

SUMITOMO

SH80

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.

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
SH80

Compact Swing Radius and Swing Boom Design

Because of compact-swing and swing-boom design, an operator can concentrate on the work at hand. The swing-boom can be positioned anywhere within a 130 degree arc. These design not only provides greater versatility and capability to work within confined areas, but also achieve more excellent stability in digging and driving.

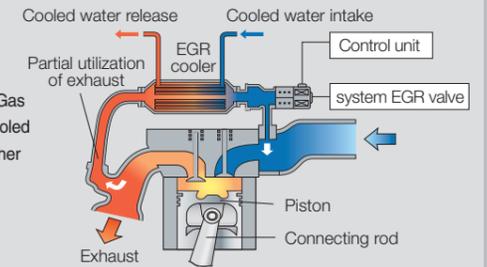


Clearing the Non-road Special Motor Vehicle Exhaust Emission Standard



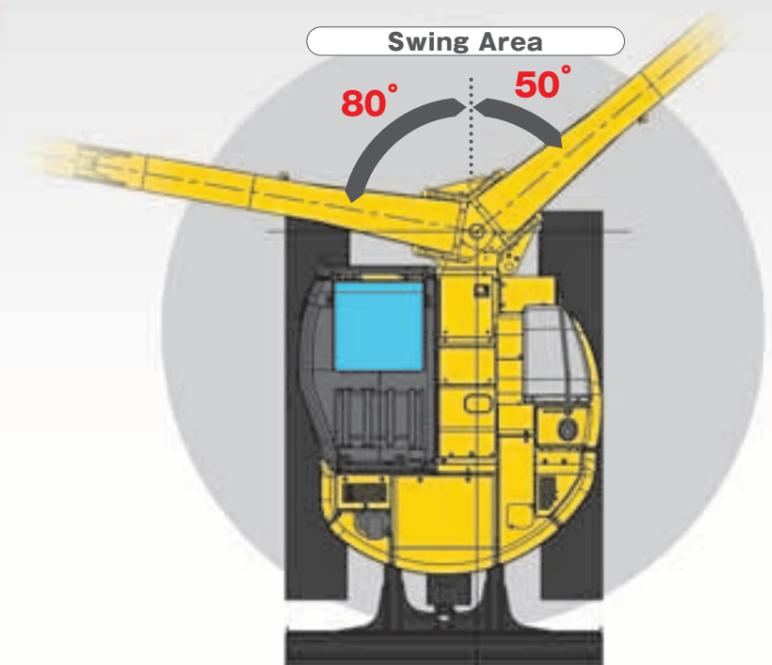
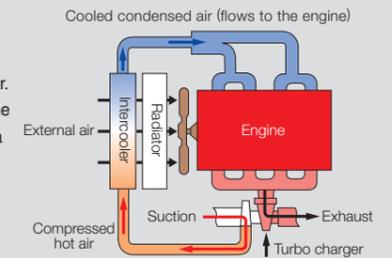
● Cooled EGR system

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).



● 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.



● Bucket digging capacity **57 kN**
 ● Arm digging capacity **39 kN**

Diversified operational field

Road works Forest road works Demolition works

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

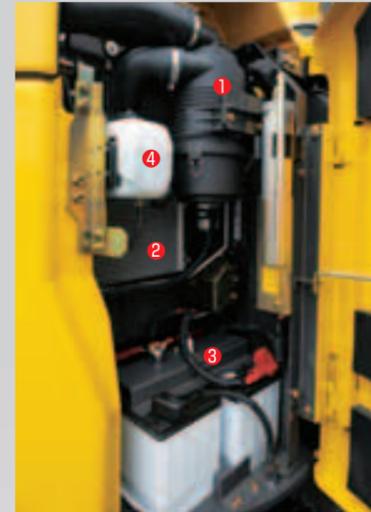
Through employing an oil return system in the arm and boom, speed assisted operations for digging, as well as fuel consumption, have been improved.

Maintenance

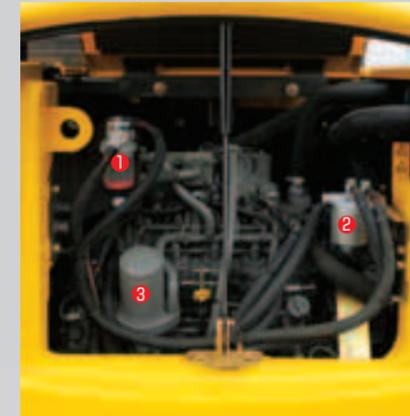
Diverse innovations designed to reduce running costs and make maintenance easy. In terms of both cost and labor, you will really come to appreciate its efficiency the longer you use it.

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 Condenser
- ③ Battery (maintenance free)
- ④ Reserve tank



● Fuel and oil filters

The fuel and oil filters are installed in positions that can be accessed from ground level, so replacing them is made simple.

- ① Water separator
- ② Fuel filter
- ③ Oil filter

Ease of cleaning around radiator



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.



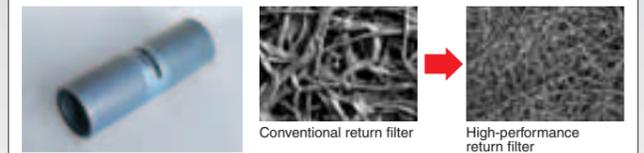
High-Performance Return Filter

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.

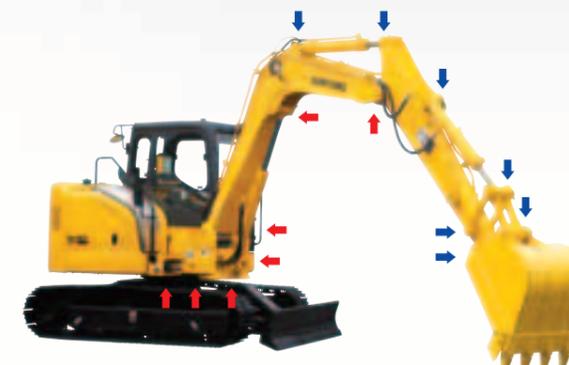
The High-Performance Return Filter is made more precisely to condense the Nephron filter function.



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.

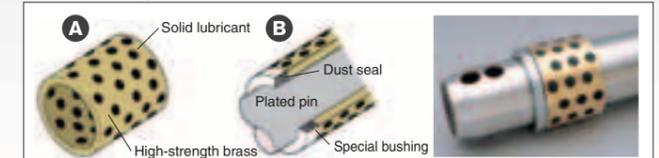


- ➔ Sections equipped with EMS bushing
- ➔ Sections equipped with steel

● Greasing interval for EMS : 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

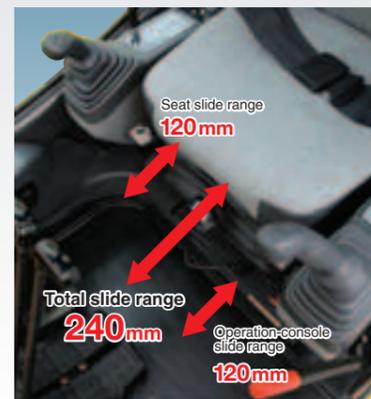


Travel pedals are optional equipment

Floor design allows easy access to and from cab



Full operation-console slide adjustment (Reclining seat)



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.

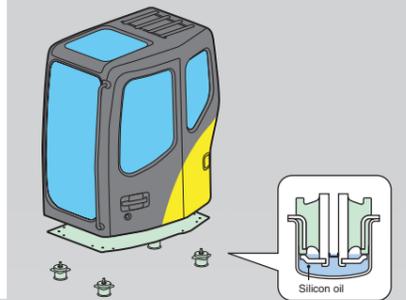


Slide-door windows



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.



AM/FM radio



Stereo speakers

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



Cab side light



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 : 450G
 BUCKET : 0.28BUCKET
 ARM LENGTH = 1.71 (m)
 MAXIMUM REACH = 6.01 (m)
 TIPPING CAPACITY (MARK:) = 75.0 (%)
 HYDRAULIC CAPACITY (MARK:*) = 87.0 (%)

Bucket Hook Height		Radius of Load						
		Max. Radius	5m	4m	3m	2m	Min. Radius	
5m	We	1380*	4.39				1330*	4.24
	Ws	1380*	4.39				1330*	4.24
4m	We	1510	5.23	1490*			1350*	4.2
	Ws	1370	5.23	1480			1350*	4.2
3m	We	1280	5.72	1600	1720*		1770*	3.5
	Ws	1150	5.72	1440	1720*		1770*	3.5
2m	We	1170	5.96	1550	2190	3460	3200*	2.52
	Ws	1050	5.96	1390	1960	3030	3200*	2.52
1m	We	1130	6	1490	2080	3210	1830*	2.64
	Ws	1010	6	1330	1850	2800	1830*	2.64
0	We	1150	5.83	1440	2010	3130	2300*	2.12
	Ws	1030	5.83	1290	1780	2730	2300*	2.12
-1m	We	1260	5.43	1420	1980	3120	3310*	1.27
	Ws	1130	5.43	1270	1750	2720	3310*	1.27
-2m	We	1550	4.74		1990	3160	4880*	1.3
	Ws	1380	4.74		1760	2750	4880*	1.3
-3m	We	2510	3.5			3230	6900*	1.99
	Ws	2220	3.5			2820	5900	1.99

WE : OVER END WS : OVER SIDE

BLADE : DOWN
 ARM : STD ARM
 SHOE : 450G
 BUCKET : 0.28BUCKET
 ARM LENGTH = 1.71 (m)
 MAXIMUM REACH = 6.01 (m)
 TIPPING CAPACITY (MARK:) = 75.0 (%)
 HYDRAULIC CAPACITY (MARK:*) = 87.0 (%)

Bucket Hook Height		Radius of Load						
		Max. Radius	5m	4m	3m	2m	Min. Radius	
5m	We	1380*	4.39				1330*	4.24
	Ws	1380*	4.39				1330*	4.24
4m	We	1540*	5.23	1490*			1350*	4.2
	Ws	1370	5.23	1480			1350*	4.2
3m	We	1670*	5.72	1660*	1720*		1770*	3.5
	Ws	1150	5.72	1440	1720*		1770*	3.5
2m	We	1810*	5.96	1970*	2390*	3600*	3200*	2.52
	Ws	1050	5.96	1390	1960	3030	3200*	2.52
1m	We	1980*	6	2320*	3070*	3850*	1830*	2.64
	Ws	1010	6	1330	1850	2800	1830*	2.64
0	We	2170*	5.83	2590*	3530*	4060*	2300*	2.12
	Ws	1030	5.83	1290	1780	2730	2300*	2.12
-1m	We	2430*	5.43	2710*	3700*	5480*	3310*	1.85
	Ws	1130	5.43	1270	1750	2720	3310*	1.27
-2m	We	2790*	4.74		3550*	5250*	4880*	1.85
	Ws	1380	4.74		1760	2750	4880*	1.3
-3m	We	3480*	3.5			4270*	6900*	1.99
	Ws	2220	3.5			2820	5900	1.99

WE : OVER END WS : OVER SIDE

BLADE : UP
 ARM : LONG ARM
 SHOE : 450G
 BUCKET : 0.22BUCKET
 ARM LENGTH = 2.12 (m)
 MAXIMUM REACH = 6.40 (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
5m	We	1240*	4.95				1140*	4.66
	Ws	1240*	4.95				1140*	4.66
4m	We	1320	5.69		1230*		1140*	4.62
	Ws	1190	5.69		1230*		1140*	4.62
3m	We	1140	6.14	1190	1420*		1370*	4.1
	Ws	1030	6.14	1070	1420*		1370*	4.1
2m	We	1050	6.36	1160	1560	2030*	2790*	2.39
	Ws	940	6.36	1040	1400	1990	2790*	2.39
1m	We	1010	6.39	1120	1490	2090	3270	2.51
	Ws	910	6.39	1010	1340	1860	2850	2.51
0	We	1030	6.24	1090	1440	2000	3130	1.71*
	Ws	920	6.24	980	1280	1780	2720	1.71*
-1m	We	1110	5.88		1410	1960	3090	2830*
	Ws	990	5.88		1250	1730	2680	2830*
-2m	We	1310	5.25		1400	1950	3100	4130*
	Ws	1170	5.25		1250	1730	2700	4130*
-3m	We	1840	4.22			1990	3160	5830*
	Ws	1630	4.22			1760	2750	5760

WE : OVER END WS : OVER SIDE

BLADE : DOWN
 ARM : LONG ARM
 SHOE : 450G
 BUCKET : 0.22BUCKET
 ARM LENGTH = 2.12 (m)
 MAXIMUM REACH = 6.40 (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
5m	We	1240*	4.95				1140*	4.66
	Ws	1240*	4.95				1140*	4.66
4m	We	1380*	5.69		1230*		1140*	4.62
	Ws	1190	5.69		1230*		1140*	4.62
3m	We	1500*	6.14	1480*	1420*		1370*	4.1
	Ws	1030	6.14	1070	1420*		1370*	4.1
2m	We	1600*	6.36	1640*	1750*	2030*	2790*	2.39
	Ws	940	6.36	1040	1400	1990	2790*	2.39
1m	We	1770*	6.39	1840*	2130*	2780*	4520*	2.51
	Ws	910	6.39	1010	1340	1860	2850	2.51
0	We	1940*	6.24	2020*	2460*	3350*	4170*	1.71*
	Ws	920	6.24	980	1280	1780	2720	1.71*
-1m	We	2160*	5.88		2660*	3630*	5010*	2830*
	Ws	990	5.88		1250	1730	2680	2830*
-2m	We	2460*	5.25		2650*	3630*	5450*	4130*
	Ws	1170	5.25		1250	1730	2700	4130*
-3m	We	2960*	4.22			3210*	4770*	5830*
	Ws	1630	4.22			1760	2750	5760

WE : OVER END WS : OVER SIDE

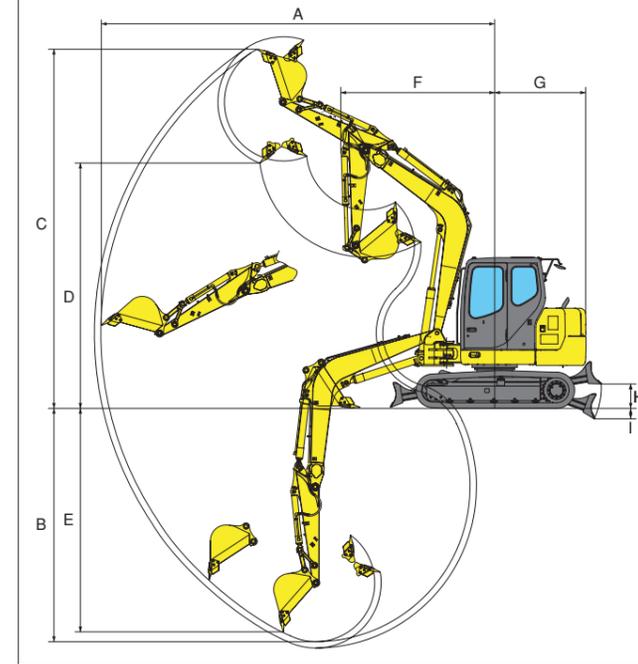
■ Standard equipment

- 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
 - Side hand rail
- Cab/interior equipment
 - KAB seat
 - Large-size rounded cab
 - Fluid mount
 - Air conditioner
- Defroster
 - Automatic lock for front facing window
 - Automatic point wiper connector
 - Intermittent wiper with washer
 - Reclining seat
 - Cup holder
 - Ashtray
 - Room lamp
 - Hat hook

■ Optional equipment

- AM/FM Radio
- Others
 - Engine that complies with tear-3 exhaust emissions regulations
 - Semi-EMS (Semi Easy Maintenance System)
 - Long life hydraulic fluid
 - Front-face protective net for radiator
 - Aluminum radiator
- Aluminum oil cooler
- Tool box
- Tool kit
- Grease gun
- Fuel filter
- Double-element air cleaner
- Quick change 4way (Kit)
- Travel pedal

■ Working Range



■ Working Range

	SH80-3B	
	1.71m	2.12m
Arm length	3.50m	
Boom length	7030mm	7400mm
A Max. digging radius	4180mm	4590mm
B Max. digging depth	6390mm	6600mm
C Max. digging height	4390mm	4600mm
D Max. dumping height	3080mm	3550mm
E Max. vertical wall cut depth	2750mm	2910mm
F Min. front swing radius	1655mm	
G Rear end swing radius	415mm	
H Max. lift above ground	205mm	
I Min. drop below ground		

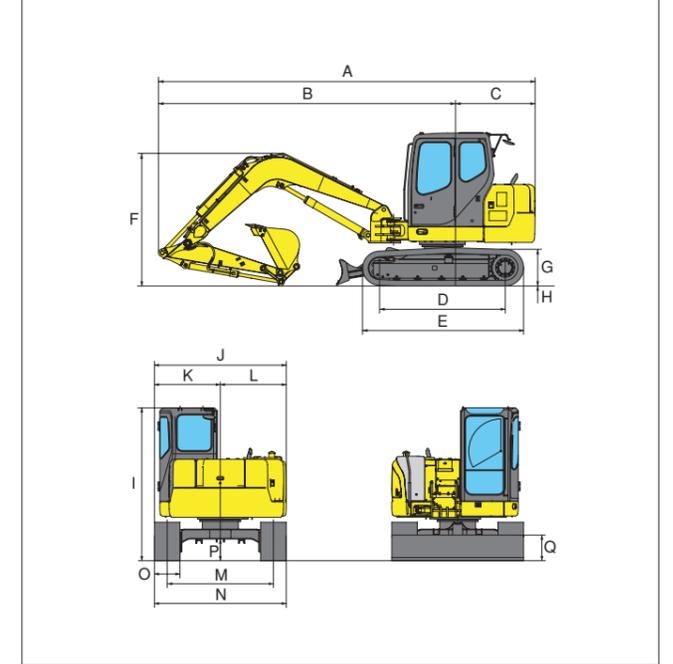
■ Principal specifications

		SH80-3B	
		STD Specifications	
Base	Boom length	3500cm	
	Arm length	1.71m	
	Bucket capacity (ISO heaped)	0.28m ³	
	Std. Operating weight	8,430kg	
Engine	Make & model	ISUZU AU-4LE2X	
	Rated output	40.0kw/2000min ⁻¹	
Hydraulic System	Displacement	2179ml(cc)	
	Main pump	2 variable displacement axial piston pumps	
	Max pressure	29.4Mpa	
	Travel motor	Variable displacement axial piston motor	
Performance	Parking brake type	Mechanical disc brake	
	Swing motor	Fixed displacement axial piston motor	
Dozer Blade	Travel speed	5.1/3.3km/h	
	Drawbar pull	59.2kN(6,037kgf)	
	Grade ability	70% <35°>	
	Ground pressure	38kPa	
Others	Swing speed	9.5min ⁻¹	
	Bucket	56.9kN	
Dozer Blade	Arm	38.3kN	
	Size (Width×Height)	2,320mm×450mm	
Others	Lift above ground	415mm	
	Drop below ground	205mm	
Others	Fuel tank	100liter	
	Hydraulic fluid tank	97.3liter	

■ Weight & Ground pressure

Shoe type	SH80-3B			
	Shoe width	Overall width	Operating weight	Ground pressure
Triple grouser shoe	450mm	2320mm	8430kg	38kPa
	600mm	2470mm	8530kg	29kPa

■ Dimensions



■ Dimensions

	SH80-3B	
	1.71m	2.12m
Arm length	3.50m	
A Overall length	6655mm	6740mm
B Length from center of machine (to arm top)	5000mm	5085mm
C Upper structure rear end radius	1655mm	
D Center to center of wheels	2210mm	
E Overall track length	2845mm	
F Overall height	2330mm	2645mm
G Clearance height under upper structure	745mm	
H Shoe lug height	20mm	
I Cab height	2700mm	
J Upper structure overall width	2225mm	
K Width from center of machine (left side)	1065mm	
L Width from center of machine (right side)	1160mm	
M Track gauge	1870mm	
N Overall track width	2320mm	
O Std. Shoe width	450mm	
P Minimum ground clearance	360mm	
Q Height of blade	450mm	

■ Bucket

Model	SH80-3B				
	0.11m ³	0.17m ³	0.22m ³	0.28m ³	0.34m ³
Bucket capacity (ISO/SAE/PCSA heaped)	0.11m ³	0.17m ³	0.22m ³	0.28m ³	0.34m ³
Bucket capacity (CECE heaped)	0.1m	0.15m	0.19m	0.24m	0.3m
Bucket type	STD	STD	STD	STD	STD
No. of tooth	3	3	4	4	4
Width	With side cutter	-	-	673mm	804mm
	Without side cutter	370mm	480mm	600mm	730mm
Weight	1.71m arm	136kg	161kg	178kg	204kg
	2.12m arm	136kg	161kg	178kg	204kg

- : Suitable for materials with density up to 2000kg/m³ or less
- : Standard bucket (Suitable for materials with density up to 1800kg/m³ or less)
- : Suitable for materials with density up to 1600kg/m³ or less
- △: Suitable for materials with density up to 1200kg/m³ or less
- ×: Not available