



# SY80U

**Engine power**  
53.7kW/2100rpm

**Bucket capacity**  
\*0.28m<sup>3</sup>

**Operating weight**  
8800kg



High reliability



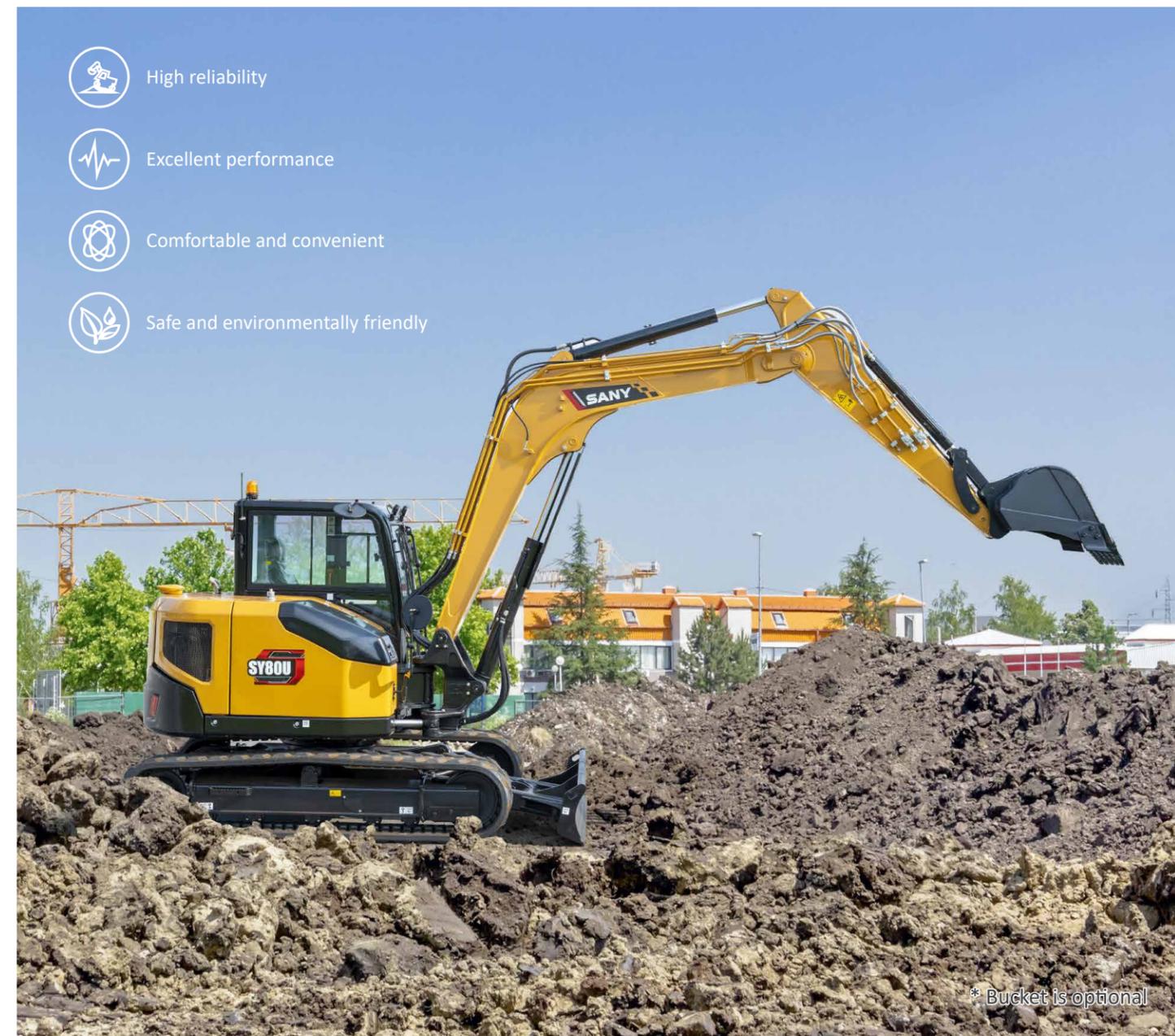
Excellent performance



Comfortable and convenient



Safe and environmentally friendly



\* Bucket is optional



SANY HEAVY MACHINERY LTD

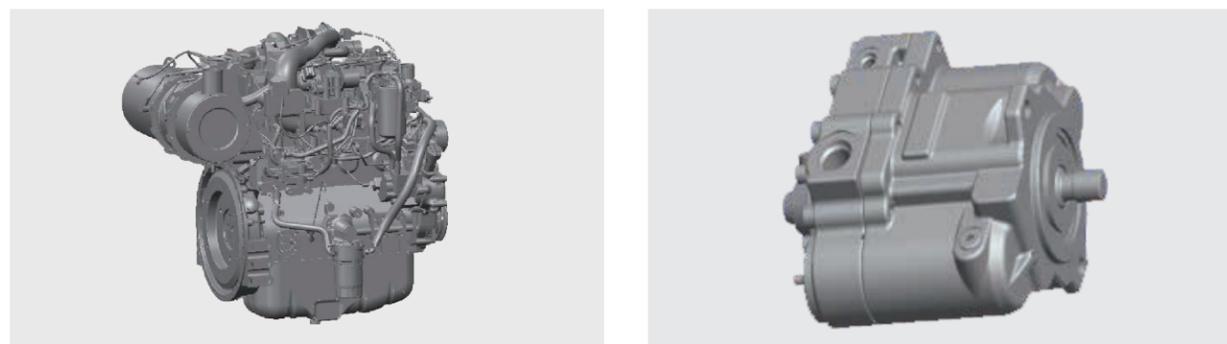
<http://www.sanyglobal.com>

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## Strong power

▶ Adopt SANY special Yanmar engine. The power is strong and the performance is reliable.



▶ The E-controlled pump can precisely match the engine power to achieve maximum fuel economy efficiency. Using Borgwarner's programmable electronic silicon clutch fan which lower the fuel consumption and noise. The new design of the strengthened structural parts which make the machine have a longer service life.



# The core of the best configuration

7" large-sized high-precision air filter as standard configuration, filter precision is up to 99.9%. Large capacity design, long service life and low maintenance cost. Electronic alarm device, which is safe and effective.



Standard with large capacity, high filtration accuracy fuel coarse filter and fuel fine filter, double protection, higher filtration efficiency, and the use of long life design make the service life twice longer.

Both coarse filtration accuracy of 4µm and fine filtration accuracy of 5 µm can filter out the small impurities to ensure the safe use of the engine.

# Maintenance within easy reach

Air filter, fuel oil coarse filter, fuel oil fine filter, engine oil filter and pilot filter element are within easy reach and can be maintained very conveniently.

Detachable radiator dust screen is convenient to be washed.



# Environmental protection friendly

## Recycling

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



SY80U  
All-metal covering parts are used

## Environmental friendly

The engine meets latest standard of stage V and Tier 4f. Aluminum radiator and oil cooler are used. Environmental paint is used to minimize environmental pollution. Garden-type manufacturing site.



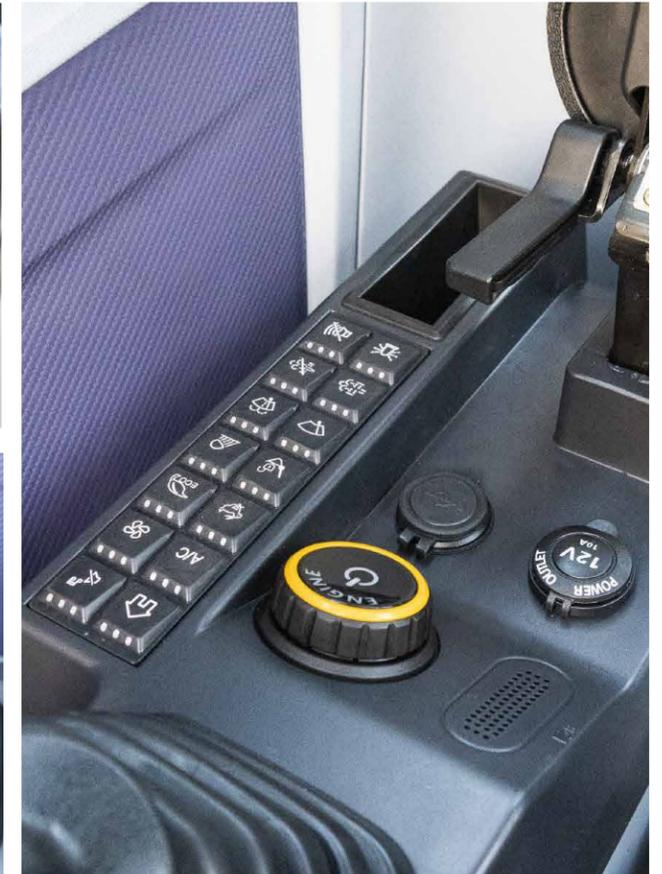
## Comfort and easy operation

New cab interior, plastic folding feet, increased right window, interior styling and air conditioning outlet and other improvements not only make the cab more modern, but also reduce indoor noise and improve the operating comfort of the cab.

The display is a 7-inch LCD touch screen, the radio and air conditioning functions are integrated into the screen, and 20 types of equipment can be adapted to switch functions, so that customers can easily complete various types of operations in various scenarios, and easily adapt to different engineering scenarios.

New one-button start-stop switch, integrated throttle knob function, USB charger and rear camera, new control experience, safer control environment; The dozer is equipped with a floating function, which can easily complete the ground level during garden construction and ground correction work, and can be more efficient in land clearing.

Charging port, cup holder, storage compartment, reading light, suspension seat and multi-function handle are all equipped.



# Strengthen the structure

## .01

The rear support and center support of the boom are forged to avoid local welding stress concentration and improve durability.

The key parts are reinforced steel envelope, which is more suitable for harsh working conditions.



## .02 Undercarriage

Carrier wheel is replaced by thrust wheel, which is done for the first time in the industry. The service life is doubled.

The fixture of carrier wheel is reinforced on both sides so that the structure is more sturdy, durable and reliable.

## .03 Arm

With the wear-resisting plate adopted on the front end of the arm, the service life is longer.

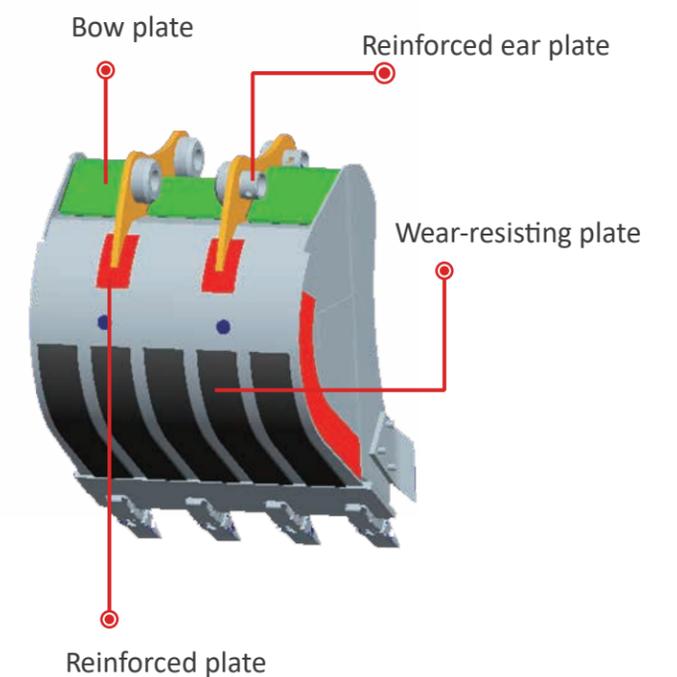
With new tungsten carbide technology on the front end face of the arm, and the wear resistance is doubled.



wear-resisting plate+ thickened plate

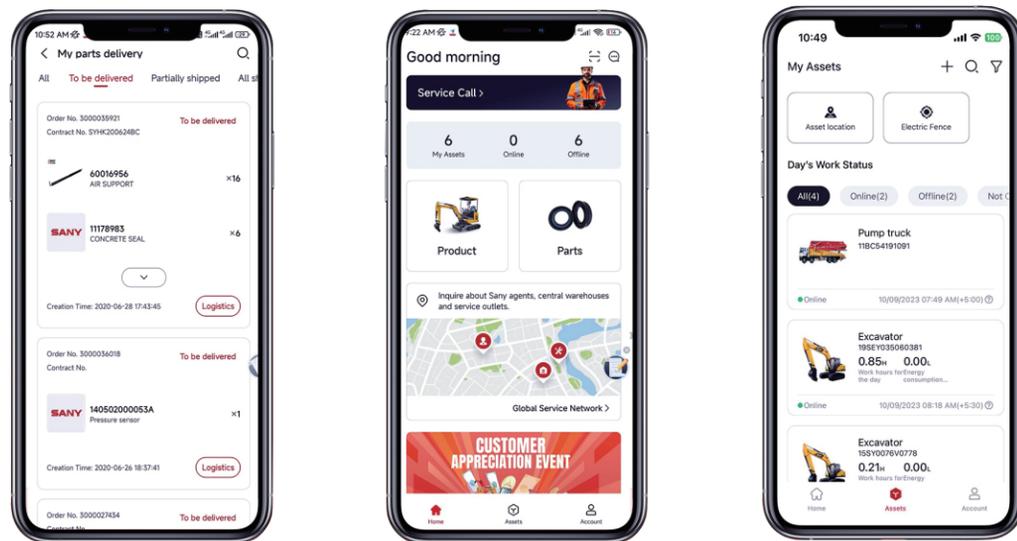
## .04 Bucket (non-standard)

The bucket bottom is equipped with wear-resisting plate, reinforced back plate and ear plate so that its service life is improved by over 50%.



# MySANY APP

## Easy use, quick response



### Quick Parts Access

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

### Fleet Management

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

### Streamlined Service

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



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 fullautomatic 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.  
SY80U cab adopts ROPS structural design.

# Excellent performance

## Load-sensitive

SANY utilizes load-sensitive system which features higher operating efficiency, better control performance, excellent flat ground capacity and outstanding microoperation performance and is capable of providing almost perfect operating feeling.

	SY80U
Hydraulic system	Load-sensitive system
System characteristics	Able to sense tiny change of the load and adjust flow and pressure from time to time for realizing perfect control performance
Advantages and disadvantages	Movement speed is irrelevant to the load

# Special configuration

The SY80U is available in a variety of special configuration options to suit different customer needs.

## Arm configuration

2050mm standard arm (standard configuration)

1622mm short arm (optional configuration)

## Track configuration

450mm rubber track (standard configuration)

450/600mm steel track (optional configuration)

## Bucker configuration

No bucket (standard configuration)

0.28m<sup>3</sup> bucket

## Cab configuration

With air conditioner (standard configuration)

Front and top guard (optional configuration)

## Other special configuration



# Technical specifications

Specification		Main performance	
Operating weight	8800 kg	Traveling speed (high/low)	4.5/2.5 km/h
Engine	EU Stage V/U.S. EPA Tier 4 Final	Gyration speed	10.2 rpm
Model	4TNV98CT	Grade ability	58%/30°
Type	4-cylinder/4-stroke/inline/ water cooled/diesel	Ground pressure	37.9 kPa
Engine power	53.7 kW/ 2100 rpm (SAEJ1995)	Digging force of bucket	62.3 kN
Maximum torque	290 Nm/ 1350 rpm	Digging force of arm	40.5 kN
Displacement	3.318 L		

Capacity of oil and coolant		Travelling section	
Fuel tank	100 L	Carrier wheel on each side	1
Hydraulic oil tank	120 L	Thrust wheel on each side	5
Engine oil	8.5 L	Standard crawler	450 mm rubber track
Radiator	12 L		
Final drive	2x1.2 L		

# Table of lifting capacity

Rated Lift Capacity(Kg)-Dozer blade down									
Load point height	Radius						Digging reach		
	3m		4m		5m		MAX.		
									mm
5m			*1960	*1960	*1800	1338	*1710	1325	5025
4m			*2080	*2080	*2085	1345	*1225	1055	5703
3m	*3100	*3100	*2540	1875	*2275	1315	*1585	930	6106
2m	*4745	2675	*3180	1760	*2570	1260	*1630	865	6297
1m	*4325	2450	*3745	1650	*2845	1205	*1750	855	6297
0m	*4850	2390	*4020	1590	*2995	1170	*1965	885	6109
-1m	*5670	2360	*3950	1550	*2935	1140	*2370	995	5707
-2m	*4915	2375	*3490	1550	*2445	1150	*2400	1185	5031
-3m	*3385	2450					*2290	1735	3899

**Note:**

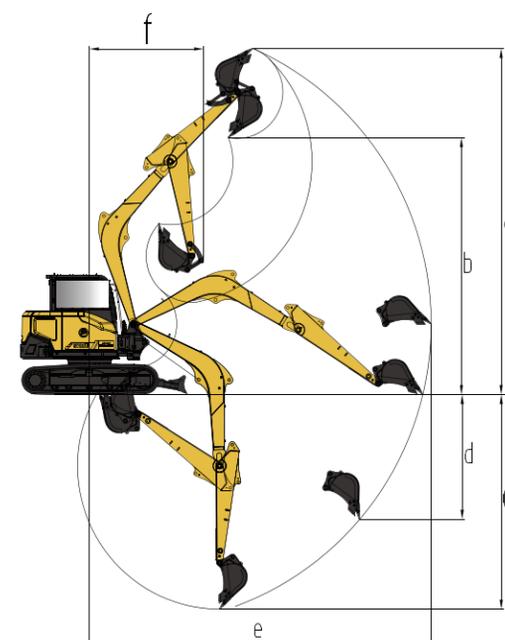
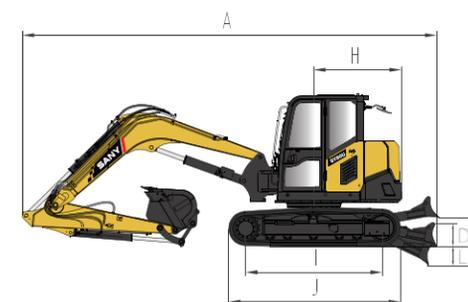
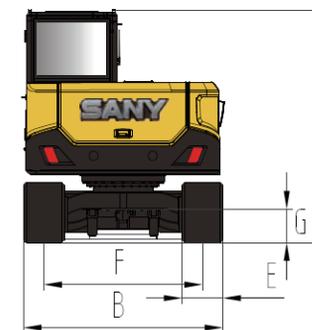
- \* indicates the lifting force limited by the hydraulic system.
- The lifting capacities are based on ISO 10567 and do not exceed 75% of the static tilt load of the machine or 87% of the hydraulic lifting capacity of the machine.
- Boom length 3520mm, arm length 2050mm, and the bucket is not included.

# Table of lifting capacity

Rated Lift Capacity(Kg)-Dozer blade up									
Load point height	Radius						Digging reach		
	3m		4m		5m		MAX.		
	□	□	□	□	□	□	□	□	mm
5m			*1960	*1960	*1800	1338	1710	1325	5025
4m	*3100	*3100	*2080	*2080	*2085	1345	*1225	1055	5703
3m	3850	2675	*2540	1875	1770	1315	1285	930	6106
2m	3595	2450	2425	1760	1715	1260	1185	865	6297
1m	3525	2390	2305	1650	1655	1205	1170	855	6297
0m	3490	2360	2240	1590	1615	1170	1215	885	6109
-1m	3510	2375	2195	1550	1585	1140	1360	995	5707
-2m	*3385	2450	2195	1550	1600	1150	1630	1185	5031
-3m							*2290	1735	3899

Note:  
 1.\* indicates the lifting force limited by the hydraulic system.  
 2.The lifting capacities are based on ISO 10567 and do not exceed 75% of the static tilt load of the machine or 87% of the hydraulic lifting capacity of the machine.  
 3.Boom length 3520mm, arm length 2050mm, and the bucket is not included.

# Machine dimensions



Overall dimensions (mm)	SY80U
A. Overall length (in transportation state)	7010
B. Overall width	2200
C. Overall height (in transportation )	2550
D. Height of bulldozing plate	460
E. Standard track plate width	450
F. Track gauge	1750
G. Minimum ground clearance	365
H. Slewing radius of tail	1480
I. Wheel gauge	2315
J. Track ground contact length	2915
k. Max. blade height above the ground	480
L. Max. lowering blade depth	325

Operation range (mm)	SY80U
a. Maximum digging height	7315
b. Maximum unloading height	5430
c. Maximum digging depth	4535
d. Maximum digging depth with vertical boom	2490
e. Maximum digging distance	7290
f. Minimum slewing radius	2435
g. Maximum reach at ground level	5490

# Standard configuration

Power system	Cab	Traveling body of undercarriage
12V/3kw starter motor	• Soundproof steel structure cab	• Traveling motor guard plate
12V/80A alternator	• Reinforced light glass	• Hydraulic tension device of tracks
Dry type dual element air filter	• Rubber shock absorber	• Driving wheels
Barrel oil filter	• Openable front upper window glass	• Thrust wheels
Barrel diesel filter (Coarse and fine)	• Rear window emergency exit	• Reinforced track with pin seal
Radiator with safety net	• Silent wiper with washer	• 450mm rubber track shoes
Radiator auxiliary water tank	• Mechanical suspension seat	• Bottom cover plate
Fan hood	• AM-FM radio with blue teeth	• Floating bulldozer
Yanmar engine	• Pedals and floor mat	
Automatic idle system	• Speaker and rearview mirror	
Engine auto stop	• Seat belt and fire extinguisher	
DPF insulated package	• Water cup holder and reading lamp	
100L plastic fuel tank	• Folding foot pedal	
	• File box	
	• Pilot controlled cut-off lever	

Hydraulic system	Front-end working device	Electrical system
Control valve with overflow valve	• All-welded box-type boom	• 7 inch LCD display
Electric main pump	• Deflection boom	• Rear camera
Return oil filter	• Deflection head	• Two batteries
Suction filter	• Welded linkage rod	• Engine emergency stop switch
Pilot oil filter	• Dust seal ring	• Power master switch
	• Pin	• Fuel filling pump

Slewing platform of superstructure	Indicator lamp	Others
Fuel oil level	• Charging indicator lamp	• Breaker pipeline
Hydraulic oil level	• Walking alarm lamp	• Quick couple pipeline
Cathode switch		• Multi-function handle levers
		• Anti-explosion valve of boom and stick
		• Fuel pump
		• LCD with GPS function