

SUMITOMO

SH135XU

MINIMUM SWING RADIUS

LEGEST



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Illustrations may include optional equipment and accessories and may not include all standard equipment.

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Courtesy of Machine.Market

MADE IN JAPAN

The world knows that Japanese design and manufacturing is the best especially for industrial products. The hydraulic excavator is not the exception when a total integration concept is required in design work involving key components, manufacturing engineering and product quality assurance in the factory.

All SUMITOMO hydraulic excavators are engineered and assembled in SUMITOMO's its one and only factory located in Chiba City, Japan, and distributed to each country in the world. This distinctive feature is unique to SUMITOMO, giving the SUMITOMO machine users total comfort and reliance on product quality.

(Note: Some of the items manufactured and sourced in other countries may be assembled in Japan.)



LEGEST
SH135XU



Minimum Swing Radius

In addition to boasting top-class compact rotational capability for cramped areas, outstanding stability, and powerful digging and drive strength have been realized. On various kinds of work-sites it can always be trusted to perform and maneuver exactly as the operator intends.



High-level operational performance and environmental soundness have been simultaneously achieved. The new-type "SPACE 5" engine system meets the newly enacted Japanese Off-road machinery regulation (Law on Regulation of Special Motor Vehicle Exhaust)

SPACE 5
SUMITOMO Powerful And Clean Engine System
1 Powerful 2 Economy 3 Clean 4 Silent 5 Strong

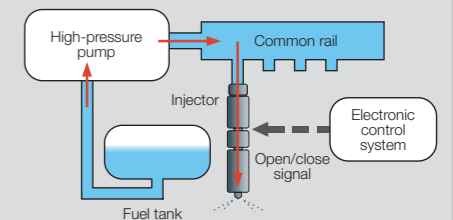
Clearing the Non-road Special Motor Vehicle Exhaust Emission Standard

"Achieving an exceptionally high standard for the 5 major qualities required of construction machinery", that is the solution provided by the SPACE5 engine that will meet the demands of the next generation.



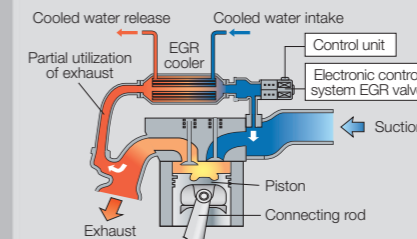
Common rail fuel injection system

The super-high-pressure common rail fuel injection system realizes super-high-pressure, high-precision multiple-injections. Timing and volume of fuel injection is controlled, which improves consumption efficiency, and PM (particulate matter) is greatly reduced.



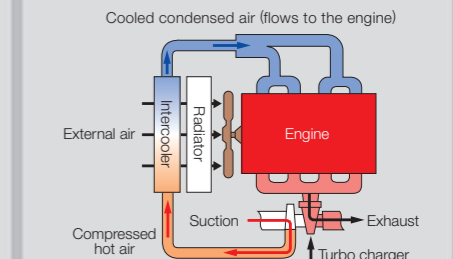
Cooled EGR system

Exhaust gas is re-circulated and combustion temperature lowered by the EGR (Exhaust Gas Recirculation) engine. In addition, a water-cooled EGR system has been employed, which further efficiently reduces NOx (nitrogen oxide).



4-valve DOHC turbo engine with intercooler

Air intake efficiency is improved by the intercooler. It cools air taken in, which has been heated by the compression of the turbo charger. In addition to a great reduction of NOx and PM, high output and improved fuel consumption have been realized.



- Performance capacity **4% UP**
(As compared with SH130-5 in H-mode)
- Standard output **8% UP**
70.9kW/2000min⁻¹

Diversified operational field

- Road works
- Forest road works
- Demolition works

Improvements to precision maneuverability

Precision maneuverability that functions exactly as the operator intends has been made possible through the employment of a new type of rotational bearing.

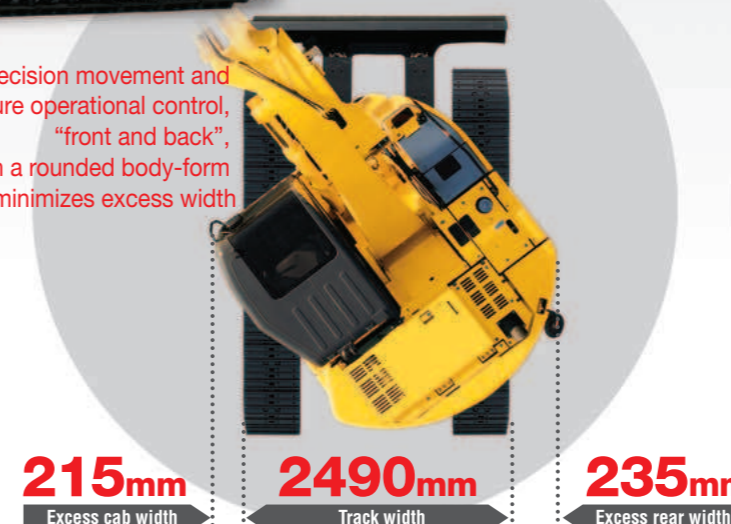
Rotational ABS

A rotation shock-absorber device has been installed to soften jolts that occur when the vehicle halts rotation. This is particularly useful for pinpointing position, and preventing spillages during manual operation.

Employment of speed assisted mechanics

Through employing an oil return system in the arm and boom, speed assisted operations for digging, as well as fuel consumption, have been improved.

Precision movement and secure operational control, "front and back", with a rounded body-form that minimizes excess width



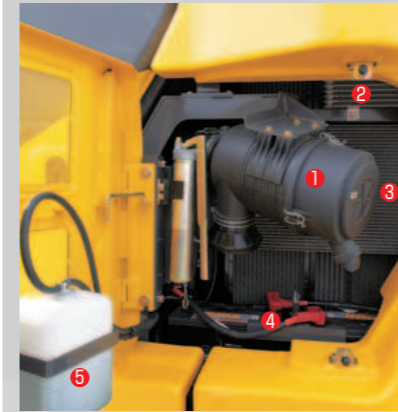
Maintenance

Diverse innovations designed to reduce running costs and make maintenance easy. In terms of both cost and labor, you will really come to appreciate its efficiency the longer you use it.

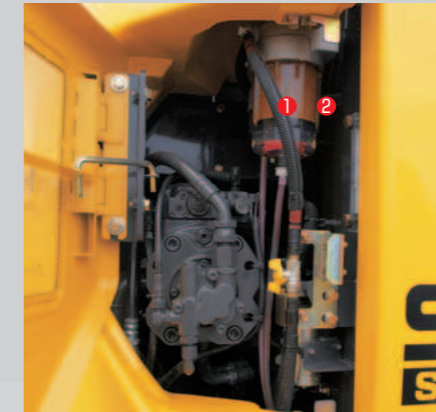


Ground Level Access

Various parts of the excavator can now be cleaned and changed from ground level without climbing onto the body of the vehicle. Maintenance is no longer troublesome.



- ① Double element air cleaner
- ② Fuel cooler
- ③ Condenser
- ④ Battery (maintenance free)
- ⑤ Reserve tank

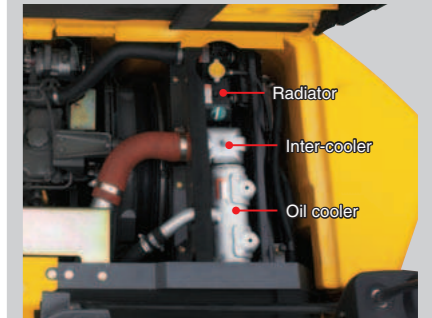


Fuel, filter remote

Thanks to the installation of a fuel pre-filter as standard, breakdowns caused by fuel blockages are reduced. In addition, because the fuel filter is installed in a position that can be accessed from ground level, replacing it is made simple.

- ① Fuel pre-filter (with water separator)
- ② Fuel filter (with water separator)

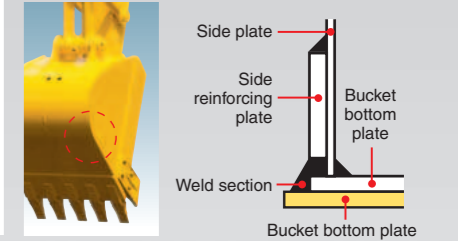
Ease of cleaning around radiator



Bucket

A one piece wear plate covers the weldment area to increase the wear life of the bucket.

■Cross section
Protection of weld bottom plate and flattening of bottom plate by changing the bottom plate weld structure.



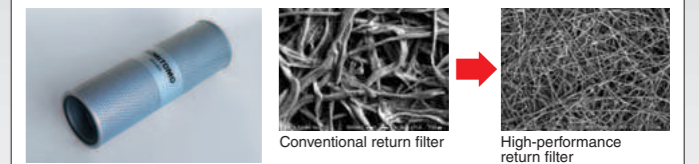
High-Performance Return Filter

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 effect as a nephron.

- Hydraulic • oil change : **5,000 hours**
- Life of filter : **2,000 hours**

※The oil and filter change interval depends on the working conditions.

The High-Performance Return Filter is made more precisely to condense the Nephron filter function.



EMS (Easy Maintenance System) as Standard

SUMITOMO unique design

SUMITOMO's new improved 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.

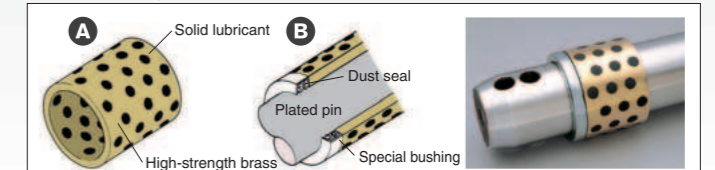
The interval of greasing around the bucket is 250 hours, and the interval for the other sections is 1,000 hours, keeping the joints lubricated for a long time and extending the service life of parts by reducing abrasion and rattling.



- Bucket greasing interval : **250 hours**
- Greasing interval for other sections : **1,000 hours**

※The greasing interval depends on the working conditions.

EMS bushing



- A A solid lubricant embedded in high strength brass forms a layer on the bushing surface to prevent contact between metals, maintaining an excellent lubricated state to reduce the abrasion of joints.
- B The surface of the pin is plated to increase the surface hardness and to improve the wear resistance accordingly.

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.

Operation mode-change switch

The customer can easily switch between N Mode, which maximizes operational capacity, and E Mode, which prioritizes fuel economy, as required.



Cycle time
Reduced by
approximately

4%
(when in N Mode)

Fuel consumption rate
Improved by
approximately

26%
(when in E Mode)

Engine Oil Drain Coupler

The engine oil pan is provided with a drain coupler. This makes it easier to do drain work and prevents oil from spattering because of the attached drain hose.



Internalized Hydraulic Hose

The hydraulic hose is installed inside the off-set rod, protecting it from potential damage caused by direct external contact.



Operator Comfort and Safety

How safely, and in what level of comfort can the driver carry out daily operations?
We have extended every possible care and attention to ensure that both safety and comfort are provided.



Comfortable and spacious cab

Spacious foot space



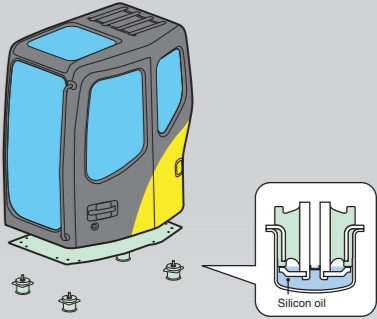
Air conditioner installed as standard

An air conditioner is fitted as standard. Front facing airflow vents and a defrosting function allow a pleasant work environment to be maintained.



Employment of fluid-mount suspension to reduce fatigue

Impacts and vibrations on the cab are effectively absorbed, providing a pleasant and comfortable ride, as well as reducing noise levels inside the cab. Operator fatigue is reduced.



Floor design allows easy access to and from cab



Slide-door windows



AM/FM radio



Stereo speakers

Full operation-console slide adjustment (Reclining seat)



Gate-type lock lever on the operation lever to prevent operational errors



Large hand rail on front right side



Photo: crane specifications



Emergency escape hammer



Reversing rear-view mirror



Cab roof window



Membrane switch



Emergency stop switch



Defroster/Cup holder

■ Lifting Capacity

BLADE : UP
 ARM : STD ARM
 SHOE : 500G
 BUCKET : 0.45BUCKET
 ARM LENGTH = 2.11 (m)
 MAXIMUM REACH = 6.34 (m)
 TIPPING CAPACITY (MARK.) = 75.0 (%)
 HYDRAULIC CAPACITY (MARK. *) = 87.0 (%)

Bucket Hook Height	Max. Radius	Radius of Load						Min. Radius		
		6m	5m	4m	3m	2m				
6m	We	2030*	4.45			2690*		2970*	3.06	
	Ws	2030*	4.45			2690*		2970*	3.06	
5m	We	1980*	5.29	2580*	3100*	3070*		3050*	2.85	
	Ws	1980*	5.29	2580*	3100*	3070*		3050*	2.85	
4m	We	2020*	5.83	3300*	3710*	3890*		3840*	2.05	
	Ws	2020*	5.83	2820*	3710*	3890*		3840*	2.05	
3m	We	2140*	6.17	2670	3690	5040*	6380*	8410*	2.26	
	Ws	1820	6.17	1920	2660	3880	6290	8410*	2.26	
2m	We	2340*	6.33	2570	3490	5060	7850*	9050*	2.67	
	Ws	1650	6.33	1820	2480	3530	5510	6610	2.67	
1m	We	2260	6.32	2460	3300	4720	7710	5980*	2.67	
	Ws	1580	6.32	1720	2310	3230	4940	5920	2.67	
0	We	2280	6.16	2380	3160	4490	7380	4430*	2.24	
	Ws	1580	6.16	1650	2170	3020	4660	4430*	2.24	
-1m	We	2440	5.82		3070	4370	7260	5240*	4380*	1.39
	Ws	1680	5.82		2100	2920	4570	5240*	4230*	1.07
-2m	We	2830	5.27		3060	4350	7290	7010*	5870*	1.39
	Ws	1940	5.27		2090	2900	4590	7010*	5520*	1.07
-3m	We	3770	4.42			4430	6450*	8350*	7880*	1.39
	Ws	2560	4.42			2970	4710	8350*	7550*	1.22
-4m	We	4150*	3.06				4210*		4690*	2.56
	Ws	4150*	3.06				4210*		4690*	2.56

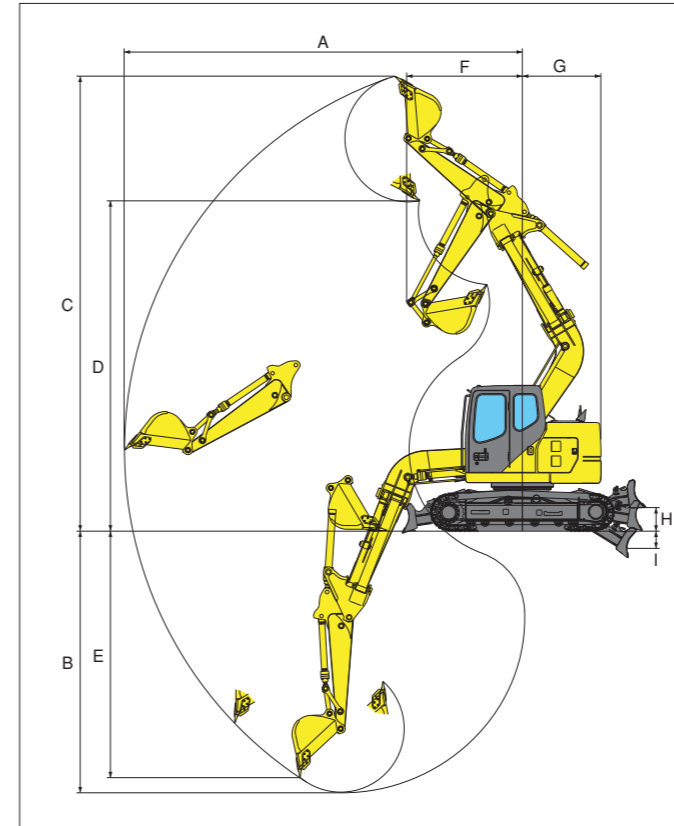
WE : OVER END WS : OVER SIDE

BLADE : DOWN
 ARM : STD ARM
 SHOE : 500G
 BUCKET : 0.45BUCKET
 ARM LENGTH = 2.11 (m)
 MAXIMUM REACH = 6.34 (m)
 TIPPING CAPACITY (MARK.) = 75.0 (%)
 HYDRAULIC CAPACITY (MARK. *) = 87.0 (%)

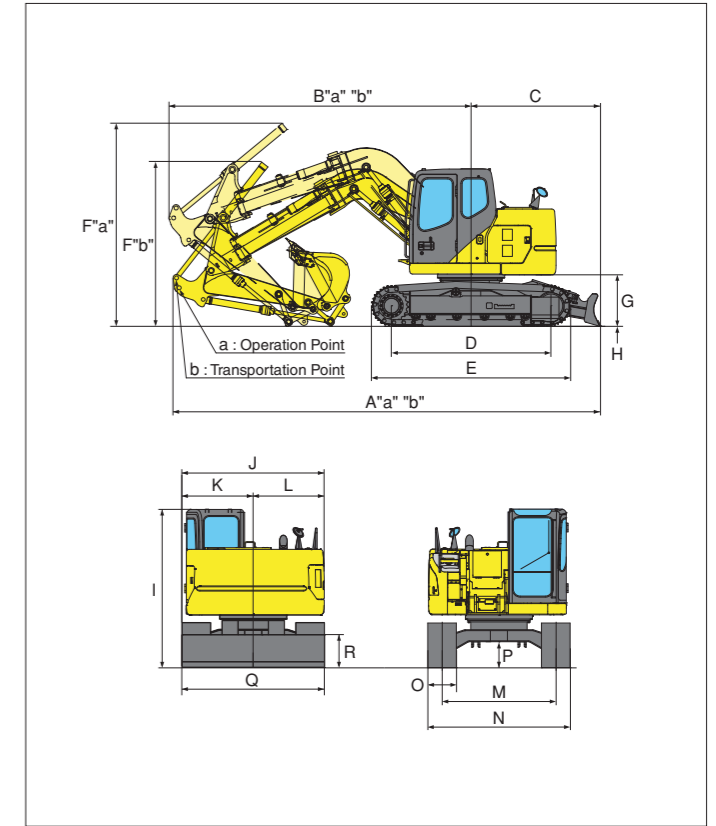
Bucket Hook Height	Max. Radius	Radius of Load						Min. Radius	
		6m	5m	4m	3m	2m			
6m	We	2030*	4.45			2690*		2970*	3.06
	Ws	2030*	4.45			2690*		2970*	3.06
5m	We	1980*	5.29	2580*	3100*	3070*		3050*	2.85
	Ws	1980*	5.29	2580*	3100*	3070*		3050*	2.85
4m	We	2020*	5.83	3300*	3710*	3890*		3880*	2.26
	Ws	2020*	5.83	2820*	3710*	3890*		3840*	2.05
3m	We	2140*	6.17	2700*	4210*	5040*	6380*	8410*	2.26
	Ws	1820	6.17	1920	2660	3880	6290	8410*	2.26
2m	We	2340*	6.33	3510*	4690*	5750*	7850*	9050*	2.67
	Ws	1650	6.33	1820	2480	3530	5510	6610	2.67
1m	We	2650*	6.32	4180*	5000*	6320*	8780*	5980*	2.67
	Ws	1580	6.32	1720	2310	3230	4940	5920	2.67
0	We	3170*	6.16	4240*	5160*	6570*	8120*	4480*	2.26
	Ws	1580	6.16	1650	2170	3020	4660	4430*	2.24
-1m	We	4110*	5.82		5090*	6470*	8570*	5870*	2.26
	Ws	1680	5.82		2100	2920	4570	4230*	1.07
-2m	We	4380*	5.27		4680*	5990*	7770*	7770*	2.26
	Ws	1940	5.27		2090	2900	4590	5520*	1.07
-3m	We	4450*	4.42			5000*	6450*	7790*	2.26
	Ws	2560	4.42			2970	4710	7550*	1.22
-4m	We	4150*	3.06				4210*	4690*	2.56
	Ws	4150*	3.06				4210*	4690*	2.56

WE : OVER END WS : OVER SIDE

■ Working Range



■ Dimensions



BLADE : UP
 ARM : LONG ARM
 SHOE : 500G
 BUCKET : 0.37BUCKET
 ARM LENGTH = 2.41 (m)
 MAXIMUM REACH = 6.61 (m)
 TIPPING CAPACITY (MARK.) = 75.0 (%)
 HYDRAULIC CAPACITY (MARK. *) = 87.0 (%)

Bucket Hook Height	Max. Radius	Radius of Load						Min. Radius		
		6m	5m	4m	3m	2m				
6m	We	1900*	4.83			2570*		2630*	3.35	
	Ws	1900*	4.83			2570*		2630*	3.35	
5m	We	1850*	5.6	2560*	2730*			2650*	3.17	
	Ws	1850*	5.6	2560*	2730*			2650*	3.17	
4m	We	1890*	6.12	2170*	2980*	3150*	3120*	3030*	2.51	
	Ws	1890*	6.12	2030	2870	3150*	3120*	3030*	2.51	
3m	We	1980*	6.44	2710	3690*	4470*	5880*	7580*	2.22	
	Ws	1700	6.44	1950	2710	3970	5880*	7580*	2.22	
2m	We	2150*	6.59	2590	3540	5160	7420*	8600*	2.64	
	Ws	1550	6.59	1840	2520	3620	5720	7040	2.64	
1m	We	2110	6.59	2480	3340	4790	7870	6740*	2.64	
	Ws	1470	6.59	1740	2340	3290	5080	6220	2.64	
0	We	2130	6.43	2380	3180	4530	7450	4370*	2.2	
	Ws	1470	6.43	1650	2190	3050	4720	4370*	2.2	
-1m	We	2260	6.11	2320	3070	4380	7270	4950*	4010*	1.39
	Ws	1550	6.11	1590	2090	2920	4570	4950*	3770*	1.07
-2m	We	2570	5.58		3040	4330	7250	6460*	5330*	1.39
	Ws	1760	5.58		2060	2880	4560	4980*	1.07	
-3m	We	3280	4.8			4370	6930*	8630*	7070*	1.39
	Ws	2230	4.8			2920	4640	8630*	6540*	1.07
-4m	We	4270*	3.58				5020*	6470*	6750*	1.84
	Ws	3640	3.58				4860	6470*	6750*	1.84

WE : OVER END WS : OVER SIDE

BLADE : DOWN
 ARM : LONG ARM
 SHOE : 500G
 BUCKET : 0.37BUCKET
 ARM LENGTH = 2.41 (m)
 MAXIMUM REACH = 6.61 (m)
 TIPPING CAPACITY (MARK.) = 75.0 (%)
 HYDRAULIC CAPACITY (MARK. *) = 87.0 (%)

Bucket Hook Height	Max. Radius	Radius of Load						Min. Radius	
		6m	5m	4m	3m	2m			
6m	We	1900*	4.83			2570*		2630*	3.35
	Ws	1900*	4.83			2570*		2630*	3.35
5m	We	1850*	5.6	2560*	2730*			2650*	3.17
	Ws	1850*	5.6	2560*	2730*			2650*	3.17
4m	We	1890*	6.12	2170*	2980*	3150*	3120*	3030*	2.51
	Ws	1890*	6.12	2030	2870	3150*	3120*	3030*	2.51
3m	We	1980*	6.44	2870*	3690*	4470*	5880*	7480*	2.26
	Ws	1700	6.44	1950	2710	3970	5880*	7580*	2.22
2m	We	2150*	6.59	3510*	4530*	5510*	7420*	8600*	2.64
	Ws	1550	6.59	1840	2520	3620	5720	7040	2.64
1m	We	2410*	6.59	4120*	4890*	6150*	8540*	6740*	2.64
	Ws	1470	6.59	1740	2340	3290	5080	6220	2.64
0	We	2830*	6.43	4210*	5110*	6510*	8460*	4540*	2.26
	Ws	1470	6.43	1650	2190	3050	4720	4370*	2.2
-1m	We	3550*	6.11	4140*	5120*	6520*	8740*	5600*	2.26
	Ws	1550	6.11	1590	2090	2920	4570	3770*	1.07
-2m	We	4190*	5.58		4830*	6160*	8090*	7190*	2.26
	Ws	1760	5.58		2060	2880	4560	4980*	1.07
-3m	We	4320*	4.8			5340*	6930*	8560*	2.26
	Ws	2230	4.8			2920	4640	6540*	1.07
-4m	We	4270*	3.58				5020*	6060*	2.26
	Ws	3640	3.58				4860	6750*	1.84

WE : OVER END WS : OVER SIDE

■ Working Range

	SH135XU-3B	
Arm length	2.11m	2.41m
A Max. digging radius	7525mm	7775mm
B Max. digging depth	4960mm	5260mm
C Max. digging height	8580mm	8760mm
D Max. dumping height	6205mm	6380mm
E Max. vertical wall cut depth	3650mm	3940mm
F Min. front swing radius	2185mm	2380mm
G Rear end swing radius	1480mm	
H Max. lift above ground	435mm	
I Min. drop below ground	520mm	

■ Dimensions

	SH135XU-3B			
	a : Operation Point		b : Transportation Point	
Arm length	2.11m		2.41m	
A Overall length	a : 7470mm	b : 7540mm	a : 7405mm	b : 7505mm
B Length from center of machine (to arm top)	a : 5275mm	b : 5205mm	a : 5240mm	b : 5140mm
C Length from center of machine (to blade top)	2265mm			
D Center to center of wheels	2785mm			
E Overall track length	3510mm			
F Overall height	a : 3545mm	b : 2870mm	a : 3790mm	b : 2810mm
G Clearance height under upper structure	880mm			
H Shoe lug height	20mm			
I Cab height	2750mm			
J Upper structure overall width	2415mm			
K Width from center of machine (left side)	1170mm			
L Width from center of machine (right side)	1245mm			
M Track gauge	1990mm			
N Overall track width with 500mm	2490mm			
	600mm			
	2590mm			
	700mm			
O Std. Shoe width	500mm			
P Minimum ground clearance	435mm			
Q Width of blade	2490mm			
R Height of blade	570mm			

■ Principal specifications

	SH135XU-3B	
	STD Specifications	
Arm length	2.11m	
Bucket capacity (ISO heaped)	0.45m ³	
Std. Operating weight	14800kg	
Engine	Make & model	ISUZU AJ-4JJ1X
	Rated output	70.9kw/2000min ⁻¹
	Displacement	2999ml(cc)
Hydraulic System	Main pump	2 variable displacement axial piston pumps with regulating system
	Max pressure	34.3Mpa
Performance	Travel motor	Variable displacement axial piston motor
	Parking brake type	Mechanical disc brake
Performance	Swing motor	Fixed displacement axial piston motor
	Travel speed	5.0/3.1km/h
Performance	Traction force	114kN
	Grade ability	70% <35°>
	Ground pressure	48kPa
	Swing speed	10.0min ⁻¹
	Bucket	89kN
Others	Arm	60kN
	Fuel tank	165liter
Hydraulic fluid tank	130liter	

■ Weight & Ground pressure