

# A PORVERFUE DE COMPACT. FLEXIBLE. VERSATILE.

# **CONSTRUCTION MACHINERY**



MINI EXCAVATORS

Engine Yanmar 3TNV88F Rated power 18.2 kW / 2400 rpm Bucket capacity 0.12 m<sup>3</sup> Operating mass 3855 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 250 000 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. 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.

# 250000 EXCAVATORS SOLD IN 10 YEARS

5–7% TURNOVER FOR RESEARCH AND DEVELOPMENT

# FIVE-YEAR Warranty

Quality Changes the World

# HARD FACTS Max. bucket digging force 30.4 kN (ISO) Max. arm digging force 18.2 kN (ISO) Swingspeed 9 rpm Max. travel speed 4.5 km/h

# **GREAT PERFORMANCE CAN BE SO SMALL**

every day.

The SANY SY35U short-tail-swing excavator is a little construction as well as in smaller demolition and civil powerhouse. Its compact dimensions make it the perfect tool wherever power and manoeuvrability need to come together. Versatility is one of the great strengths of this "little" machine. As a true all-purpose machine, it can also be equipped with powerful attachments such as a hammer or a grapple. It thus provides maximum versatility in gala





engineering works, which pays off every day. Especially in the city, where there is usually little space available on construction sites, the short tail concept makes it the ideal solution for many challenges that have to be overcome



# **TOP PROPERTIES**

FCONOMY

# LESS IS MORE -**AT LEAST IN TERMS OF OPERATING COSTS**

The SY35U pays for itself. A versatile workhorse, it is a future-proof investment in performance, reliability and productivity. With a complete package of comprehensive technology, developed for maximum profitability.

#### OUALITY

Robust and durable - the most important protective elements and reinforcements as well as all access panels parts are made of high-quality metal, ideal for tough use in the construction industry.

#### DIMENSIONS

Compact and powerful - on the one hand a short-tail-swing excavator with small dimensions, on the other hand a small powerhouse that offers exceptional performance in its category. For quick and efficient work even in confined circumstances.

SAFETY No compromise - the SY35U is fully

it comes to safety.

#### **COMPONENTS**

Quality as standard - the SY35U already comes with extensive features as standard. This can be upgraded with additional special options and adapted to individual requirements.

#### ECONOMY

SY35U

#### Efficiency or performance? Why should you have to choose?

The times when you had to pay for high performance with extremely high operating costs are over. The SY35U combines exemplary cost-effectiveness and performance. The modern drive and the load-sensing hydraulic system with variable delivery rate are designed for extremely low fuel consumption in compliance with the strict emission standard 5. With two work programs to choose from, the performance of the machine can also be specifically optimised for the task at hand.

equipped for precise, safe working

even under extreme application

conditions - No compromise when

#### Absolute reliability – for peace of mind!

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



# Fully resilient – metal covers



#### **USER EXPERIENCE**

Extremely comfortable - from easy access to the comfortable seat and the ergonomically designed controls, the driver can look forward to maximum comfort.

#### **ECONOMY**

Economically impressive - with low fuel consumption, straightforward maintenance. low investment costs. the SY35U offers an impressive price-performance ratio in every respect.

Durability and robustness are standard features on all SANY mini excavators. For example, panels are made of metal. This makes them particularly robust - and if a accident happens during the tough everyday work on a construction site, it can usually be straightened out again quickly. Furthermore, all maintenance access points are lockable and thus offer additional protection for the interior.



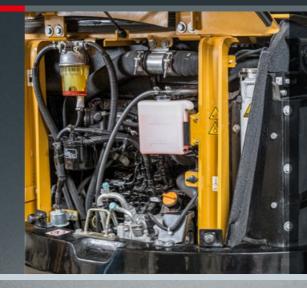
# EFFICIENCY, COST-EFFECTIVENESS AND USER EXPERIENCE



#### USER EXPERIENCE

#### Maintenance and servicing made easy

Carry out maintenance and inspections quickly and reliably - no problem with SANY's sophisticated service concept, where each part can be maintained from ground level. The generously sized bonnets ensure quick and easy access to all maintenance-related components. The central lubrication points enables a central supply to various bearings. In this machine, for example, the entire slewing ring can be conveniently lubricated through an opening in the upper structure.



## COMPONENTS Many good things from the ground up

Whether it is the engine from Yanmar, the hydraulic system from Casappa or the ground drive from Nachi, the machine is distinguished by its many brandname components and the high quality associated with them.

# USER EXPERIENCE **FOCUS ON DRIVER COMFORT**

The generously designed cab offers operating comfort geared to practical use. For many people, it is the most important component: The comfortable driver's seat. The armrests can be adapted to any body size because they can be easily adjusted in height and thus make fatigue-free working possible. Special rubber dampers reduce vibrations and working movements. Ergonomically arranged controls round off the overall package.

You have everything in view with the large, central display, which shows all important data and values clearly and well arranged. In addition to the basic information, the working mode, ground speed or attachment can also be set here. The next planned maintenance is also stored in the menu.



USER EXPERIENCE

**Operator comfort is key** 

The standard air conditioning system

is a real novelty in its class, so that the

driver always keeps a cool head.

# What is important must be protected

Safety for people and machines is ensured here not only by warning devices such as the standard rotating warning beacon and the travel alarm. The boom cylinder is also protected by a metal guarding, which prevents major damage to the cylinder.

#### DIMENSIONS

## Perfect stability – in every situation

The track width of 1420 mm, the low centre of gravity and the well thought-out mass distribution give the SY35U firstclass stability – even when working at maximum horizontal reach and in extreme conditions. At the same time, the compact short tail causes only a slight shift in the centre of gravity, even when the upper structure is swivelled. The swing boom ensures an even wider range of applications and makes it possible to work comfortably and safely parallel to building boundaries of any kind.



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

- + Air conditioning system

- + Cab or canopy
- + Load-sensing hydraulic system

#### ECONOMY

#### Little things make all the difference – open to everything

For a full view, the SY35U is also available as a canopy version. It offers a perfect view outside of the work area - naturally in compliance with the current ROPS specifications.

# ENGINE

Model	YANMAR 3TNV88F
Тур	Water-cooled four-stroke diesel engine with turbulence chamber fuel injection
Exhaust emissions	Stage V
Rated power	18.2 kW / 2400 rpm
Max. torque	94.2 Nm / 1 320 rpm
Displacement	1 642 ccm
Batteries	1 × 12 V / 80 Ah

# HYDRAULIC SYSTEM

Mainpump	Variable displacement axial piston pump
Max. oilflow	88 l/min
Travelmotor	Variable displacement axial piston motor
Rotation device	Axial piston motor

# SERVICE REFILL CAPACITIES

Fuel tank	40 I
Engine coolant	6.7 I
Engine oil	6.7 I
Drive (per side)	0.7 l
Hydraulicsystem	45
Hydraulic oil tank	40 I

## PERFORMANCE

Swingspeed	9 rpm
Max. travel speed	High 4.5 km/h, slow 2.2 km/h
Max. travel force	42.5 kN
Gradeability	30°
Bucket capacity	0.12 m <sup>3</sup>
Groundpressure	0.32 kg/cm <sup>2</sup>
Bucket digging force ISO	30.4 kN
Arm digging force ISO	18.2 kN

3855 kg

# **OPERATING MASS**

SY35U

# UNDER AND UPPER STRUCTURE

Boom length	2 540 mm
Arm length	1 400 mm
Bottomrollers	4
Rotation device	Axial piston motor with planetary gear running in 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.

# RELIEF VALVE SETTINGS

Implement circuit	245 bar
Swing circuit	206 bar
Travle circuit	245 bar
Pilot pressure	35 bar

# LIFTING CAPACITIES OF LOWER DOZER BLADE

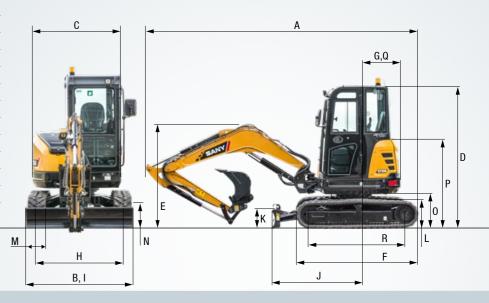
				Rad	ius			Digging	reach
<u>A</u>		2.0 m /	6.6 ft	3.0 m /	9.8 ft	4.0 m /	13.1 ft	Maximal	
Load poin height	ıt	∋–€		≫∄		Э₩Ĵ		∋–€	
4.0 m	kg							803	660
13.1 ft	lb							1767	1452
3.0 m	kg					818	503	688	458
9.8 ft	lb					1800	1 107	1 514	1008
2.0 m	kg			1000	762	855	491	667	386
6.6 ft	lb			2200	1676	1 881	1080	1467	849
1.0 m	kg			1 4 4 7	703	1036	468	695	364
3.3 ft	lb			3183	1547	2279	1030	1 529	801
Ground	kg			1650	669	1 137	452	787	371
line	lb			3630	1 472	2501	994	1731	816
-1.0 m	kg	2372	1245	1631	665	1082	451	999	431
- 3.3 ft	lb	5218	2739	3588	1463	2380	992	2 198	948
-2.0 m	kg	2057	1287	1 217	691			1023	620
-6.6 ft	lb	4525	2831	2677	1 5 2 0			2 2 5 1	1364

# LIFTING CAPACITIES OF UPPER DOZER BLADE

				Rad	ius			Digging	reach
		2.0 m / 6.6 ft 3.0 m / 9.8 ft			4.0 m /	13.1 ft	Maximal		
Load poir height	nt	∋—€		)		∋–€		∋	
4.0 m	kg							704	660
13.1 ft	lb							1549	1 4 5 2
3.0 m	kg					534	503	486	458
9.8 ft	lb					1 175	1 107	1069	1008
2.0 m	kg			817	762	522	491	411	386
6.6 ft	lb			1797	1676	1148	1 080	904	849
1.0 m	kg			755	703	499	468	387	364
3.3 ft	lb			1661	1547	1098	1030	851	801
Ground	kg			720	669	482	452	398	371
line	lb			1584	1 472	1060	994	876	816
- 1.0 m	kg	1377	1245	717	665	482	451	459	431
- 3.3 ft	lb	3029	2739	1577	1463	1060	992	1 0 1 0	948
-2.0 m	kg	1 423	1287	743	691			665	620
-6.6 ft	lb	3 1 3 1	2831	1635	1 520			1 463	1364

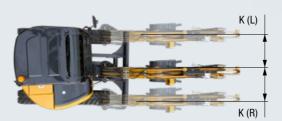
# DIMENSIONS (TRANSPORT)

Α	Transport length	4915 mm
В	Transport width	1720 mm
С	Upperstructure carriage	1548 mm
D	Height over cabin/ROPS	2515 mm
Е	Height of Boom – transport	1 800 mm
F	Overall length of crawler	2155 mm
G	Tail length	860 mm
Н	Track gauge	1 420 mm
Ι	Undercarriage width (blade)	1720 mm
J	Horizontal distance to blade	1 500 mm
Κ	Blade height	350 mm
L	Track height	520 mm
Μ	Track pads width	300 mm
Ν	Min. ground clearance	295 mm
0	Counterweigth clearance	560 mm
Р	Engine cover height	1 550 mm
Q	Tail swing radius	860 mm
R	Center distance of tumblers	1 670 mm
_		



# WORKING AREA

A	Max. digging reach	5465 mm
В	Max. digging depth	3 105 mm
С	Max. digging height	4855 mm
D	Max. dumping height	3460 mm
E	Min. dumping height	1 210 mm
F	Max. vertical digging depth	2700 mm
G	Overall height over arm by min. swing radius	3690 mm
Н	Swing radius by max. boomswing (L)	2000 mm
	Swing radius by max. boomswing (R)	2160 mm
	Min. swing radius	2420 mm
I	Max. clearance when blade up	375 mm
J	Max. depth of blade down	370 mm
Κ	Offset boom (L)	800 mm
	Offset boom (R)	550 mm
	Max. boom-swing angle (L)	57°
	Max. boom-swing angle (R)	63°







# EQUIPMENT

#### The SY35U – already well equipped with high-quality features as standard

Productive and concentrated work is only possible with the right equipment. The SY35U leaves practically nothing to be desired here.

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

Heater	•
Manual air condition system	•
Radio and speaker	•
Armrests (adjustable)	•
12v outlets	•
Wiper	•
Sprayer f. wiper	•
AUX 1 on Joystick	•
AUX 2 on Joystick	•
8 stored hydraulic settings for attachments	•

#### SAFFTY

Battery master switch	•
Beaconlamp	•
Lockable hoods	•

#### 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 guardes – boom	•

#### Standard equipment • Special option •

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.



#### WORKING LIGHTS

Lights front (LED)	•
Lights - boom (LED)	•
UNDERCARRIAGE	
Rubber tracks	•
Steel tracks	•
Safety valves on blade cylinder	•
Holes/loops for fixing	•

#### ENGINE

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

•

•

# HYDRAULIC SYSTEM

Swing brake	
2 speed travel	
Hydr. Pre-pressure operating joysticks	
Mainfilter	

# **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 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.

#### 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.

#### GERMANY Cologne

#### 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.



# SANY 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.

# HIGHLIGHTS <mark>SY35U</mark>



# THE LITTLE ONE WHO OVERCOMES BIG THINGS

Precise results and reliable high performance, getting down to work even in confined spaces – the SY35U offers everything you expect from a mini excavator. It is robust, easy to use and, thanks to its excellent performance data, suitable for all types of excavation work.

#### **ROBUST AND DURABLE**

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

#### EXTREMELY COMFORTABLE

Impressively simple control thanks to the **large display** and the **various working modes** – combined with the comfort of an **air conditioning system**.

#### **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**.

#### **COMPACT POWER**

In its performance class, the SY35U is an outstanding powerhouse with the small dimensions of a short-tail swing excavator. The swivel bracket further increases flexibility.

#### **ECONOMIC**

The low **fuel consumption in compliance with emission standard 5**, the intelligent load-sensing hydraulic system and the option of purchasing the SY35U as a canopy are all impressive as a complete package with an excellent price-performance ratio.

#### **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**, which includes several **LED work lights**.

#### **TECHNICAL HIGHLIGHTS**

YANMAR 3TNV88F
18.2 kW / 2400 rpm
94.2 Nm / 1 320 rpm
4.5 km/h
9 rpm
Variable displ. axial piston pump
88 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 EUROPE GmbH** Sany Allee 1 D-50181 Bedburg fon +49 2272 90531 100 fax +49 2272 90531 109 info@sanyeurope.com www.sanyeurope.com