

SY16C|SY18C|SY18U

SANY

Quality Changes the World



NOWHERE IS OUT OF REACH

SO SMALL. SO MANOEUVRABLE. SO VERSATILE.
CONSTRUCTION MACHINES



MINI EXCAVATOR
SY16C | SY18C | SY18U

Engine
Yanmar 3TNV80F
Rated power
14.6 kW / 2400 rpm
Bucket capacity
0.04 m³
Operating mass
1 865 / 1 925 kg

SANY

**You need an outstanding partner
for demanding tasks**

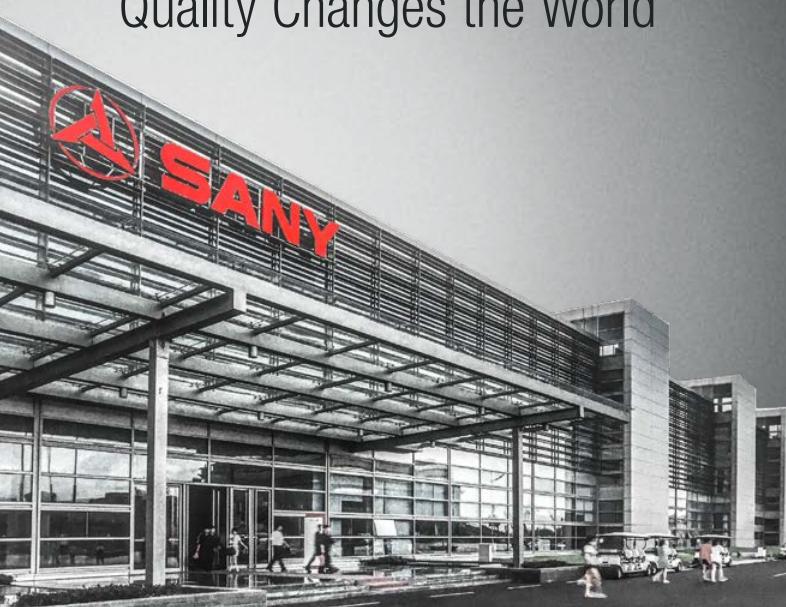
Quality comes from experience. And from new ideas. That is why we combine these two vital factors at SANY. Because we are one of the leading manufacturers, having produced well over **500 000** excavators **worldwide**. This means you can always rely on sophisticated products that have been tried and tested in practice. By way of example, **5 to 7%** of our annual revenue is invested in research and development. Our products are so powerful and robust that we give you our exceptional **5-year warranty** on them.

> 500,000
EXCAVATORS PRODUCED
WORLDWIDE

5–7%
OF REVENUE FOR RESEARCH
AND DEVELOPMENT

5–YEAR
WARRANTY*

Quality Changes the World



* Available on selected SANY products only



SY18C SPECIFICATIONS

| |
|--|
| A technical line drawing of the SY18C excavator, showing the arm, bucket, and cab. The drawing is set against a grid background. |
| Max. bucket digging force 15.2 kN (ISO) |
| Max. arm digging force 9.2 kN (ISO) |
| Swing speed 10 rpm |
| Max. travel speed 4 km/h |



IT WORKS WELL IN THE SMALLEST OF PLACES

Whenever space is limited, the SANY SY16/18 mini excavators are the perfect machine. With a width of just 980 mm, they can travel through narrow passages with ease, making them the ideal solution for construction, landscaping, indoor job sites or narrow urban locations. The SY18U model, as a zero tail machine, offers even more flexibility. Key features include the width-adjustable undercarriage, the versatile proportional hydraulics of the auxiliary control circuit and powerful LED work lights.

With a working weight of just 1865 kg (SY16C) - 1925 kg (SY18U) and a transport height of just 2390 mm, SY16/18 excavators are also very easy to transport, and can be quickly loaded and unloaded on site. At the same time, they do not compromise on efficiency thanks to a maximum digging reach of up to 4135 mm. **The SY18C mini excavator is available with operators cab, whilst the SY16C and zero tail swing SY18U are both canopy machines.**

TOP FEATURES

QUALITY

Robust and durable – Our smallest excavators feature 100% steel bodywork to ensure maximum protection on site and reduced cost of ownership.



SAFETY

No compromise – The SY16/18 machines are fully equipped for precise, safe working even when the operating space is tight. In addition to the rotating beacon, standard safety equipment also includes a battery isolating switch and emergency lowering system.

DIMENSIONS

Lightweight and compact – The SY16/18 machines can easily be transported by truck or car trailer from one site to another, and their higher levels of manoeuvrability also make them the ideal solution for jobs in confined spaces.

EASE OF USE

Extremely comfortable – From easy access to the operators seat and ergonomic controls, operators can look forward to maximum comfort and straightforward operation.

COMPONENTS

Quality as standard – The SY16/18 mini excavators come with a comprehensive range of equipment as standard. Key components from renowned brand manufacturers, such as Yanmar, ensure high engine performance and with it the resulting high hydraulic power.

ECONOMY

Economically convincing – Competitive purchase price, economic consumption in compliance with the Stage V emissions standard, and uncomplicated maintenance, an all-round attractive package. When it comes to costs, SANY mini excavators really are mini.

THE PERFECT PRECISION TOOL

Mini-excavators in particular need to be operationally flexible. The SY16/18 machines with cab, canopy or zero tail options are simply unbeatable. They also have an efficient load-sensing hydraulic system that ensures they have the power they need, whether in construction, landscaping or indoor job sites.

QUALITY

Fully robust

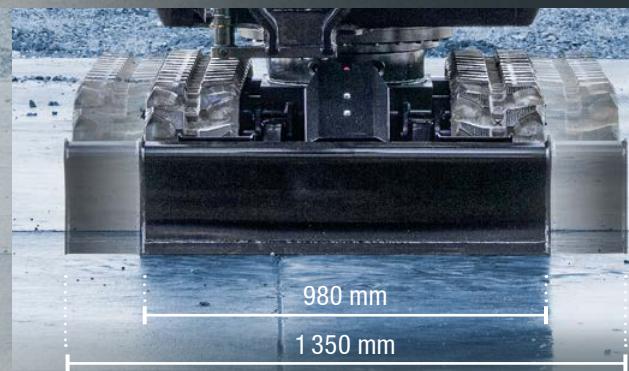
Durability and reliability come as standard with all SANY mini excavators. All bodywork is 100% steel, which makes them particularly robust and offers maximum protection on site as well as reduced cost of ownership.



DIMENSION

Adjustable undercarriage to suit all your requirements and increase stability

For narrow spaces, the SY16/18 excavators can be adjusted to a width of just 980 mm, to allow them to fit through a garden gate, door recess, or be transported on a small trailer. If greater stability is required the undercarriage can be easily widened to 1350 mm. The blade can also be adjusted to the respective width. The SY18U zero tail version allows the upper frame to always stay within the undercarriage for maximum protection.



Your SANY Plus benefits:

- +
- Expanding undercarriage (980 - 1350mm)
- +
- Auxiliary proportional control circuit with joystick operation as standard
- +
- LED work lighting
- +
- Cab, canopy and zero tail-swing options
- +
- Efficient, load sensing hydraulic system
- +
- Stage V emission standard



Absolute reliability – for complete peace of mind.

SANY has earned a reputation worldwide for reliability, durability and performance but to provide peace of mind and to ensure maximum uptime all SANY excavators are backed by the SANY industry leading 5 year warranty*

* Terms and conditions apply. Check with your local dealer for more information.

EFFICIENCY, COST-EFFECTIVENESS & EASE OF USE

ECONOMY

MAKE SHORT WORK OF CONFINED SPACES – SANY SY18U

With its compact dimensions and zero tail swing design, the SY18U is built to excel in confined spaces without compromising on digging performance. The hydraulic hoses are neatly integrated into the boom for optimal protection against damage. Additionally, the SY18U can be equipped with an **optional** hitch line and an additional auxiliary line on joystick 2, providing even greater versatility for a range of attachments and job requirements.



SAFETY

Protection for people and machines

Thanks to the TOPS-certified operator platform, SANY's smallest excavators deliver impressive safety performance. The machines feature a sturdy side-entry cab or canopy structure that provides excellent visibility. To ensure both the operator and nearby personnel remain safe on-site, standard features include a battery disconnect switch and an emergency stop button. Additionally, the rotating warning beacon and travel alarm enhance visibility and awareness, helping to maintain a secure working environment.



EASE OF USE

Maintenance done the easy way

All maintenance parts of the SY16 and SY18 mini excavators are easily accessible from ground level. This saves time and money during regular inspections and all maintenance work, therefore keeping any downtime to a minimum.

The fuel tank is also easily accessible, but thanks to a tank capacity of 20 litres (SY16/18C) and 21 litres (SY18U) and low fuel consumption, you won't need to refuel very often anyway.

**COMPONENTS****The machine that already has it all**

A lot of what is good about the SY16/18 machines comes as standard such as the LED work lights for optimum visibility in poor or low light working conditions. Or the smart hydraulic system with precise power adjustment to match the job requirements.

ECONOMY**Your very own minor economic miracle**

For great performance in the smallest of spaces, you need a real powerhouse and the SY16/18 mini's deliver thanks to their compact dimensions, flexibility and powerful hydraulic systems that maximise on fuel economy and keep operating costs to a minimum.

EASE OF USE**Everything under perfect control**

Precise handling, quick response and fatigue-free working, the controls of the SY16/18 are designed for ergonomic handling. Designed for everyday use, all switches are easy to reach and the digital, high resolution display is clear and straightforward for operators to use.

**ECONOMY****THE FINE DIFFERENCE:
SANY SY16C**

Same technology, same performance – the SY16C differs from the cab-equipped SY18C only because of its canopy configuration. This also gives the SY16C a slightly lower weight of 1 865 kg. This canopy machine provides optimal visibility of the surrounding working area and also fulfils the current TOPS specification. The zero tail swing SY18U is also a canopy machine.



TECHNICAL SPECIFICATIONS

| ENGINE | SY16C/SY18C | SY18U |
|-------------------|---|-------|
| Model | Yanmar 3TNV80F | |
| Type | Water-cooled 4-stroke diesel engine with turbulence-chamber injection | |
| Emission standard | Stage V | |
| Rated power | 14.6 kW / 2 400 rpm | |
| Max. torque | 65.3 Nm / 1 800 rpm | |
| Displacement | 1 267 cc | |
| Batteries | 1 x 12 V / 60 Ah | |

HYDRAULIC SYSTEM

| | |
|----------------------|--|
| Main pump | Variable displacement axial piston pump |
| Max. oil flow | 72 l/min |
| Traction drive | Variable displacement axial piston motor |
| Swing motor | Axial piston motor |
| Max. oil flow (AUX1) | 40 l/min |

PRESSURE LIMITING VALVES

| | |
|---------------------|---------|
| Boom circuit | 245 bar |
| Swing circuit | 162 bar |
| Driving circuit | 245 bar |
| Pre-control circuit | 35 bar |

FILLING QUANTITIES

| | | |
|---------------------------|-------|-------|
| Fuel tank | 20 l | 21 l |
| Engine coolant | 5 l | 3.8 l |
| Engine oil | 3.4 l | |
| Traction drive (per side) | 0.3 l | |
| Hydraulic system | 32 l | 26 l |
| Hydraulic oil tank | 21 l | |

RATED POWER

| | |
|---------------------------|--|
| Swing speed | 10 rpm |
| Max. travel speeds | Fast 4 km/h, slow 2.7 km/h |
| Max. traction force | 15.6 kN |
| Bucket capacity | 0.04 m ³ |
| Ground pressure | 0.29/0.31 kg/cm ² 0.30 kg/cm ² |
| Gradeability | 30° |
| Bucket digging force, ISO | 15.2 kN |
| Arm digging force, ISO | 9.2 kN 9.2 kN / 8.3 kN |

UNDERCARRIAGE AND SUPERSTRUCTURE

| | | |
|---------------|---|----------------|
| Boom length | 1 810 mm | 1 770 mm |
| Arm length | 1 130 mm | 960 / 1 160 mm |
| Rollers | 3 | |
| Swinging gear | Axial piston motor with planetary gearbox running in an oil bath and single-row slewing ring. The swinging gear brake is released hydraulically. | |
| Undercarriage | Reinforced, generously dimensioned undercarriage. Welded undercarriage frame in box construction made of special material. Telescopic side frame. | |

OPERATING WEIGHT

| SY16C | SY18C | SY18U |
|------------------|----------|----------|
| Operating weight | 1 865 kg | 1 910 kg |

Operating weight: Includes 75 kg (165 lb) operator and full fuel tank and excludes bucket.

LIFTING CAPACITIES BLADE DOWN SY16C

| Load point height | Radius | | | | Digging reach |
|-------------------|--------|-------|--------------------------|-------|--------------------------|
| | 1.5 m | 2.0 m | 2.5 m | 3.0 m | |
| Front & Side | | | | | Front & Side |
| 3.0 m kg | | | | | 380 380 |
| 2.0 m kg | | | 360 360 368 339 | | 313 298 |
| 1.0 m kg | 652 | 594 | 501 | 427 | 430 327 |
| Ground kg | 821 | 821 | 858 | 558 | 619 406 487 315 |
| -1.0 m kg | 999 | 883 | 766 | 557 | 557 404 |
| | | | | | 430 341 |

LIFTING CAPACITIES BLADE UP SY16C

| Load point height | Radius | | | | Digging reach |
|-------------------|---------------|---------------|--------------------------|---------------|--------------------------|
| | 1.5 m / 4.9ft | 2.0 m / 6.6ft | 2.5 m / 8.2ft | 3.0 m / 9.8ft | |
| Front & Side | | | | | Front & Side |
| 3.0 m kg | | | | | 290 380 |
| 2.0 m kg | | | 290 360 215 339 | | 188 298 |
| 1.0 m kg | 367 | 594 | 267 | 427 | 204 327 |
| Ground kg | 502 | 821 | 335 | 558 | 248 406 193 315 |
| -1.0 m kg | 510 | 883 | 334 | 557 | 246 404 |
| | | | | | 210 341 |

LIFTING CAPACITIES BLADE DOWN SY18C

| Load point height | Radius | | | | Digging reach |
|-------------------|--------|-------|--------------------------|-------|--------------------------|
| | 1.5 m | 2.0 m | 2.5 m | 3.0 m | |
| Front & Side | | | | | Front & Side |
| 3.0 m kg | | | | | 380 380 |
| 2.0 m kg | | | 360 360 368 344 | | 313 303 |
| 1.0 m kg | 652 | 602 | 501 | 433 | 430 322 |
| Ground kg | 821 | 821 | 858 | 566 | 619 412 487 320 |
| -1.0 m kg | 999 | 897 | 766 | 566 | 557 411 |
| | | | | | 430 347 |

LIFTING CAPACITIES BLADE UP SY18C

| Load point height | Radius | | | | Digging reach |
|-------------------|--------|-------|--------------------------|-------|--------------------------|
| | 1.5 m | 2.0 m | 2.5 m | 3.0 m | |
| Front & Side | | | | | Front & Side |
| 3.0 m kg | | | | | 294 380 |
| 2.0 m kg | | | 294 360 219 344 | | 191 303 |
| 1.0 m kg | 373 | 602 | 271 | 433 | 208 332 |
| Ground kg | 510 | 821 | 340 | 566 | 252 412 197 320 |
| -1.0 m kg | 518 | 897 | 339 | 566 | 250 411 |
| | | | | | 213 347 |

LIFTING CAPACITIES BLADE DOWN SY18U

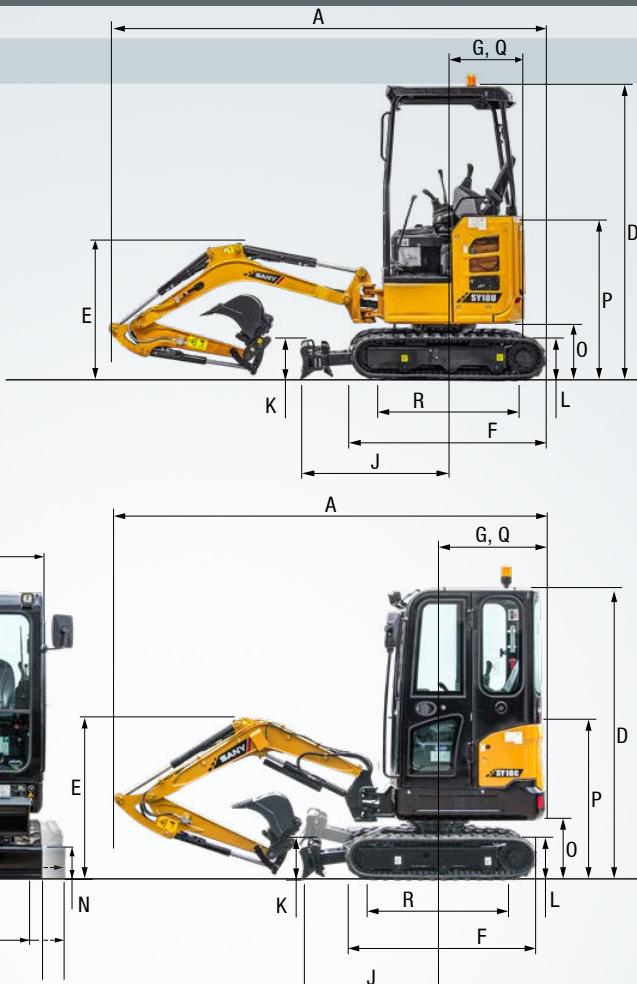
| Load point height | Radius | | | | Digging reach |
|-------------------|--------|-------|-------|------------|--------------------------|
| | 1.5 m | 2.0 m | 2.5 m | 3.0 m | |
| Front & Side | | | | | Front & Side |
| 3.0 m kg | | | | | 265 265 |
| 2.0 m kg | | | | 292 263 | 255 225 |
| 1.0 m kg | 517 | 461 | 415 | 333 | 336 255 |
| Ground kg | 662 | 651 | 774 | 425 | 541 313 414 245 |
| -1.0 m kg | 1012 | 660 | 650 | 422 | 468 309 342 243 |
| | | | | | 312 232 |

LIFTING CAPACITIES BLADE UP SY18U

| Load point height | Radius | | | | Digging reach |
|-------------------|--------|-------|-------|------------|--------------------------|
| | 1.5 m | 2.0 m | 2.5 m | 3.0 m | |
| Front & Side | | | | | Front & Side |
| 3.0 m kg | | | | | 265 265 |
| 2.0 m kg | | | | 260 263 | 222 225 |
| 1.0 m kg | 462 | 461 | 331 | 333 | 253 255 |
| Ground kg | 661 | 651 | 425 | 311 | 313 242 245 |
| -1.0 m kg | 671 | 660 | 423 | 422 | 307 309 240 243 |
| | | | | | 229 232 |

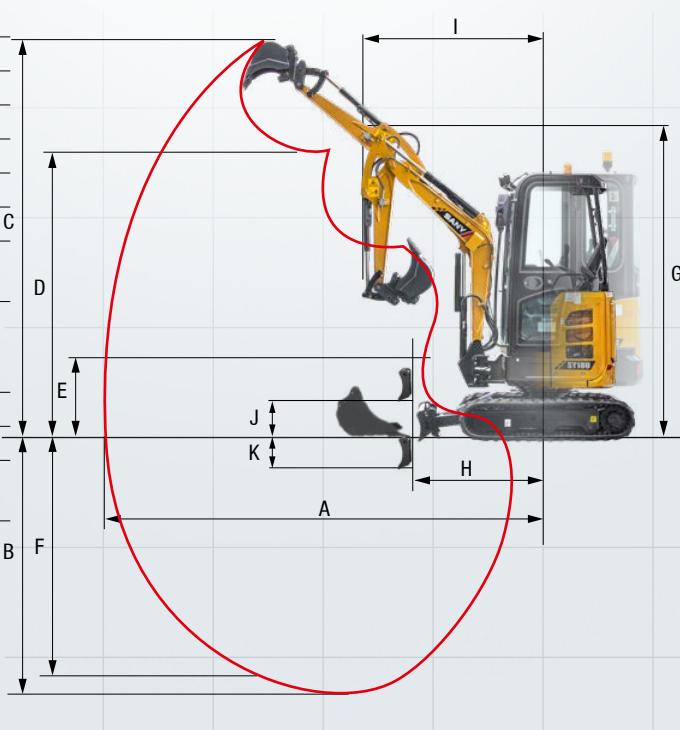
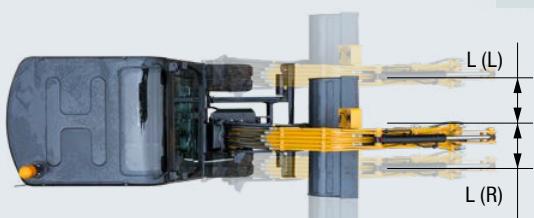
DIMENSIONS

| | SY16C | SY18C | SY18U |
|--|--------------|----------------|--------------|
| A Overall length | 3 665 mm | 3 665 mm | 3 515 mm |
| B Total width | 980/1 350 mm | 1 030/1 350 mm | 980/1 350 mm |
| C Total width of the superstructure | 980 mm | 1 030 mm | 980 mm |
| D Overall height above cab | 2 410 mm | 2 410 mm | 2 370 mm |
| E Overall height of the boom | 1 355 mm | 1 355 mm | 1 100 mm |
| F Undercarriage length | 1 585 mm | 1 585 mm | 1 585 mm |
| G Rear length | 920 mm | 920 mm | 675 mm |
| H Track gauge | 750/1 120 mm | 750/1 120 mm | 750/1 120 mm |
| I Undercarriage width (blade) | 980/1 350 mm | 980/1 350 mm | 980/1 350 mm |
| J Horizontal clearance to the blade | 1 190 mm | 1 190 mm | 1 190 mm |
| K Blade height | 270 mm | 270 mm | 270 mm |
| L Track height | 375 mm | 375 mm | 375 mm |
| M Track pad width | 230 mm | 230 mm | 230 mm |
| N Min. ground clearance | 160 mm | 160 mm | 160 mm |
| O Rear weight ground clearance | 470 mm | 470 mm | 470 mm |
| P Bonnet height | 1 270 mm | 1 270 mm | 1 275 mm |
| Q Tail swing radius | 920 mm | 920 mm | 675 mm |
| R Distance (centre) track sprocket to idler sprocket | 1 220 mm | 1 220 mm | 1 225 mm |



WORKING AREA

| | SY16C/SY18C | SY18U |
|---|-------------|----------------|
| A Max. digging reach | 4 000 mm | 4 010/4 135 mm |
| B Max. digging depth | 2 360 mm | 2 385/2 585 mm |
| C Max. digging height | 3 665 mm | 3 410/3 530 mm |
| D Max. dumping height | 2 635 mm | 2 350/2 475 mm |
| E Min. dumping height | 795 mm | 786/650 mm |
| F Max. vertical digging depth | 2 215 mm | 2 010/2 205 mm |
| G Overall height at min. swing radius | 2 745 mm | 2 550/2 545 mm |
| H Arm head separation for max. working equipment retraction | 1 230 mm | 1 230 mm |
| I Swing radius with swing frame (L) | 1 490 mm | 1 305/1 310 mm |
| Swing radius with swing frame (R) | 1 510 mm | 1 195/1 200 mm |
| Min. swing radius | 1 705 mm | 1 705/1 715 mm |
| J Max. ground clearance of blade up | 310 mm | 310 mm |
| K Max. depth of blade down | 320 mm | 320 mm |
| L Swing frame offset (L) | 595 mm | 625 mm |
| Swing frame offset (R) | 350 mm | 400 mm |
| Max. Boom swing angle (L) | 46° | 58° |
| Max. Boom swing angle (R) | 73° | 51° |



Astonishingly well equipped for their size

The SY16C, SY18C and SY18U may be the smallest and lightest of the SANY mini excavators, but they still come with everything you need for efficient and precise work, fitted as standard.



EASE OF USE - CAB/CANOPY

| | SY16C | SY18C | SY18U |
|---|-------|-------|-------|
| Heater | ● | | |
| Radio with loudspeakers | ● | | |
| Armrests, adjustable | ● | ● | ● |
| 12 V socket | ● | ● | ● |
| Screen washer | | ● | |
| Screen sprayer | | ● | |
| Auxiliary control circuit 1 on joystick | ● | ● | ● |
| Auxiliary control circuit 2 on joystick | | | ● |
| Removable front screen | | ● | |
| Roof window | | ● | |

SAFETY

| | SY16C | SY18C | SY18U |
|--------------------------|-------|-------|-------|
| Battery isolating switch | ● | ● | ● |
| Beacon | ● | ● | ● |
| Emergency lowering | ● | ● | ● |
| Lockable bonnets | ● | ● | ● |
| Lockable fuel filler | ● | ● | ● |

WORK EQUIPMENT

| | SY16C | SY18C | SY18U |
|--|-------|-------|-------|
| Safety valves on arm | ● | ● | ● |
| Double-acting hydraulic circuit for quick change unit including piping | ● | ● | ● |
| Proportional crusher and shearing circuit control on joystick including piping | ● | ● | ● |
| Proportional rotation circuit control on joystick including piping | ● | ● | ● |
| Cylinder guard on the arm | ● | ● | |
| Quick Hitch Line | | | ● |

● Standard ● Optional

The standard and special options differ depending on the delivery country. Please contact your dealer directly if you have any questions.

SANY genuine parts

SANY genuine parts are designed, tested and manufactured to meet the exact specification and requirements of your SANY excavator. They will fit exactly as needed and will deliver maximum performance. They also ensure optimum safety for the operator on site and reduce unplanned maintenance and downtime. Ultimately, SANY genuine parts are the best choice for your machine and are backed with a 12 month warranty period.

WORK LIGHTING

| | SY16C | SY18C | SY18U |
|------------------------------------|-------|-------|-------|
| 2 x LED worklights – on roof front | ● | ● | ● |
| 1 x LED work light – boom | ● | ● | ● |

UNDERCARRIAGE

| | SY16C | SY18C | SY18U |
|--------------------------------|-------|-------|-------|
| Width-adjustable undercarriage | ● | ● | ● |
| Rubber track | ● | ● | ● |
| Cylinder guard – blade | ● | ● | ● |
| Lashing eyes | ● | ● | ● |

ENGINE

| | SY16C | SY18C | SY18U |
|-------------------------------|-------|-------|-------|
| Diesel filter | ● | ● | ● |
| Draining of the diesel system | ● | ● | ● |
| Grease gun holder | ● | ● | ● |
| Air filter monitor | ● | ● | ● |

HYDRAULIC SYSTEM

| | SY16C | SY18C | SY18U |
|--|-------|-------|-------|
| 2 travel speeds | ● | ● | ● |
| Piping for auxiliary control circuit 1 | ● | ● | ● |
| Piping for auxiliary control circuit 2 | | | ● |
| Hydraulic pilot control of the joysticks | ● | ● | ● |



A SERVICE YOU CAN RELY ON

In the event of a breakdown during your warranty period, Vertu will come to your site as soon as possible to get your machine back up and running.

National Service Representation

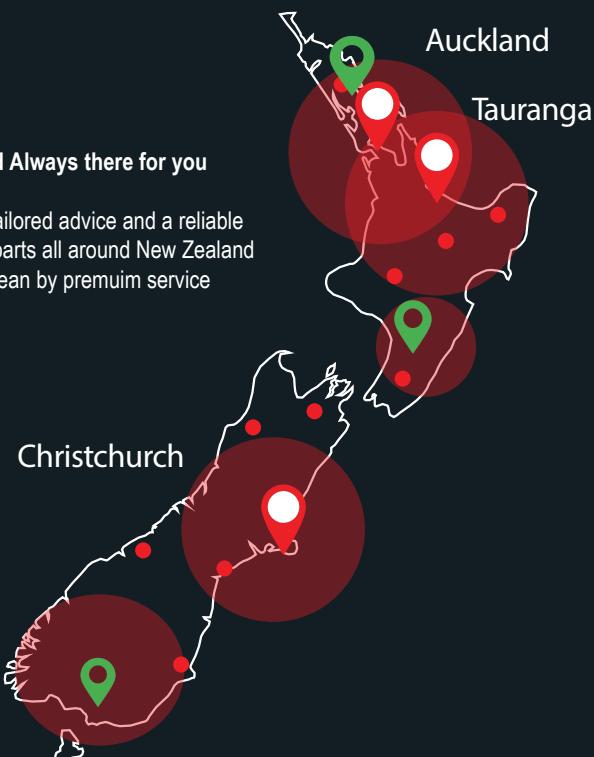
Our national service network partnerships provide certainty that you are supported with service and parts, wherever you are located.

Parts and Inventory

As the dealer of SANY excavators, roading and construction equipment Vertu holds a significant inventory of SANY Genuine and aftermarket parts and attachments, both in New Zealand and Australia to keep you going. With direct relationships locally and internationally we can source parts quickly and as a matter of priority.

Flexible, Fast and Always there for you

Paid assistance, tailored advice and a reliable supply of original parts all around New Zealand. That is what we mean by premium service



The added benefits SANY offers you:

Fast parts supply thanks to the SANY NZ Distribution Hub

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.



Seamless, in black and white

Manuals and documents are available for all SANY excavators to assist you during operation, maintenance, servicing and repair of your machine. These documents include operating and maintenance instructions and technical specifications.

HIGHLIGHTS **SY16C | SY18C | SY18U**

EFFICIENT PERFORMANCE IN MINI FORMAT

Extremely easy handling and flexible, precise operation make SANY mini excavators highly productive machines whatever your application. Light weight and compact dimensions also mean they can be easily transported and manoeuvred on site.



ROBUST AND DURABLE

The most important guards and all paneling parts are made of steel for maximum protection on site and reduced cost of ownership.

EXTREMELY COMFORTABLE

Convincingly simple: the easy-to-operate joysticks offer high precision and the clearly laid out display is simple and intuitive to use.

SAFETY FIRST

A ROPS/FOPS certified operator platform and equipment such as cylinder guards that are integrated as standard ensure optimum protection of the machine, operator and bystanders.

LIGHTWEIGHT AND COMPACT

Width adjustable undercarriage from extremely narrow (980 mm) for manoeuvring to wide (1350 mm) for optimum stability. The zero tail swing of the SY18U further supports safe work in confined/tight spaces.

ECONOMIC

Great efficiency, lower fuel consumption and easy all-round maintenance result in SANY minis being mini on price too.

QUALITY COMES AS STANDARD

High-quality components from brand renowned manufacturers ensure top performance and a high level of operational reliability.

TECHNICAL HIGHLIGHTS

| | |
|-------------------|---|
| Engine | Yanmar 3TNV80F |
| Rated power | 14.6 kW / 2400 rpm |
| Max. torque | 65.3 Nm / 1800 rpm |
| Max. travel speed | 4 km/h |
| Swing speed | 10 rpm |
| Main pump | Variable displacement axial piston pump |
| Max. oil flow | 72 l/min |

Not all products are available in all markets. We reserve the right to change specifications and designs without prior notice as part of our continuous improvement process. The illustrations may contain additional options.



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