



SANY HEAVY MACHINERY LTD

<http://www.sanyglobal.com>

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SY155W

Engine power

115kW/2000rpm

Bucket capacity

*0.65 m³

Operating weight

15500-16700kg



Comfortable driving



Precise handling



Diverse configurations



Powerful Performance



Durable structure



* Bucket is optional



More powerful

Powerful, low fuel consumption straight four-cylinder engine, rated power/speed :115kW/2000rpm, maximum torque/speed: 609N.m / 1600rpm. Using the latest fuel saving technologies such as in-cylinder direct injection, ultra-high compression ratio and turbocharging, the environment-friendly high-power engine has strong power. Sufficient power reserve to extend engine life by more than 10%. Equipped with silicone oil clutch fan, which can greatly reduce fan noise and reduce fuel consumption by 5%;

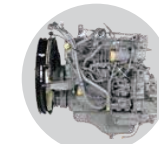
DOMCS dynamic optimization and intelligent matching technology

Adopt a new intelligent dual-core controller, equipped with the original DOMCS dynamic optimization intelligent control system, for the hydraulic system adopts the neural network, fuzzy PID and variable speed integration and other advanced control theory, according to the load situation to achieve the engine and pump real-time perfect match, bring high efficiency and fuel saving at the same time, to ensure the comfort of control.

Brand new intelligence
dual-core controller



Perfectly matched engine
and hydraulic pump power



Highly efficient and energy saving power system

Hydraulic system

This product uses an advanced load sensitive system to sense changes in external load in real time and intelligently adjust hydraulic flow and pressure output to ensure accurate coordination of composite actions of multiple actuators, and completely solve the problem of hysteresis and energy waste of traditional equipment.



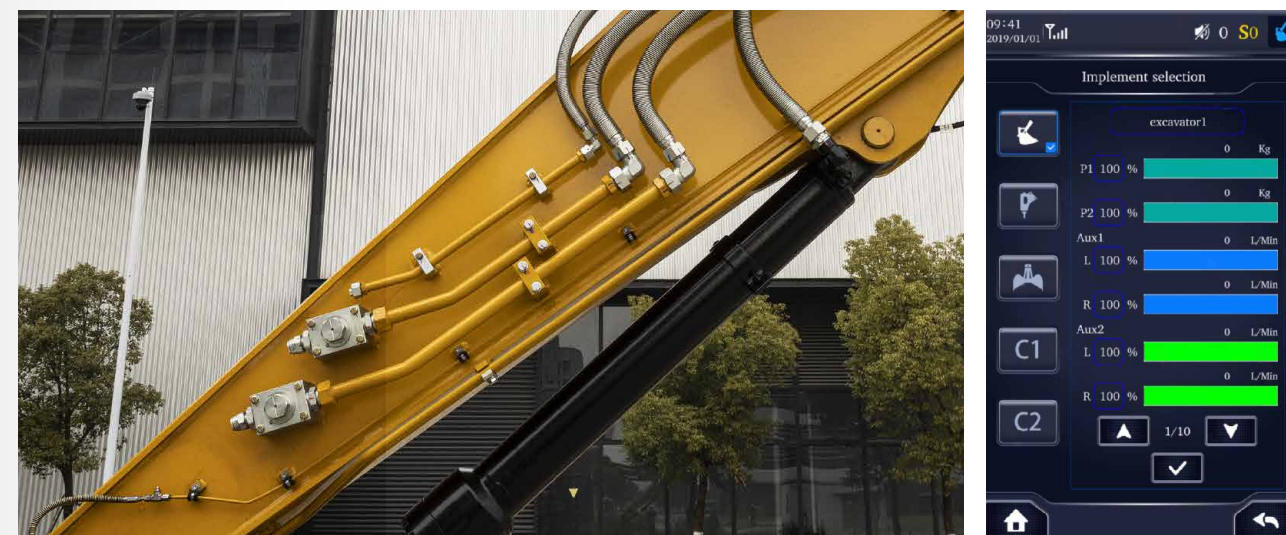
Master valve

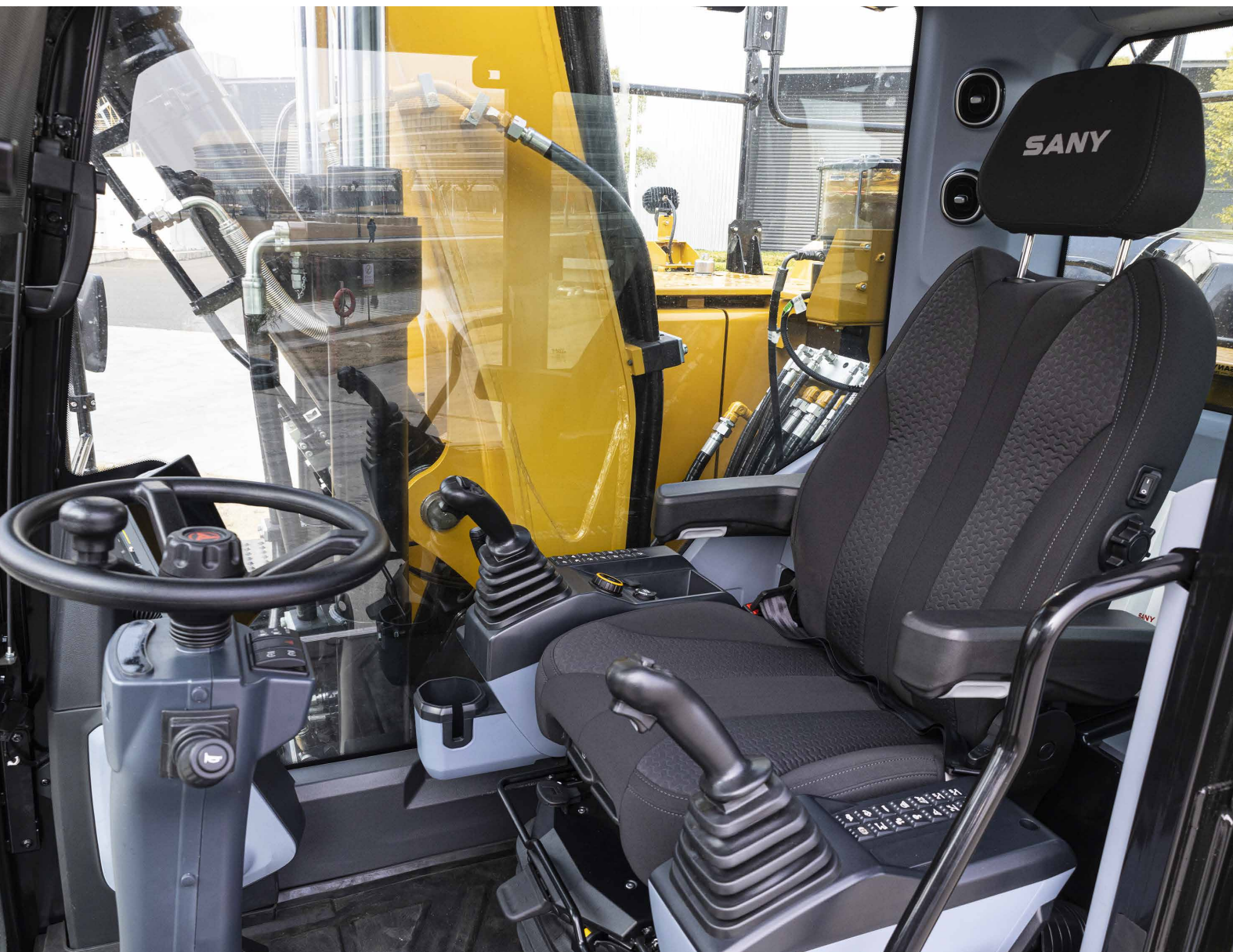
Germany Rexroth original imported M7 hydraulic system, integrated secondary pressurization, dual mode auxiliary regulation (high pressure/medium pressure), walking intelligent flow distribution and other 8 core functions. After the depth adjustment of Trinity heavy machine, the engine and hydraulic millisecond power matching is realized.



Auxiliary line

Equipped with three sets of independent auxiliary pipes, support single/two-way hydraulic one-button switching, with intelligent proportional control handle, to achieve efficient collaborative work of multiple auxiliary tools. The pipeline system adopts quick change design, the switching response time is less than 3 seconds, compatible with more than 20 kinds of equipment such as crushing hammer and hydraulic shear.





New Cab

New cab interior, equipped with one-click start, USB interface, Bluetooth, 360 round view, air suspension seat, seat heating and other functions

10-inch large display screen, suitable for 50 types with switching function, 3 sets of auxiliary pipeline flow pressure adjustable, intelligent touch more convenient

The cab adopts through-wall joint, new sealing technology, multi-pronged to completely solve the problem of ash into the cab; Using vibration and noise reduction technology, **noise reduction 71 decibels**, better than the industry.

Premium Comfort Seat Upgrade

• New Ergonomic Design for Enhanced Fit

The exterior adopts SANY-exclusive styling, with a redesigned A-surface contour that better aligns with the natural curves of the human body.

• Structural and Functional Optimization for Improved Comfort

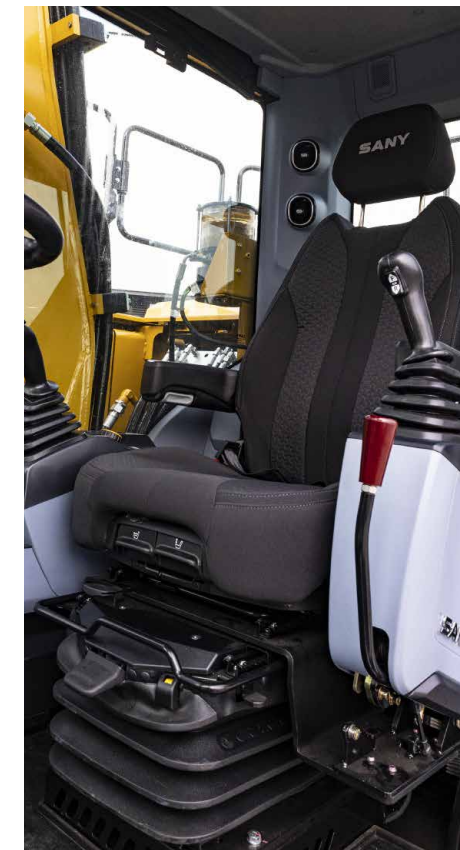
The upgraded backrest frame eliminates pressure points on the waist during reclining. The seat cushion now supports both fore/aft sliding and tilt adjustment, while newly added seat heating and adjustable lumbar support further reduce fatigue.

• Detail Design Refinement for Enhanced Usability

Equipped with rapid-response heating modules, instantly wrap you in cozy warmth during freezing conditions. Winter driving comfort soars to new heights, turning every chilly journey into a luxurious escape.

• Optimized Linkage Mechanism for Effortless Operation

A dual-layer rail system has been implemented, enabling synchronized adjustment between the armrest and seat to improve operational convenience and comfort.



(Translated strictly following original technical descriptions without subjective embellishments.)

360 Panoramic Surround View System

• Panoramic Vision Upgrade | 4-Channel HD Cameras for Full Coverage

Upgraded from a single rearview camera to four high-precision wide-angle cameras (strategically positioned at the front, rear, left, and right), achieving 360° blind spot-free monitoring around the vehicle.

• Interactive Experience Revolution | Split-Screen Display + Free View Switching

Split-Screen Mode: Supports simultaneous display of a main screen and sub-screen (e.g., main screen shows 3D panoramic view while sub-screen zooms in on a single-side close-up), ensuring both key area details and overall perspective are captured.

2D/3D Dual Modes:

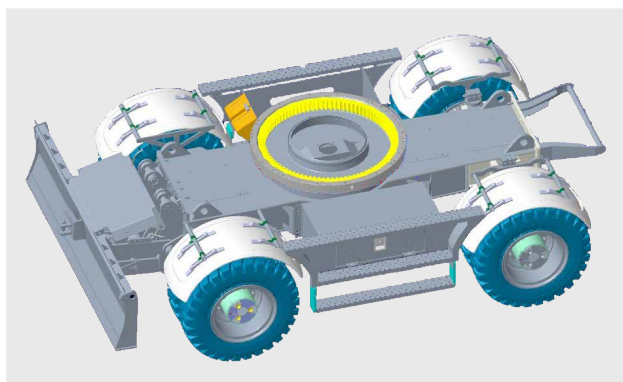
2D Top-Down View: Delivers a bird's-eye perspective for accurate distance assessment between the vehicle and obstacles.

3D Dynamic View: Allows manual rotation to inspect any angle of the vehicle, enabling intuitive control in complex scenarios (e.g., parallel parking, off-road recovery).



Under Carriage

- **Full-time four-wheel drive**, can cope with a variety of road conditions, so that the vehicle has a super ability to escape.
- **Maximum travel speed** increased to 35 km/h, to achieve fast transition.
- **More Comprehensive Optional Configurations**: One type of chassis with 15 different optional features available, including mudguards, solid tires, outrigger, and various other configurations, allowing for customer customization.



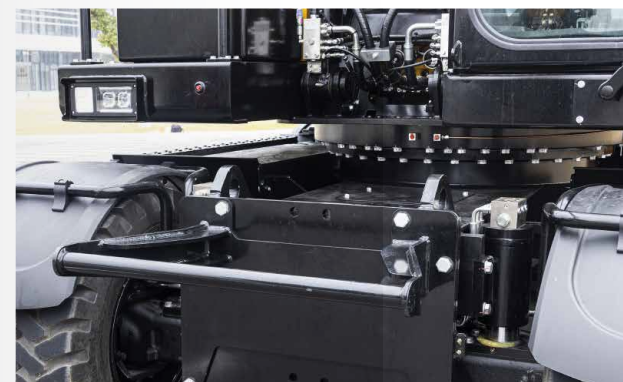
Double-balanced hydraulic suspension system

- The front axle is equipped with a unique double balanced hydraulic suspension system. When a road is rough, the suspension system can automatically adjust the tilt angle of the front axle to keep the cab level, reduce the bumpiness of the whole vehicle and improve the comfort of the passengers. The suspension stroke is up to 120 mm. When traveling on extremely uneven mud, it can still ensure the contact between the four wheels and the ground, effectively play a strong driving force, and ensure the super ability to get rid of difficulties.
- In digging, the controller controls the locking of the balance cylinder to ensure the stability of the front axle. With the shovel bucket, the stability of excavation is greatly improved.



Chassis Optimization Added Standardized Lifting Points

Four **high-strength alloy lifting holes** are integrated at key stress points on the chassis, with diameters compatible with mainstream lifting equipment.



Enhanced Step Connection Steel Cable Upgraded to High-Elasticity Rubber Plate

Traditional steel cable connections are replaced with a **one-piece non-slip rubber plate**, crafted from wear-resistant and anti-aging composite materials.



Scenario-Based Optional Expansion Modular Mudguard Kit

covering all wheel positions (front/rear optional).



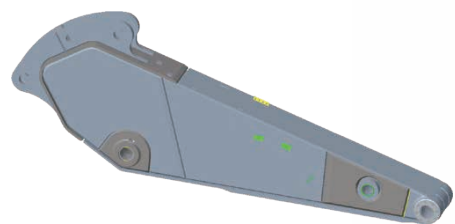
High strength structural parts

The structural parts are designed by the method of finite element analysis and test, and the reliability and durability of the structural parts of the excavator are effectively guaranteed through the fatigue test of two axes and the durability test of the whole machine.

.01

Reinforced arm

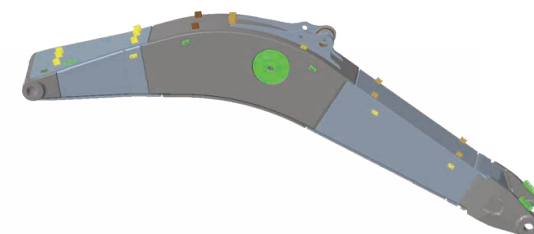
Adopts forging-type rear support to avoid local welding stress concentration and improve reliability; The use of imported wear-resistant plates at the front end makes the bucket rod life longer.



.02

Enhanced boom

The rear support and center support of the boom are forged to avoid local welding stress concentration and improve durability. The key parts are reinforced steel envelope, which is more suitable for harsh working conditions.



Safety protection



Headlights (standard)

Upgraded from halogen to high-lumen LED light source, offering a broader illumination range and lower energy consumption.



Turn Signals (standard)

Matrix-style turn signal clusters added to both sides of the vehicle platform, ensuring clear communication of driving intentions (e.g., lane changes or turns) in traffic.



Warning Lights (optional)

- ◎ No more screws: Magnetic chassis design enables one-second installation/removal, improving maintenance efficiency by 70%.
- ◎ Visual seat belt status: New green seat belt warning light (optional) provides clear status indication.



Protective Guard (optional)

A 270-degree protective guard above the entire vehicle enhances safety during overhead operations.

Work Lights (optional)

In addition to the standard front lighting on the cab, 7 optional lighting units are provided around the vehicle to adapt to polar night working conditions.

Convenient maintenance

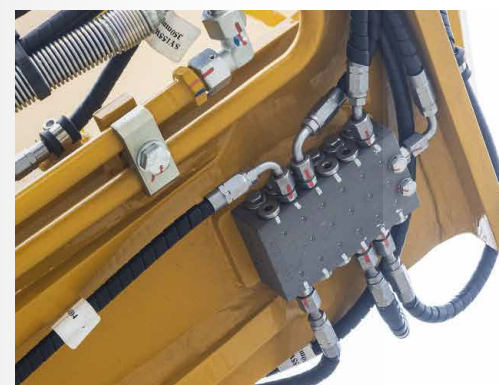
- **Fully open covering design maximizes maintenance space.** The centralized valve group arrangement facilitates one-stop maintenance, improving overall maintenance convenience.
- **Reasonable layout of access:** to ensure that maintenance can easily reach the location you want to go.



Automatic Lubrication System Upgrade:

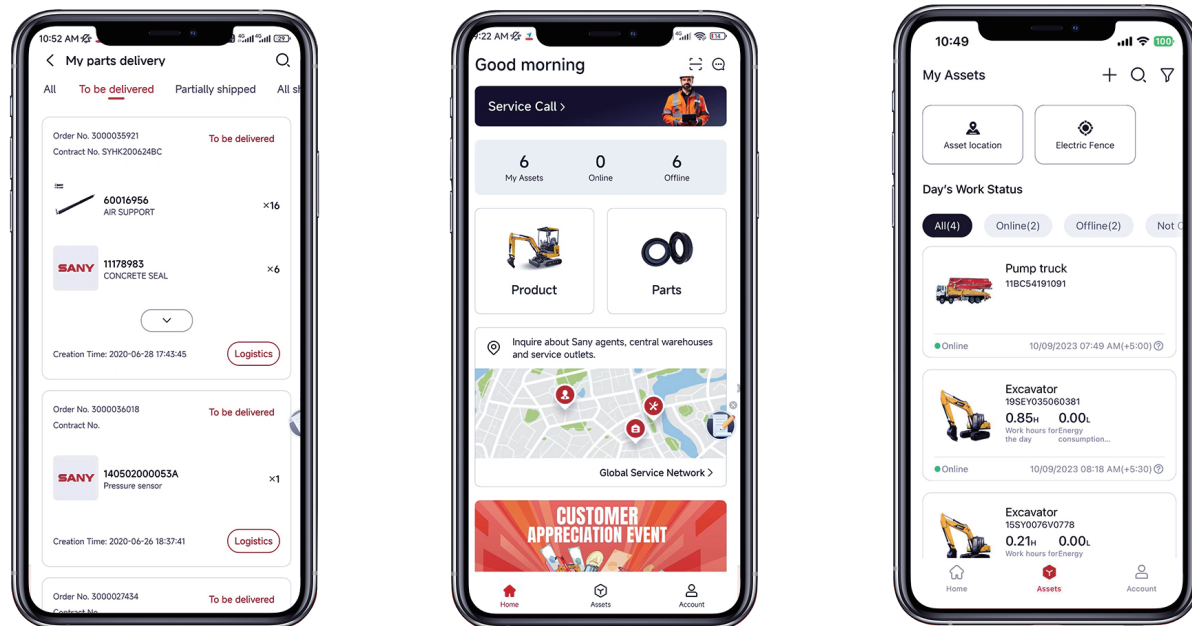
The automatic lubrication system controller is integrated into the main system to eliminate single-point control failures.

Lubrication coverage is now more comprehensive, including full lubrication for the boom, stick, and linkage mechanisms.



MySANY APP

Easy use, quick response



Quick Parts Access

- View parts manuals
- View parts availability
- Check equipment & parts order status

Fleet Management

- Check equipment working condition
- Monitor equipment energy consumption
- Set up e-fence

Streamlined Service

- One-click to initiate service request
- Check global service network
- View local service team's phone number & email



Scan to download!

Complete research & development and test system

It has established complete machine endurance test center with full functions. Each model of excavator must be subjected to over 2,000h field excavating test.

Key components like working device, cab and hydraulic components etc. must be subject to fatigue test over 800,000 times.



Advanced manufacturing technology

SANY has RGV assembling line and full automatic welding robots, and possesses high precision machining equipment and precise machining center.

SANY's manufacturing and assembling lines won five-star national site in 2013 and national quality award in 2014. In 2023, SANY Mini Excavator Factory was awarded as the intelligent factory.



Technical specifications

Specification		Main performance	
Operating weight	15500-16700 kg	Oscillation	±6.5°
Bucket capacity	0.65 m³	Twin wheels	10.00-20
Engine	Tier 4f/Stage V	Tractive force	89 kN
Model	TCD4.1	Max. Travel speed, on road	20.0/35.0 (km/h)
Voltage	2 x 12 V	Max.Travel speed, off road	10 (km/h)
Engine power	115 kw/2000 rpm	Relief valve setting pressur	34/37.5 Mpa
Maximum torque	609 Nm/ 1600 rpm	Breakout force (bucket)	102.3 kN
Displacement	4.1 L	Tearout force	64 kN

Capacity of oil and coolant		Traveling part	
Fuel tank	280 L	Model of tire	10.00-20 16PR
Hydraulic oil tank	150 L	Number of gears	Two gears at the front and Two gears at the back
Engine oil	11.5 L	Min. ground clearance	360 mm
Radiator	26 L	Front axle swing angle	±6.5°
Gyration driving	3 L		
Transmission	2.5 L		

Wheel side of axle	4x2.4 L
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Lifting capacity table

Rated Lift Capacity(Kg)-SY155W									
	3.0m		4.5m		6m		Max		
									m
7.5m	—	—	3630*	3630*	—	—	3390	3840*	4.95
6.0m	—	—	3410*	3410*	2510	3320	2270	3000	6.33
4.5m	—	—	3920	3980*	2480	3280	1840	2450	7.12
3.0m	—	—	3660	4980	2380	3710	1590	2130	7.53
1.5m	—	—	3390	4680	2260	3050	1650	2210	7.61
0m	—	—	3240	4520	2180	2960	1650	2210	7.38
-1.5m	6020	9130	3220	4500	2170	2950	1850	2490	6.81

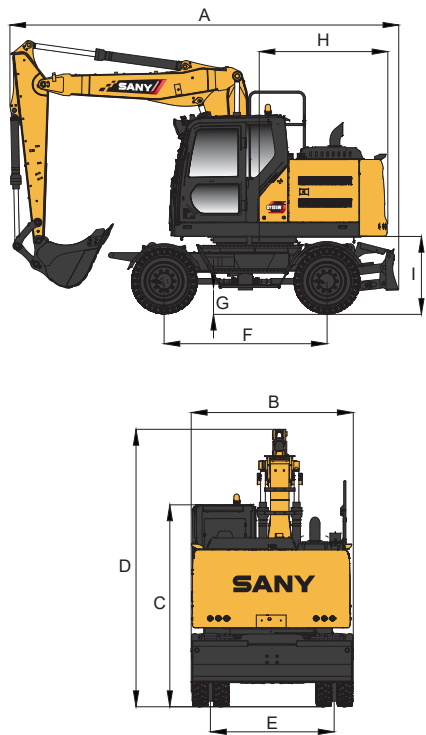
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									m
7.5m	—	—	3630*	3630*	3340	3520*	3840*	3840*	4.95
6.0m	—	—	3410*	3410*	3310	3620*	3030	3620*	6.33
4.5m	—	—	3980*	3980*	3200	4040*	2490	3590*	7.12
3.0m	—	—	4920	4990*	3080	4510*	2180	3700*	7.53
1.5m	—	—	4640	6070*	4800*	3000	2260	3790*	7.61
0m	—	—	4490	6590*	2990	4690*	2260	3790*	7.38
-1.5m	8600	9600	4470	6480*			2540	3870*	6.81

1. The lifting capacity is calculated in accordance with ISO10567 and SAEJ1097, where the limit coefficient of the hydraulicsystem is 0.87 and tilting limit coefficient is 0.75;

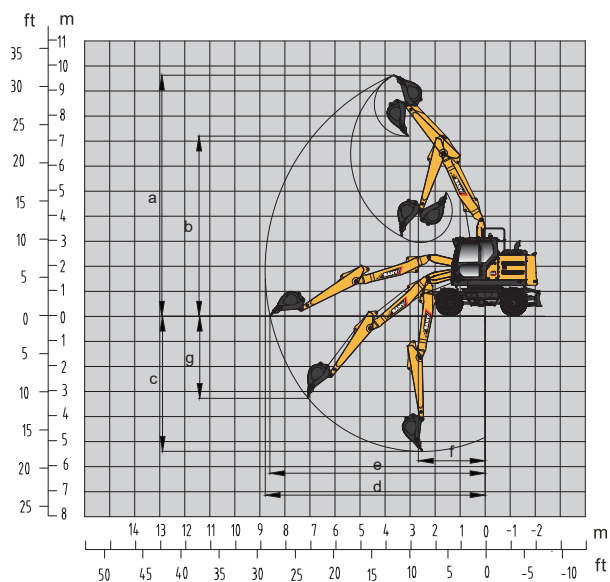
2. The item with the mark * is limited by hydraulic pressure and the item without the mark “*” is limited by stability;

3. The lifting point is the front support hole of the grab arm (excluding the weight of the bucket). If additional accessories such as the bucket are added, they shall be deducted from the above lifting weight.

Machine dimensions



Overall dimensions (mm)	SY155W
A.Overall length(transportation)	8000
B.Overall width	2550
C.Overall height(cab top)	3200
D.Overall height(transportation)	3980
E. Track width	1944
F. Wheelbase	2600
G.Min. ground clearance	360
H.Tail gyration radius	2120
I. Ground clearance of counterweight	1230



Operating range (mm)	SY155W
a. Maximum digging height	9700
b.Maximum dump height	7150
c. Maximum digging depth	5260
d.Max. excavation radius	8750
e. Max. ground excavation radius	8540
f. Min. front slew radius	2030
g. Max. vertical digging depth	4220

Standard configuration

Engine	Traveling body of undercarriage	
Euro V Emission Engine	●	Integral Frame ●
Fuel Priming Pump	●	Front Bucket Stand + Rear Dozer Blade ●
Electrically Controlled Silicone Oil Fan	●	Front Dozer Blade + Rear Outriggers ○
Four-stroke, water-cooled, and direct injection turbo-charging	●	Front Outriggers + Rear Dozer Blade ○
Air prefilter	●	Front Outriggers + Rear Outriggers ○
Automatic engine preheating	●	Front Dozer Blade + Rear Dozer Blade ○
H/S/L mode control	●	Left Toolbox Assembly + Right Pedal Assembly ●
Startup protection system	●	Right Toolbox Assembly + Left Pedal Assembly ○
24V/5.0kW starter motor	●	Right Toolbox Assembly + Right Toolbox Assembly ○
50A alternator	●	Left Pedal Assembly + Right Pedal Assembly ○
Dry-type dual-element air filter	●	Pneumatic Tire 10.00-20 ●
Cylinder-type engine oil filter	●	Solid Tire 10.00-20 ○
Cylinder-type fuel oil filter	●	Dual Tires 315/70R22.5 ○
Engine oil cooler	●	Tire Mud Flaps ○
Radiator with protective screen	●	Tow Hook ○
Radiator auxiliary water tank	●	
Fan deflector	●	
Isolated mounted engine	●	
Automatic idling system	●	

● stands for standard configurations ○ stands for optional configurations

Standard configuration

Cab		Hydraulic system	
Multi-Functional Handle	●	Quick Coupling Lines	●
Automatic Air Conditioning	●	Mode Switching	●
Comfortable Seat (Back Adjustment + Heated Seat)	●	First Set of Auxiliary Lines (Flow/Pressure Adjustable)	●
Front Cabin Protection Net	○	Second Set of Auxiliary Lines (Flow/Pressure Adjustable)	●
Top Cabin Protection Net	○	Boom and Arm Burst Protection Valves	●
Front Lower Cabin Protection Net	○		
Parallel Windshield Wiper	●		
Front Cabin Rain Shield	●		
Full Upper Vehicle Protection Rail	○		

working device

0.6m³ Bucket	○
1.9m Boom / 3.1m Arm	●
2.5m Stick	●

Electric	Function	
Halogen Headlights	●	Automatic Lubrication ●
LED Headlights	●	Maximum Speed 20km/h ●
One-key Start	●	Maximum Speed 35km/h ○
Bluetooth/USB	●	Cruise Control Function ●
Touch Screen Display	●	Floating Boom Function ●
14 Languages	●	Overload Alarm Function ●
Rearview Camera	○	Swing Lock Function ●
360-degree Camera	●	Startup Password Function ●
Seat Belt Warning Light	○	50 Sets of Attachments Optional and Memory Function ●
Audible and Visual Alarm Light	●	
Auxiliary Lighting	○	
License	●	

