



**COMPACT EXCAVATORS** 

SY155U

Engine
ISUZU '4JJ1X
Rated Power
78.5 kW / 1900 rpm
Bucket capacity
0.6 m³
Operating mass
16 000 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





# Max. bucket digging force 103 kN (ISO) Max. arm digging force 67 kN (ISO) Swingspeed 12.5 rpm Max. travel speed 5.3 km/h

# PROFITABILITY FOR THE NEXT GENERATION

How can we pack maximum working power into the smallest possible space? It's quite simple: With our sophisticated SANY compact excavator concept, and the SY155U short-tail-swing excavator is the jewel in the crown. Its compact dimensions and resulting short slewing radius allow it to work even in extremely tight spaces with no reduction in performance. It doesn't shy

away from difficult tasks. It performs them with the help of its powerful drive and fully developed hydraulic system. The substantial machine weight and wide, stable undercarriage ensure secure stability. It boasts the best features for a variety of tasks and achieves exemplary productivity.



TOP PROPERTIES

**USER EXPERIENCE** 

Ergonomic design and enhanced user experience - The wide opening engine

bonnet and clear, central arrangement of the

key components make routine tasks such as

# LESS IS MORE

Outstanding performance with low energy consumption - the efficient high-performance unit makes it possible. The smart auto-throttle function combines the best fuel efficiency with high power output. For the machine, this means not only lower fuel consumption, fewer exhaust emissions and reduced wear, but also enhanced driver comfort thanks to reduced engine noise and load relief due to automatic idling mode.

QUALITY

Stable foundation - For those who value durability and stability, the HD chassis is essential. You are covered with the SY155U, because the HD undercarriage comes as standard.

#### **DIMENSIONS**

Performs in the tightest spaces\_ The powerful short-tail-swing machine with short overhang radius enables working even in tight spaces, where conventional machines would not be suitable



#### **SAFETY**

Protection for both people and the machine- From its stable, non-slip hand rails to its large mirrors and its camera, the safety package ensures that your construction site runs safely every day.

#### **COMPONENTS**

Thoroughly reliable – The quality and consequently the stability of the boom is a particular priority for SANY. The topside and underside of the SY155U are also manufactured from one continuous metal sheet.

#### **ECONOMY**

Efficiency and power- The smart control system adapts the pump capacity to the available engine power for greater performance and reduced fuel consumption. This boosts profitability on every construction site.

**ECONOMY** 

#### **Performance plus flexibility:** The efficiency formula for intelligent

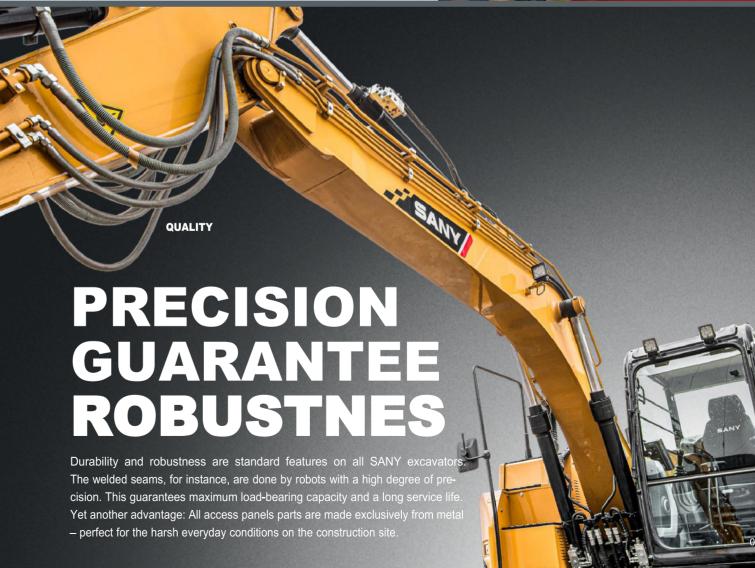
Those who now wish to work cost-efficiently on construction sites should avoid achieving performance at the expense of high energy consumption. Therefore, SANY has developed its compact excavator with efficiency as the highest priority. With the SY155U, you will benefit from an exemplary price-performance ratio, an efficient use of fuel and minimal maintenance costs with long maintenance intervals.

COMPONENTS

#### **Reliable drive**

The tried-and-tested ISUZU- engine guarantees reliable performance in the long term, even in harsh working conditions.







THE DRIVER'S CAB -

WELCOME TO
THE COMFORT ZONE

Safe, easy entry, plenty of room and full visibility outside – the driver's cab leaves nothing to be desired. The driver can also enjoy a comfortable, fully adjustable air-suspension seat, ergonomic controls and a modern audio system.

The automatic climate control and powerful ventilation and heating ensure that the temperature and fresh air levels in the cab are always perfect.





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

- + Reinforced chassis
- + Comfortable air-suspension seat
- + Compact short-tail-swing machine
- + Clear instruments
- + Large, high-resolution display
- + High safety standards, e.g. camera
- + ROPS/FOPS-certified for safety in operation



#### **USER EXPERIENCE**

#### **Trust your instincts**

The intuitive operation of all excavator functions via the joystick control makes optimum performance achievable with precision. The ergonomic shape of the joystick ensures that it sits comfortably in your hand and allows precise handling. The two auxiliary control circuits already come as part of the standard equipment and allow operation of various attachment devices such as tilt buckets or grapples. Both of these proportional control functions are operated smoothly via the sliders in the joysticks.



#### **USER EXPERIENC**

## Intelligent solutions for quick maintenance

The SY155U's maintenance-friendly concept is based on simplicity. The engine bonnet is easy to open, which makes all components needed for regular checks and maintenance easily accessible. The filter, radiator and battery are arranged centrally and can therefore be accessed easily and quickly. Particularly long oil change intervals also help keep downtimes to a minimum.



#### USER EXPERIENCE

#### Always optimally configured

A monitor with a high-resolution display shows all important data at a glance. The menu navigation is extremely user-friendly and enables the driver to manage machine functions safely and comfortably. The camera image can also be shown on the display if required.

The next inspection due and basic data such as torque and oil and cooling water temperatures are also displayed. Various attachment devices can also be easily changed at the touch of a button within the programme.

By pressing a button you can easily choose the operating mode that best suits the task at hand. The smart SANY drive control takes care of the rest. It always adjusts the engine and hydraulic power precisely to your requirements.





#### **ENGINE**

Model	ISUZU 4JJ1X	
Тур	Water-cooled, 4 cylinder, with commonrail and Adblue	
Exhaust emissions	Stage V	
Rated power	78.5 kW / 1 900 rpm	
Max. torque	375 Nm / 1800 rpm	
Displacement	2999 ccm	
Batteries	2 x 12V / 120 Ah	

#### SERVICE REFILL CAPACITIES

Fuel tank	210	
Engine coolant	23.61	
Engine oil	15 l	
Drive (per side)	1.8	
Adblue	20	
Hydraulic oil tank	110 I	

#### PERFORMANCE

Swingspeed	12.5 rpm	
Max. travel speed	High 5.3 km/h, slow 3.1 km/h	
Max. travel force	114 kN	
Gradeability	35°	
Bucket capacity	0.6 m³	
Groundpressure	0.41 kg/cm <sup>2</sup>	
Bucket digging force ISO	103 kN	
Arm digging force ISO	67 kN	

#### OPERATING MASS

SY155U	16 000 kg	
SY155U weight w/o blade	15 350 kg	

#### RELIEF VALVE SETTINGS

Implement circuit	343 bar	
Swing circuit	250 bar	
Travle circuit	343 bar	
Pilot pressure	39 bar	

#### HYDRAULIC SYSTEM

Mainpump	2 x variable-piston-pump with electronic positive control
Max. oilflow	2 x 110 l/min
Max. oilflow (AUX 1)	110 l/min
Max. oilflow (AUX 2)	70 l/min
Travelmotor	Variable displacement axial piston motor
Swingmotor	Axial piston motor

#### UNDER AND UPPER STRUCTURE

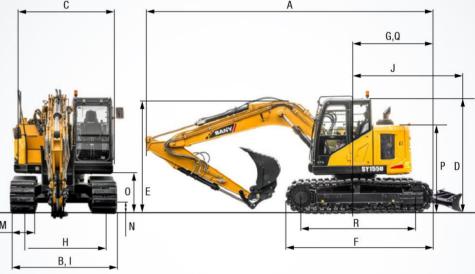
Boom length	4600 mm
Arm length	2500 mm
Bottomrollers	7
Toprollers	1
Rotation device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released

#### LIFTING CAPACITIES OF LOWER AND UPPER DOZER BLADE

Load point heigh	Radius							Digging reach							
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4,0 m kg			4736	4736	4643	3487	4146	2628	3822	2048			1764	1764	6,3
3,0 m kg			6858	4607	5314	3325	4484	2537	3967	2001			1625	1625	6,9
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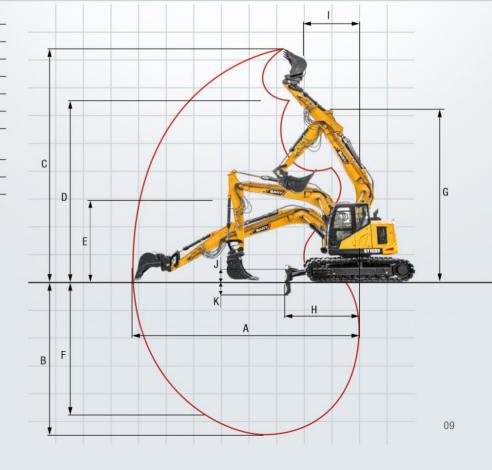
#### DIMENSIONS (TRANSPORT)

Α	Transport length	7 300 mm
В	Transport width*	2590 mm
	Transport width **	2690 mm
С	Upperstructure carriage	2490 mm
D	Height over cabin/ROPS	2820 mm
E	Height of Boom – transport	2755 mm
F	Overall length of crawler	3665 mm
G	Tail length	1 500 mm
Н	Track gauge	1 990 mm
I	Undercarriage width (blade)*	2590 mm
	Undercarriage width (blade) **	2690 mm
J	Horizontal distance to blade	2650 mm
K	Blade height	480 mm
L	Track height	815 mm
M	Track pads width*	600 mm
	Track pads width**	700 mm
N	Min. ground clearance	425 mm
0	Counterweigth clearance	910 mm
P	Engine cover height	1 418 mm
Q	Tail swing radius	1 500 mm
R	Center distance of tumblers	2930 mm



#### WORKING AREA

Α	Max. digging reach	8338 mm
В	Max. digging depth	5 468 mm
С	Max. digging height	9218 mm
D	Max. dumping height	6756 mm
E	Min. dumping height	2920 mm
F	Max. vertical digging depth	3796 mm
G	Overall height over arm by min. swing radius	6749 mm
Н	Arm head distance with work equipment retracted as far as possible	2650 mm
ı	Min. swing radius	2086 mm
J	Max. clearance when blade up	504 mm
K	Max. depth of blade down	350 mm



<sup>\*</sup> at 600 mm track pads width \*\* at 700 mm track pads width

Ready for any challenge

Its extensive standard equipment makes the SY155U a perfect partner to tackle everyday challenges on the construction site. Optional extra equipment and attachment devices are also available to increase its flexibility even more.



#### OPERATORS COMFORT / CABINE

Airsuspension seat	•
Heated seat	•
Heater	•
Automatic air conditioning C/H	•
Radio and speaker	•
Armrests (adjustable)	•
12v outlets	•
Wiper	•
Sprayer f. wiper	•
Sky light openable	•
Integrated cooling box	•
AUX 1 on Joystick	•
AUX 2 on Joystick	•
Removable front-window	•
Rubberfloor	•

#### **WORKING LIGHTS**

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

#### **ENGINE**

Auto idle	•
DPF	•
Diesel filter	•
Airfilter	•

Standard equipment 
Special option

#### **WORKING EQUIPMENT**

Boom and arm load holding valves with overload indicator  Double acting circuit for hydraulic quick coupler with piping	
Rotation line proportional on Joystick with piping	
Flow adjustment for attachments	
Dozer blade	
Without dozer blade	

#### SAFETY

Battery master switch	•
Warning beacon	•
Lockable hoods	•
Handrails	•
Lockablge fuel cap	•

#### **UNDERCARRIAGE**

Steel tracks	•
Holes/loops for fixing	•

#### 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	•
Mainfilter	•

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



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. If the repair cannot be undertaken on-site or in good time, Vertu will arrange a similar replacement while your machine is repaired under warranty.

#### **National Service Representation**

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

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.

#### **NEW ZEALAND**



#### 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.

#### 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.

#### **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.





The SY155U short-tail-swing excavator shows what it's capable of, even in confined areas. The compact design with short slewing radius allows for powerful operation even in tight spaces. And thanks to its manoeuvrability, you can easily access areas not possible with other machines of its type.

#### STABLE FOUNDATION

HD undercarriage as standard: You can rely on the enhanced control of the idler to guarantee a long service life, even with the toughest applications. The powerful ISU-ZU-AR-4JJ1XASC engine with AdBlue emission control is part of this.

#### PERFORMS IN THE TIGHTEST OF SPACES

Experience **compact mobility** with this short-tail-swing machine. Perfect for working in places where space is limited, for example in inner-city areas.

# ERGONOMIC DESIGN AND ENHANCED USER EXPERIENCE

From the air-suspension seat to the large storage compartments – the driver's cab was built for comfort.

### PROTECTION FOR PEOPLE AND MACHINES

Safety valves are essential for safety on the construction site, not only when lifting loads but also when moving earth masses – so naturally, they are provided as **standard** with the SY155U.

#### THOROUGHLY RELIABLE

Continuous sheet metal on the topside and underside of the boom and particularly precise, robot-controlled welded seams underpin our quality standards for the toughest requirements.

#### **EFFICIENCY AND POWER**

Low energy consumption levels are a characteristic feature of the SY155U. The smart hydraulic system ensures the highest possible fuel efficiency, fewer exhaust emissions and reduced wear.

#### **TECHNICAL HIGHLIGHTS**

Max. oilflow	2 x 110 l/min
Mainpump	2 x variable-piston-pump with electronic positive control
Swingspeed	12.5 rpm
Max. travel speed	5.3 km/h
Max. torque	375 Nm / 1 800 rpm
Rated power	78.5 kW / 1 900 rpm
Engine	ISUZU 4JJ1X



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