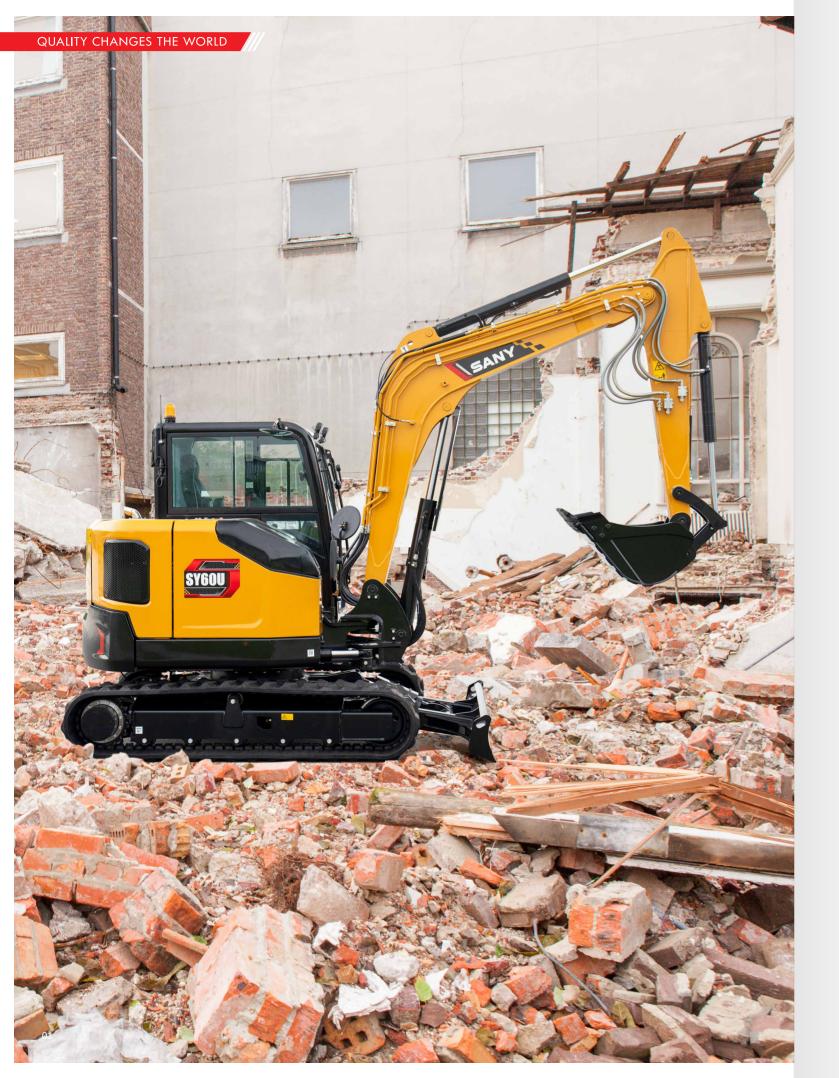




This manual was printed in 2024. The product information may have been changed when you read it. Products (including specific configuration, detail, etc.) are based on the specific models and products applicable to markets outside china, which are displayed and sold by agents. For more details, please visit the local authorized agent of SANY Heavy Machinery Ltd.







### More powerful

Advantages of Yanmar engines: Energy-saving environmental-friendly engines exclusively for SANY are widely used and well recognized by the customers. It is sturdy, durable and fuel-saving, is fitted with low-cost spare parts and is convenient for maintenance.



Hengli main pump HP3V80/AV10RC2S3M has pressure cut-off functions to reduce the over flow loss, and the maximum flow of the hydraulic system can reach 148L/min.

QUALITY CHANGES THE WORLD



Equipped with Hengli main valve HVSE-12-10-PL300-BE196, safe and reliable, with excellent performance.

## Structural parts specifically designed for mine applications

### .01

#### Bucket

It is reinforced bucket for rocks and is fitted with wear-resisting steel plate at the bottom so that the strength of bucket is improved.

With secondary arc shape of optimized design, the digging resistance and the wear of sand and soil against the bucket body when digging so that it saves energy and is more durable.



### .02

#### Structural analysis

Through professional CAE analysis, optimize the structure and reduce stress concentration: Consequently mean service life of working device is extended by 30%.

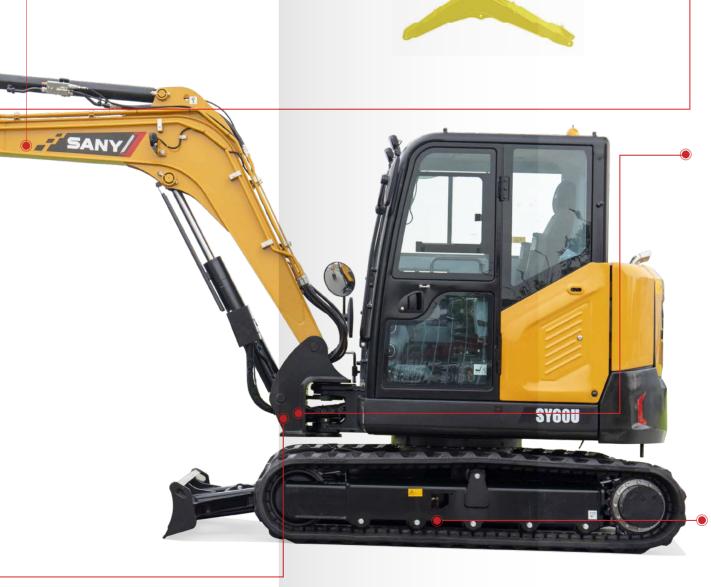


### .03

#### Boom

Rear support and center support of the boom adopt forgings for avoiding concentrated local welding stress and improving thedurability.

Key positions are enveloped with fortified steel plate for severe working conditions.



### .04

#### Arm

Rear support is made of forgings for avoiding concentrated local welding stress and improving the reliability.

With wear resisting plate on front end, the service life of bucket rod is extended.





#### Platform

High-strength slewing platform . D-shaped large-section side beams are more secure, can survive higher external impact and improves the decorous feeling of complete machine.

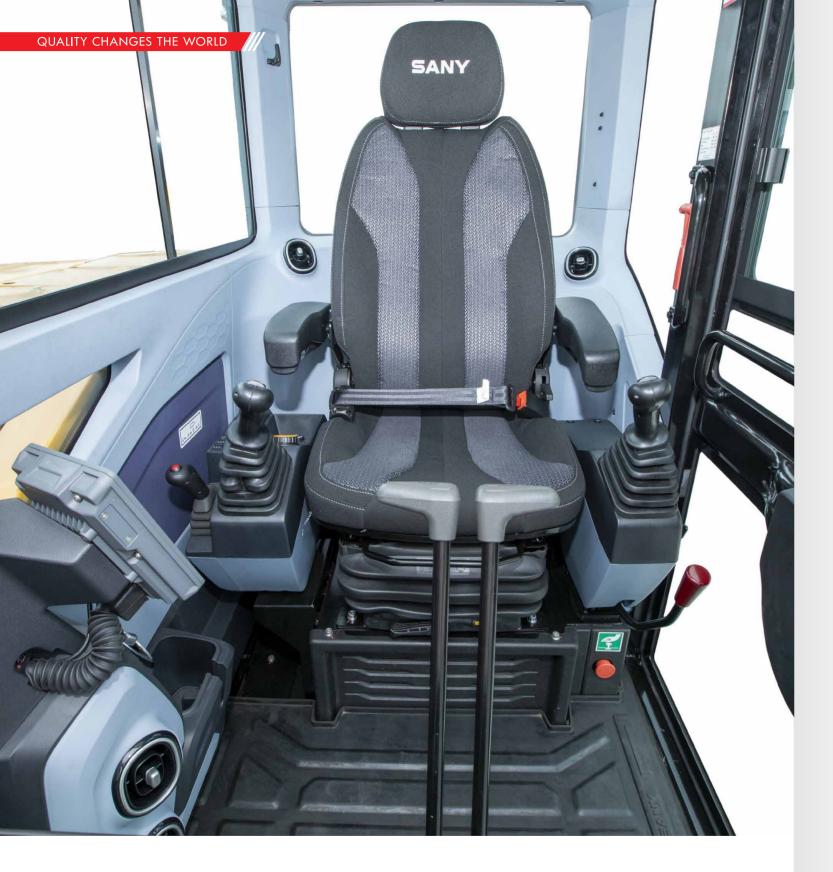
### .06

#### Undercarriage

Complete hydraulic buffer system minimizes the internal impact of hydraulic system.

With performance test of 30,000 times and market verification of 50,000 units, the operating stability of complete machine is improved and product life is extended significantly.





## **Comfortable driving**

With high-grade trim parts wide view, suspended seat, excellent vibration damping and noise reduction performance, the driving experience will be more comfortable.

high-end interior, wide view, mechanically suspended seats, fully automatic heating and cooling air conditioning, etc.

Cigar lighter, cup holder and reading lamp all are complete .







QUALITY CHANGES THE WORLD



### **Environmental protection** standard in world front

#### Recoverable



SY60U All-metal covering parts are used

All-metal covering part is used, is recoverable and environmental-friendly; the materials liable to pollution like glass fiber reinforced plastics are not used.

### **High Reliability**

#### **Top-ranking core configuration**

· Yanmar engine meeting emission standard EC Stage V exclusively for SANY could ensure the operating reliability of the machine under severe conditions.

• Hengli main pump, Hengli main valve and hydraulic components from world famous brands ensure high reliability of hydraulic system.

- · Reinforced structural members with brand-new design have longer service life.
- The total weight is much larger than that of other companies and the stability is higher.











**Traveling motor** 

Slewing motor

Multitandem valve



# More powerful energy

#### **Power system**

- · Ultra-light power engine exclusively for SANY: Power margin is sufficient, and service life is extended by over 10%.
- · New-type parallel radiator: Coolant temperature is 3-5°C lower than the competitor and hydraulic oil temperature is 7-10°C lower than the competitor.
- · External-mounting fuel filter: It has high capacity and strong assimilative capacity, and is equipped with ultra-large capacitydual oil-water separator.
- cylinder components.





**Dual air filter element** 

External-mounting fuel filter

· Air prefilter + dual air filter element could ensure sufficient and clean air and reduce the wear of

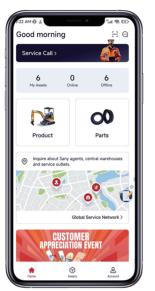


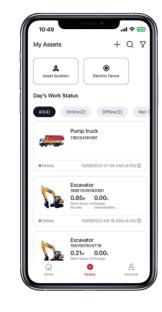


Ultra-large parallel radiator

### MySANY APP Easy use, quick response

10:52 AM 🕸		et statt for	
	e <u>delivered</u>	Partially shipped	-
Order No. 3 Contract No	000035921 . SYHK200624BC	To be deliver	ed
~	60016956 AIR SUPPORT	:	×16
SANY	11178983 CONCRETE SEAL		×6
Creation Tir	ne: 2020-06-28 17:4	43:45 Logisti	
Order No. 3 Contract No	000036018	To be deliver	ed
SANY	14050200005 Pressure sensor	3A	×1
Creation Tir	ne: 2020-06-26 18:3	57:41 Logisti	5
Order No. 3 Contract Mr	000027434	To be deliver	ed





#### **Quick Parts Access**

- View parts manuals
- View parts availability
- Check equipment & parts order status

#### **Streamlined Service**

- One-click to initiate service request
- Check global service network
- View local service team's phone number & email

#### **Fleet Management**

- Check equipment working condition
- Monitor equipment energy consumption
- Set up e-fence



Scan to download!

# Complete research & development and test system

SANY has established complete machine endurance test center with full functions. Each model of excavator must be subjected to over 2,000h field excavating test. Key components like working device, cab and hydraulic components etc., must be subject to fatigue test over 800,000 times.





# Advanced manufacturing technology

SANY has RGV assembling line and full automatic welding robots, and possesses high precision machining equipment and precise machining center. SANY's manufacturing and assembling lines won five-star national site in 2013 and national quality award in 2014. In 2023, SANY Mini Excavator Factory was awarded as the intelligent factory.





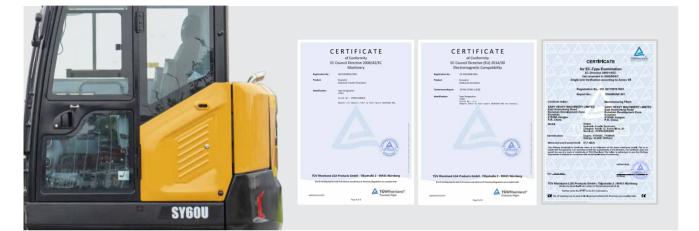




### Safety configuration

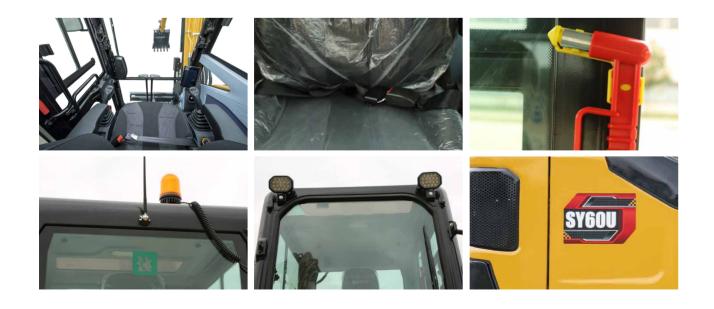
#### Safety configuration of national standard

Meet safety standard of many regions including China, EU and North America etc. SY60U cab adopts ROPS and FOPS structural design and is certified with ROPS and FOPS.



#### Safety facility

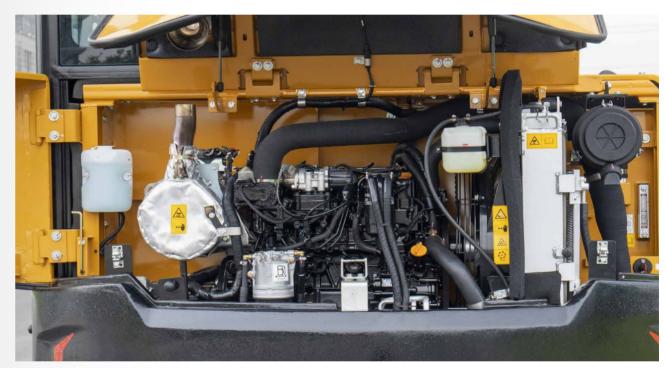
Wide view. Fire extinguisher, escape hammerbreak-in area and seat belt. Dual front headlamps. Compressor belt shield.



## **Convenient maintenance**

• Large-area covering part is used. After it is opened, daily maintenance can be carried out on the ground; thus the maintenance is convenient and the accessibility is good.

- Air filter, fuel oil coarse filter, fuel oil fine filter, engine oil filter and pilot filter element are within easy reach and can bemaintained very conveniently.
- The beautiful and elegant grease bucket holder may be used to carry the grease bucket easily.
- Large-size tool kit may contain maintenance tools conveniently.
- Detachable radiator dust screen is convenient to be washed.





### **Technical Specifications**

#### Specification

Operating weight	6300 kg	Travel Pressure (maximum)	27 MPa
Ground Pressure	34.9 kPa	Travel Speeds (maximum)	2.2/3.8 km/hr
Engine	Yanmar 4TNV98C-WSY	Travel Effort (maximum)	61.6 kN
Displacement	3.3 L	Swing Motor Axial P	iston with Swing Brake
Gross Power(SAE J1995)	42.4 kW/ 2000 rpm	Swing Pressure (maximum)	19.1 MPa
Hydraulics	Load Sensing with Pilot Control	Swing Speed (maximum)	10 RPM
Main Hydraulic Pump	Axial Piston - Variable Displacement	Undercarriage (standard) Be	elted Rubber Track
Operating Flow (maximur	m) 148 L/min	Track Shoe width (standard)	400 mm
Operating Pressure (maxi	imum) 27 MPa	Track Rollers (per side)	5
Travel Motor	Axial Piston with Park Brake	Carrier Rollers (per side)	1

#### Service refill capacities

Fuel Tank Capacity	85 L		
Hydraulic Tank Capacity	105 L		
Engine Oil Capacity	8.5 L		
Cooling System Capacity	13 L		

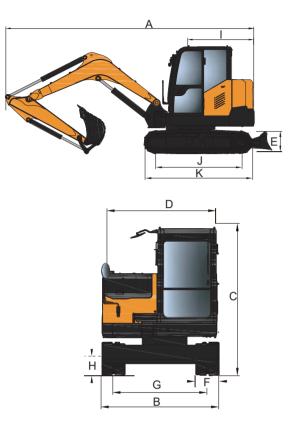
### Lifting capacity table

Blade c	lown										
Load Radius	5	2.0	) m	3.	0 m	4.	0 m	5.0	m	MAX R	EACH
Load Point H	leight	Ī				Ī,				Ī	
4.0 m	kg					*1150	1135			*1120	925
3.0 m	kg					*1250	1100	*1300	770	*1060	745
2.0 m	kg			*2020	1520	*1550	1050	*1390	750	*1080	665
1.0 m	kg			*2890	1470	*1910	995	*1540	725	*1150	635
0 m	kg			*3290	1400	*2160	950	*1650	700	*1320	650
-1.0 m	kg	*2720	2660	*3260	1390	*2210	935			*1660	720
-2.0 m	kg	*4000	2715	*2880	1415	*1920	955			*1800	910

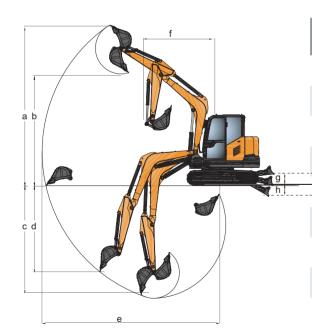
Blade u	p											
Load Radius	5		2.0 m		3.	0 m	4	.0 m	5.0	) m	MAX F	REACH
Load Point	Heigh	t 🖟	, (		Ð				I.		I.L.	
4.0 m	kg						*1150	1135			980	925
3.0 m	kg						1180	1100	815	770	800	745
2.0 m	kg				1675	1520	1130	1050	800	750	710	665
1.0 m	kg				1632	1470	1070	995	775	725	680	635
0 m	kg				1568	1400	1030	950	755	700	700	650
-1.0 m	kg	*2720	0 26	60	1536	1390	1005	935			770	720
-2.0 m	kg	3220	) 27	15	1558	1415	1022	955			980	910

\* Indicates load limited by hydraulic lifting capacity

### **Machine dimensions**



Overall dimensions (mm)	SY60U
A. Transport Length	5830
B. Transport Width	2000
C. Transport Height	2530
D.Upper Structure Width	2000
E. Blade Height	340
F. Track Width (standard shoe)	400
G.Track Gauge	1600
H.Ground Clearance (minimum)	320
I. Tail Swing Radius	1350
J. Track Length on Ground	2055
K. Track Length	2580



Operating range (mm)	SY60U
a. Maximum Digging Height	5695
b. Maximum Dumping Height	3970
c. Maximum Digging Depth	3990
d. Maximum Vertical Wall Digging Depth	3130
e.Maximum Reach	6375
f. Minimum Swing Radius	2730
g. Maximum Blade Height	400
h. Maximum Blads Depth	385

### Standard configuration

Engine		Cab		Traveling body of undercarriage	
12V/3kW starter motor	•	Ultra-silence frame cab	•	Traveling parking brake	•
80A alternator	•	Reinforced light-color glass window	•	Traveling motor guard plate	•
Dry-type dual-element air filter	•	Silicone oil rubber damper	•	Grease filler cover plate on traveling beam	•
Cylinder engine oil filter	•	Openable front wall upper window and left side window	•	Hydraulic tensioning device of track	•
Two-stage fuel filter	•	Rear window emergency fire exit	•	Bolted driving wheel	•
Radiator	•	Wiper (with washer)	•	Carrier roller and thrust wheel	•
Auxiliary radiator water tank	•	Multidirectional adjustable seat	•	Reinforced chain track with pin shaft seal	•
Fan deflector	•	Radio (with digital clock)	•	400mm triple bulging track shoes	•
Isolated mounted engine	•	Foot rest and floor mat	•	Reinforced side pedal	•
Automatic idling system	•	Loudspeaker and rearview mirror	•	Bottom cover plate	•
2 sets of auxiliary pipes	•	Seatbelt	•	Drain line	•
Quick change line	•	Cupholder and compartment lamp	•		
Rear-view camera	•	Ash tray and emergency hammer	•		
Floating dozer	•	Pilot control cut-off lever	•		
Fuel filling pump	•				
Keyless start	•				

• stands for standard configurations • o stands for optional configurations

### Standard configuration

Hydraulic system		Front-end working device	•	Instruments of monitoring system	
Operating mode selector switch	•	Flange pin	•	Global positioning system (GPS)	•
Control valve with main overflow valve	•	Bucket clearance adjuster	•	7 touch screen	•
Control valve with spare oil port	•	Welded connecting rod	•	EEVIA system	•
Oil suction filter	•	All bucket pins are equipped with dust proof seal rings	•	Hour meter, fuel tank oil level gauge	•
Oil return filter	•	Reinforced all-welded box-type boom	•	Engine coolant temperature gauge	•
Pilot filter	•	Reinforced all-welded box-type bucket rod	•	Failure diagnosisand alarm system	•

Air conditioning system

•

•

Air conditioner

Air conditioner control panel

Upper slewing platform	n Alarm system	Others	
Fuel oil level sensor	Engine oil pressure insufficier	Standard storage battery	•
Hydraulic oil level gauge	engine coolant temperature t	oo high • Lockable engine hood	•
Slewing parking brake	Insufficient fuel volume	• Lockable fuel filler cap	•
Rearview mirror (right) •	Fault code alarm	Boom swing function	•
		Traveling direction sign on traveling frame	٠
		400mm rubber track	٠
		400mm steel track	0

• stands for standard configurations 0 stands for optional configurations

