



SY16C

Engine power
14.6kW/2400rpm

Bucket capacity
*0.04m³

Operating weight
1865kg



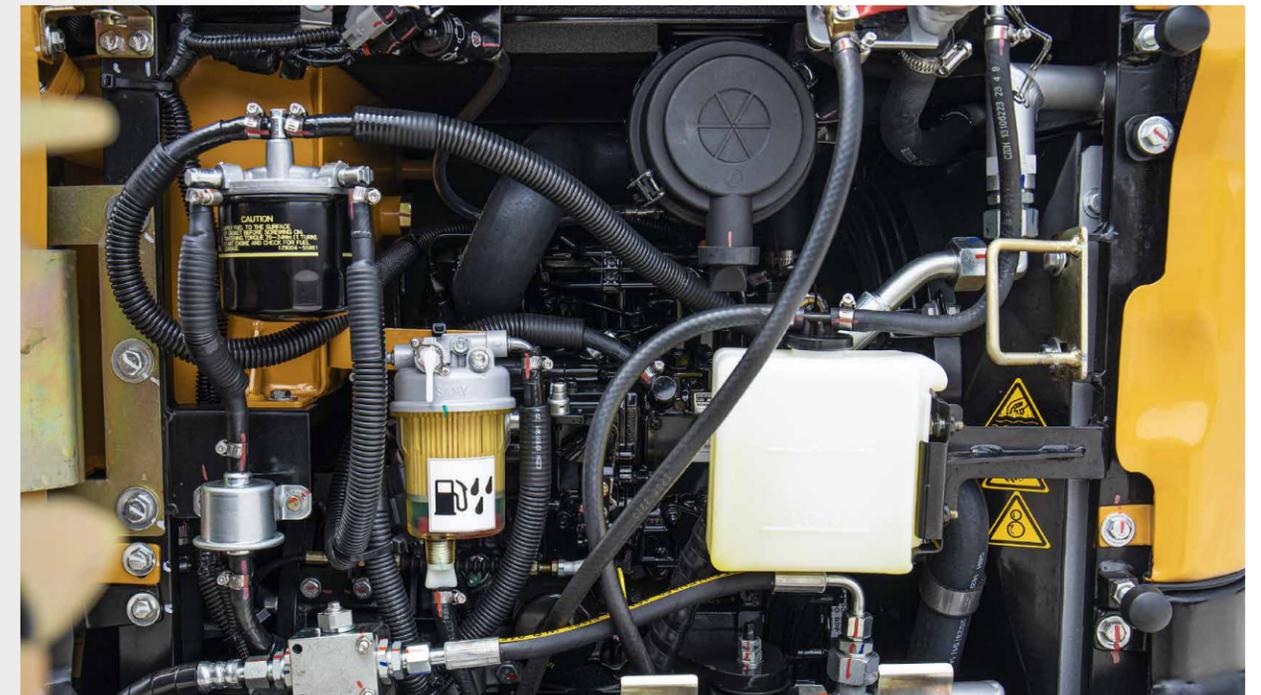
-  High Power Engine
-  Small and flexible
-  Efficient Operation
-  Versatile



SANY HEAVY MACHINERY LTD
<http://www.sanyglobal.com>

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* Bucket is optional



Strong power

▶ SY16C uses SANY custom Yanmar 3TNV80F engine, delivering 14.6kW of power and meeting Euro 5 emissions standards, strong power, With reliable and durable performance, it caters to the diversified power needs of customers.

Using high-precision oil-water separator with filter element, it can effectively filter impurities in fuel while separating water, providing multiple protection to the engine, and extending the service life of the engine.

Main pump



Master valve



Rotary motor



▶ Hydraulic system adopts a high-torque main pump and a high-flow main valve to ensure high efficiency of excavation and crushing operation.

Load-sensing hydraulic system: It can provide and distribute flow according to the needs of the system for flow, to meet the requirements of actuator speed regulation and composite action. Through hydraulic system optimization, precise engine matching ensures accurate and smooth control of machine operations.

As precise as manual control but much quicker

Mini excavators in particular require high operational flexibility. In this regard, the SY16C is simply unbeatable. It also has a powerful hydraulic system that gives it the necessary power. Together with the precise response behaviour of the hydraulics and undercarriage, this makes it a perfect precision tool.

Load-sensing hydraulic system



Quality

Robust and durable – the most important protective elements and reinforcements as well as all cladding parts are made of high-quality metal, ideal for tough use in the construction industry.

Dimensions

Lightweight and compact – the SY16C fits easily onto standard car trailers and can be transported quickly to any location, even where space is tight.

User experience

Extremely comfortable – from easy access to the comfortable seat and the ergonomically designed controls, drivers can look forward to maximum comfort.



Safety

No compromise – the SY16C is fully equipped for precise, safe working even in very confined application conditions. In addition to the standard walking warning beacon, this also includes the battery disconnection switch and an emergency stop button.

Components

Quality as standard – the SY16C already comes with extensive features as standard. In addition, it features core components such as the engine and pumps from renowned brand manufacturers like Yanmar and Casappa.

Economy

Economically impressive – low procurement cost, economical consumption in compliance with Euro 5 and straightforward maintenance which is attractive. When it comes to costs, SANY mini excavators really are mini.



Adjustable track frame to suit all your requirements and increase stability

When things get really tight, the SY16C makes itself very small – with a width of just 980 mm, it can even fit through a garden gate, a door opening or onto a trailer for transport.

If stability is required, the undercarriage can be hydraulically adjusted to a width of 1 350 mm. The dozer blade can also be adjusted to varying widths as needed.



Safe enhanced cab canopy

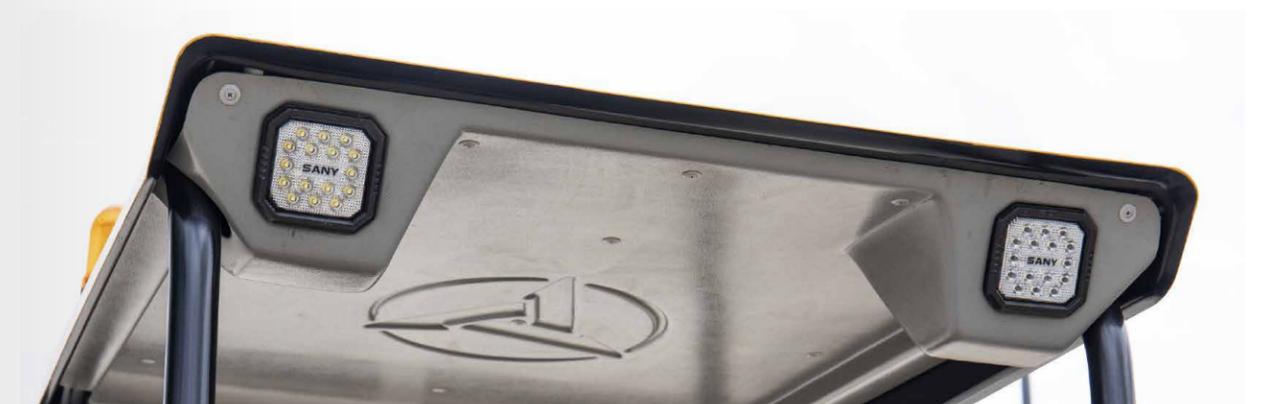
Brand new upgrade of cab

Protection for people and machines

Thanks to the ROPS or FOPS-tested operator's platform, SANY's smallest model also performs well in terms of safety. To ensure that people and machines, tools and buildings and the environment are optimally protected, the standard equipment includes a battery disconnection switch and an emergency stop button. The travel alarm helps the operator to pay attention to their work during operation.

The individual that already has everything

The SY16C comes with many standard features that are highly beneficial. For instance, it includes LED work lights that ensure optimal visibility in any condition. Additionally, it boasts a sophisticated load-sensing hydraulic system, which provides precise power adjustment to meet specific operational needs.





Everything perfectly under control

Precise handling, quick reactions, fatigue-free operation – the controls of the SY16C are designed for ergonomic handling. Designed for everyday use, all switches are easy to reach. Joysticks transmit movements directly and precisely. The digital display is clear and easy to read and shows the most important data at a glance. Using the small wheel in the joystick, the proportional function of the auxiliary control circuit can be easily controlled with the thumb.



Complete research & development and test system

SANY's has established a 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 an RGV assembling line and fullautomatic welding robots, and possesses highprecision machining equipment and a precise machining center.

SANY's manufacturing and assembling lines won a five-star national site recognition in 2013 and national quality award in 2014. In 2023, SANY Mini Excavator Factory was awarded as the intelligent factory.



Convenient maintenance

Only a well maintained machine can do a good job. Therefore, all maintenance-relevant parts of the SY16C are easily accessible from ground level. This saves time and money during regular inspections and all maintenance work and increases availability.

The fuel tank is also easy to reach – but with a tank capacity of 20 litres and low fuel consumption, you do not need to refuel as often anyway.



Technical specifications

Specification		Main performance	
Engine	Yanmar	Gyraton Speed	10 rpm
Model	3TNV80F	Max. Traveling Speed	High 4.0 km/h, slow 2.7 km/h
Type	Water-cooled four-stroke diesel engine with turbulence chamber fuel injection	Max. Traveling Force	15.6 kN
Engine power	14.6kW/2400rpm (SAEJ1995)	Bucket Capacity	0.04 m ³
Maximum Torque	65.3 Nm / 1800 rpm	Ground pressure	29.1kPa
Displacement	1.267L	Grade Ability	30°
		Digging Force of Bucket (ISO)	15.2 kN
		Digging Force of Arm (ISO)	9.2 kN

Service Refill Capacities		Traveling part	
Fuel Tank	20L	Carrier Roller of Each Side	/
Engine Coolant	5.0L	Supporting Wheel of Each Side	3
Engine Oil	3.4L	Standard Track	230mm
Drive (Per Side)	0.33L		
Hydraulic System	32L		
Hydraulic Oil Tank	21L		

Table of lifting capacity

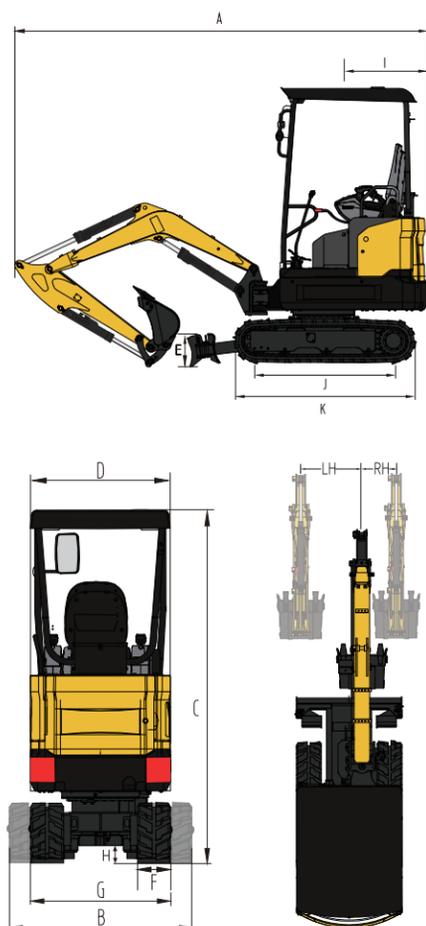
SY16C											
		1.5m		2.0m		2.5m		3.0m		Max	
blade up		front	side								
3.0m	kg									*380	*380
2.0m	kg					*360	*360	325	340	286	299
1.0m	kg			573	596	410	429	313	328	249	262
0	kg	*821	*821	537	560	389	407	301	317	257	270
-1.0m	kg	857	887	536	559	388	406			326	342

SY16C											
		1.5m		2.0m		2.5m		3.0m		Max	
blade down		front	side								
3.0m	kg									*380	*380
2.0m	kg					*360	*360	*368	340	*313	299
1.0m	kg			*652	596	*501	429	*430	328	*314	262
0	kg	*821	*821	*858	560	*619	407	*487	317	*365	270
-1.0m	kg	*999	887	*766	559	*557	406			*430	342

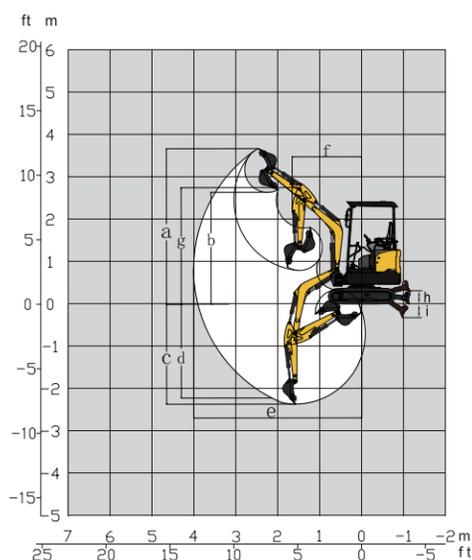
- The lifting capacity is calculated in accordance with ISO10560 and SAEJ1097, where the limit coefficient of hydraulic system is 0.87 and tilting limit coefficient is 0.75;
- Item with * is limited by hydraulic pressure and item without "*" is limited by stability;
- Lifting point is front support hole of arm (excluding the weight of the bucket). It is necessary to deduct from the above lifting capacity if additional accessory is installed, such as bucket;
- Depending on the selected configuration, the machine weight and lifting capacity data will be different. Please refer to the actual configuration for details.

Machine dimensions

DIMENSIONS (TRANSPORT) (mm)	SY16C
A. Overall length (during transportation)	3665
B. Overall width (during transportation)	980/1350
C. Upper structure carriage	2410
D. Upper width	980
E. Blade height	270
F. Width of track shoes	230
G. Track gauge (in transportation state / in operation state)	750/1120
H. Min. ground clearance	160
I. Tail length	920
J. Ground length of track	1220
k. Track length	1585



Operating range (mm)	SY16C
a. Max. digging height	3665
b. Max. unloading height	2635
c. Max. digging depth	2360
d. Max. vertical digging depth	2215
e. Max. digging distance	4000
f. Arm head distance with work equipment retracted as far as possible	1655
g. Overall height over arm by min. gyration radius	2745
h. Max. lifting height of blade	310
i. Max. lowering depth of blade	320
RH/LH. Offset boom	350/595



Standard configuration

Engine	Cab	Traveling body of undercarriage
3TNV80F	• Four-column FOPS/TOPS canopy	• 230mm wide steel track ○
12V-55A alternator	• Extensible seat belt	• 230mm wide rubber track •
Dry type dual-element air filter	• 2 dome lamps in driving shed	• Foldable dozer blade •
Cylinder-type engine oil filter	• Adjustable seat	• Dual-speed traveling •
Cylinder-type fuel oil filter	• Foot rest and floor mat	• Extensible undercarriage •
Engine preheating	• Hydraulic system	•
Engine oil cooler	• Pilot switch control rod	•
Fan aerofoil	• Single-way pipeline and double-way double-circuit auxiliary pipeline	•
Separately mounted engine	• Changeover valve for single-way pipeline and double-way double-circuit pipeline	•
20L steel fuel tank	• Accumulator	•
	• Cooling by hydraulic oil	•
	• Protection for boom cylinder	•
	• 21L hydraulic oil tank	•
Front-end working device	Optional devices	
1,130mm-long arm	•	Changeover between SAE/BHL modes ○
1810mm boom	•	Multi-function handle + electrical interface •
Welded-type patented deflection joint	•	Alarm device •
		Rearview mirror •
		Emergency stop device for engine ○
Electrical control system	Others	
12V power socket	•	Grease gun clamp •
Battery main switch	•	Toolbox •

• stands for standard configurations ○ stands for optional configurations