

CONSTRUCTION MACHINERY



COMPACT EXCAVATORS SY155U

Engine
ISUZU 4JJ1X
rated Power
78.5 kW / 1 900 rpm
Bucket capacity
0.6 m³
Operating mass
16 000 kg

SANY

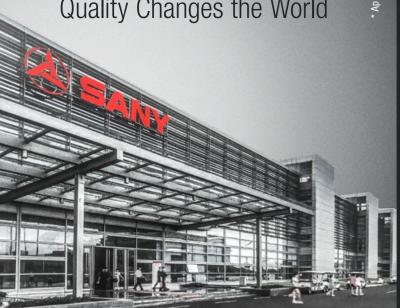
For challenging tasks, you need a first-class partner

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 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

Quality Changes the World





HARD FACTS 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

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.

USER EXPERIENCE

Ergonomic design and enhanced user

experience – The wide opening engine

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

powerful short-tail-swing machine with short overhang radius enables working even in tight spaces, where conventional machines would not be suitable.

bonnet and clear, central arrangement of the key components make routine tasks such as maintenance and servicing simple and quick. Performs in the tightest spaces - The

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.

FCONOMY

Performance plus flexibility: The efficiency formula for intelligent minds

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.



Absolute reliability – for peace of mind!

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

* Key component warranty





Durability and robustness are standard features on all SANY excavators. The welded seams, for instance, are done by robots with a high degree of precision. This guarantees maximum load-bearing capacity and a long service lif Yet another advantage: All access panels parts are made exclusively from metal - perfect for the harsh everyday conditions on the construction site.



USER EXPERIENCE

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 EXPERIENCE

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	
Exhaust emissions	Stage V	
Rated power	78.5 kW / 1 900 rpm	
Max. torque	375 Nm / 1 800 rpm	
Displacement	2 999 ccm	
Batteries	2 x 12V / 120 Ah	

SERVICE REFILL CAPACITIES

Fuel tank	210
Engine coolant	23.6
Engine oil	15 I
Drive (per side)	1.8
Adblue	201
Hydraulic oil tank	110

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 ²
Bucket digging force ISO	103 kN
Arm digging force ISO	67 kN

OPERATING MASS

SY155U	16 000 k

RELIEF VALVE SETTINGS

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

HYDRAULIC SYSTEM

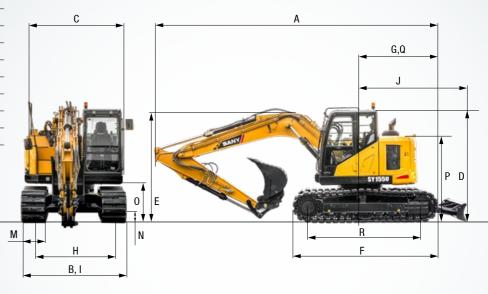
Mainpump	2 x variable-piston-pump with electronic positive control
Max. oilflow	2 x 110 l/min
Max. oilflow (AUX 1)	110 l/min
Max. oilflow (AUX 2)	70 I/min
Travelmotor	Variable displacement axial piston motor
Swingmotor	Axial piston motor

UNDER AND UPPER STRUCTURE

Boom length	4 600 mm
Arm length	2 500 mm
Bottomrollers	7
Toprollers	1
Rotation device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake

DIMENSIONS (TRANSPORT)

Α	Transport length	7300 mm
В	Transport width	2590 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	1500 mm
Н	Track gauge	1990 mm
I	Undercarriage width (blade)	2590 mm
J	Horizontal distance to blade	2650 mm
K	Blade height	480 mm
L	Track height	815 mm
M	Track pads width	600 mm
N	Min. ground clearance	425 mm
0	Counterweigth clearance	910 mm
P	Engine cover height	1 418 mm
Q	Tail swing radius	1500 mm
R	Center distance of tumblers	2930 mm

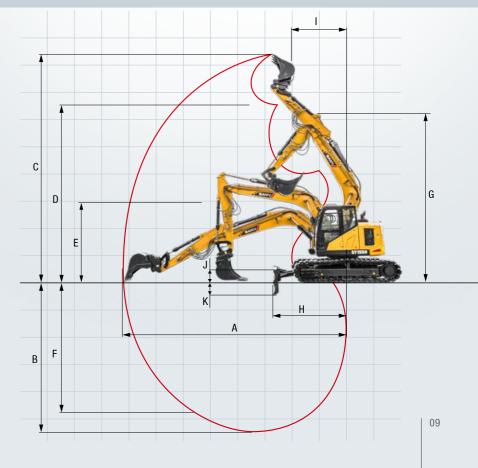


LIFTING CAPACITIES OF LOWER AND UPPER DOZER BLADE

Load point heigh						Rad							Dig	ging reac	h
Load point noigh	2,0 r		3,0 m		4,0 n		5,0 n		6,0 n		7,0 m		Max		Meter
below	3		>=	3	3—3		>=							5	
7,0 m kg					3 353	3 3 5 3							2536	2536	4,3
6,0 m kg					3632	3632	3310	2687					2216	2216	5,4
5,0 m kg					3594	3594	3944	2685	2590	2061			1994	1994	6,1
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
2,0 m kg			8370	4238	6031	3140	4855	2432	4144	1941	2549	1 574	1548	1548	7,1
1,0 m kg			6651	3979	6547	2980	5144	2334	4278	1881	2748	1545	2183	1 520	7,1
Ground line kg			6813	3868	6703	2876	5 2 5 3	2260	4293	1834			2366	1539	6,9
-1,0 m kg	4686	4686	8485	3839	6484	2826	5115	2218	4163	1854			2659	1612	6,6
-2,0 m kg	7212	5997	7511	3854	5892	2819	4659	2209	3559	1813			3151	1763	6,2
-3,0 m kg	7480	6088	6070	3909	4842	2853	3697	2242					3048	2050	5,5
-4,0 m kg			3876	3876	2956	2948							2372	2372	4,4
	2,0 r		3,0 m		4,0 n		5,0 n		6,0 n		7,0 m		Max		Meter
above	—)							A	
7,0 m kg					3 353	3353							2536	2536	4,3
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5,0 m kg					4203	3594	3592	2685	2590	2061			2073	1994	6,1
4,0 m kg			4736	4736	4621	3487	3 5 3 5	2628	2803	2048			2016	1764	6,3
3,0 m kg			6118	4607	4459	3 3 2 5	3444	2537	2756	2001			2019	1625	6,9
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1,0 m kg			5490	3979	4114	2980	3 2 4 1	2334	2637	1881	2192	1545	2160	1 520	7,1
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-3,0 m kg	7480	6088	5 4 2 1	3909	3987	2853	3149	2242					2881	2050	5,5
-4,0 m kg			3876	3876	2956	2948							2372	2372	4,4

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
Ε	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
	Min. swing radius	2086 mm
J	Max. clearance when blade up	504 mm
K	Max. depth of blade down	350 mm



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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	•
Breaker&Shear line proportional on Joystick 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

•	
•	
•	
•	

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 certainty that you are supported with service and parts, wherever you are located.

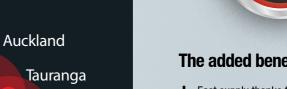
Parts and Inventory

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.

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 premuim service

Christchurch



The added benefits SANY offers you:

- + Fast supply thanks to NZ Vertu Equipment branch locations
- → More than 15,000 spare parts to make your ma chine highly reliable
- Expert knowledge for optimal supply for your machine
- Thanks to SANY's special training programme, our technicians are always kept up-to-date so that they can face all technical challenges.

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 **SY155U**

COMPACT PRODUCTIVITY

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.

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

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



"THE MACHINE IS ECONOMICAL AND POWERFUL!"

Stefan Welsch

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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