## SANY

Quality Changes the World



SO SMALL. SO AGILE. SO VERSATILE.

**CONSTRUCTION MACHINERY** 



# MINI EXCAVATORS SY16C SY18C

Engine
Yanmar 3TNV80F
Rated power
14.6 kW / 2400 rpm
Bucket capacity
0.04 m³
Operating mass
1 750 / 1850 kg

## SANY

## For challenging tasks, you need a first-class partner

Quality comes from experience. And from new ideas. This is why we combine these two crucial factors at SANY. This is because we are one of the world's leading producers, having sold more than 170000 excavators in 10 years. This means that you can always rely on sophisticated products that have been tried and tested in practice. An impressive 5–7% of our annual turnover is dedicated to research and development. This is why we give you not only our word, but also our extraordinary five-year warranty as a guarantee of how powerful and robust our products are.

170000 EXCAVATORS SOLD IN 10 YEARS

5-7%
TURNOVER FOR RESEARCH AND DEVELOPMENT

FIVE-YEAR WARRANTY\*

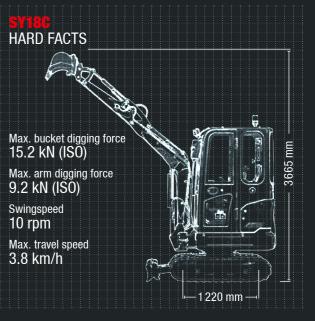
Quality Changes the World



# COPES WELL WITH LITTLE SPACE

Whenever things get tight, the SANY SY18C mini excavator is just right. Measuring just 980 mm in width, it even fits through narrow passages, making it the ideal solution for garden and landscaper construction and for work directly on buildings or in existing buildings. Its outstanding equipment is also impressive — take, for example, the width-adjustable chassis, the versatile proportional hydraulics of the auxiliary control circuit or the bright LED work lights.

Weighing in at just 1 850 kg and with a transport height of only 2 420 mm, it is also very easy to transport, can be loaded and unloaded quickly and impresses on site with its excellent manoeuvrability in confined spaces. At the same time, it does not compromise on efficiency in any way – for example, it stands out with a maximum horizontal reach of up to 4 000 mm. It is also available as a canopy version in the SANY SY16C version.



TOP PROPERTIES SY16C I SY18C

#### 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 SY18C 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 SY18C is fully equipped for precise, safe working even in very confined application conditions. In addition to the standard rotating warning beacon, this also includes the battery disconnection switch and an emergency stop button.

#### **COMPONENTS**

**Quality as standard** – the SY18C 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 emission standard 5 and straightforward maintenance which is attractive. When it comes to costs, SANY mini excavators really are mini.

## AS PRECISE AS BY HAND – ONLY MUCH QUICKER

Mini excavators in particular require high operational flexibility. In this regard, the SY18C 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 chassis, this makes it a perfect precision tool.

#### QUALITY

## Fully resilient – metal access panels

Durability and robustness are standard features on all SANY mini excavators. For example, the access panels parts are made exclusively of metal. This makes them particularly robust – and if a bump happens during the tough everyday work on a construction site, it can usually be repaired. This is what we mean by sustainability.

#### DIMENSIONS

## Adjustable track frame to suit all your requirements and increase stability

When things get really tight, the SY18C 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 chassis can be hydraulically adjusted to a width of 1350 mm. The dozer blade can also be adjusted to the respective width.





### The added benefits SANY offers you:

- ★ Width-adjustable chassis
- + Proportional auxiliary control circuit via joystick operation as standard
- **★** LED work lighting
- + Cab or canopy
- + Load-sensing hydraulic system
- **+** Emission standard Stage V



0.4

SAFETY

#### **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 rotating warning beacon and the travel alarm helps the operator to pay attention to their work during operation.



#### COMPONENTS

#### The individual that already has everything

Many things that are good are already standard with the SY18C. For example, the LED work lights that guarantee optimum views in all conditions. Or the sophisticated load-sensing hydraulic system with precise power adjustment to meet current requirements.



LISER EXPERIENCE

#### Maintenance done the easy way

Only a well maintained machine can do a good job. Therefore, all maintenance-relevant parts of the SY18C 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 23 litres and low fuel consumption, you do not need to refuel as often anyway.

ECONOMY

## Your very personal little economic miracle

For great performance in the smallest of spaces, you need a real powerhouse: Agile and extremely compact, flexible and precise. The SY18C gets to the heart of maximum power – for quick and clean results where only manual work would otherwise be possible. This makes it a highly efficient tool. In addition, the SY18C offers an attractive priceperformance ratio at the time of purchase and then in terms of operating costs.



## Absolute reliability – for peace of mind!

SANY's five-year warranty\* gives you the assurance that you can fully count on your equipment.

\* With participating partners







#### **ENGINE**

Model	Yanmar 3TNV80F
Тур	Water-cooled four-stroke diesel engine with turbulence chamber fuel injection
Exhaust emissions	Stage V
Rated power	14.6 kW / 2 400 rpm
Max. torque	64.7 Nm / 1800 rpm
Displacement	1 267 ccm
Batteries	1x 12 V / 55 Ah

#### **HYDRAULICSYSTEM**

Mainpump	variable displacement axial piston pump
Max. oilflow	48 I/min
Travelmotor	Variable displacement axial piston engine
Rotation device	Variable displacement axial piston engine

#### RELIEF VALVE SETTINGS

Implement circuit	245 bar	
Swing circuit	162 bar	
Travle circuit	245 bar	
Pilot pressure	35 bar	

#### SERVICE REFILL CAPACITIES

Fuel tank	23	
Engine coolant	3.81	
Engine oil	21	
Drive (per side)	0.4	
Hydraulicsystem	26	
Hydraulic oil tank	21	

#### PERFORMANCE

Swingspeed	10 rpm
Max. travel speed	High 3.8 km/h, slow 2.2 km/h
Max. travel force	15.6 kN
Bucket capacity	0.04 m³
Groundpressure	29.1 kg/cm <sup>2</sup> / 30.8 kg/cm <sup>2</sup>
Gradeability	30°
Bucket digging force ISO	15.2 kN
Arm digging force ISO	9.2 kN

#### OPERATING MASS

SY16C	1 750 kg
SY18C	1 850 kg

#### UNDER AND UPPER STRUCTURE

Boom length	1 810 mm
Arm length	1 130 mm
Bottomrollers	3
Rotation device	Axial piston engine with planetary gear running in the oil bath and single-row slewing ring. Spring-loaded slewing gear parking brake, hydraulically released.
Undercarriage	Reinforced lower structure with larger dimensions. Welded drive frame in box design made of special material. Side frame welded to the drive frame.

#### LIFTING CAPACITIES OF LOWER DOZER BLADE

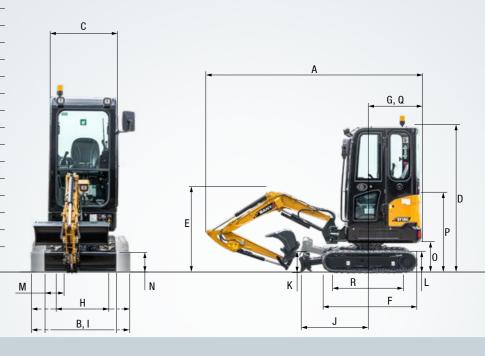
K					Rac	lius				Digging	reach
1	_	1.5 m	/ 4.9 ft	2.0 m	/ 6.6 ft	2.5 m /	8.2 ft	3.0 m /	9.8 ft	Maxi	mal
Load po	int	<b>&gt;—3</b>		<b>&gt;—∄</b>		<del>)</del>	5	<b>&gt;—∄</b>		<b>)</b>	
3.0 m	kg									285	285
9.8 ft	lb									627	627
2.0 m	kg					267	253	271	271	278	278
6.6 ft	lb					587	557	596	596	612	612
1.0 m	kg			483	486	371	370	316	306	288	244
3.3 ft	lb			1063	1063	816	814	695	673	634	537
Ground	kg	826	826	631	528	456	383	357	295	304	252
line	lb	1817	1817	1388	1162	1003	843	785	649	669	554
-1.0 m	kg	819	819	563	529	407	382			318	318
-3.3 ft	lb	1802	1802	1239	1164	895	840			700	700

#### LIFTING CAPACITIES OF UPPER DOZER BLADE

k		Radius									Digging reach	
4-	<u>U</u>	1.5 m	/ 4.9 ft	2.0 m	/ 6.6 ft	2.5 m/	8.2 ft	3.0 m /	9.8 ft	Maxi	mal	
Load po	int	<b>&gt;—∄</b>		<b>&gt;—∄</b>	J	<b>&gt;—∄</b>		<b>&gt;—∄</b>		<b>&gt;—∄</b>		
3.0 m	kg									285	285	
9.8 ft	lb									627	627	
2.0 m	kg					253	253	271	271	270	278	
6.6 ft	lb					557	557	596	596	594	612	
1.0 m	kg			483	483	370	370	296	306	235	244	
3.3 ft	lb			1063	1063	814	814	651	673	517	537	
Ground	kg	811	826	514	528	371	383	285	295	243	252	
line	lb	1784	1817	1 131	1162	816	843	627	649	535	554	
-1.0 m	kg	819	819	514	529	370	382			316	318	
-3.3 ft	lb	1802	1802	1 131	1164	814	840			695	700	

#### DIMENSIONS (TRANSPORT)

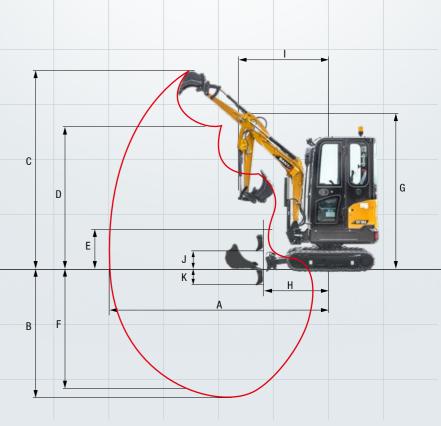
Α	Transport length	3575 mm
В	Transport width	980/1 350 mm
С	Upperstructure carriage	980 mm
D	Height over cabin/ROPS	2420 mm
E	Height of Boom – transport	1 175 mm
F	Overall length of crawler	1 585 mm
G	Tail length	900 mm
Н	Track gauge	750/1 120 mm
I	Undercarriage width (blade)	980/1 350 mm
J	Horizontal distance to blade	1 140 mm
K	Blade height	280 mm
L	Track height	375 mm
M	Track pads width	230 mm
N	Min. ground clearance	180 mm
0	Counterweigth clearance	470 mm
P	Engine cover height	1 275 mm
Q	Tail swing radius	920 mm
R	Center distance of tumblers	1 220 mm
_		



#### WORKING AREA

A	Max. digging reach	4000 mm
В	Max. digging depth	2360 mm
С	Max. digging height	3665 mm
D	Max. dumping height	2635 mm
E	Min. dumping height	795 mm
F	Max. vertical digging depth	2215 mm
G	Overall height over arm by min. swing radius	2745 mm
Н	Arm head distance with work equipment retracted as far as possible	1655 mm
ı	Swing radius by max. boomswing (L) Swing radius by max. boomswing (R) Min. swing radius	1 420 mm 1 435 mm 1 705 mm
J	Max. clearance when blade up	310 mm
K	Max. depth of blade down	320 mm
L	Offset boom (L) Offset boom (R)	595 mm 350 mm
	Max. boom-swing angle (L) Max. boom-swing angle (R)	73° 46°





0

#### **Amazingly well** equipped for their size

Although the SY16C and SY18C are the smallest and lightest of the SANY mini excavators, they still have everything you need for efficient, precise work on board as standard.



#### OPERATORS COMFORT / CABINE

Heater	•
Manual air condition system	•
Radio and speaker •	•
Armrests (adjustable)	•
12v outlets	•
Wiper	•
Sprayer f. wiper	•
AUX 1 on Joystick	•
Removable front-window •	•
Sky light •	•

#### **SAFETY**

Battery master switch •	•
Beaconlamp	•
Lockable hoods •	•
Lockablge fuel cap •	•

#### **WORKING EQUIPMENT**

Boom and arm load holding valves with overload indicator	opt.	opt.
Double acting circuit for hydraulic quick coupler		
with piping	opt.	opt.
Breaker&Shear line proportional on Joystick		
with piping	•	•
Rotation line proportional on Joystick with piping	•	•
Cylinder guardes – boom	•	•

#### **WORKING LIGHTS**

Lights front (LED)			•	•

#### UNDERCARRIAGE

Telescopic thread	•	•
Rubber tracks	•	•
Steel tracks	opt.	opt.
Safety valves on blade cylinder	•	•
Holes/loops for fixing	•	•

#### **ENGINE**

Auto idle	•	•
Diesel filter	•	•
Dehydr. For fuelsystem	•	•
Cage or storage for grease gun	•	•
Air filter guard	•	•

#### HYDRAULIC SYSTEM

Swing brake	•	•
2 speed travel	•	•
Piping for additional hydraulic function AUX 1	•	•
Hydr. Pre-pressure operating joysticks	•	•
Mainfilter	•	•

• SY16C • SY18C

The standard and special options differ depending on the country in which the mini excavator is delivered. If you have any questions, please contact your dealer directly.

#### Parts supply quick and reliable

With the purchase of a SANY mini excavator you have made an investment in the future. Fast availability of spare parts is your guarantee of minimal downtimes and failure times.



## **A SERVICE YOU CAN RELY ON**

Just as we do with our excavators, we also demand high quality for efficiency, cost-effectiveness and safety. Your SANY dealer is excellent price-performance ratio. After all, maintenance is crucial long term.

and reliability of our service products. This underlines our happy to help you with a comprehensive range of services to equipment's performance in terms of their durability and their ensure that your machine continues operating efficiently in the

#### SANY - flexible, fast and always there for you

Rapid assistance, tailored advice and a reliable supply of original parts - that is what we mean by a premium service.





#### The added benefits SANY offers you:

- + Fast supply thanks to the central warehouse near Cologne
- → More than 15,000 spare parts to make your machine highly reliable
- + Expert knowledge for optimal supply for your machine
- + Thanks to SANY's special training programme, our dealers are always kept up-to-date so that they can face all technical challenges.

#### **Detailed information in black and white**

Handbooks and documents are available for all SANY mini excavators, and these can help you with operation, maintenance, servicing and repairs. These include operating and maintenance instructions and technical specifications.



#### HIGHLIGHTS **SY16C** I **SY18C**



## EFFICIENT PERFORMANCE IN MINI FORMAT

Their extremely simple handling and flexible, precise operation make the mini-excavators a highly productive tool for every job. As lightweight machines with compact dimensions, they can also be transported quickly and easily to the place of use.

#### **ROBUST AND DURABLE**

The most important protective elements and reinforcements as well as all cladding parts are made of **robust metal**. **Robotic welded components** guarantee a long service life under all conditions.

#### **EXTREMELY COMFORTABLE**

Impressively simple thanks to the joystick, which is easy to operate with high precision, and the clear display.

#### **NO COMPROMISE**

In order to provide the best possible protection for both people and machines, devices such as cylinder guard plates are already integrated. It goes without saying that the platform is ROPS or FOPS certified.

#### LIGHTWEIGHT AND COMPACT

**Chassis** adjustable in width – from extremely narrow when manoeuvring to wide for the best possible stability.

#### **ECONOMIC**

The intelligent control system adapts the pump capacity to the respective demand for greater efficiency and reduced fuel consumption.

#### **QUALITY AS STANDARD**

High-quality components from brand manufacturers guarantee top performance and a high level of operational safety – also for the extensive standard equipment. For example, these include the auxiliary control circuit, LED lighting and even the radio on cab machines.



"EXCELLENT POWER AND CONTROLLABILITY COMBINED WITH A VALUE ADDED PRICE!"

Tim Berges -

Retzmann Bauunternehmen Tief- und Straßenbau GmbH

#### **TECHNICAL HIGHLIGHTS**

Engine	Yanmar 3TNV80F	
Rated power	14.6 kW / 2400 rpm	
Max. torque	64.7 Nm / 1800 rpm	
Max. travel speed	3.8 km/h	
Swingspeed	10 rpm	
Mainpump	Variable displacement axial piston pump	
Max. oilflow	48 l/min	

Not all products are available in all markets. As part of our continuous improvement process, we reserve the right to modify specifications and designs without giving prior notice. The figures may contain additional options.



Quality Changes the World

#### SANY EUROPE GmbH

Sany Allee 1 D-50181 Bedburg fon +49 2272 90531 100 fax +49 2272 90531 109 info@sanyeurope.com www.sanyeurope.com