

**CONSTRUCTION MACHINERY** 



# COMPACT EXCAVATORS SY80U

Engine
YANMAR 4TNV98CT-VSY
Rated Power
53.7 kW / 2100 rpm
Bucket capacity
0.28 m³
Operating weight
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.



# 320000 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,

it is an ideal choice for road and line construction, work on bridges, for redevelopment in urban housing construction and in landscaping. This is where it can display its other strengths – its comprehensive standard features, good panoramic visibility and clarity for the driver and its high cost-effectiveness thanks to low operating costs.



#### **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.

#### **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.



#### **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.



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.



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



SAFETY

# **Enhanced productivity** through safety

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 contact.



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.



**ECONOMY** 

# 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.







COMPONENTS

# **Designed for the long term**

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.



# TECHNICAL SPECIFICATIONS

# **ENGINE**

Model	YANMAR 4TNV98CT-VSY
Туре	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	3 318 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 I
Engine coolant	12
Engine oil	10.2 l
Drive (per side)	1.21
Hydraulic system	160 I
Hydraulic oil tank	120 I

# **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 m³
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	2 0 5 0 mm
Bottomrollers	4
Toprollers	1
Rotation device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake

# **OPERATING WEIGHT**

SY80U*	8 800 kg	
* Includes 75 kg (16	55 lb) operator and full fuel tank and excludes bucket	

# LIFTING CAPACITIES - DOZER BLADE DOWN

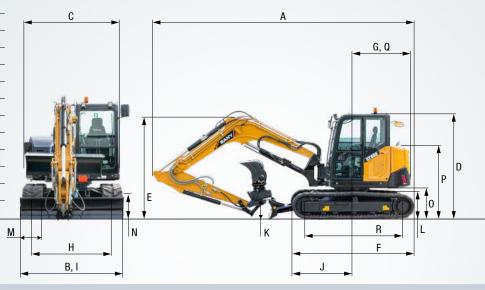
-		Digging reach							
120	3.0 m		4.0 m 5.0 m			Max.			
Load point heigh	<b>&gt;—</b> €		<b>&gt;</b>		<b>&gt;</b> —₹		>—{		mm
5.0 m kg			1960	1960	1800	1338	1710	1 325	5025
4.0 m kg			2080	2080	2085	1345	1 2 2 5	1055	5703
3.0 m kg	3100	3100	2540	1875	2275	1 315	1585	930	6106
2.0 m kg	4745	2675	3180	1760	2570	1260	1630	865	6297
1.0 m kg	4325	2450	3745	1650	2845	1 205	1750	855	6297
Ground line kg	4850	2390	4020	1590	2995	1 170	1 965	885	6109
-1.0 m kg	5670	2360	3950	1550	2935	1140	2370	995	5707
-2.0 m kg	4915	2375	3490	1550	2445	1 150	2400	1 185	5 0 3 1
-3.0 m kg	3385	2450					2290	1735	3899

# LIFTING CAPACITIES - DOZER BLADE UP

J.	Radius						Digging reach		
	3.0	m	4.0	m	5.0	m	Max.		
Load point heigh	<b>&gt;—∄</b>		<b>&gt;—</b> }		<b>&gt;—</b> }		>—{		mm
5.0 m kg			1960	1960	1800	1338	1710	1 325	5025
4.0 m kg			2080	2080	2085	1345	1 2 2 5	1055	5703
3.0 m kg	3100	3100	2540	1875	1770	1 315	1 285	930	6106
2.0 m kg	3850	2675	2 4 2 5	1760	1715	1260	1 185	865	6297
1.0 m kg	3 5 9 5	2450	2305	1650	1655	1 205	1170	855	6297
Ground line kg	3 5 2 5	2390	2240	1590	1 615	1170	1 215	885	6109
-1.0 m kg	3490	2360	2195	1550	1 585	1 140	1360	995	5707
-2.0 m kg	3510	2375	1550	1550	1600	1150	1630	1 185	5031
-3.0 m kg	3385	2450					2290	1735	3899

# DIMENSIONS (TRANSPORT)

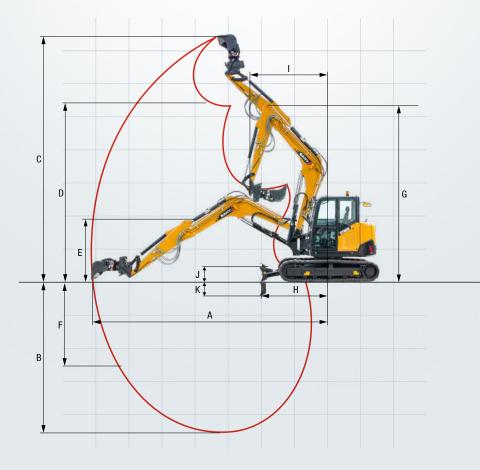
Α	Transport length	6 500 mm
В	Transport width	2220 mm
С	Upperstructure carriage	2150 mm
D	Height over cabin/ROPS	2550 mm
Ε	Height of Boom – transport	2220 mm
F	Overall length of crawler	2915 mm
G	Tail length	1 480 mm
Н	Track gauge	1750 mm
I	Undercarriage width (blade)	2200 mm
J	Horizontal distance to blade	2080 mm
K	Blade height	450 mm
L	Track height	660 mm
М	Track pads width	450 mm
N	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**

Α	Max. digging reach	7 290 mm
В	Max. digging depth	4535 mm
С	Max. digging height	7315 mm
D	Max. dumping height	5 430 mm
E	Min. dumping height	1 915 mm
F	Max. vertical digging depth	2490 mm
G	Overall height over arm by min. swing radius	5 490 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°







# **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 / CAB

4 473

# **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	•
Hammer & Shear line proportional on Joystick with piping	•
Rotation line proportional on Joystick with piping	•
Flow adjustment for attachments	•
Dozer blade	•
Cylinder guards – boom	•

Standard equipment 

Special option

# **WORKING LIGHTS**

Lights – front (LED)	•
Lights – boom (LED)	•

# **UNDERCARRIAGE**

Rubber tracks	•
Steel tracks	•
Holes/loons for fixing	

## **ENGINE**

Auto idle	•
Diesel filter	•
DPF	•
DOC	•
Δirfilter	3.89

# 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	•

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.



# 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.



# The added benefits SANY offers you:

- ★ Experienced dealer network throughout England, Wales, Northern Ireland and Ireland
- + Direct sales and support route in Scotland
- Dedicated SANY team based in the UK to support you and your product
- UK office and parts warehouse to ensure SANY excavators are fully supported

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

## **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.





#### 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 short-tail-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**

YANMAR 4TNV98CT-VSY
53.7 kW / 2100 rpm
290 Nm / 1 350 rpm
72.7 kN
10 rpm
Variable-piston-pump
193.2 I/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.



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