

# LARGE EXCAVATOR



# SY500H

## STANDARD FEATURES

- ➔ Removable counterweight
- ➔ 1-way and 2-way primary auxiliary and 2-way secondary auxiliary circuits
- ➔ Quick coupler plumbed to end of stick
- ➔ Heated air ride seat
- ➔ Rear view cameras
- ➔ Powerful Cummins Engine

**400 hp**

Gross Power

**25' 3"**

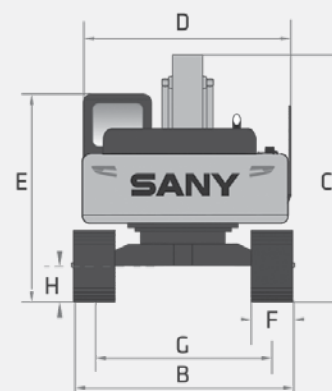
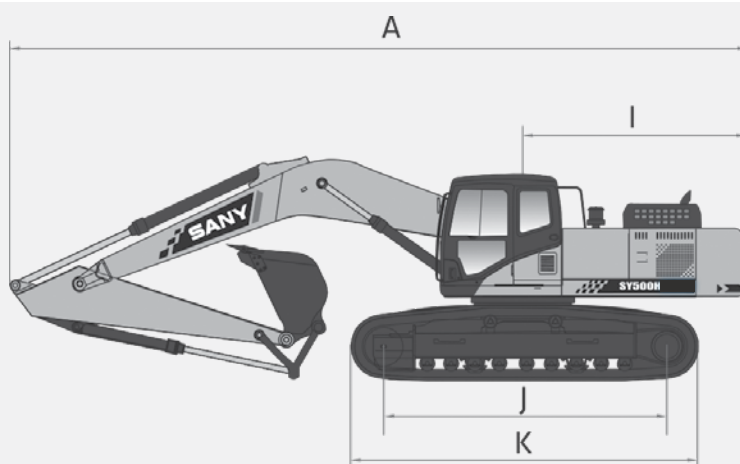
Dig Depth

**120,152 lbs**

Operating Weight

**61,822 lbs**

Bucket Breakout



## TECHNICAL SPECIFICATIONS

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Operating Weight	120,152 lbs	54 500 kg
Ground Pressure	8.6 psi	59.0 kPa
<b>Engine</b>	Cummins QSG12 Stage V / Tier4F	
Displacement	720.1 in <sup>3</sup>	11.8 L
Gross Power	400 HP	298 kW
<b>Hydraulics</b>	Positive Flow Control w/Pilot Control	
Main Hydraulic Pump	Axial Piston - Variable Displacement	
Operating Flow (maximum)	190.2 gal/min	720.0 L/min
Operating Pressure (maximum)	4,975 psi	34.3 MPa
Power Boost Pressure (maximum)	5,410 psi	37.3 MPa
<b>Travel Motor</b>	Axial Piston with Park Brake	
Travel Pressure (maximum)	4,975 psi	34.3 MPa
Travel Speeds (maximum)	2.1 / 3.2 mph	3.4 / 5.2 km/hr
Travel Effort (maximum)	76,101 lbf	339.0 kN
Grade Capability (maximum)	35°	
<b>Swing Motor</b>	Axial Piston with Swing Brake	
Swing Pressure (maximum)	3,989 psi	27.5 MPa
Swing Speed (maximum)	8.0 RPM	
<b>Undercarriage (standard)</b>	Steel Track	
Track Shoe Width (standard)	35"	900 mm
Track Rollers (per side)	9	
Carrier Rollers (per side)	2	

## DIMENSIONS

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Boom Length	23'	7 000 mm
Stick (Arm) Length	11'	3 350 mm
A Transport Length	39' 11"	12 194 mm
B Transport Width	11' 11"	3 640 mm
C Transport Height	12' 8"	3 874 mm
D Upper Structure Width	10' 10"	3 292 mm
E Cab Height	11' 3"	3 423 mm
F Track Width (standard shoe)	35"	900 mm
G Track Gauge	9'	2 740 mm
H Ground Clearance	22'	560 mm
I Tail Swing Radius	12' 8"	3 850 mm
J Track Length on Ground	14' 6"	4 412 mm
K Track Length	17' 11"	5 459 mm

### SERVICE REFILL CAPACITIES

Fuel Tank Capacity	179.6 gal	680.0 L
DEF Tank Capacity	15.0 gal	56.6 L
Hydraulic Tank Capacity	126.8 gal	480.0 L
Engine Oil Capacity	8.7 gal	33.0 L
Cooling System Capacity	13.2 gal	50.0 L

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



STANDARD AND OPTIONAL EQUIPMENT

s = standard / o = optional

SY500H	ENGINE
s	11.8 l Cummins
s	Auto-idle
s	Dual-element dry air filter
s	Automatic belt-tension device
s	Batteries 24V (2 - 12V)
s	Coolant Expansion tank
s	Electronic engine control
s	Enclosed fan guard
s	Engine coolant to -37 deg. C (-34 deg. F)
s	Fuel filter with water separator
s	Full-flow oil filter
s	Turbocharger with charge air cooler
s	High flow hydraulically powered cooling fan
s	500-hour engine-oil-change interval
s	70% (35 deg.) off-level capability
s	Engine air precleaner
s	Severe-duty fuel filter
HYDRAULIC SYSTEM	
s	Spring-applied, hydraulically released automatic swing brake
s	Auxiliary hydraulic-flow adjustments through monitor
s	Lift power boost on joystick
s	Control pattern change valve
s	Auxiliary hydraulics with 1 and 2-way combination piping for high flow
s	Auxiliary hydraulics with 2- way rotation piping and controls
s	Auxiliary pilot and electric controls
s	Quick coupler plumbing and control
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 2 additional per side
s	2-speed travel selection
s	Upper carrier rollers (2)
s	Sealed and lubricated track chain
s	Triple semi-grouser shoes, 900 mm (36")
s	Undercarriage frame opening guard
BOOM & STICK	
s	Boom 7 m (23')
o	Stick, 3.3 m (11')
UPPERSTRUCTURE	
s	Right-hand, left-hand, and counterweight mirrors
s	Vandal lock with ignition key: Cab door /Service door/ Toolbox/Cab Filter
s	Debris screen in side panel
s	Remote-mounted engine oil and fuel filters
s	Heavy duty triangle channel frame guard
s	Hydraulic removable counterweight 9.7 kg (21,380 lbs)



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



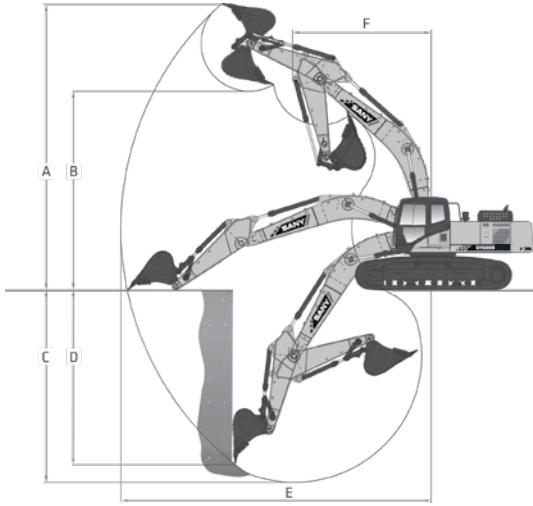
STANDARD AND OPTIONAL EQUIPMENT

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SY500H ATTACHMENTS CONTINUED	
s	Convenient grease points
o	Centralized lubrication system
s	Dirt seals on all bucket pins
s	Oil-impregnated bushings
s	Reinforced resin thrust plates
o	Quick coupler
o	Buckets: Heavy duty / Heavy-duty high capacity / Side cutter and teeth
OPERATOR'S STATION	
s	Adjustable independent-control positions (levers-to-seat, seat-to-pedals)
s	AM/FM radio with USB charging and Bluetooth® connectivity
s	Auto climate control/air conditioner/heater/pressurizer
s	Built-in Operator's Manual storage compartment and manual
s	12 and 24V outlets 60 watt 5 amp
s	Deluxe heated air suspension cloth seat with adjustable armrests
s	Heavy duty rubber floor mat
s	Front windshield wiper with intermittent speeds
s	Illuminated gauge: diesel exhaust fluid, engine coolant, and fuel levels
s	Horn, electric
s	Hour meter, electric
s	Hydraulic shutoff lever, all controls
s	Interior light
s	Large cup holder
s	Digital Power mode selection: 3 power modes- low, standard, and high
s	Digital tool selection: bucket, shear, hammer, etc.
s	Multifunction color LCD monitor with: Diagnostic capability / Multiple-language / Maintenance tracking / Clock
s	System monitoring with alarm features: Auto-idle indicator, engine air cleaner restriction indicator light, engine check, engine coolant temperature indicator light with audible alarm, engine oil pressure indicator light with audible alarm, low-alternator-charge indicator light, low-fuel indicator light, low DEF indication with audible alarm, fault code alert indicator, fuel-rate display, wiper-mode indicator, work-lights-on indicator, and work-mode indicator
s	Motion alarm with cancel switch (conforms to SAE J994)
s	Power-boost switch on right joystick
s	Auxiliary hydraulic control switches in right console lever
s	Seat belt, 2", non-retractable
s	Transparent overhead hatch
s	Heated or cooled food/beverage storage
s	Hydraulic oil filter restriction indicator light
s	Protection screens for cab front, rear, and side
ELECTRICAL	
s	60-amp alternator
s	Ground level electrical disconnect (lockout tag out)
s	Blade-type multi-fused circuits
s	Positive-terminal battery covers
s	Rearview camera
LIGHTS	
s	Work lights: High power LED - 2 mounted on boom, 2 mounted on top of cab, 1 mounted under step on right side of machine

# PRODUCT SPECIFICATIONS LARGE EXCAVATOR || SY500H

## WORKING RANGE

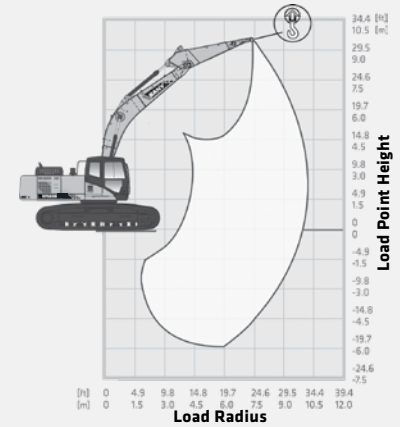
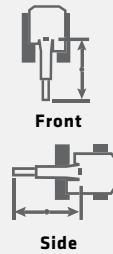


WORKING RANGE			
Boom Length	23'	7 000 mm	
Stick (Arm) Length	11'	3 350 mm	
A Maximum Digging Height	35' 10"	10 929 mm	
B Maximum Dumping Height	25' 1"	7 647 mm	
C Maximum Digging Depth	25' 3"	7 705 mm	
D Maximum Vertical Wall Digging Depth	20' 7"	6 278 mm	
E Maximum Reach at Ground Level	39' 5"	12 035 mm	
F Minimum Swing Radius	17' 1"	5 216 mm	
DIGGING PERFORMANCE			
Boom Length	23'	7 000 mm	
Stick (Arm) Length	11'	3 350 mm	
Bucket Breakout Force (ISO)	61,822 lbf	275.0 kN	
Stick (Arm) Digging Force (ISO)	45,535 lbf	207.0 kN	

## LIFTING PERFORMANCE

**Standard 23' (7 000 mm) Boom**  
**Standard 11' (3 350 mm) Stick**  
**Standard 35" (900 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.



LOAD RADIUS	9.8 FT 3.0 M		14.8 FT 4.5 M		19.7 FT 6.0 M		24.6 FT 7.5 M		29.5 FT 9.0 M	
LOAD POINT HEIGHT										
19.7 ft 6.0 m							24,372 lb* 11055 kg*	24,372 lb* 11055 kg*	23,340 lb* 10587 kg*	23,340 lb* 10587 kg*
14.8 ft 4.5 m			41,099 lb* 18642 kg*	41,099 lb* 18642 kg*	31,480 lb* 14279 kg*	31,480 lb* 14279 kg*	26,879 lb* 12192 kg*	26,879 lb* 12192 kg*	24,443 lb* 11087 kg*	19,745 lb 8956 kg
9.8 ft 3.0 m			51,963 lb* 23570 kg*	51,963 lb* 23570 kg*	36,762 lb* 16675 kg*	36,762 lb* 16675 kg*	29,787 lb* 13511 kg*	24,784 lb 11242 kg	25,995 lb* 11791 kg*	19,185 lb 8702 kg
4.9 ft 1.5 m			35,841 lb* 16257 kg*	35,841 lb* 16257 kg*	41,063 lb* 18626 kg*	32,132 lb 14575 kg	32,419 lb* 14705 kg*	23,861 lb 10823 kg	27,498 lb* 12473 kg*	18,667 lb 8467 kg
0 ft 0 m			44,899 lb* 20366 kg*	44,899 lb* 20366 kg*	43,502 lb* 19732 kg*	31,257 lb 14178 kg	34,205 lb* 15515 kg*	23,243 lb 10543 kg	28,501 lb* 12928 kg*	18,314 lb 8307 kg
-4.9 ft -1.5 m	33,188 lb* 15054 kg*	33,188 lb* 15054 kg*	58,595 lb* 26578 kg*	47,102 lb 21365 kg	43,934 lb* 19928 kg*	30,982 lb 14053 kg	34,723 lb* 15750 kg*	22,994 lb 10430 kg	28,440 lb* 12900 kg*	18,228 lb 8268 kg
-9.8 ft -3.0 m	55,986 lb* 25395 kg*	55,986 lb* 25395 kg*	55,113 lb* 24999 kg*	55,113 lb* 24999 kg*	42,243 lb* 19161 kg*	31,191 lb 14148 kg	33,416 lb* 15157 kg*	23,144 lb 10498 kg		
-14.8 ft -4.5 m	64,589 lb* 29297 kg*	64,589 lb* 29297 kg*	48,511 lb* 22004 kg*	48,511 lb* 22004 kg*	37,547 lb* 17031 kg*	31,921 lb 14479 kg	28,206 lb* 12794 kg*	23,931 lb 10855 kg		

\* Indicates load limited by hydraulic lifting capacity.

