# SUMITOMO

SH360LC/380LHD-7 Hydraulic Excavator



731-1 Naganumahara-cho, Inage-ku,Chiba, 263-0001 Japan For further information please contact: Phone : +81-43-420-1829 Facsimile : +81-43-420-1907 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.



SUM E X C A V



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# E NO A T O R S SSOLC-7 SSOLHD-7

YDRAULIC EXCAVATOR FOR REAL PERFORMANCE

## EU Stage V

# Advances-Abound. Innovation Infinite.

SUMITOMO

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## Setting a new bar for worksite proficiencies. The All-new LEGEST.

The new LEGEST series from Sumitomo has been developed to exceed its own capabilities in every regard, with performance benchmarks that will stand the test of time and innovation to tackle any job. Created for more seamless operations in an extensive range of worksite surroundings, both businesses and operators will come to treasure the performance the LEGEST is capable of providing. Unleash the potential on your worksite with capabilities never before seen.

#### Advanced Energy Efficiency and Eco-friendly Operation 04-07

 $\bullet$  Clean and Fuel-efficient Engine "SPACE 5  $\alpha$  "

- Innovative Hydraulic System "SIH:S α"
- SUMITOMO Technology for Fuel Efficiency

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## **Advanced Energy Efficiency and Eco-friendly Operation**

The combination of the advanced clean engine "SPACE 5 a" and SUMITOMO's proprietary hydraulic system "SIH:S a" 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!**





#### Meets EU Stage V standards

The clean engine "SPACE 5 a" 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 SH380LHD-7 series excavator has been designed to be even more environmentally friendly.

NOx: **90**% reduction

PM: 92% reduction



### Clean and Fuel-efficient Engine "SPACE 5 a"

(compared to SH370I HD-6)

The SH380LHD-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.



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



#### SCR System Design

## Advanced Energy Efficiency and Eco-friendly Operation

#### Innovative Hydraulic System "SIH:S a"

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.



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#### Three Working Modes for Economic Operation or Work Efficiency

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 easily choose the optimum working mode.

#### SUMITOMO Technology for Fuel Efficiency

#### •Spool Stroke Control (SSC) α

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

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)

Increases fuel efficiency during boom-down operation.

#### PTR (Pump Transition Reduction)

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.





#### **Superb Working Efficiency**

#### SUMITOMO

Spool Stroke Control (SSC) a ensures a precise, optimum level of flow control to suit working conditions. The machine's speed, power and handling are exactly as the operator intends, which helps to boost working efficiency. The SSC range has been expanded, with better precision for identifying types of operation-the result is both greater energy efficiency and much smoother operation.

#### **Outstanding Operating Speed and Handling**

The speed of excavating and filling dump trucks is on an equivalent level to the current SH370LHD-6. The system prioritises controls when work calls for careful handling, thus achieving both high volume and delicate operations.



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#### **New High-capacity Control Valve**

The valve structure has been improved to significantly reduce pressure loss within internal circuits. Hydraulic oil from the pump is distributed and pumped to actuators efficiently, drastically increasing work speed for both single and combined operations.

#### **Easier Filling Dump Trucks**

Filling trucks is easier through the combination of SUMITOMO's proprietary technology\* and more powerful boom raising when swinging. This mixes surplus hydraulic pressure when lowering the boom with the arm opening circuit, to empty buckets and excavate soil significantly faster. This makes filiing dump trucks much smoother and quicker.

\* Boom-down Energy Save boosts the arm opening circuit



#### **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**

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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.

## 1

Seat heater switch

## **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.

#### New Monitor-Even More Intuitive and User-friendly

A wide range of excavator operating and maintenance information, warnings and other data are displayed as text messages. Providing a way to view accurate and easy-tounderstand information helps to boost operating efficiency and safety.



#### Automatic Air-conditioner

Fully automatic climate control maintains a comfortable temperature within the cabin. The optimal ducting layout and airtight cabin also help to boost air-conditioning efficiency.



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#### Illustrations of new monitor displays



aintenance info

#### Indicators

- 1 Working modes
- 2 Icons
- 3 Warning messages
- 4 Engine coolant temperature
- 5 Fuel level
- 6 Urea water level
- ATS warning
  - o warning
- 8 Camera view (rear camera)
- Camera view (right side camera)



Display settings

#### Switch Panel

- A Travel speed button
- B ATS purge
- C Aux. hydraulic settings
- D Window wiper
- B Window washer
- F Work lights
- G Auto idle/Idle stop
- H Display modes
- Hour meter toggle (trip/total)

#### **Equipment for Comfort and Safety**



Rear luggage space Hot & d



Anti-theft system



Hot & cool box



Magazine rack



Emergency stop switch



## **Sophisticated Safety Features**

The cabin provides excellent driving visibility, and features a high-strength design to better protect the operator. Every aspect has been designed for day-to-day safety, including excellent access in and out of the cabin, and steps and handrails to make inspections and maintenance easier. The use of rear and right side cameras also helps to ensure operations remain safe.

#### Safe ROPS-compliant Cabin

A high-strength cabin design means operators are even better protected. ROPS: Roll-Over Protective Structure

#### Wide View for Excellent Site Safety

In addition to the front of the excavator, the cabin design gives the operator a wide, unrestricted view to check upper and lower areas. Direct visibility for the operator means work can be performed safer.



### **Rear and Right Side Cameras**

Two cameras are installed as standardrear view and on the right side-so the operator can check for safety behind the excavator. Optimally positioned mirrors and the use of cameras ensure that mirror visibility meets ISO standards. thus making it easier for the operator to check for safety in any desired direction.



Monitor videos



Right side camera

Handrails

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Moulded steel pip Thick pla

#### **Superb Access**

The wide door opening and large handrails provide excellent access up to and down from the cabin. The spacious footwell also makes it easier to get in and out.



Large handrail and spacious footwell

#### Handrails and Non-slip Plates for Operator Safety

Steps and handrails are in the optimal positions to assist getting in and out of the cabin and to ensure safety during inspections and maintenance. New handrails have now also been installed at the rear of the cabin and the right side of the body, while non-slip plates improve safety when it is raining.







Non-slip plates

### LED Cabin Top Light (OPTION)

A long-life LED cabin top light is now available as an optional extra. Super bright and with a high-visibility colour, the light enhances safety during night-time operations.



LED cabin top light



### **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

The use of a larger radiator and oil cooler help to increase cooling performance and reliability. It is also easier to clean the dust-proof net.



AC external filter Air cleaner

Battery (with cover) AC condenser

#### **Battery Cutoff Switch**

A battery switch is mounted inside the inspection cover. ensuring safe operations during maintenance procedures.



#### •Designed for Easy Filter Replacement

The pre-fuel filter is designed to reduce issues due to a blocked fuel filter, and the easily accessible location of the fuel and oil filters ensure smooth inspection and replacement work

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#### **Other Maintenance Features**



behind seat



Washable cab floor and floor mats

#### **Dust-proof Net for Enhanced Maintenance**

A dust-proof net mounted in front of the radiator and cooler reduces the amount of dust adhesion, leading to a higher level of reliability. The dust-proof net can be removed from the front for easy cleaning.



#### **High-Performance Return Filter**

A long hydraulic oil change interval of 5,000 hours, and the use of a high-performance return filter ensures superior ease-of-maintenance.



## Hydraulic oil change: **5,000** hours Filter life: 2,000 hours \* The oil and filter change intervals vary depending on operating conditio

#### Precautions with machines installed with the SCR System

To ensure that the machine can be used safely and smoothly, use AdBlue® aqueous solution (or a urea aqueous solution that complies with ISO standards). Using a non-standard aqueous solution or diluting the solution before use may cause me the use of non-standard aqueous solutions are not covered by SUMITOMO's warranty service. •The remaining AdBlue® level can be checked during work on the monitor display in the cab. A warning is displayed on the monitor when the

The engine power output will be limited if the remaining AdBlue<sup>®</sup> level falls below the minimum level or there is an issue with quality, so be sure to plan refills in advance.

#### Precautions when handling AdBlue®

•The SCR System is designed exclusively for the machine, and must not be used for any other purpose •Rinse with water any solution that comes in contact with skin.

•When storing the solution, always use sealed containers and store at room temperature in a well-ventilated location out of direct sunlight. When carrying the solution, always use the container that the solution was purchased in, or other specified container •The SCR System includes a heater function, however sufficient care must be taken to prevent freezing when the solution is stored in cold regions (freezing temperature: -11°C).

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#### **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: 152 L Refilling Refilling frequency: **Once** per **8** 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 eight times the fuel tank is filled (may vary depending on usage conditions).





Read the instruction manual for more details.

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### EMS for Enhanced Maintenance of Joints

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.





Attachment EMS bushing with self-lubricating capability

#### **Higher Rigidity Boom and Arm**

The boom and arm essential for operations feature a heavy-duty design and optimally shaped structure for greater strength and durability, as well as enhanced reliability of joints.



#### **Superior Undercarriage Cleanout**

A linear angled shape for the upper side frame is designed to make it easier to clean out debris from the undercarriage.



Upper side frame shape Image has been simplified for illustration purposes

#### **Enhanced Undercarriage for** Greater Durability and Easier Maintenance

Durability of the undercarriage has been enhanced with improvements to the track rollers and front idlers. Better interior sealing also increases sediment resistance.



## **Heavy Duty Specifications SH380LHD-7**

"Heavy Duty (HD) specifications" designed for harsh worksites. Tough, rigid body and dependable power bring out the machine's full potential.





#### **Arm Lock Guard** A lower guard mounted at the arm tip protects against denting when carrying rocks.

**High-durability Bucket** 

installed as standard for the HD

spec machine, providing added reliability on tough worksites.

A high-durability bucket is





#### Front Guard & Head Guard (OPTION)

A front guard and head guard is available to protect the cab from falling rocks or debris.



Side Deck Guard Guards mounted on both side decks of the machine protect against collisions or shocks.





A full track guard along the lower undercarriage prevents shoes riding off, and also helps to protect the rollers.



## **Specifications**

#### SH360LC/SH380LHD-7 Technical Data

The electronic-controlled engine of S PACE 5  $\alpha$  and SIH:S  $\alpha$  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

<b>J</b>	
	SH360LC/SH380LHD-7
Model	ISUZU VE-6HK1X
Туре	Water-cooled, 4-cycle diesel, 4-cylinder in line, high pressure common rail system (electric control), turbocharger with air cooled intercooler, ATS
Rated output	200 kW at 1,900 min-1
Maximum torque	988 N-m at 1,500 min <sup>-1</sup>
Piston displacement	7.79 ltr (7,790 cc)
Bore and stroke	115 mm x 125 mm
Starting system	24 V electric motor starting
Alternator	24 V, 90 A
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.

	SH360LC/SH380LHD-7
Maximum oil flow	2 x 300 ltr/min
Pilot pump max. oil flow	28.5 ltr/min

#### Hydraulic motors

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

#### Working circuit pressure

Boom/arm/bucket ..... 34.3 MPa Boom/arm/bucket ···· 37.3 MPa with auto power-up 

#### 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

SH360LC/SH380LHD-7			
Cylinder	Q'ty	Bore x rod diameter x stroke	
Boom	2	145 mm x 100 mm x 1,495 mm	
Arm	1	170 mm x 120 mm x 1,748 mm	
Bucket	1	150 mm x 105 mm x 1,210 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 with 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 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.

	SH360LC/SH380LHD-7
Swing speed	0 ~ 9.7 min <sup>-1</sup>
Tail swing radius	3,540 mm
Swing torque	112 kN·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 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

	SH360LC/SH380LHD-7
Upper rollers	2
Lower rollers	8
Track shoes	48

#### 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.

SH360LC/SH380LHD-7		
Travel speed	High	5.7 km/h
	Low	3.4 km/h
Drawbar pull		264 kN

#### Lubricant & coolant capacity

	SH360LC/SH380LHD-7	
Hydraulic system	350 ltr	
Hydraulic oil tank	175 ltr	
Fuel tank	590 ltr	
Cooling system	38 ltr	
Final drive case (per side)	9.5 ltr	
Swing drive case	5.0 ltr	
Engine crank case (with remote oil filter)	49 ltr	
Urea water tank	152 ltr	

#### Auxiliary hydraulic system

	SH360LC/SH380LHD-7		
Auxiliary piping type (option)	For Breaker	For Double (breaker & crusher) acting	For D/A + Second option line STD
Arm type	HD	HD	HD
Bucket linkage type	HD	HD	HD
Auxiliary hydraulic pump flow	300 ltr/min	600 ltr/min	600+62 ltr/min

#### Bucket

		options and specifications may differ depending on countries and reg		
Model		SH360LC-7	SH380LHD-7	
Bucket capacity (ISO/SAE/PCSA he	aped)	1.7 m <sup>3</sup>	1.9 m <sup>3</sup>	
Bucket type		HD ROCK	HD ROCK	
Number of teeth		5	5	
Width	With side cutter	_	_	
	Without side cutter	1,325 mm	1,465 mm	
Weight		1,667 kg	1,765 kg	
Combination	2.63 m arm	0	0	
	3.25 m arm	•	•	

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

Standard bucket (Suitable for materials with density up to 1,800 kg/m<sup>3</sup> or less)

#### Weight & Ground Pressure

-					
Model	SH360LC-7				
Shoe type	Shoe width	Overall width	Operating weight	Ground pressure	
Triple grouser shoe	600 mm	3,200 mm	38,100 kg	71 kPa	
Model	SH380LHD-7				
Shoe type	Shoe width	Overall width	Operating weight	Ground pressure	
Triple grouser shoe	600 mm	3,200 mm	38,500 kg	72 kPa	

#### **Digging Force**

lodel		
rm length		2.63 m
ucket digging force with auto power up>	ISO 6015	
rm digging force with auto power up>	ISO 6015	194 kN <211 kN>

### and enacifications may differ depending on countries

SH360LC/SH380LHD-7	,
31 1300L0/31 1300L1 1D-1	

3.25 m

225 kN (244 kN)

164 kN <178 kN>

#### Lifting Capacity



8 m	(kg) 6 700*	(m) 7.37	(kg) 6 700*	(m) 7.37					8 600*	8 600*											(kg) 8 580*	(m) 6.79	(kg) 8 580*	(m) 6.79
7 m	6 440*	8.09	6 440*	8.09			7 090*	7 090*	8 520*	8 520*											8 560*	6.79	8 560*	6.79
6 m	6 310*	8.62	6 260	8.62			8 490*	7 150	8 780*	8 780*											9 020*	6.45	9 020*	6.45
5 m	6 290*	9.02	5 750	9.02	6 480*	5 770	8 720*	7 030	9 250*	8 690	10 040*	10 040*									10 410*	5.64	10 410*	5.64
4 m	6 350*	9.29	5 400	9.29	8 530	5 700	9 080*	6 880	9 850*	8 440	11 010*	10 630	12 810*	12 810*	15 920*	15 920*					19 890*	3.31	19 890*	3.31
3 m	6 500*	9.45	5 180	9.45	8 420	5 600	9 490*	6 700	10 510*	8 160	12 030*	10 200	14 450*	13 260	18 820*	18 380					16 740*	3.73	16 740*	3.73
2 m	6 750*	9.49	5 070	9.49	8 300	5 490	9 890*	6 530	11 140*	7 900	12 970*	9 810	15 860*	12 650	14 630*	14 630*					11 620*	3.85	11 620*	3.85
1 m	7 110*	9.43	5 050	9.43	8 200	5 400	9 750	6 380	11 640*	7 680	13 680*	9 490	16 800*	12 220	13 410*	13 410*					9 360*	3.69	9 360*	3.69
0 m	7 610*	9.26	5 130	9.26	8 130	5 340	9 630	6 270	11 710	7 520	14 100*	9 280	17 210*	11 960	15 580*	15 580*					8 290*	3.22	8 290*	3.22
-1 m	8 140	8.98	5 340	8.98			9 550	6 200	11 600	7 420	14 170*	9 150	17 160*	11 840	19 480*	16 630	11 490*	11 490*			8 220*	2.24	8 220*	2.24
-2 m	8 710	8.56	5 690	8.56			9 550	6 190	11 560	7 380	13 880*	9 1 1 0	16 660*	11 820	20 390*	16 690	16 450*	16 450*	12 570*	12 570*	11 750*	1.55	11 750*	1.55
-3 m	9 110*	8.00	6 270	8.00			9 120*	6 280	11 090*	7 430	13 150*	9 160	15 690*	11 900	18 960*	16 840	22 170*	22 170*	17 490*	17 490*	16 420*	1.58	16 420*	1.58
-4 m	9 010*	7.26	7 250	7.26					9 650*	7 580	11 810*	9 290	14 120*	12 070	16 900*	16 900*	20 380*	20 380*	23 160*	23 160*	22 900*	1.94	22 900*	1.94
-5 m	8 590*	6.27	8 590*	6.27							9 330*	9 330*	11 620*	11 620*	13 900*	13 900*	16 450*	16 450*			16 980*	2.81	16 980*	2.81

SH3	SH360LC-7 SHOE : 600 (mm)G MAXIMUM REACH : 8.97 (m)								ARM LENGTH : 2.63 (m) BOOM : 6.45 (m) COUNTERWEIGHT : 7 400 kg											
Arm										Radius	s of Load	b								
Top	Max. Radius		8 m		7 m		6 m		5 m		4 m		3 m			Mi	n. Radius			
Height	Ů		Ģ	<b>-</b>	ů	<b>;</b> ]	ų	<b>;</b> ]-•	Ů	<b>Ģ</b> ₽•	ų	<b>;</b> ]	ų	Ģ₽•	ů	Ģ₽•	Ľ	1	Ç	.∔-
7 m	<sup>(kg)</sup> 9 260*	(m) 7.47	<sup>(kg)</sup> 7 940	(m) 7.47			9 460*	8 890									<sup>(kg)</sup> 9 680*	(m) 6.16	<sup>(kg)</sup> 9 680*	(m) 6.16
6 m	9 010*	8.05	6 970	8.05	9 340*	7 050	9 590*	8 800	10 200*	10 200*							10 420*	5.73	10 420*	5.73
5 m	8 940*	8.47	6 350	8.47	9 410*	6 990	10 000*	8 610	10 950*	10 880	12 450*	12 450*					13 940*	4.35	13 940*	4.35
4 m	8 880	8.76	5 940	8.76	9 680*	6 860	10 540*	8 380	11 870*	10 490	14 020*	13 680					17140*	4.16	17 140*	4.16
3 m	8 540	8.92	5 700	8.92	10 010*	6710	11 130*	8 130	12 820*	10 100	15 570*	13 020					17 680*	4.50	15 050	4.50
2 m	8 390	8.97	5 570	8.97	9 940	6 570	11 660*	7 900	13 620*	9 760	16 740*	12 510					18 520*	4.60	14 010	4.60
1 m	8 410	8.91	5 570	8.91	9 810	6 450	11 920	7 720	14 160*	9 500	17 340*	12 190					15 320*	4.47	14 270	4.47
0 m	8 620	8.73	5 690	8.73	9 720	6 370	11 780	7 600	14 370*	9 350	17 410*	12 030					13 150*	4.10	13 150*	4.10
-1 m	9 040	8.42	5 950	8.42	9 690	6 340	11 720	7 540	14 220*	9 280	17 040*	11 990	18 350*	16 910			12 050*	3.39	12 050*	3.39
-2 m	9 620*	7.98	6 420	7.98			11 580*	7 550	13 660*	9 290	16 230*	12 040	19 360*	17 020	16 790*	16 790*	12 760*	2.17	12 760*	2.17
-3 m	9 510*	7.38	7 200	7.38			10 450*	7 660	12 590*	9 380	14 930*	12 160	17 620*	17 220	20 510*	20 510*	20 450*	2.21	20 450*	2.21
-4 m	9 130*	6.57	8 570	6.57					10 650*	9 600	12 880*	12 400	15 130*	15 130*	17 440*	17 440*	18 150*	2.68	18 150*	2.68
-5 m	8 810*	5.21	8 810*	5.21							9 350*	9 350*					10 780*	4.33	10 780*	4.33

Notes: 1. Ratings are based on ISO 10567

Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.

The load point is a arm top.
 \*Indicates load limited by hydraulic capacity.
 0 m = Ground.

SH38	SHOE         : 600 (mm)/G MAXIMUM REACH : 9.49 (m)         ARM LENGTH : 3.25 (m) COUNTERWEIGHT : 7 400 kg         BOOM : 6.45 (m)																							
							Radius of Load																	
Arm Top		Max. F	Radius		9	9 m		8 m 7 m		m	n 6 m		5 m		4	m	3	m	2	m		Min. F	Radius	
Height	Ů		Ç	1-0	ů	<b>;</b> ‡-•	Ů	<b>;</b> ‡-•	Ե	<b>;</b> ‡-•	Ů	÷	ů	Ç <b>}</b> ⊷	ů	<b>;</b> ‡-•	Ů	<b>;</b> }-	ů	<b>;</b> }-	Ľ	I	Ç	₽
8 m	(kg) 6 700*	(m) 7.37	(kg) 6 700*	(m) 7.37					8 600*	8 600*											(kg) 8 580*	(m) 6.79	(kg) 8 580*	(m) 6.79
7 m	6 440*	8.09	6 440*	8.09			7 090*	7 090*	8 520*	8 520*											8 560*	6.79	8 560*	6.79
6 m	6 310*	8.62	6 310	8.62			8 490*	7 200	8 780*	8 780*											9 020*	6.45	9 020*	6.45
5 m	6 290*	9.02	5 790	9.02	6 480*	5 810	8 720*	7 090	9 250*	8 750	10 040*	10 040*									10 410*	5.64	10 410*	5.64
4 m	6 350*	9.29	5 440	9.29	8 570*	5 740	9 080*	6 930	9 850*	8 500	11 010*	10 700	12 810*	12 810*	15 920*	15 920*					19 890*	3.31	19 890*	3.31
3 m	6 500*	9.45	5 220	9.45	8 480	5 640	9 490*	6 760	10 510*	8 220	12 030*	10 270	14 450*	13 360	18 820*	18 510					16 740*	3.73	16 740*	3.73
2 m	6 750*	9.49	5 110	9.49	8 370	5 540	9 890*	6 580	11 140*	7 960	12 970*	9 880	15 860*	12 750	14 630*	14 630*					11 620*	3.85	11 620*	3.85
1 m	7 110*	9.43	5 090	9.43	8 270	5 450	9 830	6 430	11 640*	7 740	13 680*	9 570	16 800*	12 310	13 410*	13 410*					9 360*	3.69	9 360*	3.69
0 m	7 610*	9.26	5 180	9.26	8 200	5 380	9 700	6 320	11 800	7 580	14 100*	9 350	17 210*	12 060	15 580*	15 580*					8 290*	3.22	8 290*	3.22
-1 m	8 210	8.98	5 380	8.98			9 630	6 250	11 690	7 480	14 170*	9 230	17 160*	11 930	19 480*	16 770	11 490*	11 490*			8 220*	2.24	8 220*	2.24
-2 m	8 780	8.56	5 740	8.56			9 620	6 250	11 650	7 450	13 880*	9 190	16 660*	11 920	20 390*	16 820	16 450*	16 450*	12 570*	12 570*	11 750*	1.55	11 750*	1.55
-3 m	9 110*	8.00	6 330	8.00			9 120*	6 330	11 090*	7 490	13 150*	9 230	15 690*	11 990	18 960*	16 970	22 170*	22 170*	17 490*	17 490*	16 420*	1.58	16 420*	1.58
-4 m	9 010*	7.26	7 310	7.26					9 650*	7 640	11 810*	9 370	14 120*	12 160	16 900*	16 900*	20 380*	20 380*	23 160*	23 160*	22 900*	1.94	2 2900*	1.94
-5 m	8 590*	6.27	8 590*	6.27							9 330*	9 330*	11 620*	11 620*	13 900*	13 900*	16 450*	16 450*			16 980*	2.81	16 980*	2.81

SH38	SH380LHD-7         SHOE : 600 (mm)G MAXIMUM REACH : 8.97 (m)								ARM LENGTH : 2.63 (m) BOOM : 6.45 (m) COUNTERWEIGHT : 7 400 kg											
Arm		May	Dediue		0.	~~	7.	~~	6	Radius	s of Loa	d	4	4				N.A.	a Dadiua	
Top Height	ů Ç		Hadius C	։ ի		" Ģ₽•	ற் ச⊷		Ů		ů				ů 🕂		ц			
7 m	<sup>(kg)</sup> 9 260*	(m) 7.47	(kg) 7 990	(m) 7.47			9 460*	8 950									<sup>(kg)</sup> 9 680*	(m) 6.16	<sup>(kg)</sup> 9 680*	(m) 6.16
6 m	9 010*	8.05	7 020	8.05	9 340*	7 100	9 590*	8 860	10 200*	10 200*							10 420*	5.73	10 420*	5.73
5 m	8 940*	8.47	6 400	8.47	9 410*	7 040	10 000*	8 670	10 950*	10 950*	12 450*	12 450*					13 940*	4.35	13 940*	4.35
4 m	8 950	8.76	5 990	8.76	9 680*	6 910	10 540*	8 4 4 0	11 870*	10 570	14 020*	13 770					17 140*	4.16	17 140*	4.16
3 m	8 610	8.92	5 740	8.92	10 010*	6 760	11 130*	8 190	12 820*	10 170	15 570*	13 120					17 680*	4.50	15 160	4.50
2 m	8 450	8.97	5 620	8.97	10 020	6 620	11 660*	7 970	13 620*	9 830	16 740*	12 600					18 520*	4.60	14 120	4.60
1 m	8 470	8.91	5 610	8.91	9 890	6 500	12 010	7 780	14 160*	9 580	17 340*	12 290					15 320*	4.47	14 380	4.47
0 m	8 680	8.73	5 730	8.73	9 800	6 420	11 870	7 660	14 370*	9 420	17 410*	12 130					13 150*	4.10	13 150*	4.10
-1 m	9 1 1 0	8.42	6 000	8.42	9 770	6 390	11 810	7 600	14 220*	9 350	17 040*	12 090	18 350*	17 050			12 050*	3.39	12 050*	3.39
-2 m	9 620*	7.98	6 470	7.98			11 580*	7 620	13 660*	9 360	16 230*	12 130	19 360*	17 160	16 790*	16 790*	12 760*	2.17	12 760*	2.17
-3 m	9 510*	7.38	7 260	7.38			10 450*	7 720	12 590*	9 460	14 930*	12 260	17 620*	17 350	20 510*	20 510*	20 450*	2.21	20 450*	2.21
-4 m	9 130*	6.57	8 640	6.57					10 650*	9 680	12 880*	12 490	15 130*	15 130*	17 440*	17 440*	18 150*	2.68	18 150*	2.68
-5 m	8 810*	5.21	8 810*	5.21							9 350*	9 350*					10 780*	4.33	10 780*	4.33



A: Radius of load B: Arm top height C: Lifting capacity

Load Radius Over Front Unit: kg

#### **Principle Specifications**

	SH360LC-7 SH380LHD-7									
	STD Specifications									
Boom length	6.45 m									
Arm length	3.25 m									
Bucket capacity (ISO heaped)	1.7 m <sup>3</sup> 1.9 m <sup>3</sup>									
Std. operating weight	38,100 kg 38,500 kg									
Make & model	ISUZU VE-4HK1X									
Rated output	200 kW/1,900 min <sup>-1</sup>									
Displacement	7.79 ltr									
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									
Travel speed	5.7/3.4 km/h									
Drawbar pull	264 kN									
Gradeability	70% <35°>									
Ground pressure	71 kPa 72 kPa									
Swing speed	9.7 min <sup>-1</sup>									
Bucket digging force	225 kN									
/with power boost	244 kN									
Arm digging force	164 kN									
/with power boost	178 kN									
Fuel tank	590 ltr									
Hydraulic fluid tank	175 ltr									
Urea water tank	152 ltr									
Bucket digging force /with power boost Arm digging force /with power boost Fuel tank Hydraulic fluid tank Urea water tank	225 kN 244 kN 164 kN 178 kN 590 ltr 175 ltr 152 ltr									

#### Working Range



		SH360LC/SH380LHD-7						
Arı	m length	2.63 m	3.25 m					
Bo	om length	6.45 m						
А	Max. digging radius	10,660 mm	11,180 mm					
в	Max. digging depth	6,730 mm	7,350 mm					
С	Max. digging height	10,290 mm	10,380 mm					
D	Max. dumping height	7,100 mm	7,240 mm					
Е	Max. vertical wall cut depth	5,360 mm	5,630 mm					
F	Min. front swing radius	4,440 mm	4,520 mm					
G	Rear end swing radius	3,540 mm						

#### Standard Equipment

#### [Hydraulic system]

- SIH:S α hydraulic system
  Operation mode (SP, H and A mode) •Automatic 2-speed travel Automatic power boost
- Boom/arm holding valve Arm/boom/bucket reactivation circuit
- •Automatic swing parking system
- Auxiliary valve •High-performance return filter

- [Cabin/interior equipment] •Shock-less cab suspension by 4-point fluid mounts •New full-colour LCD monitor Tilting console •Fresh-air intake pressurised full-automatic air conditioner Defroster •Hot & cool box •High water-repellent seat Seat suspension Armrest & headrest •Windscreen wiper (with intermittent operation function) •Cup holder •Magazine rack Accessory case •Floor mat Ashtray & cigarette lighter •Cab light (Auto-OFF function) Coat hook •Operation lever with one-touch wiper switch
- Polycarbonate roof top window
- with sunshade
- •12V power (DC-DC converter)

#### [Safety equipment] •ROPS cab (FOPS level 1) •Head guard (OPG Level 2) •Rear/right side camera •Rearview mirror (left/right) •Emergency escape tool Retracting seat belt •Gate lock lever (engine neutral start) Travel alarm •Anti-theft alarm system Engine room firewall Fan guard •Engine emergency stop switch

[Others]

•Fuel filter

•Large tool box

•A set of tools

•Pre-air cleaner

•EMS

Auto/one-touch idling

Long-life hydraulic oil

•Auto idle shutdown system

•Double-element air cleaner

•Grease-enclosed track link

•Fuel pre-filter (with water separator)







M	odel	SH36	50LC-7	SH38	BOLHD-7						
Ar	m length	2.63 m	3.25 m	2.63 m	3.25 m						
А	Overall length	11,220 mm	11,170 mm	11,220 mm	11,170 mm						
в	Length from centre of machine (to arm top)	7,700 mm	7,650 mm	7,700 mm	7,650 mm						
С	Length from centre of machine (to rear end)		3,520 mm								
D	Centre to centre of wheels		4,040 mm								
Е	Overall track length		4,980 mm								
F	Overall height	3,670 mm	3,510 mm	3,670 mm	3,510 mm						
G	Clearance height under upper structure	1,180 mm									
н	Shoe lug height	36 mm									
Т	Cab height		3,27	0 mm							
J	Upper structure overall width	3,030	) mm	3,120	D mm						
κ	Width from centre of machine (left side)	1,540	) mm	1,560	) mm						
L	Width from centre of machine (right side)	1,490	) mm	1,560	D mm						
Μ	Track gauge		2,600	) mm							
Ν	Overall width		3,200	) mm							
0	Std. shoe width	600 mm									
Ρ	Minimum ground clearance	470 mm									
Q	Handrail height		3,360	) mm							

### Accessories (option)

Cab-top lights (LED)



Rain deflector



TERSES.

Camera lights (LED) (top: side, bottom: rear)

Sun visor



Front guard (OPG level 1 or 2)



Refuel pump

■ Hose burst check valve (HBCV) for boom/arm cylinders Accessories and specifications may differ depending on countries and regions.