SY50U

SANY

Quality Changes the World

GREAT PERFORMANCE, SMALL PACKAGE

PHENOMENALLY AGILE. PHENOMENALLY EFFICIENT.

CONSTRUCTION MACHINERY



MINI EXCAVATORS

SY50U

Engine
Yanmar 4TNV86CT
Rated power
35.5 kW / 2 400 rpm
Bucket capacity
0.152 m³
Operating mass
5 100 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 leading producers, having sold more than **500 000** excavators **worldwide**. 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.

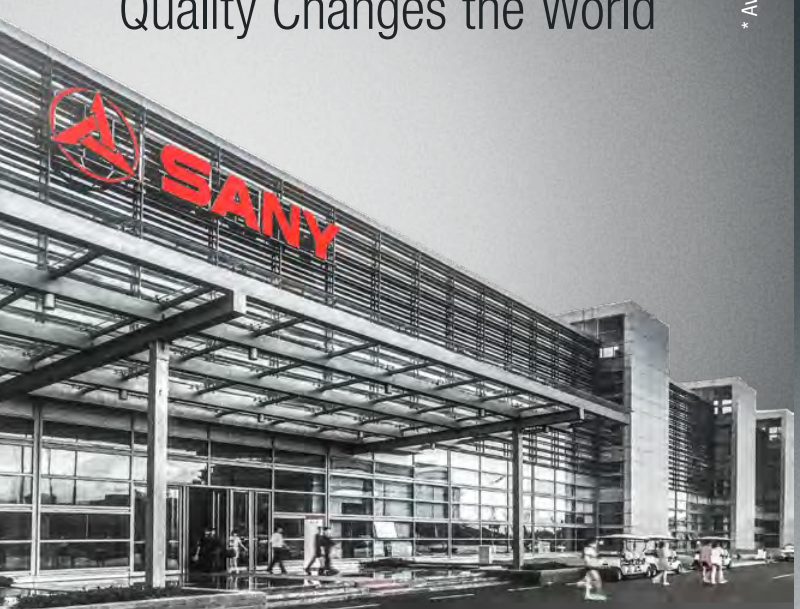
500 000
EXCAVATORS SOLD
WORLDWIDE

5–7 %
TURNOVER FOR RESEARCH AND DEVELOPMENT

FIVE-YEAR
WARRANTY *

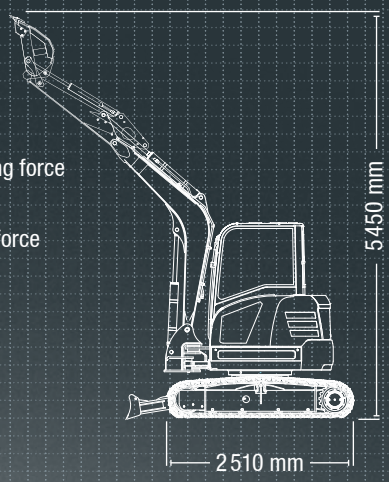
Quality Changes the World

* Available on selected products only.





SY50U
HARD FACTS



Max. bucket digging force
32.5 kN (ISO)

Max. arm digging force
22.9 kN (ISO)

Swingspeed
10 rpm

Max. travel speed
4 km/h



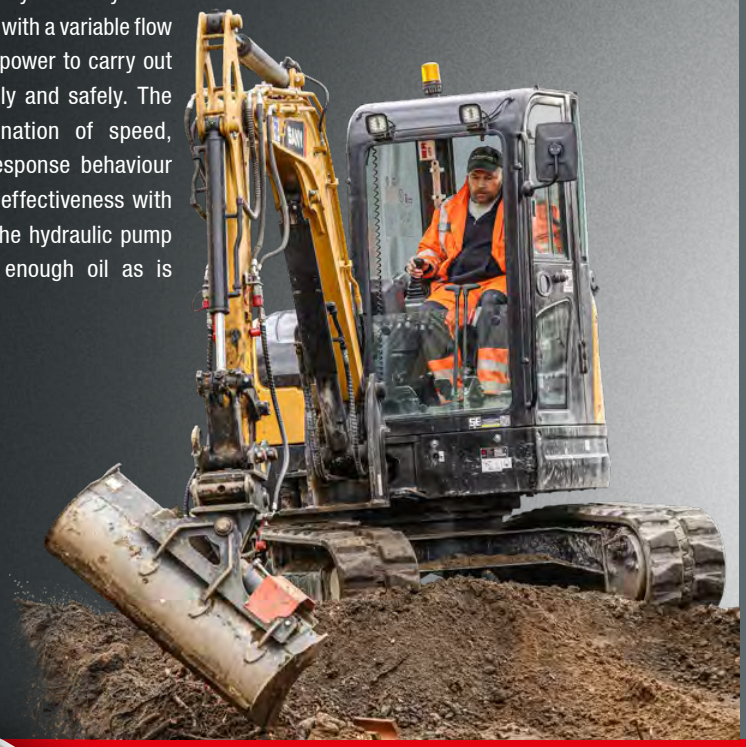
LIGHT WEIGHT, HEAVY DUTY

With the SY50U zero tail swing, you have a specialist at your side that can prove its power especially in confined spaces. It requires little space, so can work and manoeuvre everywhere where conventional machines reach their limits – in places that are difficult to access, directly next to walls, on construction sites in busy inner-city areas or on busy roads. You can rely on its responsive, precise control and on the fact that this small machine is ranked at the level of significantly larger machines in its class in terms of speed and rated power.

ECONOMY

OPERATING COSTS DOWN, PRODUCTIVITY UP

The SY50U is equipped with a particularly effective load-sensing hydraulic system. The axial piston pumps with a variable flow rate ensure sufficient power to carry out all operations smoothly and safely. The well-balanced combination of speed, power and precise response behaviour guarantees high cost-effectiveness with fuel in every phase: The hydraulic pump always delivers just enough oil as is actually needed.



QUALITY

Robust and durable – Precise, robot-manufactured welded seams guarantee a long service life under the harshest conditions.



SAFETY

No compromises – Extensive safety equipment is standard: Beacon lamps, lockable protective hoods, a battery disconnect switch and safety valves as standard on the arm and boom.



Absolute reliability – for total 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.

ECONOMY

Less is more

Quality that pays for itself in the long term: Low maintenance requirements and long service intervals. Additionally, all important maintenance points are easily accessible. This saves on operating costs and increases cost-effectiveness.



DIMENSIONS

In the smallest of spaces – The compact dimensions of this zero tail swing machine enable it to manoeuvre masterfully in confined areas where space is tight. This mobility broadens its possible applications and increases productivity.

USER EXPERIENCE

Maintenance and service – The engine bonnet is very easy to open with help from the gas pressure dampers. At the back, the key components for maintenance and service are clearly arranged saving time on routine daily checks.



COMPONENTS

Power – The tried-and-tested Yanmar 4TNV86CT engine guarantees reliable performance for all tasks, even in harsh working conditions.

ECONOMY

Cost-effectiveness as standard – The smart control system adapts the pump capacity to the available engine power for greater efficiency and reduced fuel consumption.



QUALITY

Fully resilient

Durability and robustness are standard features on all SANY excavators. Panels are made of steel, which makes them particularly robust machines in tough everyday working conditions and helps to reduce overall cost of ownership.



USER EXPERIENCE

A FOCUS ON THE OPERATOR

The productivity of an excavator is largely dependent on whether the operator can work for long periods in a focused manner. The cab of the SY50U has been designed to meet the everyday requirements of a modern construction site. The manual-suspension operators seat and armrests with multi-position locations allow for an optimal working posture. Whilst the excavator controls are ergonomically designed to provide a comfortable operating experience and to enhance precision and control. The cab comes equipped with other standard features such as manual climate control to maintain internal cab temperature settings.





USER EXPERIENCE

For a full view

The cab comes equipped with a high-resolution screen with integrated telematics for easier fleet management. Different programmable workmodes are also available to optimise performance for specific tasks.



USER EXPERIENCE

Easy-maintenance concept

Machines that are quick and easy to maintain save time and money. The SANY SY50U provides ground level access to all maintenance points, meaning that daily checks and scheduled maintenance can be carried out quickly, increasing the machines availabilty and service life.

Our highlights – the added benefits SANY offers you:

- Zero tail swing machine with compact dimensions
- 2 proportional auxiliary control circuits via joystick operation as stand
- Efficient, powerful load-sensing hydraulic system
- Next generation operators cab with integrated telematics
- 5 year / 5000 hours warranty

SANY PLUS ADVANTAGES



COMPONENTS

MORE LIGHT, MORE VISIBILITY, MORE SAFETY

Safety for both people and machines is ensured by the ROPS/FOPS certified cab and other safety features such as battery disconnect switch, rotating warning beacon and travel alarm to increase visibility and attract attention. LED work lights also guarantee maximum visibility in low light conditions.

DIMENSIONS

Quick look round the back

With the compact zero tail swing SY50U excavator, you can enjoy the highest degree of manoeuvrability, as well as unlimited rotation.



SAFETY

Optimum panoramic view

The large windows and sophisticated cab design ensure that the operator has the best possible view of the area around the machine. The 360° panoramic view allows exceptional safety levels in the working area.

TECHNICAL SPECIFICATIONS

ENGINE

Model	Yanmar 4TNV86CT
Typ	Water-cooled, 4 cylinder, with commonrail and DPF
Exhaust emissions	Stage V
Rated power	35.5 kW / 2400 rpm
Max. torque	144.9 Nm / 1500 rpm
Displacement	2190 ccm
Batteries	1 × 12 V / 120 Ah

HYDRAULIC SYSTEM

Main pump	Variable displacement axial piston pump
Max. oil flow	152 l/min
Travel motor	Variable displacement axial piston motor
Swing motor	Axial piston motor
Max. oil flow (AUX 1)	80 l/min
Max. oil flow (AUX 2)	45 l/min

SERVICE REFILL CAPACITIES

Fuel tank	78 l
Engine coolant	4.2 l
Engine oil	7.4 l
Drive (per side)	0.9 l
Hydraulic system	80 l
Hydraulic oil tank	52 l

PERFORMANCE

Swing speed	10 rpm
Max. travel speed	High 4 km/h, slow 2.7 km/h
Max. travel force	40.7 kN
Gradeability	30°
Bucket capacity	0.152 m³
Ground pressure	0.32 kg/cm²
Bucket digging force ISO	32.5 kN
Arm digging force ISO	22.9 kN

OPERATING WEIGHT

SY50U	5100 kg (+310kg bolt on counterweight) Includes 75kg (165 lb) operator, full fuel tank and excludes any attachments or hitch

UNDERCARRIAGE AND UPPER STRUCTURE

Boom length	2700 mm
Arm length	1500 mm
Bottom rollers	4
Top rollers	1
Rotation device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake

RELIEF VALVE SETTINGS

Implement circuit	245 bar
Swing circuit	191 bar
Travel circuit	245 bar
Pilot pressure	35 bar

LIFTING CAPACITIES OF LOWER DOZER BLADE

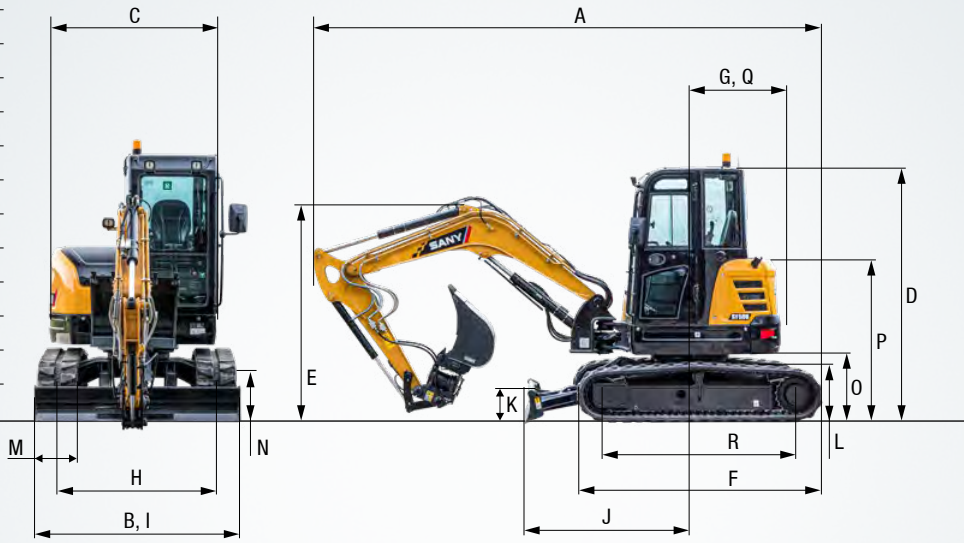
Load point height		Radius 2.0 m		Radius 3.0 m		Radius 4.0 m		Radius 5.0 m		Digging reach Capacity		mm
4.0 m	kg									1085	845	3905
3.0 m	kg					1050	815			1050	655	4605
2.0 m	kg			1545	1190	1190	790			1055	580	4948
1.0 m	kg			2020	1110	1365	760	1080	560	1075	555	5024
Ground line	kg			2165	1075	1445	735			1100	575	4849
-1.0 m	kg	2735	2000	1975	1075	1325	735			1110	655	4385
-2.0 m	kg	2135	2050	1370	1100					1040	905	3476

LIFTING CAPACITIES OF UPPER DOZER BLADE

Load point height		Radius 2.0 m		Radius 3.0 m		Radius 4.0 m		Radius 5.0 m		Digging reach Capacity		mm
4.0 m	kg									1025	845	3905
3.0 m	kg					985	815			790	655	4605
2.0 m	kg			1485	1190	960	790			700	580	4948
1.0 m	kg			1400	1110	925	760	680	560	675	555	5024
Ground line	kg			1360	1075	905	735			700	575	4849
-1.0 m	kg	2735	2000	1355	1075	900	735			800	655	4385
-2.0 m	kg	2135	2050	1370	1100					1040	905	3476

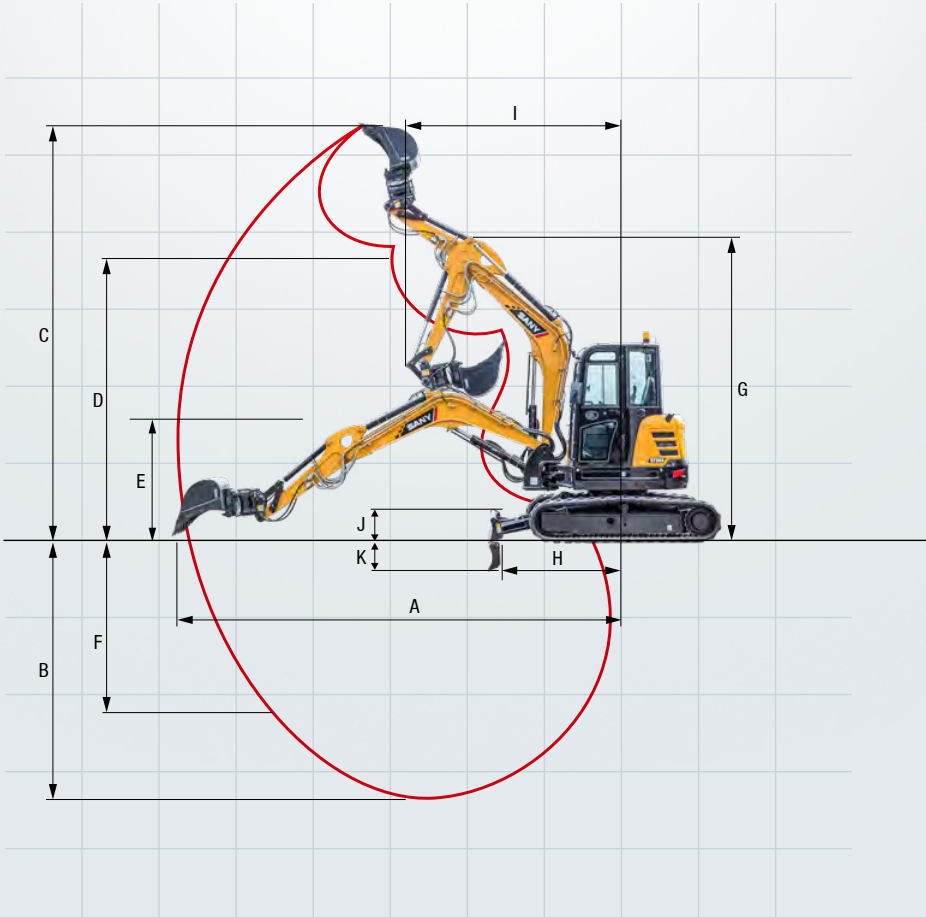
DIMENSIONS (TRANSPORT)

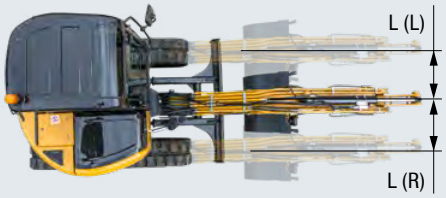
A	Transport length	5390 mm
B	Transport width	1960 mm
C	Overall width of upper structure	1760 mm
D	Height over cabin/ROPS	2630 mm
E	Height of Boom – transport	2060 mm
F	Overall length of crawler	2510 mm
G	Tail length	980 mm
H	Track gauge	1560 mm
I	Undercarriage width (blade)	1960 mm
J	Horizontal distance to blade	1790 mm
K	Blade height	340 mm
L	Track height	610 mm
M	Track pads width	400 mm
N	Min. ground clearance	325 mm
O	Counterweight clearance	675 mm
P	Engine cover height	1660 mm
Q	Tail swing radius	980 mm
R	Center distance of tumblers	1970 mm



WORKING AREA

A	Max. digging reach	5880 mm
B	Max. digging depth	3420 mm
C	Max. digging height	5450 mm
D	Max. dumping height	3805 mm
E	Min. dumping height	1410 mm
F	Max. vertical digging depth	2460 mm
G	Overall height over arm by min. swing radius	4155 mm
H	Arm head distance with work equipment retracted as far as possible	1690 mm
I	Swing radius by max. boomswing (L)	2260 mm
	Swing radius by max. boomswing (R)	2080 mm
	Min. swing radius	2520 mm
J	Max. clearance when blade up	420 mm
K	Max. depth of blade down	405 mm
L	Offset boom (L)	745 mm
	Offset boom (R)	710 mm
	Max. boom-swing angle (L)	58°
	Max. boom-swing angle (R)	54°







The SY50U – great results and great equipment

The SY50U ex-works is an all-rounder and perfectly equipped for a range of applications. Optional extra equipment and attachments are available to increase its flexibility even more.

OPERATORS COMFORT / CAB

Heater	●
Manual air condition system*	●
USB/Bluetooth Radio	●
Armrests (adjustable)	●
12v outlets	●
Wiper	●
Sprayer f. wiper	●
AUX 1 on joystick	●
AUX 2 on joystick	●
8 stored hydraulic settings for attachments	●
Mechanical suspension seat	●
Removable front-window	●

SAFETY

Battery master switch	●
Travel alarm	●
Orange and green beacon	●
Emergency lowering	●
Lockable hoods	●

HYDRAULIC SYSTEM

Swing brake	●
2 speed travel	●
Hydr. Pre-pressure operating joysticks	●
Piping for additional hydraulic function AUX 1	●
Piping for additional hydraulic function AUX 2	●
Main filter	●

WORKING LIGHTS

Lights – front (LED)	●
Lights – boom (LED)	●

UNDERCARRIAGE

Rubber tracks	●
Tie down and Lifting points	●
Bolt on counterweight - 310kg	○
Cylinder guards – dozer blade	●

ENGINE

Auto idle	●
Diesel filter	●
DPF	●
Airfilter	●

WORKING EQUIPMENT

Boom and arm load holding valves with overload indicator	●
Double acting circuit for hydraulic quick coupler with piping	●
Breaker&Shear line proportional on Joystick with piping	●
Rotation line proportional on Joystick with piping	●
Flow adjustment for attachments	●
Dozer blade	●
Cylinder guards – boom	●
Angled dozer blade	○

Standard equipment ● Special option ○

The standard and special options differ depending on the country in which the crawler excavator is delivered. If you have any questions, please contact your dealer directly.
* The air conditioner contains fluorinated greenhouse gases: Refrigerant type: HFC-134a, Global warming potential: 1 430, Quantity: 0.625 kg, CO_2e: 0.89 t

Parts supply – fast and reliable

ANY 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.



A SERVICE YOU CAN RELY ON

Just as we do with our excavators, we also demand high quality and reliability of our service products. This underlines our equipment's performance in terms of their durability and their excellent price-performance ratio. After all, maintenance is crucial for efficiency, cost-effectiveness and safety. Your SANY dealer is happy to help you with a comprehensive range of services to ensure that your machine continues operating efficiently in the long term.

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. To locate your nearest dealer, visit https://www.sanyuk.com.



SANY PLUS ADVANTAGES

The added benefits SANY offers you:

- Experienced dealer network throughout the UK and Ireland
- Direct sales and support route in Scotland and the south east of England
- Dedicated SANY team based in the UK to support you and your product
- UK parts warehouse to ensure SANY machines are fully supported



Detailed information in black and white

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

HIGHLIGHTS **SY50U**



PERFECT COMBINATION OF COMPACTNESS & AND POWER

The SANY SY50U really is a powerful little machine. Its compact design means it is at home on urban construction sites, as well as in confined spaces. Its performance and extensive standard equipment guarantee high productivity.

ROBUST AND DURABLE

The most important protective elements and reinforcements as well as all cladding parts are made of steel to guarantee a long service life under all conditions.

IN THE SMALLEST OF SPACES

The SY50U is a versatile machine with a zero tail swing to facilitate work in confined spaces.

MAINTENANCE AND SERVICE

Thanks to the wide opening engine bonnet and the central, **clear arrangement of the key components**, usual routine checks and work on the machine can be carried out quickly and easily.

NO COMPROMISES

Daily operations on the construction site make high demands on both operators and machines. **High-quality safety components** are therefore always included.

POWER

The **powerful Yanmar 4TNV86CT engine** means that this mini excavator is also perfectly suited to “maxi” tasks.

COST-EFFECTIVENESS AS STANDARD

The **smart hydraulic system reduces the fuel consumption**, **engine wear** and **exhaust emissions**. This is positively reflected in its cost-effectiveness and **low life cycle costs**.

TECHNICAL HIGHLIGHTS

Engine	Yanmar 4TNV86CT
Rated power	35.5 kW / 2 400 rpm
Max. torque	144.9 Nm / 1 500 rpm
Max. travel speed	4 km/h
Swing speed	10 rpm
Main pump	Variable displ. axial piston pump
Max. oil flow	138.6 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.

SANY

Quality Changes the World

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