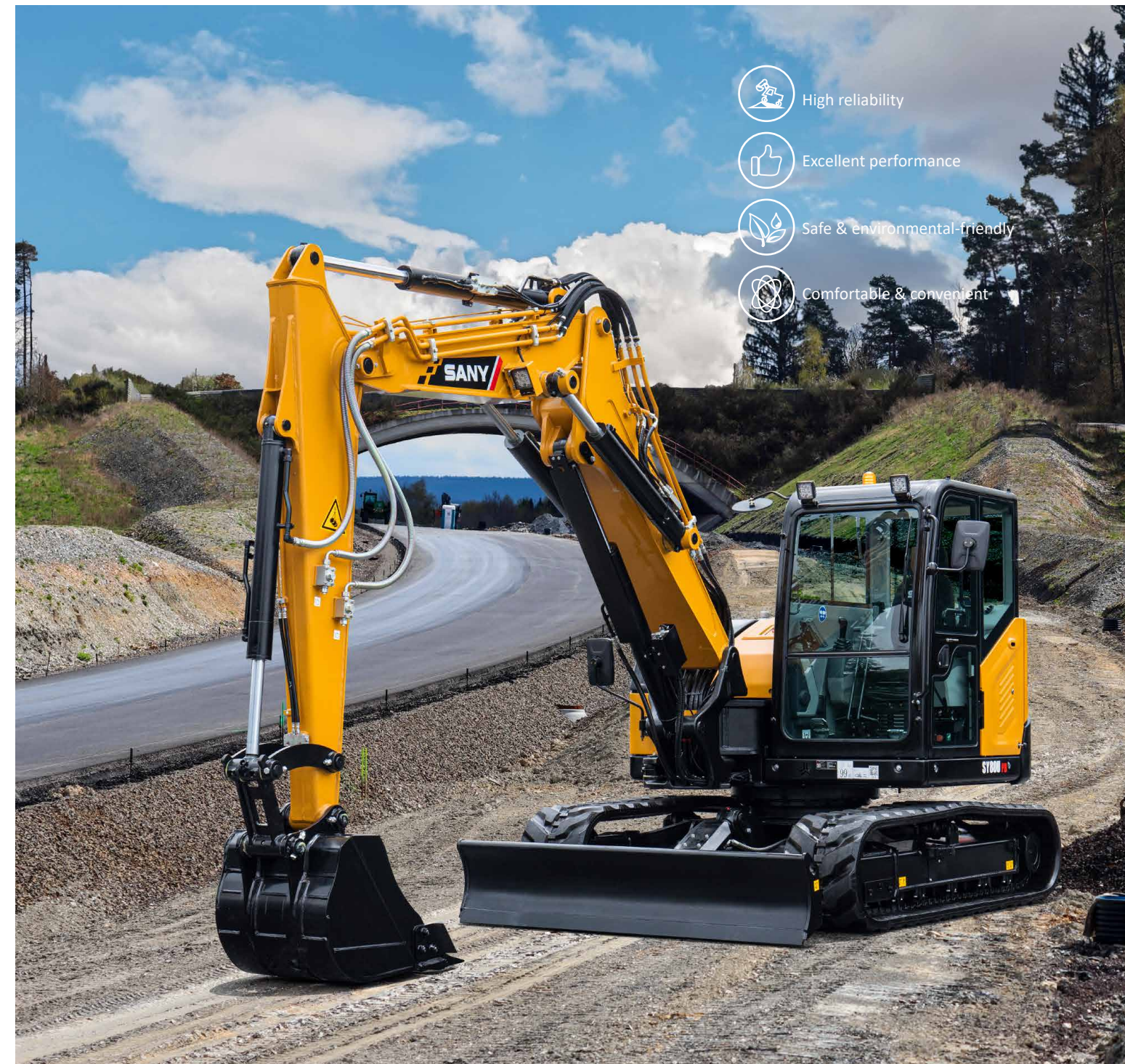
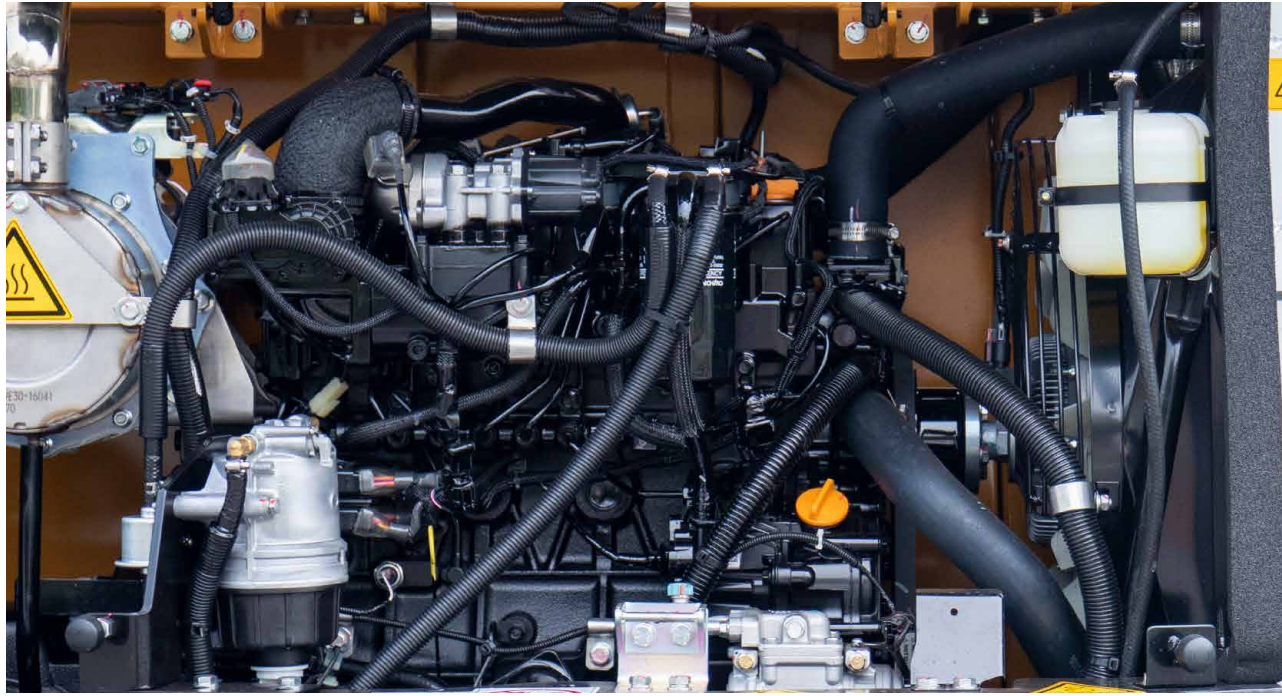


SY80U PB

Engine power / **Operating weight**
53.7kW/2100rpm / 9580kg



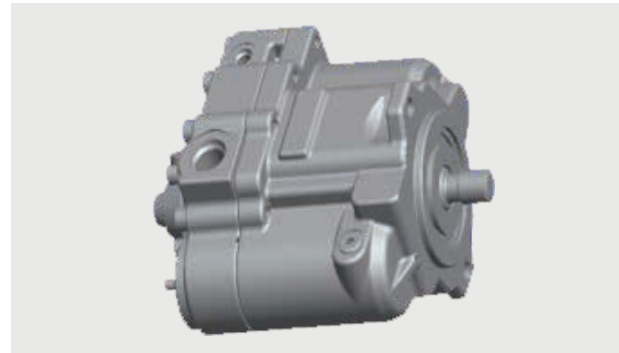
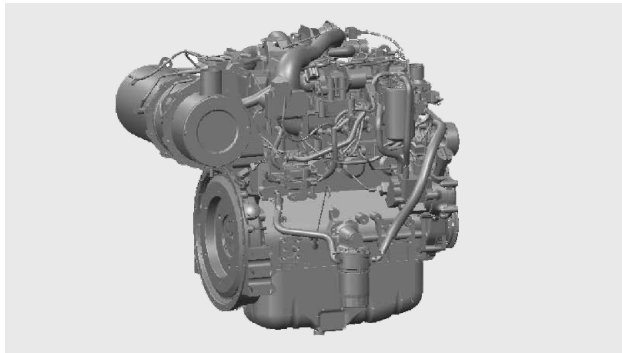
-  High reliability
-  Excellent performance
-  Safe & environmental-friendly
-  Comfortable & convenient



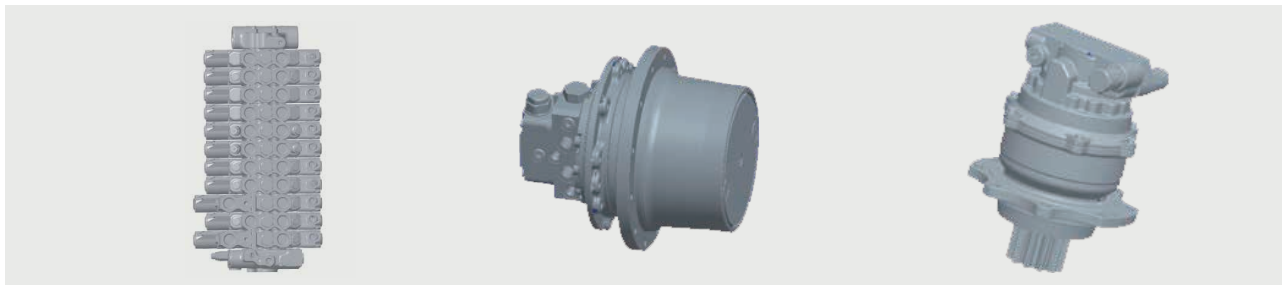
Strong power



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 PB
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

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

High performance air conditioner outputs air in stereoscopic mode and makes inside climate more comfortable.

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

The display is upgraded to a multi-functional touch screen, which makes the operation more convenient and adapts to 20 types of attachment with switching function.



Strengthen the structure

.01 Arm

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

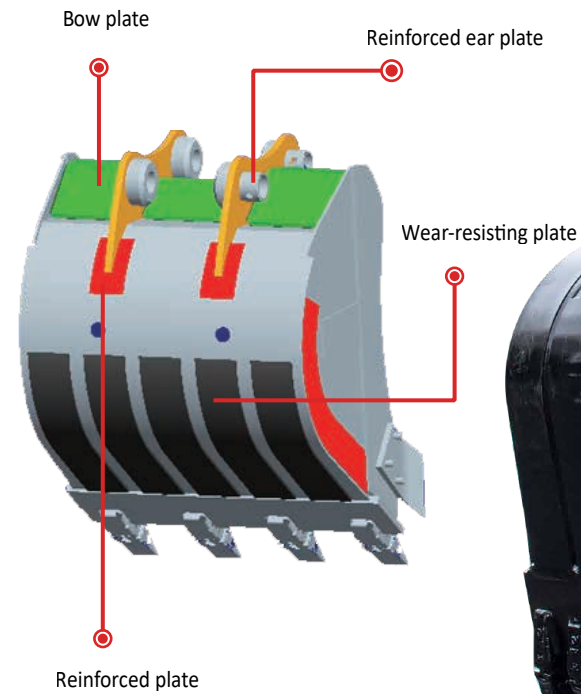
With new tungsten carbide technology on the front end face of the arm, and the wear resistance is doubled.



wear-resisting plate+ thicken plate

.02 Bucket (non-standard)

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



.03

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.

.04 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.



Complete research development and test system

Complete research, development and test system is the strong backup for excellent performance.

It 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

Advanced manufacturing technology is a reliable guarantee for producing excellent products.

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.



Safety configuration

Safety configuration of national standard

Meet safety standard of many regions including China, EU and North America etc. SY80U PB 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 PB |
|------------------------------|--|
| Hydraulic system | load sensing 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 PB is available in a variety of special configuration options to meet diverse needs of customers.

Arm configuration

2050mm standard arm (standard configuration)

1622mm short arm (optional configuration)

Track configuration

450mm rubber track (standard configuration)

450mm steel track (optional configuration)

Bucket configuration

No bucket (standard configuration)

0.28m³ bucket

Cab configuration

With air conditioner (standard configuration)

Beacon light

Other special configuration



Parts warehouse & service network

- Parts Warehouse: **500** parts warehouses
- ▲ Service Network: **600** service networks and **4,000** service engineers



Technical specifications

| Specification | | Main performance | |
|------------------|--|----------------------------|--------------|
| Operating weight | 9580kg | Traveling speed (high/low) | 4.5/2.5 km/h |
| Model | Yanmar 4TNV98CT | Swing speed | 11rpm |
| Type | 4-cylinder/4-stroke/inline/ water cooled/diesel | Gradeability | 70% / 35° |
| Rated power | 53.7kW/2100rpm | Ground pressure | 40kPa |
| Maximum torque | 290Nm/1350rpm | Digging force of bucket | 59kN |
| Displacement | 3.318L | Digging force of arm | 44.5kN |

| Capacity of oil and coolant | | Travelling section | |
|-----------------------------|--------|--------------------|--------------------|
| Fuel tank | 100L | Upper roller | 1 |
| Hydraulic oil tank | 120L | lower roller | 5 |
| Engine oil | 10.2L | Standard crawler | 450mm rubber track |
| Cooling system | 12L | | |
| Final drive | 2x1.2L | | |

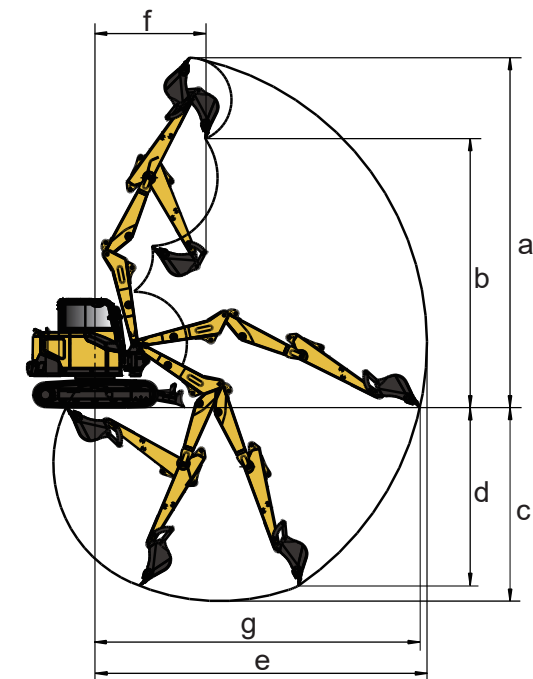
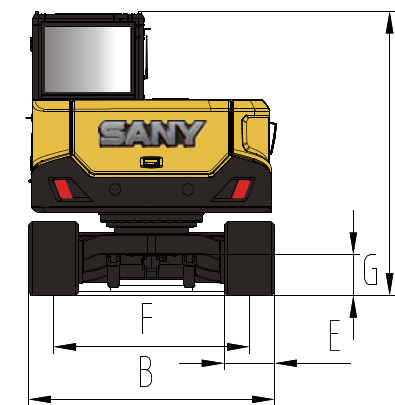
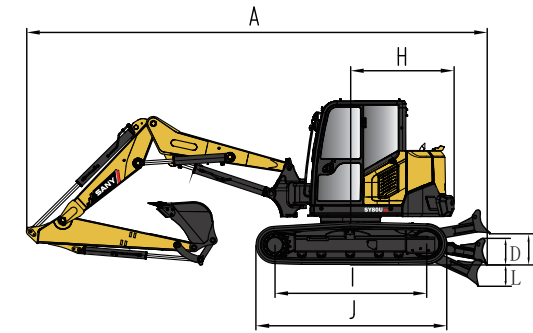
Lifting capacity

| Rated Lift Capacity(Kg)-Dozer blade down | | | | | | | | | |
|--|--------|------|-------|------|-------|-----|---------------|------|------|
| Load point height | Radius | | | | | | Digging reach | | |
| | 4m | | 5m | | 6m | | MAX. | | |
| | | | | | | | | | mm |
| 6m | *2995 | 2045 | | | | | *1970 | 1165 | 4650 |
| 5m | *3150 | 2065 | *3160 | 1395 | | | *1525 | 930 | 5605 |
| 4m | *3350 | 1995 | *2875 | 1370 | *1235 | 995 | *1645 | 890 | 6210 |
| 3m | *3565 | 1860 | *3185 | 1305 | *1060 | 960 | *1380 | 795 | 6579 |
| 2m | *3680 | 1740 | *3010 | 1235 | *1195 | 910 | *1285 | 740 | 6755 |
| 1m | *3605 | 1535 | *2855 | 1130 | *1180 | 870 | *1260 | 730 | 6755 |
| 0m | *3470 | 1460 | *2670 | 1080 | *1710 | 805 | *985 | 730 | 6580 |
| -1m | *3430 | 1440 | *2635 | 1065 | *2055 | 835 | *1065 | 805 | 6215 |
| -2m | *3475 | 1465 | *2670 | 1080 | | | *1245 | 940 | 5615 |
| -3m | *3620 | 1540 | | | | | *1680 | 1265 | 4670 |

| Rated Lift Capacity(Kg)-Dozer blade up | | | | | | | | | |
|--|--------|------|-------|------|------|-----|---------------|------|------|
| Load point height | Radius | | | | | | Digging reach | | |
| | 4m | | 5m | | 6m | | MAX. | | |
| | | | | | | | | | mm |
| 6m | *1780 | 2045 | | | | | *1530 | 1165 | 4650 |
| 5m | *1875 | 2065 | *1815 | 1395 | | | *1175 | 930 | 5605 |
| 4m | 1975 | 1995 | 1790 | 1370 | 1235 | 995 | *1270 | 890 | 6210 |
| 3m | 2100 | 1860 | 1720 | 1305 | 1060 | 960 | 1065 | 795 | 6579 |
| 2m | 2165 | 1740 | 1625 | 1235 | 1195 | 910 | 1000 | 740 | 6755 |
| 1m | 2125 | 1535 | 1540 | 1130 | 1180 | 870 | 980 | 730 | 6755 |
| 0m | 2040 | 1460 | 1485 | 1080 | 955 | 805 | 765 | 730 | 6580 |
| -1m | 2020 | 1440 | 1465 | 1065 | 1140 | 835 | 830 | 805 | 6215 |
| -2m | 2045 | 1460 | 1480 | 1080 | | | 975 | 940 | 5615 |
| -3m | 2130 | 1540 | | | | | 1310 | 1265 | 4670 |

1. This table is for the state of maximum angle between two-piece boom and the bucket is not included.
 2. * indicates the lifting force limited by the hydraulic system.
 3. 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.
 4. The first piece of boom length:2190mm; The second piece of boom length:2040mm; Arm length: 2050mm.

Dimensions



| Overall dimensions (mm) | SY80U PB |
|---|----------|
| A. Overall length (in transportation state) | 7010 |
| B. Overall width | 2200 |
| C. Overall height (in transportation) | 2550 |
| D. Dozer blade height | 410 |
| E. Standard track plate width | 450 |
| F. Lane | 1750 |
| G. Minimum ground clearance | 365 |
| H. Rear radius | 1585 |
| I. Undercarriage length | 2315 |
| J. Length of track on ground | 2915 |
| K. Max. bolade height above the ground | 480 |
| L. Max. lowering blade depth | 325 |

| Operation range (mm) | SY80U PB |
|---|----------|
| a. Maximum digging height | 8100 |
| b. Maximum unloading height | 6160 |
| c. Maximum digging depth | 4520 |
| d. Maximum digging depth with vertical boom | 4150 |
| e. Maximum digging distance | 7740 |
| f. Minimum slewing radius | 2590 |
| g. Maximum reach at ground level | 7570 |

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 | • Dozer blade cylinder guard plate |
| Yanmar engine | • Pedals and floor mat | |
| Automatic idle system | • Speaker and rearview mirror | |
| | • Seat belt and fire extinguisher | |
| | • Water cup holder and reading lamp | |
| | • Cigar lighter and ashtray | |
| | • File box | |
| | • Pilot controlled cut-off lever | |

Standard configuration

| Hydraulic system | Front-end working device | Air conditioning system |
|-----------------------------------|----------------------------|-------------------------|
| Control valve with overflow valve | • All-welded box-type boom | • Air conditioning |
| Electric main pump | • Deflection boom | • A/C control panel |
| Return oil filter | • Deflection head | |
| Suction filter | • Welded linkage rod | |
| Pilot oil filter | • Dust seal ring | |
| | • Pin | |

| 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 |