

# EFFICIENCY INTHE SMALLEST OF SPACES COMPACT. POWERFUL. COMFORTABLE.

7 SANY

#### CONSTRUCTION MACHINERY



COMPACT EXCAVATORS

**SY80U** 

Engine YANMAR 4TNV98CT-VSY rated Power 53.7 kW / 2100 rpm Bucket capacity 0.28 m<sup>3</sup> Operating mass 8 800 kg

# SANY

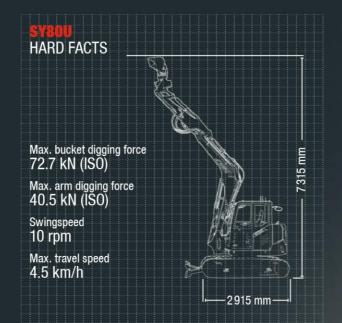
### For challenging tasks, you need a first-class partner

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 **320 000** 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.

## **320 000** EXCAVATORS SOLD IN **10 YEARS**

5–7% TURNOVER FOR RESEARCH AND DEVELOPMENT

Quality Changes the World



# SETTING THE BAR HIGH FOR THE COMPACT CLASS

Its compact dimensions and minimal slewing radius make the SY80U short-tail-swing excavator the smallest SANY compact excavator there is. It is therefore in its element anywhere where precise power is needed in confined spaces and on construction sites with impaired visibility. With an efficient slewing radius of no more than 1 480 mm,





#### **TOP PROPERTIES**



#### QUALITY

For the greatest loads - particularly precise robot-manufactured welded seams guarantee durability even in the toughest conditions

#### DIMENSIONS

Safe operation in the smallest of spaces the compact dimensions of the short-tail-swing machine allow for safe working and manoeuvring even in extremely confined places.

SANY

#### **USER EXPERIENCE**

Maximum comfort, maximum productivity - with its ergonomic seating position on the suspended seat and various comfort features such as air-conditioning and convenient gear changing on the blade lever, the driver's cab has been designed with optimal user comfort in mind.

## DIMENSIONS MINIMAL **SLEWING** RADIUS, MAXIMUM STABILITY

Whether during large-scale loading work or work in confined spaces - the SANY SY80U short-tail-swing excavator can do its job optimally anywhere. With its minimal tail swing radius, and thanks to its compact, rounded short tail design, the driver can completely concentrate on their working area without having to watch out for, the tail. In this way, the machine can work safely in the smallest of spaces or in the direct proximity of obstacles. This is perfect for tasks in inner-city areas or in landscaping. Safety has not been compromised here - even with its long digging reach and great dumping height, the SY80U remains reliably sturdy.

#### Our highlights - the added benefits SANY offers you:

- Extremely compact short-tail-swing excavator
- + Comfortable driver's cab
- + Hydraulic pipework for quick coupler attachement
- + 2 prop. control circuits on the joystick
- + Gear switching on the blade lever



### SAFETY through safety

contact.

#### SAFETY

Safety first - comprehensive safety features as standard - from stable cylinder covers to lockable protective hoods to standard safety valves.

### COMPONENTS

Reliable power - the tried-and-tested YANMAR 4-cylinder diesel engine is the centre piece of the powerhouse. The powerful transmission guarantees reliable performance for all tasks, even in harsh working conditions.

#### ECONOMY

Lower consumption means greater savings - this is especially the case for fuel consumption. The automatic speed setting ensures that the short-tail-swing excavator remains economical in the long-term even when delivering maximum performance.



### **Enhanced productivity**

From the ROPS- and FOPS-certified driver's cab to the wide field of vision for the operator to the standard safety valves and the lockable protective hood - the SY80U doesn't cut corners when it comes to safety. Right down to the smallest detail - even safety valves and cylinder covers are, as with the LED working lights, provided ex works as standard. This is also the case for maintenance and service - rotating or hot engine components are protected against inadvertent



USER EXPERIENCE

### COMFORT ZONE DRIVER'S CAB

The driver's seat with high seat backrest offers the driver a comfortable workplace, thereby reducing symptoms of fatigue to a minimum. The positioning of the controls is ergonomically designed – clear and easy to reach, they help to ensure that the driver can achieve maximum productivity while working.

The joysticks with 2 proportional control circuits are also part of the standard equipment and allow safe and precise control of the machine, including all attachment devices.

The ergonomic and handily placed control lever for the dozer blade now also has gear switching integrated, making adapting the machine to the work situation even easier and more effective.



### Service-friendly in every regard

All important places for routine maintenance or checks are conveniently accessible from the ground. Lubrication points are combined in a meaningful and easily accessible way. This means that regular service work can be completed quickly and safely. This increases the availability and service life of the machines and ensures that operators and equipment are reliably protected in the long term.

The complete hydraulic preparation for the quick change mechanism ensures easy and cost-effective adaptation of the quick coupler.



SANY



#### COMPONENTS

#### **Designed for the long**

The standard LED working lights don't only illuminate the night like the day, but also counter the harsh conditions to which the SY80U is subject in its daily work.

The reliable YANMAR drive unit complies with the latest emission standards and is inconspicuously hidden in the tail of the machine. All important service points are easily accessible.

The electronic fan control ensures a minimal level of noise emissions and reduced fuel consumption.

Meticulous machining and robot-controlled welded seams, accurate to the millimetre, also contribute to this. This gives track shoes, connections, bottom rollers etc. their extremely long service life. ECONOMY

SAL

#### Economical with every task

The "auto idle"- function ensures that fuel consumption is minimised. All without compromising the performance. The load-sensing hydraulic system delivers more hydraulic power with less loss. With intuition" – the system regulates the flow rate and pressure as required.



#### ENGINE

Modell	YANMAR 4TNV98CT-VSY	
Тур	Water-cooled, 4 cylinder, with commonrail and DPF	
Exhaust emissions	Stage V	
Rated power	53.7 kW / 2100 rpm	
Max. torque	290 Nm / 1 350 rpm	
Displacement	3318 ccm	
Batteries 1 × 12 V / 120 Ah		

#### HYDRAULIC SYSTEM

Mainpump	variable-piston-pump;
	Load sensing control
Max. oilflow	193.2 I/min
Travelmotor	Variable displacement axial piston motor
Swingmotor	Axial piston motor
Max. oilflow (AUX 1)	100 l/min
Max. oilflow (AUX 2)	70 I/min

#### SERVICE REFILL CAPACITIES

Fuel tank	100	
Engine coolant	12	
Engine oil	10.2	
Drive (per side)	1.21	
Hydraulic system	160 I	
Hydraulic oil tank	120	

#### PERFORMANCE

Swingspeed	10 rpm
Max. travel speed	High 4.5 km/h, slow 2.5 km/h
Max. travel force	70 kN
Gradeability	35°
Bucket capacity	0.28 m <sup>3</sup>
Groundpressure	0.38 kg/cm <sup>2</sup>
Bucket digging force ISO	72.7 kN
Arm digging force ISO	40.5 kN

#### **RELIEF VALVE SETTINGS**

Implement circuit	280 bar	
Swing circuit	215 bar	
Travle circuit	280 bar	
Pilot pressure	35 bar	

#### UNDER AND UPPER STRUCTURE

Boom length	3 520 mm
Arm length	2050 mm
Bottomrollers	4
Toprollers	1
Rotation device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake

#### **OPERATING MASS**

SY80U

8800 kg

#### LIFTING CAPACITIES - DOZER BLADE DOWN

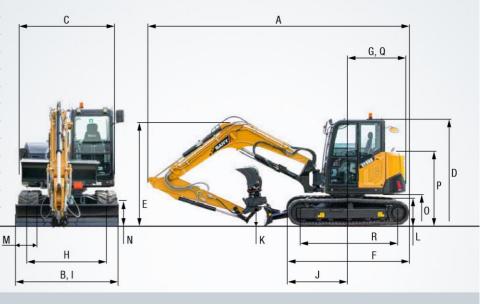
1		Radius					Digging reach			
N.	-	3.0	m	4.0	4.0 m		5.0 m		Max.	
Load point heigh		≫		⋺		⋺		⋺	]	mm
5.0 m kg	3			1960	1960	1800	1 338	1710	1 325	5025
4.0 m kg	3			2080	2080	2085	1345	1225	1055	5703
3.0 m kg	3	3100	3100	2540	1875	2275	1 3 1 5	1585	930	6106
2.0 m kg	3	4745	2675	3180	1760	2570	1260	1630	865	6297
1.0 m kg	3	4325	2450	3745	1650	2845	1205	1750	855	6297
Ground line kg	3	4850	2390	4020	1 590	2995	1 170	1965	885	6109
-1.0 m kg	3	5670	2360	3950	1550	2935	1 1 4 0	2370	995	5707
-2.0 m kg	3	4915	2375	3490	1550	2445	1 150	2400	1 185	5031
-3.0 m kg	3	3 3 8 5	2450					2290	1735	3899

#### LIFTING CAPACITIES - DOZER BLADE UP

		Radius						Dig	ging rea	ach
		3.0	m	4.0 m		5.0 m		Max.		
Load point heigh		<b>)</b>	5	Э—∄		∍		Э	J	mm
5.0 m	kg			1960	1960	1800	1 3 3 8	1710	1 3 2 5	5025
4.0 m	kg			2080	2080	2085	1345	1225	1055	5703
3.0 m	kg	3100	3100	2540	1875	1770	1 315	1285	930	6106
2.0 m	kg	3850	2675	2 4 2 5	1760	1715	1260	1 185	865	6297
1.0 m	kg	3595	2450	2305	1650	1655	1 205	1 170	855	6297
Ground line	kg	3525	2390	2240	1 590	1615	1 170	1 2 1 5	885	6109
- 1.0 m	kg	3490	2360	2195	1550	1585	1 1 4 0	1 360	995	5707
-2.0 m	kg	3510	2375	1550	1550	1600	1 150	1630	1 185	5031
-3.0 m	kg	3385	2450					2290	1735	3899

#### DIMENSIONS (TRANSPORT)

A	Transport length	6500 mm
В	Transport width	2220 mm
С	Upperstructure carriage	2150 mm
D	Height over cabin/ROPS	2550 mm
E	Height of Boom – transport	2220 mm
F	Overall length of crawler	2915 mm
G	Tail length	1 480 mm
Н	Track gauge	1 750 mm
I	Undercarriage width (blade)	2 200 mm
J	Horizontal distance to blade	2080 mm
K	Blade height	450 mm
L	Track height	660 mm
М	Track pads width	450 mm
Ν	Min. ground clearance	365 mm
0	Counterweigth clearance	745 mm
Р	Engine cover height	1 880 mm
Q	Tail swing radius	1 480 mm
R	Center distance of tumblers	2315 mm

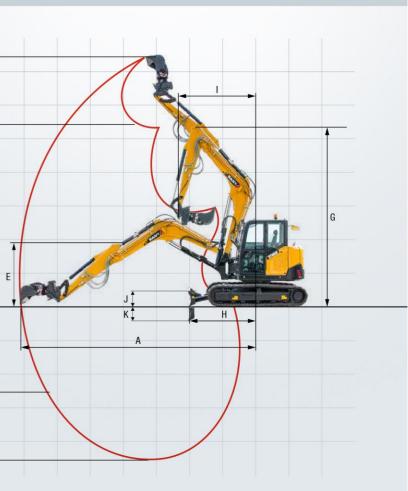


#### WORKING AREA

A	Max. digging reach	7 290 mm
В	Max. digging depth	4535 mm
С	Max. digging height	7315 mm
D	Max. dumping height	5430 mm
E	Min. dumping height	1915 mm
F	Max. vertical digging depth	2490 mm
G	Overall height over arm by min. swing radius	5490 mm
Н	Arm head distance with work equipment retracted as far as possible	2080 mm
I	Swing radius by max. boomswing (L)	4510 mm
	Swing radius by max. boomswing (R)	4670 mm
	Min. swing radius	2435 mm
J	Max. clearance when blade up	480 mm
K	Max. depth of blade down	325 mm
L	Offset boom (L)	636 mm
	Offset boom (R)	740 mm
	Max. boom-swing angle (L)	65°
	Max. boom-swing angle (R)	51°







#### EQUIPMENT

#### SY80U

#### Enormous versatility

Many components that allow flexible use are already included as standard ex works. The attachment of the hydraulic quick coupler is already prepared for.

#### **OPERATORS COMFORT / CABINE**

#### Suspension seat Heater Manual air condition system Radio and speaker Armrests (adjustable) 12v outlets USB port (music) Wiper AUX 1 on Joystick AUX 2 on Joystick 8 stored hydraulic settings for attachments

#### SAFETY

Battery master switch	•
Travel Alarm	•
Warning beacon	•

#### 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	•

#### WORKING LIGHTS

Lights – front (LED)	•
Lights – boom (LED)	•
UNDERCARRIAGE	
Rubber tracks	•
Steel tracks	0
Holes/loops for fixing	•
ENGINE	

Auto idle	•
Diesel filter	•
DPF	•
DOC	•
Airfilter	•

#### HYDRAULIC SYSTEM

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



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

long term.

#### Global Brand, Local Knowledge

Flexible, fast and always there for you

Rapid assistance, tailored advice and a reliable supply of original parts all around New Zealand.

Our service network provides certainty that you are supported with services and parts wherever you are located around New Zealand.

Standard equipment • Special option

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

#### Parts supply quick and reliable

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



#### 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.

### **VERTU SERVICE**

#### The Vertu Difference

- + Site visits to get your machine back up and running as soon as possible.
- + Significant inventory of SANY genuine and after market parts and attachments.
- + Expert knowledge including SANY trained technicians.
- + If a repair cannot be undertaken on-site or in good time, Vertu will arrange a similar replacement while your machine is repaired under warranty.

### HIGHLIGHTS SY80U

# **A TRUE WORKHORS**

The SY80U short-tail-swing excavator is tailored to the requirements of tough everyday use on the construction site. It demonstrates its impressive versatility when digging, loading and crushing – and its agility is evident, thanks to its swivelling boom and the short tail concept. Aside from its compact design, it impresses with its first-class performance, its low fuel consumption and its outstanding user comfort.

#### FOR THE GREATEST LOADS

All components are designed to withstand high stress. The meticulous machining, high-quality materials and welded seams perfectly executed by welding robots are guarantees for this.

#### IN THE SMALLEST OF SPACES

The **robust swivel bracket** is the most important aspect for all tasks. It makes the **compact manoeuvrability** of the shorttail-swing excavator possible, together with the **compact total dimensions** and the **minimal slewing radius**.

#### MAINTENANCE AND SERVICE

Full concentration and **maximum safety** are the first priorities on the construction site. For this purpose, the SY80U driver's cab offers the best conditions for the machine operator – from the **comfortable driver's seat** to the **large**, **easily legible monitor** and the **precise joystick** with fine response characteristics.

#### SAFETY FIRST

We have taken the full range of measures to minimise the risk to drivers in the cab and people on the construction site in the vicinity of the machine. This includes **optimal visibility on all sides**, as well as **LED working lights**, **safety valves** and **cylinder covers**.

#### **RELIABLE POWER**

With the strong YANMAR engine, the smallest SANY compact excavator is optimally equipped even for large tasks.

#### LESS IS MORE

The **automatic speed setting** reduces the fuel consumption, engine wear and exhaust gas emissions (Euro 5 standard). This is positively reflected in its **low fuel consumption** and exemplary **low life cycle costs**.

#### **TECHNICAL HIGHLIGHTS**

Engine	YANMAR 4TNV98CT-VSY	
Rated power	53.7 kW / 2100 rpm	
Max. torque	290 Nm / 1 350 rpm	
Bucket digging force ISO	72.7 kN	
Swingspeed	10 rpm	
Mainpump	Variable-piston-pump	
Max. oilflow	193.2 I/min	



#### VERTU EQUIPMENT

510 Ellerslie-Panmure Highway, Auckland 1060 Tel: 0800 837 888 info@vertuequipment.co.nz www.vertuequipment.co.nz

