

**POWER  
INDUSTRIAL**

**SANY**

PRODUCT SPECIFICATIONS

**EXCAVATOR**

||| **SY155U**



PRODUCT SPECIFICATIONS

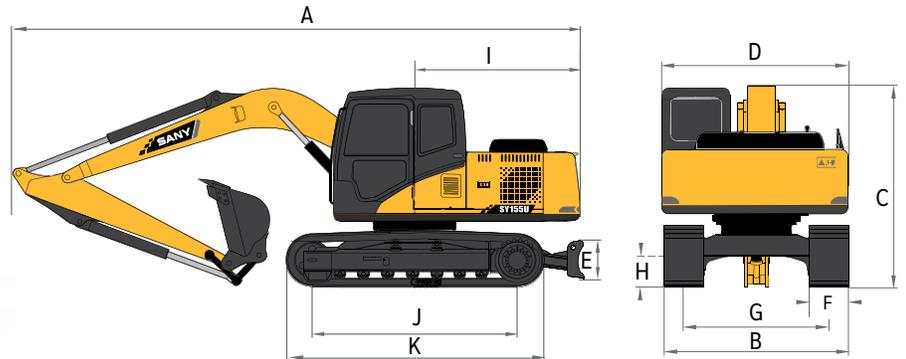
# EXCAVATOR

# SY155U

## STANDARD FEATURES

- ➔ Fixed boom functionality and reduced tail swing
- ➔ Quick coupler plumbed to end of stick
- ➔ 1-way and 2-way primary auxiliary with 2-way secondary auxiliary circuits
- ➔ Rear view camera
- ➔ Heated air ride seat
- ➔ Powerful Isuzu Engine

103.9 hp  
Net Power  
17' 11"  
Dig Depth  
35,274 lbs  
Operating Weight  
23,155 lbf  
Bucket Breakout



## TECHNICAL SPECIFICATIONS

Operating Weight	35,274 lbs	16 000 kg
Ground Pressure	5.9 psi	41.0 kPa
Engine	ISUZU FT4-4JJ1X	
Displacement	183.0 in <sup>3</sup>	3.0 L
Gross Power	105.3 HP	78.5 kW
Net Power	103.9 HP	77.5 kW
Hydraulics	Positive Flow Control w/Pilot Control	
Main Hydraulic Pump	Axial Piston – Variable Displacement	
Operating Flow (maximum)	58.1 gal/min	220.0 L/min
Operating Pressure (maximum)	4,975 psi	34.3 MPa
Primary Auxiliary Flow	29.1 gal/min	110 L/min
Primary Auxiliary Pressure (maximum)	4,975 psi	34.3 MPa
Secondary Auxiliary Flow (maximum)*	18.5 gal/min	70 L/min
Secondary Auxiliary Pressure (maximum)	3,553 psi	24.5 MPa
Travel Motor	Axial Piston with Park Brake	
Travel Pressure (maximum)	4,975 psi	34.3 MPa
Travel Speeds (maximum)	1.9 / 3.3 mph	3.1 / 5.3 km/hr
Travel Effort (maximum)	25,628 lbf	114.0 kN
Grade Capability (maximum)	35°	
Swing Motor	Axial Piston with Swing Brake	
Swing Pressure (maximum)	3,626 psi	25.0 MPa
Swing Speed (maximum)	12.5 RPM	
Undercarriage (standard)	Steel Track	
Track Shoe Width (standard)	24"	600 mm
Track Rollers (per side)	7	
Carrier Rollers (per side)	1	

\*Based on theoretical calculation at max flow with no load. Subject to alterations. In the interest of continual equipment development

## DIMENSIONS

## DIMENSIONS

Boom Length	15' 1"	4 600 mm
Stick (Arm) Length	8' 2"	2 500 mm
A Transport Length	24' 5"	7 430 mm
B Transport Width	8' 6"	2 600 mm
C Transport Height	9' 3"	2 820 mm
D Upper Structure Width	8' 2"	2 490 mm
E Blade Height	1' 8"	504 mm
F Track Width (standard shoe)	24"	600 mm
G Track Gauge	6' 6"	1 990 mm
H Ground Clearance (minimum)	1' 5"	425 mm
I Tail Swing Radius	4' 11"	1 500 mm
J Track Length on Ground	9' 7"	2 930 mm
K Track Length	12' 0"	3 665 mm

## SERVICE REFILL CAPACITIES

Fuel Tank Capacity	55.5 gal	210.0 L
DEF Tank Capacity	5.3 gal	20.0 L
Hydraulic Tank Capacity	29.1 gal	110.0 L
Engine Oil Capacity	4.0 gal	15.0 L
Cooling System Capacity	4.2 gal	16.0 L

s = standard / o = optional

SY155U	ENGINE
s	Isuzu AR-4JJ1X
s	Tier 4F / EU Stage V Ready
s	Auto-idle
s	Dual-element dry air filter
s	Engine air precleaner
s	Coolant Expansion tank
s	Electronic engine control
s	Fan guard
s	Engine coolant to -37 deg. C (-34 deg. F)
s	Full-flow oil filter
s	High flow cooling fan
s	500-hour engine-oil-change interval
s	Fuel filter and water separator
HYDRAULIC SYSTEM	
s	Spring-applied, hydraulically released automatic swing brake
s	Load sensing hydraulic system
s	Control pattern change valve
s	Primary auxiliary hydraulic circuit with 1 and 2-way combination piping
s	Secondary auxiliary hydraulics circuit
s	Auxiliary hydraulic-flow adjustments through monitor
s	Adjustable auxiliary pressure relief
s	Quick coupler ready
UNDERCARRIAGE	
s	Planetary drive with axial piston motors
s	Propel motor shields
s	Spring-applied, hydraulically released automatic propel brake
s	Track guides, front idler and middle 6 per side
s	2-speed travel selection through display and on dozer lever
s	7 lower track rollers each side
s	1 upper carrier roller each side
s	Dozer blade with cylinder guarding
s	Tie downs on track frame and dozer blade
s	600mm (24") wide tripple grouser steel tracks
s	Undercarriage frame opening guard
UPPERSTRUCTURE	
s	Right-hand, left-hand, and counterweight mirrors
s	Lockable cab, hood, and service doors
s	Debris screen in side panel
s	Remote-mounted engine oil and fuel filters
s	Daily fluid level inspection visible from ground
s	Rear reflectors
ATTACHMENTS	
s	Convenient grease points
s	Dirt seals on all bucket pins
s	Thumb bracket



\*Warranty applies to 2023 Excavator and Wheel Loader models only.

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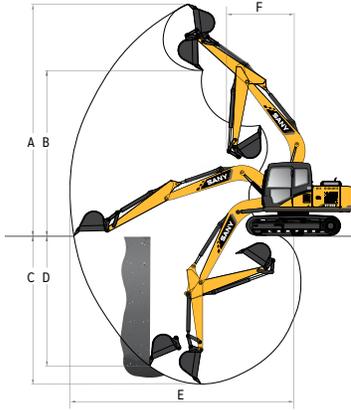
STANDARD AND OPTIONAL EQUIPMENT

s = standard / o = optional

SY155U	ATTACHMENTS
s	Oil-impregnated bushings
s	Reinforced thrust plates
s	Quick coupler plumbing to end of the stick
OPERATOR'S STATION	
s	Hydraulic pilot controls for boom, stick, swing, and travel operations
s	Proportional auxiliary switches on joystick
s	Travel levers with foot pedals
s	AM/FM radio with bluetooth and USB connection port
s	Rearview camera
s	Cell phone tray
s	Weight adjustable suspension cloth seat with fore/aft adjustment and adjustable armrests
s	2" seat mounted lap belt
s	Emergency stop switch
s	Sliding front window
s	Removable lower front window
s	Window breaker
s	ECO mode switch
s	8 tool selection modes
s	Fully adjustable auxiliary flow circuits and pressure from display
s	Multifunction color LCD monitor with: Diagnostic capability / Multiple-language
s	System monitoring features: Auto-idle indicator, 2-speed indicator, work-mode indicator, preheat icon, time and date, battery charge icon, throttle position, engine oil pressure alarm, DPF regeneration inhibit indicator, fuel level gauge, maintenance needed icon, failure code, standard/eco work mode icon, engine coolant temperature, coolant temp alarm, severe failure alarm, work tool mode icon, operating hours
s	High performance heating, ventilation, and air conditioning system
s	Operation and maintenance manual storage
s	Heavy duty removeable rubber floor mat
s	Front windshield wiper with high and low speed
s	Horn, electric
s	Hour meter, electric
s	Hydraulic shutoff lever, all controls
s	Interior light
s	Cup holder
s	Travel alarm with cancel switch
s	Transparent overhead hatch with retractable sunshade
ELECTRICAL	
s	12V electrical system
s	Maintenance free battery
s	Ground level battery disconnect
s	Terminal battery covers
s	80-amp alternator
s	12V power outlet
LIGHTS	
s	Work lights: 2 mounted on top of cab, 1 mounted on boom, magnetic beacon



WORKING RANGE



**WORKING RANGE**

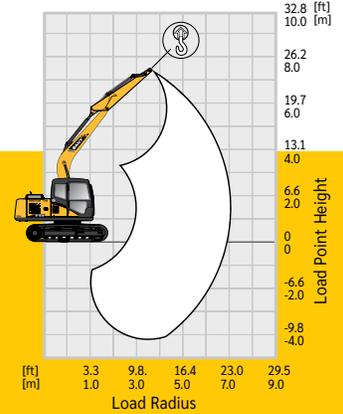
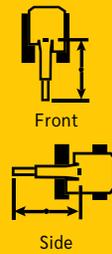
Boom Length	15' 1"	4 600 mm
Stick (Arm) Length	8' 2"	2 500 mm
A Maximum Digging Height	30' 3"	9 218 mm
B Maximum Dumping Height	22' 2"	6 756 mm
C Maximum Digging Depth	17' 11"	5 468 mm
D Maximum Vertical Wall Digging Depth	12' 5"	3 796 mm
E Maximum Reach at Ground Level	27' 4"	8 338 mm
F Minimum Swing Radius	6' 10"	2 086 mm

**DIGGING PERFORMANCE**

Boom Length	15' 1"	4 600 mm
Stick (Arm) Length	8' 2"	2 500 mm
Bucket Breakout Force (ISO)	23,155 lbf	103.0 kN
Stick (Arm) Digging Force (ISO)	15,062 lbf	67.0 kN

Standard 15' 1" (4 600 mm) Boom  
 Standard 8' 2" (2 500 mm) Stick  
 Standard 2" (600 mm) Track Shoes  
 No Bucket

Ratings are based on ISO 10567:2007. Lift capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% of hydraulic lifting capacity.



LIFTING PERFORMANCE

BLADE DOWN

BLADE UP

LOAD RADIUS	6.6 ft 2.0 m		9.8 ft 3.0 m		13.4 ft 4.0 m		16.4 ft 5.0 m		19.7 ft 6.0 m		23.0 ft 7.0 m		MAX REACH	
LOAD POINT HEIGHT														
23 ft					7,392 lb*	7,392 lb*							5,591 lb*	5,591 lb*
7.0 m					3 353 kg*	3 353 kg*							2 536 kg*	2 536 kg*
19.7 ft					8,935 lb*	8,007 lb	7,297 lb*	5,924 lb					4,885 lb*	4,885 lb*
6.0 m					4 053 kg*	3 632 kg	3 310 kg*	2 687 kg					2 216 kg*	2 216 kg*
16.4 ft					9,266 lb*	7,923 lb	8,695 lb*	5,919 lb	5,710 lb*	4,544 lb			4,570 lb*	4,396 lb
5.0 m					4 203 kg*	3 594 kg	3 944 kg*	2 685 kg	2 590 kg*	2 061 kg			2 073 kg*	1 994 kg
13.1 ft			10,441 lb*	10,441 lb*	10,236 lb*	7,688 lb	9,140 lb*	5,794 lb	8,426 lb*	4,515 lb			4,445 lb*	3,889 lb
4.0 m			4 736 kg*	4 736 kg*	4 643 kg*	3 487 kg	4 146 kg*	2 628 kg	3 822 kg*	2 048 kg			2 016 kg*	1 764 kg
9.8 ft			15,119 lb*	10,157 lb	11,715 lb*	7,330 lb	9,886 lb*	5,593 lb	8,746 lb*	4,411 lb			4,451 lb*	3,583 lb
3.0 m			6 858 kg*	4 607 kg	5 314 kg*	3 325 kg	4 484 kg*	2 537 kg	3 967 kg*	2 001 kg			2 019 kg*	1 625 kg
6.6 ft			18,453 lb*	9,343 lb	13,296 lb*	6,923 lb	10,703 lb*	5,362 lb	9,136 lb*	4,279 lb	5,620 lb*	3,470 lb	4,570 lb*	3,413 lb
2.0 m			8 370 kg*	4 238 kg	6 031 kg*	3 140 kg	4 855 kg*	2 432 kg	4 144 kg*	1 941 kg	2 549 kg*	1 574 kg	2 073 kg*	1 548 kg
3.3 ft			14,663 lb*	8,772 lb	14,434 lb*	6,570 lb	11,341 lb*	5,146 lb	9,431 lb*	4,147 lb	6,058 lb*	3,406 lb	4,813 lb*	3,351 lb
1.0 m			6 651 kg*	3 979 kg	6 547 kg*	2 980 kg	5 144 kg*	2 334 kg	4 278 kg*	1 881 kg	2 748 kg*	1 545 kg	2 183 kg*	1 520 kg
0 ft			15,020 lb*	8,527 lb	14,778 lb*	6,340 lb	11,581 lb	4,982 lb	9,464 lb*	4,043 lb			5,216 lb*	3,393 lb
0 m			6 813 kg*	3 868 kg	6 703 kg*	2 876 kg	5 253 kg*	2 260 kg	4 293 kg*	1 834 kg			2 366 kg*	1 539 kg
-3.3 ft	10,331 lb*	10,331 lb*	18,706 lb*	8,464 lb	14,295 lb*	6,230 lb	11,277 lb*	4,890 lb	9,178 lb*	4,087 lb			5,862 lb*	3,554 lb
-1.0 m	4 686 kg*	4 686 kg*	8 485 kg*	3 839 kg	6 484 kg*	2 826 kg	5 115 kg*	2 218 kg	4 163 kg*	1 854 kg			2 659 kg*	1 612 kg
-6.6 ft	15,900 lb*	13,221 lb	16,559 lb*	8,497 lb	12,990 lb*	6,215 lb	10,271 lb*	4,870 lb	7,846 lb*	3,997 lb			6,947 lb*	3,887 lb
-2.0 m	7 212 kg*	5 997 kg	7 511 kg*	3 854 kg	5 892 kg*	2 819 kg	4 659 kg*	2 209 kg	3 559 kg*	1 813 kg			3 151 kg*	1 763 kg
-9.8 ft	16,491 lb*	13,422 lb	13,382 lb*	8,618 lb	10,675 lb*	6,290 lb	8,150 lb*	4,943 lb					6,720 lb*	4,519 lb
-3.0 m	7 480 kg*	6 088 kg	6 070 kg*	3 909 kg	4 842 kg*	2 853 kg	3 697 kg*	2 242 kg					3 048 kg*	2 050 kg
-13.1 ft			8,545 lb*	8,545 lb*	6,517 lb*	6,499 lb*							5,229 lb*	5,229 lb*
-4.0 m			3 876 kg*	3 876 kg*	2 956 kg*	2 948 kg*							2 372 kg*	2 372 kg*

\* Indicates load limited by hydraulic lifting capacity.