	17 070*	12 540	15 970*	15 970*	12 380*	12 380*	10 660*	10 660*					8 780*	0.29	8 780*	0.29
-6 m	6 380*	7.86	4 410	7.86							8 320*	5 390	10 200*	6 670*	8 880	15 400*	12 740	19 610*	19 610*	16 690*	16 690*	12 810*	12 810*					11 700*	0.82	11 700*	0.82	
-7 m	6 360*	6.82	5 560	6.82										8 310*	6 840	10 400*	8 990	12 880*	12 670*	16 250*	16 250*	18 990*	18 990*					17 690*	1.79	17 690*	1.79	

Working Range

	SH300-6		
Arm length	2.65 m	3.18 m	3.66 m
Boom length		6.15 m	
A Max digging radius	10 220 mm	10 670 mm	11 160 mm
B Max digging depth	6 570 mm	7 100 mm	7 580 mm
C Max digging height	9 930 mm	10 060 mm	10 390 mm
D Max dumping height	6 940 mm	7 090 mm	7 390 mm
E Max vertical wall cut depth	5 760 mm	6 120 mm	6 720 mm
F Min front swing radius	4 000 mm	3 920 mm	4 000 mm
G Rear end swing radius		3 160 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

[Cab/interior equipment]

- Top guard OPG level1 (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
- KAB seat
- 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

[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

[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

Principle Specifications

	SH300-6
	STD Specifications
Base	Boom length
	6.15 m
	Arm length
	3.18 m
Engine	Bucket capacity (ISO heaped)
	1.3 M3
	Std. operating weight
	29,300 kg
Hydraulic System	Make & model
	ISUZU GH-6HK1X
	Rated output
	202 kW/2 000 min ⁻¹
Performance	Displacement
	7.79 ltr
	Main pump
	2 variable displacement axial piston pumps with regulating system
Others	Max pressure
	34.3 MPa
	/with auto power boost
	37.3 MPa
Hydraulic System	Travel motor
	Variable displacement axial piston motor
	Parking brake type
	Mechanical disc brake
Performance	Swing motor
	Fixed displacement axial piston motor
	Travel speed
	5.7/3.3 km/h
Performance	Drawbar pull
	233 kN
	Gradeability
	70% <35°>
Performance	Ground pressure
	56 kPa
	Swing speed
	11.0 min ⁻¹
Performance	Bucket digging force
	175 kN
	/with power boost
	190 kN
Performance	Arm digging force
	122 kN
	/with power boost
	132 kN
Others	Fuel tank
	450 ltr
Others	Hydraulic fluid tank
	147 ltr

Accessories (option)

■ Cab-top lights



■ Rain deflector



■ Head guard (OPG level 2)



■ Polycarbonate roof top window with sunshade



■ Front guard (OPG level 1 or 2)



Front mesh guard (full/lower)



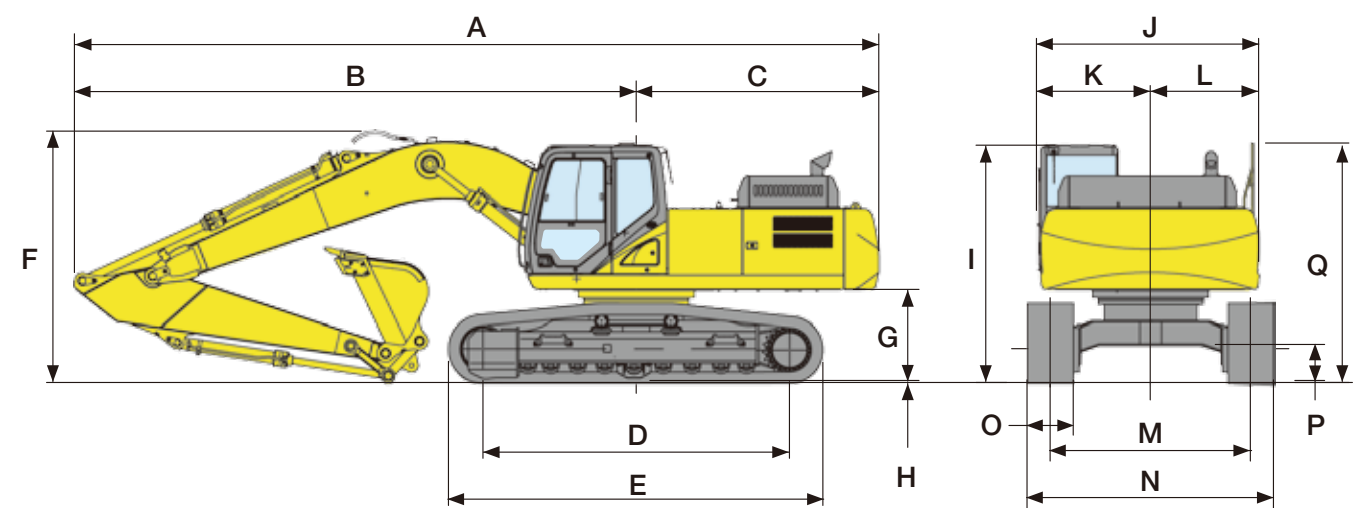
■ Precleaner



■ Air suspension (KAB seat)



- Refuel pump
- Hose burst check valve (HBCV) for boom/arm cylinders
- Straight travel pedal
- Side camera
- Rear view camera
- ISO compliant guardrail
- ISO compliant mirror
- ROPS Cabin



Model	SH300-6		
Arm length	2.65 m	3.18 m	3.66 m
A Overall length	10 480 mm	10 450 mm	10 470 mm
B Length from centre of machine (to arm top)	7 330 mm	7 300 mm	7 320 mm
C Upper structure rear end radius	3 150 mm	3 150 mm	3 150 mm
D Centre to centre of wheels	3 980 mm	3 980 mm	3 980 mm
E Overall track length	4 850 mm	4 850 mm	4 850 mm
F Overall height (to top of boom)	3 340 mm	3 260 mm	3 460 mm
G Clearance height under upper structure	1 180 mm	1 180 mm	1 180 mm
H Shoe lug height	26 mm	26 mm	26 mm
I Overall height (to top of cab)	3 090 mm	3 090 mm	3 090 mm
J Upper structure overall width	2 890 mm	2 890 mm	2 890 mm
K Width from centre of machine (left side)	1 480 mm	1 480 mm	1 480 mm
L Width from centre of machine (right side)	1 410 mm	1 410 mm	1 410 mm
M Track gauge	2 600 mm	2 600 mm	2 600 mm
N Overall width	3 200 mm	3 200 mm	3 200 mm
O Std. shoe width	600 mm	600 mm	600 mm
P Minimum ground clearance	470 mm	470 mm	470 mm
Q Overall height (to top of handrail)	3 110 mm	3 110 mm	3 110 mm