SUMITOMO

SH135XU

MINIMUM SWING RADIUS

LEGEST

●There are times when we may change the content of the catalogue without warning ●There are times when printed photographs may differ from the retailer's actual specifications ●Photographs shown above have been taken in poses for use in this catalogue. When exiting machinery, please ensure that operational equipment is always grounded, and that every effort has been made to ensure safety ●There are times when the color of catalogue photographs may, as a result of the printing process, differ from the actual color ●Please always ensure that you have read the instruction manual before operating this vehicle ●A special license (Certification of the completion of a vehicle type construction machinery skilled operator's course) is required to operate construction machinery in excess of 3 tons ●Operation of specified cranes requires completion of a vehicle type construction machinery skilled operator's course, or completion of a small size mobile crane skilled operator's course

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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.

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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)

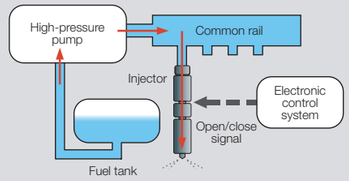
SPACE5
SUMITOMO Powerful And Clean Engine System
1 Powerful 2 Economy 3 Clean 4 Silent 5 Strong

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.

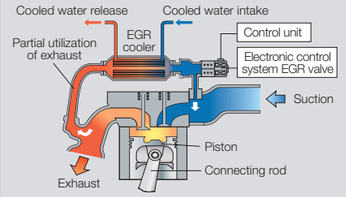
Common rail fuel injection system

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.



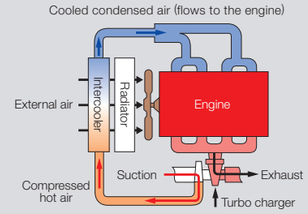
Cooled EGR system

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

215mm Excess cab width
2490mm Track width
235mm Excess rear width

Off-set area
1155mm 1185mm

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.

Operation mode-change switch

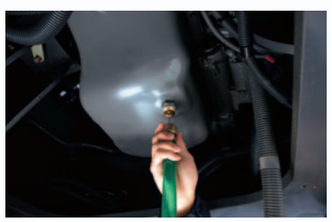
The customer can easily switch between N Mode, which maximizes operational capacity, and E Mode, which prioritizes fuel economy, as required.

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.

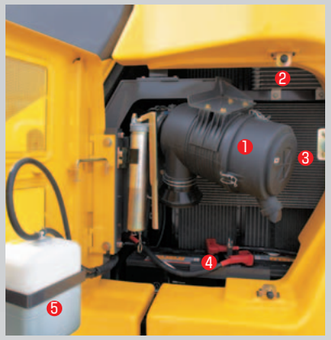


Internalized Hydraulic Hose

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

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.



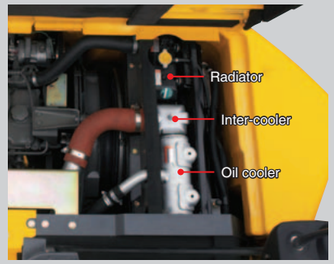
1. Double element air cleaner
2. Fuel cooler
3. Condenser
4. Battery (maintenance free)
5. Reserve tank

●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

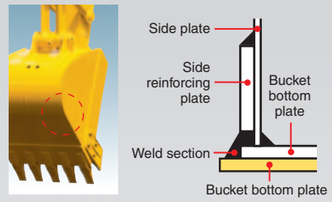


Bucket

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.



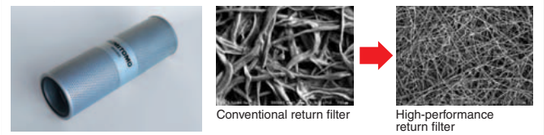
High-Performance Return Filter

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.

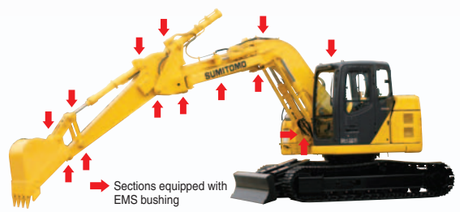


EMS (Easy Maintenance System) as Standard

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.

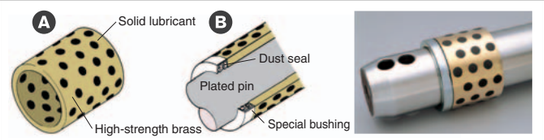
The interval of greasing around the bucket is 250 hours, and the interval for the other sections is 1,000 hours, keeping the joints lubricated for a long time and extending the service life of parts by reducing abrasion and rattling.



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

※The greasing interval depends on the working conditions.

■EMS bushing



Ⓐ A 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.

Ⓑ 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.

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

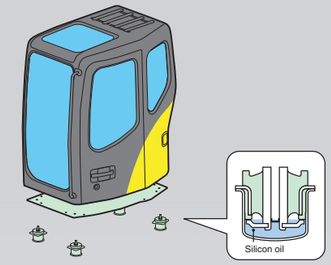
Spacious foot space

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.



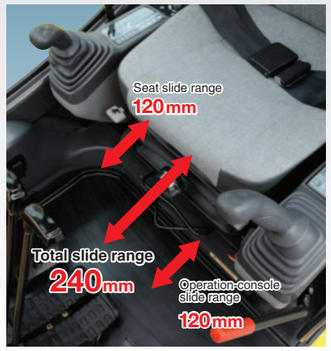
Floor design allows easy access to and from cab

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		Radius of Load								
		Max.Radius		6m	5m	4m	3m	2m	Min.Radius	
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		Radius of Load							
		Max.Radius		6m	5m	4m	3m	Min.Radius	
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

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		Radius of Load								
		Max.Radius		6m	5m	4m	3m	2m	Min.Radius	
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	6460*	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		Radius of Load							
		Max.Radius		6m	5m	4m	3m	Min.Radius	
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

■Standard equipment

●**Hydraulics system**
- High-performance return filter
- One-touch idle
- Changeable 2-speed-travel
- Rotational ABS

●**Safety equipment**
- Rear-view mirror
- Gate lock lever
- Emergency escape hammer
- Seat belt
- Large-size front right side hand-rail
- Cab-top headlight
- Travel alarm
- Theft prevention dog-chain
- Boom/arm holding valve
- Engine emergency stop switch

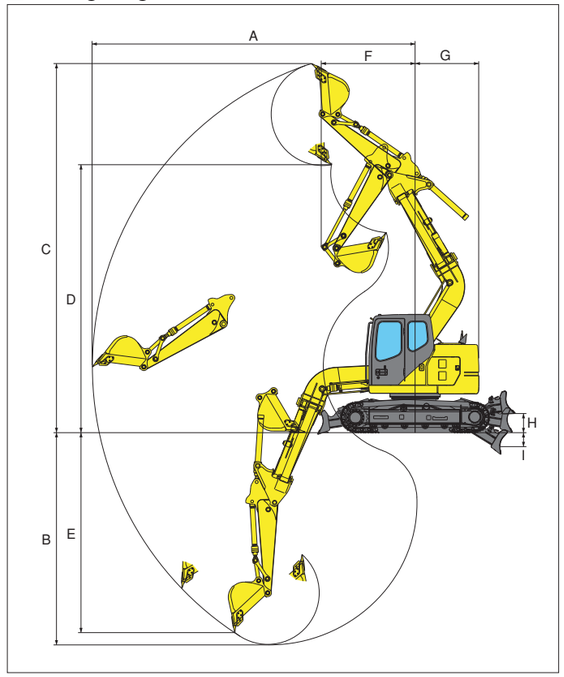
●**Cab/interior equipment**
- KAB seat
- Large-size rounded cab
- Fluid mount
- Air conditioner
- Defroster
- Automatic lock for front facing window
- Automatic point wiper connecter
- Intermittent wiper with washer
- Reclining seat
- Cup holder
- Ashtray
- Room lamp
- Hat hook
- AM/FM Radio

●**Others**
- Engine that complies with tear-3 exhaust emissions regulations
- EMS (Easy Maintenance System)
- Long life hydraulic fluid
- Front-face protective net for radiator
- Aluminum radiator
- Aluminum oil cooler
- Tool kit
- Grease gun
- Fuel filter (With water separator)
- Fuel pre-filter (With water separator)
- Double-element air cleaner

■Optional equipment

- Quick change 4way (Kit)
- Travel pedal

■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	

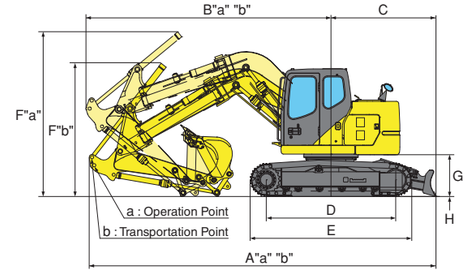
■Principal specifications

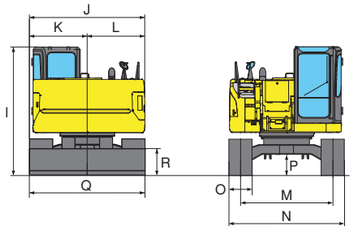
		SH135XU-3B
		STD Specifications
	Arm length	2.11m
	Bucket capacity (ISO heaped)	0.45m^3
	Std. Operating weight	14800kg
Engine	Make & model	ISUZU AJ-4JJ1X
	Rated output	70.9kw/2000min^{-1}
	Displacement	2999ml(cc)
Hydraulic System	Main pump	2 variable displacement axial piston pumps with regulating system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

■Weight & Ground pressure

Model	SH135XU-3B			
Shoe type	Shoe width	Overall width	Operating weight	Ground pressure
Triple grouser shoe	500mm	2490mm	14800kg	48kPa
	600mm	2590mm	15000kg	40kPa
	700mm	2690mm	15300kg	35kPa

■Dimensions





a : Operation Point b : Transportation Point

		SH135XU-3B			
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	2690mm			
O	Std. Shoe width	500mm			
P	Minimum ground clearance	435mm			
Q	Width of blade	2490mm			
R	Height of blade	570mm			

■Bucket

Model		SH135XU-3B			
Bucket capacity (ISO/SAE/PCSA heaped)		0.24m^3	0.30m^3	0.37m^3	0.45m^3
Bucket capacity (CECE heaped)		0.21m^3	0.27m^3	0.31m^3	0.38m^3
Bucket type		STD	STD	STD	STD
No. of tooth		3	4	4	4
Width	With side cutter	582mm	692mm	772mm	907mm
	Without side cutter	508mm	618mm	698mm	833mm
Weight		284kg	321kg	339kg	366kg
	2.11m arm	◎	◎	◎	◎
	2.41m arm	◎	◎	●	○

◎:Suitable for materials with density up to 2000kg/m^3 or less
●:Standard bucket (Suitable for materials with density up to 1800kg/m^3 or less)
○:Suitable for materials with density up to 1600kg/m^3 or less