

SUMITOMO

SH130LF-5



SUMITOMO

The four-hundred year history of Sumitomo

SUMITOMO is one of the largest business groups in Japan, tracing its roots back to the late 1600's when they started a mining and copper smelting business, and since then have expanded and diversified their business operations on a continuing basis.

Winning Two Major Awards

The high-performance energy conservation capabilities of the “LEGEST” (SH200-5) hydraulic excavator have been widely appraised. It received the 2007 “Grand Award for Energy Conservation”, awarded by the Ministry of Economy, Trade and Industry, and was also awarded the 2007 “Good Design Award”.

PT. SUMITOMO S.H.I.
CONSTRUCTION MACHINERY INDONESIA

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<http://www.sumitomokenki.com/>

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.

TCIM Sdn Bhd.

Headquarters
Lot 29, Jalan Delima 1/3, Subang Hi-Tech Ind. Park, 40000 Shah Alam, Selangor Darul Ehsan
Marketing : 03-5633 1035 Parts & Service : 03-5636 4786

Kuching Regional
Lot 1034, Section 66, KTLD, Pending Ind. Estate, Jalan Tenun, Off Jalan Tenaga, 93450 Kuching, Sarawak
Marketing : 082-346 661 Parts & Service : 082-346 662

Kota Kinabalu Regional
Lot SD1, Lorong Industrial Warisan 1, Taman Ind. Warisan Indah, Batu 7, Jalan Tuaran, 88450 Kota Kinabalu, Sabah
Marketing : 088-383 296 Parts & Service : 088-383 295



LEGEST
MALAYSIA SPEC

FAST, STRONG & TOUGH

MACAN



LEGEST

Legest = Legerity + Strong

Legest is a coined word which represents
legerity and strong performance of
SUMITOMO hydraulic excavators.



ENGINEERED IN JAPAN

The world knows that Japanese designed and engineered products represent the highest quality, especially for Industrial Products. The hydraulic excavator is no exception when a totally integrated concept is required in design work involving key components, manufacturing engineering, and product quality assurance in the factory. SUMITOMO hydraulic excavators are designed and manufactured today to meet the global demands of our many customers with the concept of Performance, Reliability, and Fuel Efficiency foremost in our minds. This proven Japanese technology and quality gives SUMITOMO excavator customers total peace of mind and provide a complete solution for the demands of the construction industry.

The engine complies with the Emission Regulations U.S. EPA Tier III, and EU Stage IIIA.

The advanced low noise design complies with the EU noise regulation 2000/14/EC, STAGE II.

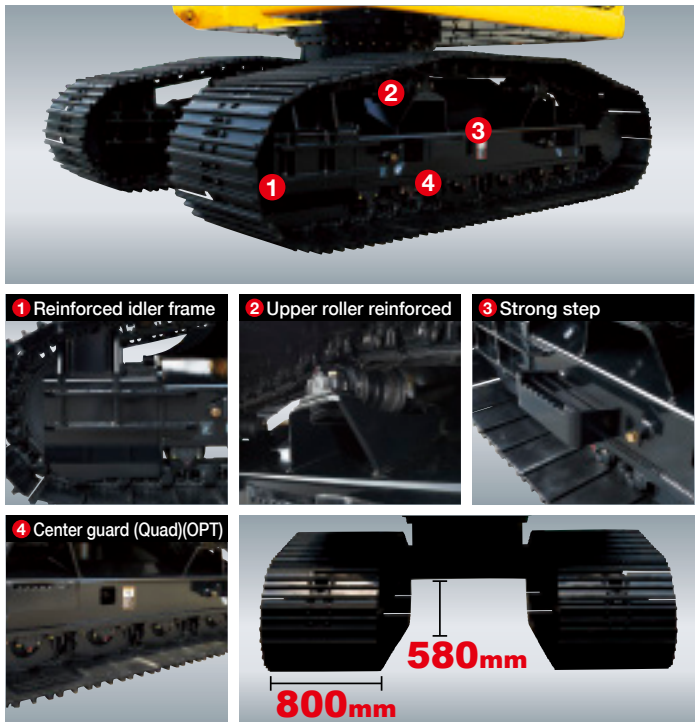
Superior traction

This 20-ton drive motor is fine-tuned especially for this class. It demonstrates unsurpassed traction force even for heavy materials transport.

Traction force
171kN



Powerful and stable travel on swampy ground. Strong traction force for skidding with 7 ton load.
With 800 mm triple grouser shoe as standard, top-class traction force (171kN) has been achieved. Minimum ground clearance is 580mm.



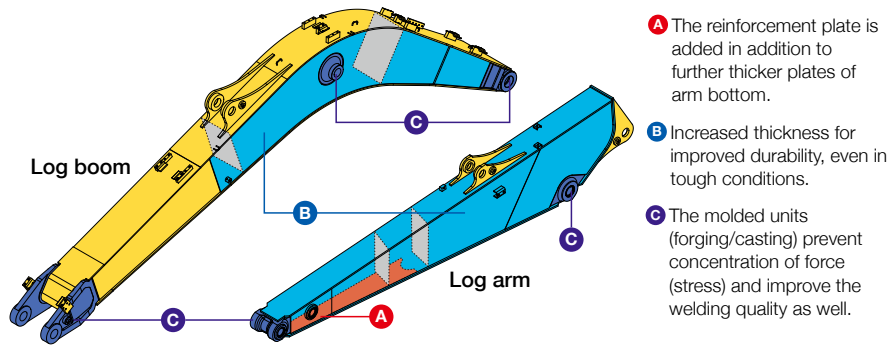
PROFITABILITY



Max working reach
8.7m*
Max working height
9.3m*
*with long arm

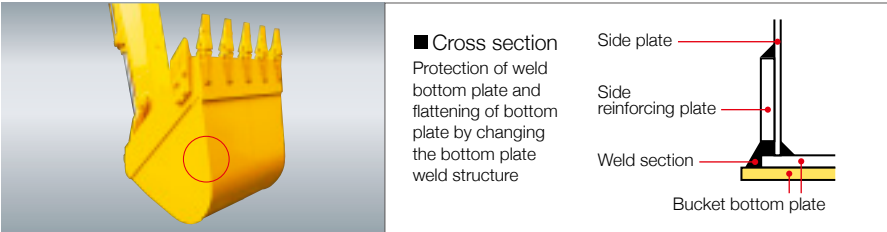
Boom & Arm

1. The boom structure is now 2 pieces instead of 3.
2. High strength castings are used for the boom base and arm end.
3. One size larger piping is used for the boom boss area.
4. Thicker steel plate is used for added strength.



Bucket

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



Upper under cover (6mm)

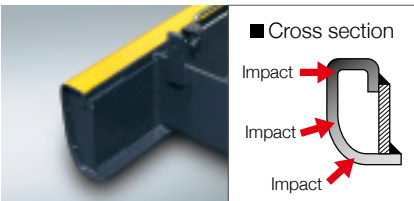


Undercarriage under cover (9mm)



Ridged Upper Side Section Frame

A closed-section "D" shape structure with thicker plate reduces stress and is high impact resistant.

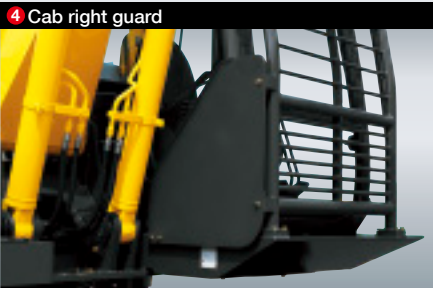


Guarding (Optional)

We've added a heavy-duty guard to protect the cab and housing, as well as an additional steel guard to the housing, where the major parts of the machine are located.



Photo: Standard grouser shoe is 800mm(960mm shoe pictured in the photo)



MOBILITY

Greater productivity and increased working efficiency

SIHIS **SPACE5** = **15%*** reduction in fuel consumption compared to SH120-3 (H mode)

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

SIHIS
SUMITOMO Intelligent Hydraulic System

- **5%** increase in bucket digging force
- **37%** increase in bucket closing speed
- **6%** increase in arm digging force
- **7.5%** increase in traction force

SPACE5
SUMITOMO Powerful And Clean Engine System

- ① Powerful
- ② Economy
- ③ Clean
- ④ Silent
- ⑤ Strong

Engine

A newly developed ISUZU engine 4JJ1X complies with Emission Regulations U.S. EPA Tier III and EU Stage IIIA. This produces greater output and torque, and far better fuel consumption than the previous model.



Quick and Smooth Control Response

A total review of the hydraulic circuit and miscellaneous hydraulic settings guarantee speedy and precise operation through a smooth control lever.

Multifunctioning Capability for Upper and Travel Operation

With the new hydraulic circuit, travel motion slowdown will not be experienced even during the combined operation of attachment and swing motion when traveling.

Automatic Power Boost

The digging power increases automatically in quick response to the working conditions without switching operations during heavy-duty digging work. It is SUMITOMO's original design and continues for 8 seconds.

SP (Speed Priority mode)

SP "Speed Priority" mode has been developed, which is not available in either the competitors' models or in our previous model. This offers greater productivity in its class with improved economical fuel efficiency even in comparison with the Heavy mode in our previous model. In addition, the throttle control is simple to use.

•SP mode : **2.5%** increase in workload

* As compared with SH120-3 (H mode)

Mode Selection by Throttle

Mode selection by pressing the button in our previous model sometimes causes an inconvenience for the operator. The throttle control system has been upgraded, and the new system "A" mode, which stands for "Adjustment Mode", now covers the 3 previous modes of "Auto, Standard and Light". In addition, there is a "H" (Heavy) mode and "SP" (Speed Priority) mode, and the hydrostatic pump oil flow will regulated automatically in each of the 3 modes respectively.

The SP mode is added to the operation mode. Furthermore, the A (Adjustment) mode is added to the SP and H modes respectively. In comparison with the H mode of Dash 3, the SP mode has reduced the fuel consumption by 8%, and the H mode of Dash 5 has reduced the fuel consumption by 15% as compared with Dash 3.

| Throttle knob position | 1 | 2 | 3 | 4~8 | 9~15 |
|------------------------|-----------|------|------|-----------|-----------|
| Engine speed | 2000 | 1850 | 1700 | 1699~1500 | 1499~1050 |
| Operation mode | SP | H | A | | |
| Automatic power boost | Automatic | | | Constant | |



| SH120-3 (Previous model) | | SH130-5 | |
|--------------------------|---|--------------|---|
| H | HEAVY Speed priority | SP | SPEED PRIORITY |
| A | AUTO Simultaneous pursuit of speed and fuel efficiency | H | HEAVY Simultaneous pursuit of speed and fuel efficiency |
| S | STANDARD Fuel priority | A (13 steps) | ADJUSTMENT Ordinary operation / Fine operation / Lifting operation |
| L | LIGHT/LIFT Fine operation / Lifting operation | | |

Reduction in fuel consumption by 8%

Reduction in fuel consumption by 15%

Reduction in fuel consumption by 9%

Working speed

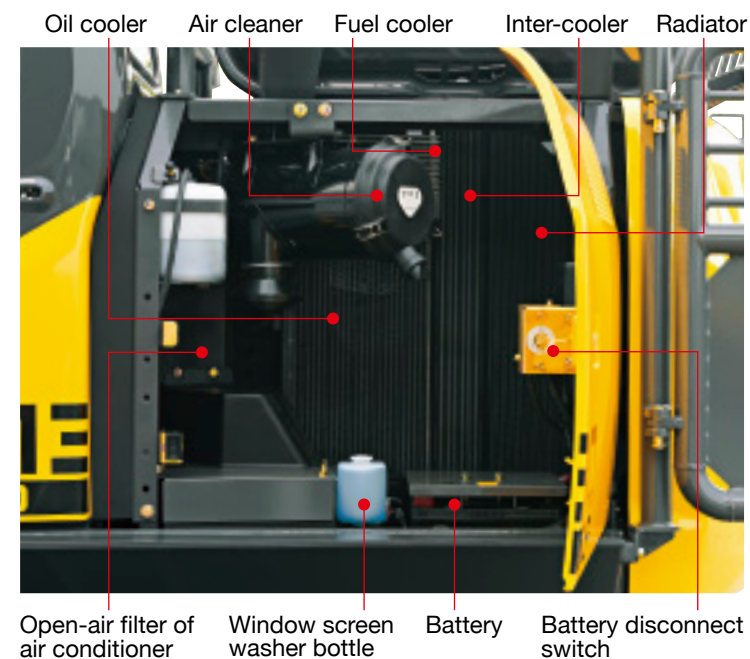


Ground Level Access to Engine Area Improves Preventative Maintenance.

Parts cleaning and maintenance are possible from the ground without climbing onto the upper structure of the excavator body.

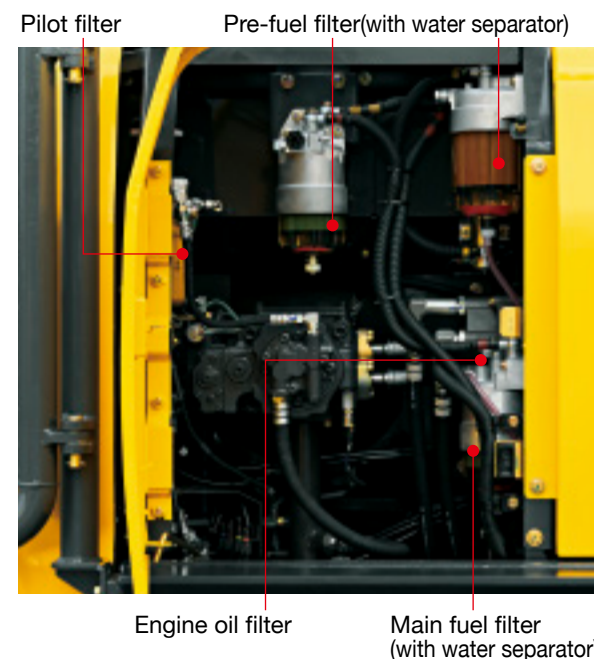
Parallel installation of radiator and oil cooler SUMITOMO unique design

A space provided at the front of the intercooler and the tilting condenser facilitates cleaning. Not only serviceability, but also cooling efficiency is also improved by parallel installation. This enables fresh air intake by the radiator, which ensures efficient heat release.



Three fuel filters prevent fuel clogging SUMITOMO unique design

By adding one more fuel pre filter, total three fuel filters are provided as a standard equipment to reduce trouble due to fuel clogging. In addition, the fuel and oil filters are installed at ground-accessible location to facilitate replacement.



MAINTENANCE

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.

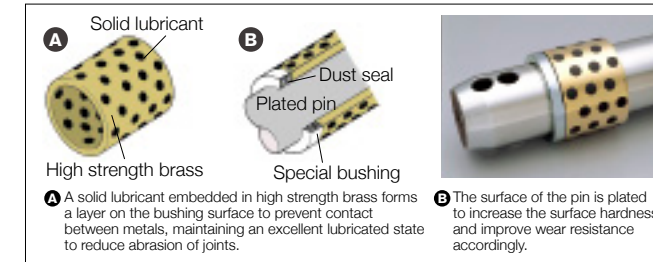
The interval of greasing around the bucket is 250 hours, and for the other sections is 1,000 hours, keeping the joints lubricated for a long time and extending the service life of parts by reducing abrasion and rattling.

■ Steel EMS bushing



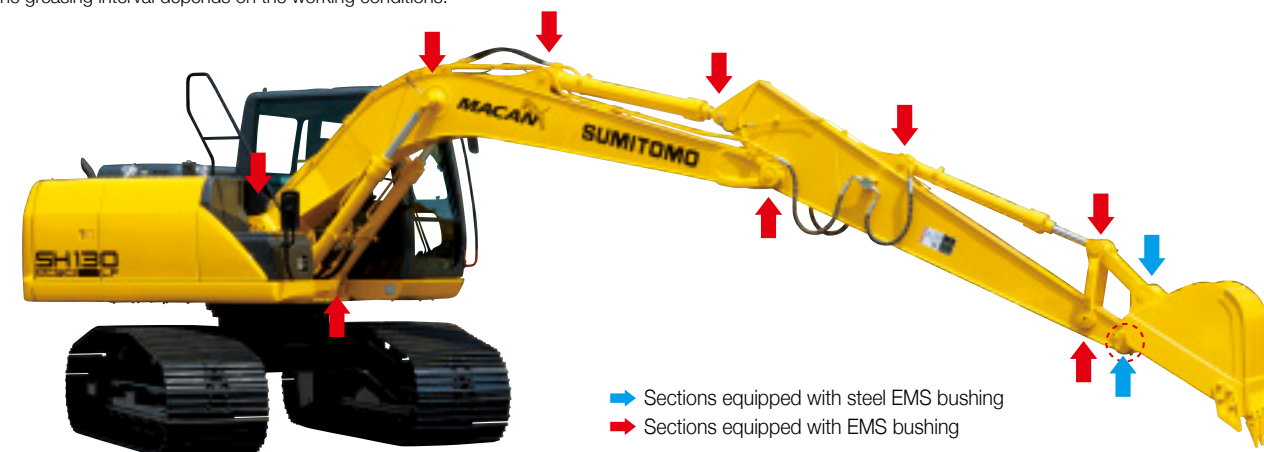
Steel EMS is installed around the bucket

■ EMS bushing



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

* The greasing interval depends on the working conditions.



Precautionary use of EMS

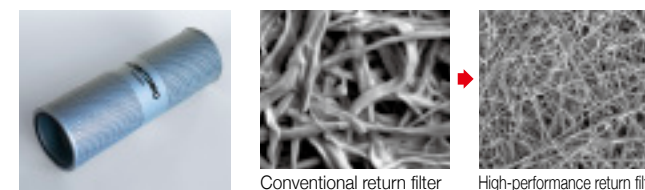
- ① Grease is enclosed, however, greasing is necessary every 1000 hours or six months depending on the level of dusting conditions.
- ② Greasing is also necessary after any components have been submerged underwater for prolonged periods.
- ③ Greasing is also recommended after use with hydraulic breakers, crushers or other high impact attachments such as Rock Saws etc.
- ④ Bucket pins should be cleaned thoroughly when removing or attaching new buckets.

High-Performance Return Filter

The hydraulic oil change interval is 5,000hours, and the return filter change interval is 2,000hours. 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**

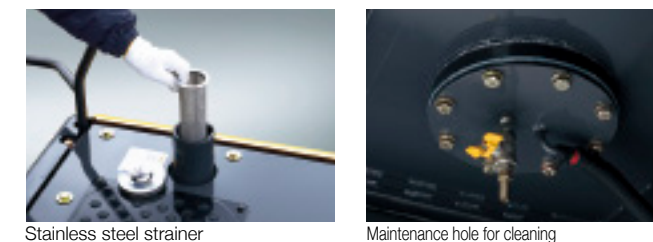
* The oil and filter change interval depends on the working conditions.



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

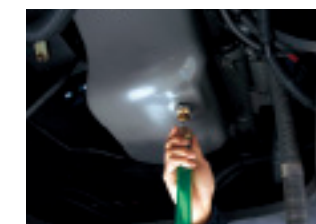
Fuel Tank SUMITOMO unique design

Stainless steel is used for the strainer to prevent dust entering during re-fueling. Furthermore, a maintenance hole is provided to permit easy periodic maintenance.



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 splashing with an attached drain hose.





COMFORT

All-round visibility increases safety during operation

SUMITOMO
unique design

In addition to the wide frontal view, the view on the right-hand side has also been made larger for enhanced safety.



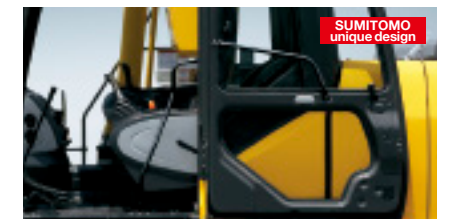
New Gate Lock Lever and Console Tilt-up Function

The console tilt-up function permits easy entry and exit.



Safe and Easy Entry into and Exit from the Cab

A large handrail for easy opening/closing of the door and a non-slip plate permits the operator to get in and out of the cab easily.



Large handrail



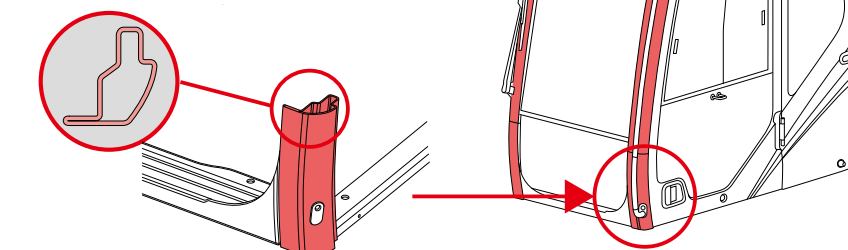
New non-slip plate

High-rigidity Cabin

The new cabin structure provides advanced operator protection.

- About **3 times** greater rigidity

* Dibandingkan dengan SH120-3

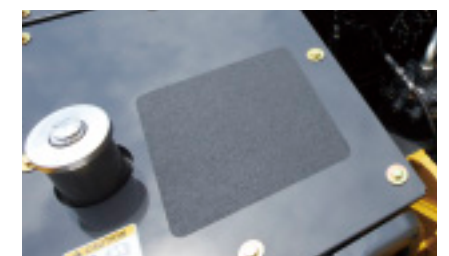


Easy Access to the Upper Structure

A large step and handrail, as well as a non-slip surface, minimizes the effort when climbing up or down the upper structure.



Front-right large step



Non-slip tape

Simple to Read LCD Monitor and Switch Panel

In addition to the monitor that is easy to read during daytime as well as nighttime by changing the backlight to white, a simple and convenient universally designed switch panel is provided.



Anti-theft Alarm System

SUMITOMO's unique anti-theft system can be activated by your SUMITOMO distributor at the time of purchase.



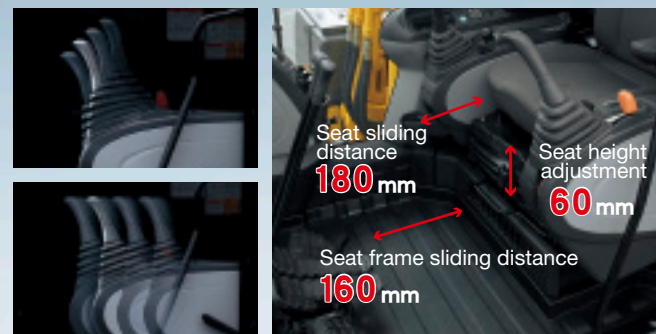
Emergency Safety Switch



ISO-compliant large handrail

Operating Positions of Sliding Seat and Tilting Console

In addition to the tilting console that is adjustable in four steps vertically, the increased sliding distance ensures optimum working conditions.



COMFORT

SUMITOMO's Redesigned Cabin and Seat provide Optimum Operator Comfort

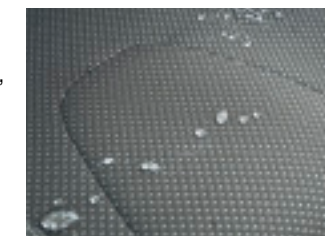
The seat reclining system allows the operator to fully recline the seat and to rest on site without removing the headrest.



New Water-repelling Operator's Seat

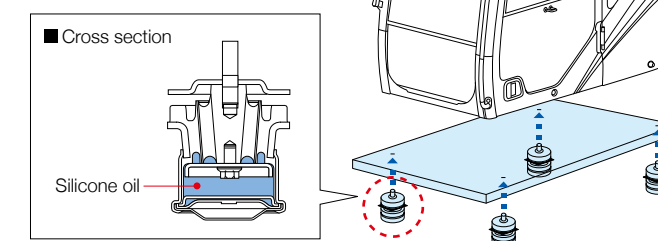
A rainwater and dust-resistant, water-repelling operator's seat has been adopted.

SUMITOMO
unique design



Fluid Filled Cab Mounts

Four fluid cab mounts reduce vibration and impact transmitted to the cabin, and improve the operators' sitting quality and reduce operator fatigue.



The Suspension Seat Eliminates Vibration



Air suspension (Option)

Automatic Air Conditioner with Round Outlets for Increased Comfort



The air outlets of the air conditioner are provided with round grills with wide adjusting angles. The efficiency of the air conditioner has been increased by pressurizing the cab to make it airtight, providing a comfortable space.

Operator friendly accessory



Multi-function storage box



Convenient One-touch Muting of AM/FM Radio

An AM/FM radio is provided as standard equipment. The mute switch on the left lever permits one-touch muting of the radio.

SUMITOMO
unique design



ISO-compliant Pressurized Cab to Prevent Dust Entering

The sealed and pressurized (sealing by pressure) cab prevents entry of dust from outside.

SH130LF-5

Principle Specifications

| | | SH130LF-5 |
|------------------|------------------------------|---|
| Base | Boom length | 4.6 m |
| | Arm length | 3.0 m |
| | Bucket capacity (ISO heaped) | 0.5 m³ |
| Engine | Std. operating weight | 15400 kg |
| | Make & model | ISUZU AJ-4JJ1X |
| | Rated output | 70.9 kw/2000 min ⁻¹ |
| Hydraulic System | Displacement | 2999 cc |
| | Main pump | 2 variable displacement axial piston pumps with regulating system |
| | Max pressure | 34.3 Mpa |
| Performance | Travel motor | Variable displacement axial piston motor |
| | Parking brake type | Mechanical disc brake |
| | Swing motor | Fixed displacement axial piston motor |
| Other | Travel speed | 4.7 / 2.5 km/h |
| | Traction force | 171 kN |
| | Grade ability | 70% <35°> |
| | Ground pressure | 29 kPa |
| | Swing speed | 14.3 min ⁻¹ |
| | Bucket digging force | 90 kN |
| | Arm digging force | 56 kN |
| | Fuel tank | 260 liter |
| | Hydraulic fluid tank | 157 liter |

Equipment Items

| | | SH130LF-5 |
|------------------|---------------------------------|-----------|
| Base carrier | 800mm triple grouser shoe | ⊙ |
| | 900mm triple grouser shoe | ● |
| | 960mm single grouser shoe | ● |
| | Center guard (Double) | ⊙ |
| | Center guard (Quad) | ● |
| | Upper structure guarding | ● |
| | Upper under cover (6mm) | ⊙ |
| Boom | Undercarriage under cover (9mm) | ⊙ |
| | HD boom | ⊙ |
| Arm | Standard arm (2.5m) | ● |
| | Log arm (3.0m) | ⊙ |
| Bucket | 0.50m³ bucket (side pin) | ● |
| | 0.55m³ bucket (side pin) | ● |
| Interior / Cabin | Air conditioner | ⊙ |
| | AM/FM radio | ⊙ |
| | Suspension seat | ⊙ |
| Others | Refuel pump | ● |
| | Anti-theft alarm system | ● |

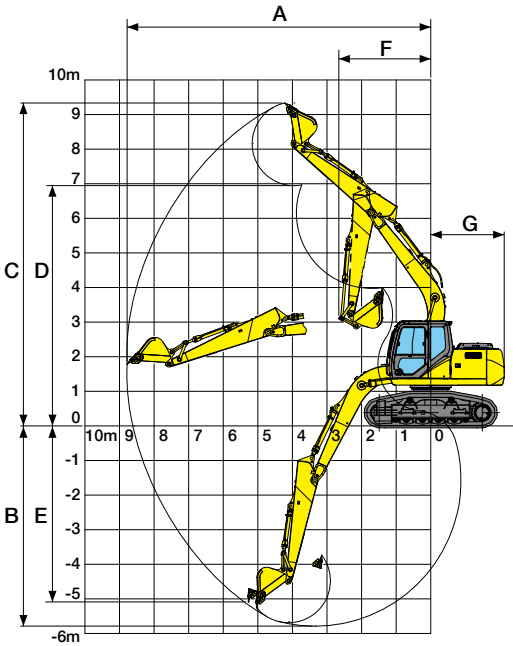
Bucket

| | | SH130LF-5 | |
|---------------------------------------|---------------------|-----------|----------|
| Bucket capacity (ISO/SAE/PCSA heaped) | | 0.5 m³ | 0.55 m³ |
| Bucket capacity (CECE heaped) | | 0.43 m³ | 0.46 m³ |
| Bucket type | | Side pin | Side pin |
| Number of teeth | | 5 | 5 |
| Width | With side cutter | 972mm | 1057mm |
| | Without side cutter | 898mm | 983mm |
| Berat | | 378kg | 396kg |
| Combination | 2.5 m Standard arm | ⊙ | ○ |
| | 3.0 m Long arm | ○ | — |

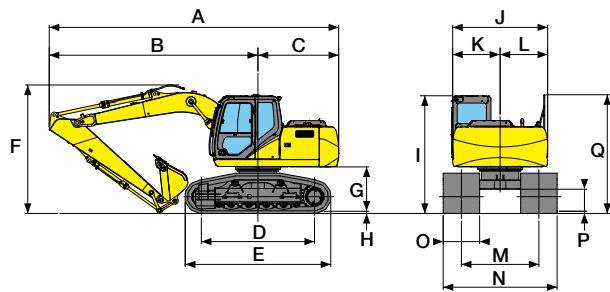
⊙ Standard bucket (Suitable for materials with density up to 1,800 kg/m³ or less)
○ Suitable for materials with density up to 1,600 kg/m³ or less

Working Range

| SH130LF-5 | | |
|-------------------------------|--------------------|-------------------|
| Arm length | 2.5 m | 3.0 m |
| | With 0.55m³ Bucket | With 0.5m³ Bucket |
| Boom length | 4.6 m | 4.6 m |
| A Max digging radius | 8320 mm | 8780 mm |
| B Max digging depth | 5280 mm | 5790 mm |
| C Max digging height | 9050 mm | 9330 mm |
| D Max dumping height | 6650 mm | 6940 mm |
| E Max vertical wall cut depth | 4690 mm | 5090 mm |
| F Min front swing radius | 2340 mm | 2660 mm |
| G Rear end swing radius | 2130 mm | 2130 mm |



Dimensions



| SH130LF-5 | | |
|--|--------------------|-------------------|
| Arm length | 2.5 m | 3.0 m |
| | With 0.55m³ Bucket | With 0.5m³ Bucket |
| A Overall length (with attachment) | 7570 mm | 7620 mm |
| B Length from center of machine (to arm top) | 5440 mm | 5490 mm |
| C Upper structure rear end radius | 2130 mm | 2130 mm |
| D Center to center of wheels | 2980 mm | 2980 mm |
| E Crawler overall length | 3790 mm | 3790 mm |
| F Overall height (with attachment) | 2780 mm | 3380 mm |
| G Clearance height under upper structure | 1160 mm | 1160 mm |
| H Shoe lug height | 26 mm | 26 mm |
| I Cab height | 3060 mm | 3060 mm |
| J Upper structure overall width | 2500 mm | 2500 mm |
| K Width from center of machine (left side) | 1250 mm | 1250 mm |
| L Width from center of machine (right side) | 1250 mm | 1250 mm |
| M Track gauge | 2040 mm | 2040 mm |
| N Undercarriage overall width (with 800mm shoes) | 2840 mm | 2840 mm |
| O Shoe width | 800 mm | 800 mm |
| P Minimum ground clearance | 580 mm | 580 mm |
| Q Handrail height | 3090 mm | 3090 mm |

Standard equipment

[Cab/interior equipment]

- Tilting console
- Water-repelling operator's seat
- Seat suspension
- Rise-up wiper (with intermittent operation function)
- Cup holder
- Clock
- Magazine rack
- Accessory case
- Floor mat
- Armrest & headrest
- Ashtray & cigar lighter
- Room light (Auto-OFF function)
- Coat hook

[Hydraulic system]

- SIH:S hydraulic system
- Operation mode (SP, H and A mode)
- Auto/one-touch idling
- Automatic 2-speed travel
- Arm/boom/bucket reactivation circuit
- Automatic swing parking system
- High-performance return filterter

[Safety equipment]

- Rearview mirror (left/right)
- Emergency escape tool
- Winding seat belt
- Gate lock lever
- Travel alarm (with on and off switch)
- Anti-theft alarm system
- Engine room firewall
- Fan guard
- Engine emergency stop switch

[Others]

- EMS
- Long-life hydraulic oil
- Two lights (main unit and left of arm)
- Fuel filter (with water separator)
- Fuel prefilter (with water separator)
- Double-element air cleaner
- Grease-enclosed track link
- Bucket rattling control mechanism
- Large tool box
- A set of tools