



Quality Changes the World

SY750H

Rated Power: 391kW/1800rpm

Operating weight: 78500kg

Standard Bucket Capacity: 5m³



Please pay attention to the official WeChat of SANY Heavy Machinery Co., Ltd.

SANY Heavy Machinery Co., Ltd.

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This manual was printed in June 2021. The product information may have been changed when you read it. Products (including specific configuration, details, etc.) are based on the specific models and products applicable to Chinese mainland, which are displayed and sold by agents. For more details, please visit the local authorized agent of SANY Heavy Machinery Co., Ltd.



Sany Large Hydraulic Excavator

Classical Renewal

Ingenuity Gathering



Digging & loading Pioneer in Open-pit Coal Mine

SY750H is a 75 tonnes mining excavator developed by Sany Heavy Machinery. Its base machine has been verified by market for several years and deeply involved in the "TOP50 Annual Product Award" of China Construction Machinery. Equipped with higher features--'new power', 'new appearance' and 'new technology', SY750H is designed mainly for mine, quarry or in heavy construction applications. Through fine control matching technology, it can optimize the operation system, strong heavy-duty operation capability, high reliability, and meets operational requirements.



NEW

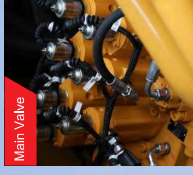
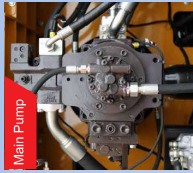
NEW Power

NEW Appearance

NEW Technology

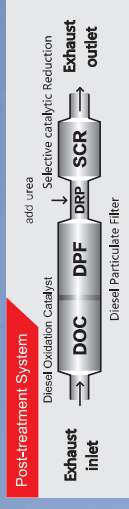
NEW

Power



Hydraulic system

- ✦ Equipped with Kawasaki full electric control main valve and main pump.
- ✦ Dual swing motor with a larger slew torque can make upper structure swing smoothly.
- ✦ Large displacement main pump and heavy P-Q increase Power control can balanced fuel consumption on the basis of improving digging efficiency, strong digging force.
- ✦ Integrated electromagnetic proportional valve, high flow distribution efficiency, compound movements are smooth.



Power system

- ✦ Equipped with Cummins X15 engine, rated power 391kW.
- ✦ Surging power output, low consumption, large carbon dioxide, high current, dynamic quick response and high efficiency.
- ✦ Adopting DOC+DPF+SCR after-treatment technology, the nitrogen oxide conversion rate has been improved high, the combustion is optimized.
- ✦ Increase engine power and torque can improve fuel economy a lot and make emission more cleaner.



NEW Appearance



Customized

- ✧ Equipped with a 10-inch smart touch screen.
- ✧ Integrated air conditioner, radio, Bluetooth, GPS and other functions.
- ✧ Standard one-button start.
- ✧ Fault detection and Alarm.
- ✧ Intelligent debugging and diagnosis.
- ✧ One-key callfunction, more secure and intelligent.



Air conditioning upgrade

- ✧ New air-conditioning duct.
- ✧ Optimized air outlet position.
- ✧ Condenser volume: 30% larger than before.
- ✧ Cooling capacity: 10% better than before.
- ✧ Easy maintenance without disassemble.

C12-cab

- ✧ Full of entertainment, technology and interaction.
- ✧ Better visibility.
- ✧ Overall width: 25mm bigger than before.
- ✧ Front window width: 10% bigger than before.
- ✧ Glass area: 10% larger than before.

Sealing upgrade

- ✧ Upgrade sealing solution, air leakage and indoor temperature are significantly reduced, effectively solving dust issue in the extreme working conditions.
- ✧ Thermal comfort is improved by 10%.

Interior upgrade

- ✧ Upgrade interior completely, it provides armrest box adjusted together with seat, water cup holder, refrigerator, 12V power outlet, USB interface, etc.
- ✧ Air suspension seat with large damping to reduce operator tire.

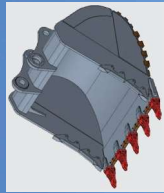
Safe and Reliable

- ✧ Safety performance of reinforced cab is 30% higher than before.
- ✧ To improve safety of mining operation, machine equips with emergency stop switch, anti-skid cover, anti-gravel slide door, etc.

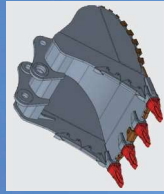
NEW Technology

Bucket Upgrade

Capacity of standard bucket is 5.0m³, it is suitable for the extreme mine working condition. 4 buckets can be chosen to meet different applications, it helps to improve working efficiency and create value for customer.



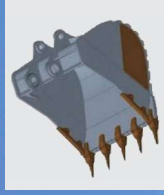
Standard rock bucket



Heavy-duty rock bucket



Earthwork bucket



Light earthwork bucket

Full Electric Control System

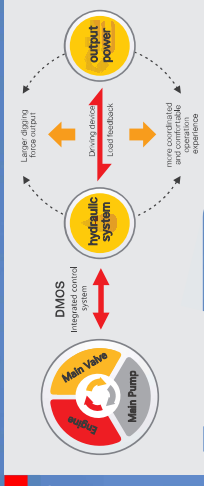
Full electric control ACE-P technology to improve operational adaptability, improve operational coordination, control Precise and soft, easy and smooth operation. Dual microcomputer controllers, high precision control, fast response, small impact of micro-motion control.

Variety of configurations

SY750H is positioned as a large hydraulic excavator for mines, which can complete material digging and loading in various mines such as coal mines and iron mines. It can be used as a base machine for large ripper, breaker above 210, large piledriver, boat excavator, etc.

Dynamic optimization intelligent control system

Adopt "positive flow" system and "DOMCS" engine-pump-valve integrated dynamic optimization intelligent control system independently developed by Sany. It can achieve high working efficiency and low fuel consumption.



Strengthen the structural parts of the working device

Comprehensively apply the 20,000 hours working device technology, adopt high-strength steel + high-strength forgings + wear-resistant steel plate, one-piece casting connect rod, three-stage box structure, widened section, enlarged box section. The modulus of bending section is increased by 20%, with high reliability and long service life.



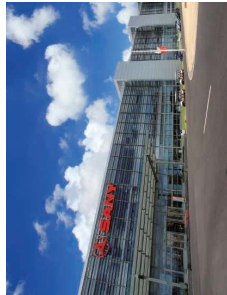
Enhanced undercarriage

KYB travel motors can provide powerful travel torque. Reinforced double grouser track shoes, heavy-duty bottom rollers and variable-gauge assembly undercarriage can realize operations in narrow spaces.



Manufacture and R&D System

Sany Heavy Machinery Global R&D Center



Advanced Manufacture Technology

Sany has RGV assembly lines and fully automatic welding robots, as well as high-precision machining equipment and precision machining centers.

Environmental protection

Equipped with an environmentally friendly engine, which can fulfill stage V and EPA Tier4f emission. Use environmentally friendly paint to effectively reduce environmental pollution, using aluminum radiators, oil coolers, and a garden-style manufacturing site.

Complete R&D test system

Complete R&D test system can make sure machine with excellent performance. Each model must run field test more than 1500 hours for a better durability. Critical components such as working devices, cabs, and hydraulic components must pass fatigue tests which test cycle shall be more than 300,000 times.

Safety facilities

Fuel tank lock cover anti-spill, hydraulic pilot lock, prevention of accidents caused by misuse, handrails, large rearview mirrors, seat belts, safety signs, fan guards, etc.

Honor & Awards

Sany manufacture and assembly lines won the 2013 National Five-Star Site, the 2014 National Quality Award and so on. SY750H has undergone several upgrades in terms of structural parts design and reliability improvement, and the performance of the whole machine is safe and reliable.

Safety certification

The cab protection guard has been certificated by the third agent and meet the European standard FOPS safety requirements.

Technical Specifications

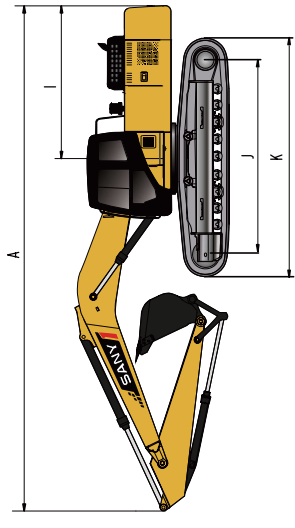
Main Parameters			
Operating Weight	78500kg	Travel Speed(high/low)	4.5/2.9 km/h
Bucket capacity	5.0m ³	Slew speed	7.2rpm
Engine Model	Cummins X15	Gradeability	70%(35°)
Type	6 cylinders 4cycles, Turbocharger and intercooler, Water cooler, Direct injection	Ground Pressure	114kPa
Rated power	391kW/1800rpm	Bucket digging force(ISO)	410kN
Max torque	2373Nm/1400rpm	Stick digging force(ISO)	354kN
Displacement	14.9L	Max. Drawball Pull	547kN
Service Refill Capacity			
Fuel tank	940L	Track shoes	2 x 48pcs
Hydraulic tank	680L	Top rollers	2 x 3pcs
Engine oil	40L	Bottom rollers	2 x 8pcs
Engine coolant	75L	Shoe width	650/750/900mm
Travel gearbox	2×16L		
Slew gearbox	2×10.5L		
DEF/AdBlue tank	100L		

Lifting Capacity

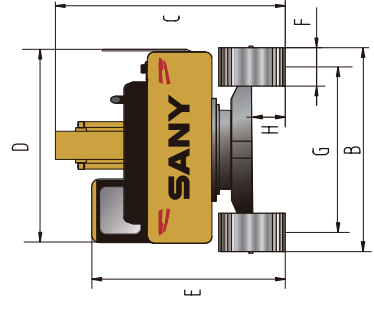
Height of lifting point	Counterweight 12300kg												
	BOOM: 7m	ARM: 3m	Shoe: 650mm	4.5m	6.0m	7.5m	9.0m	Max. reach					
7.5m kg						*16937*	*16605*	8481					
6.0m kg			*31260	26514	*17778*	17778	*16459*	16459	*16397*	16397	9200		
4.5m kg			*23021*	23021	*19131*	19131	*16948*	16948	*16394	13971	9630		
3.0m kg			*25656*	25656	*20538*	20538	*17600	15061	*16492	13278	9811		
1.5m kg			*27281*	27281	*21560*	21560	*17978	14725	*16694	13186	9756		
0m kg			*29459*	29459	*27550*	27550	*21853	18609	*17978	14524	*16895*	13610	9461
-1.5m kg			*21665*	21665	*33823*	33823	*26471*	26471	*21120*	21120	*17030*	17030	8903
-3.0m kg			*36689*	36689	*29873*	29873	*13825*	23825	*18745*	18745	*16955*	16955	8024
-4.5m kg			*23394*	23394	18491*	18491			*16202*	16202	6698		

- The above loads are in compliance with ISO10567 and SAE J1097 hydraulic excavator lifting capacity standards.
- The above loads do not exceed 87% of hydraulic lifting capacity and 75% of tipping load.
- *1 indicates that the load is limited by hydraulic capacity rather than tipping load.
- Weight of all lifting accessories must be deducted from the above loads.

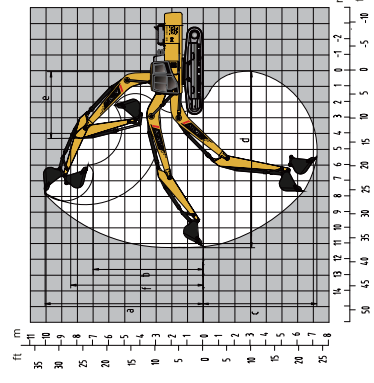
Technical Specifications



Dimensions (mm)	
A. Overall length	12879
B. Overall width without steps (extended/retracted)	4030/3430
C. Overall height	4981
D. Overall width of upper frame (with/without walkways)	4479/3484
E. Overall height of cab	3795



F. Shoe width	650
G. Track gauge (extended/retracted)	3380/2780
H. Min. ground clearance	892
I. Tail swing radius	4175
J. Tumbler length	4770
K. Track length	5986



Working ranges (mm)	
a. Max. cutting height	11020
b. Max. loading height	7170
c. Max. digging depth	7580
d. Max. digging reach on ground	12100
e. Min. front swing radius	5390
f. Max. height at min. front swing radius	9815

Note: Due to continuous improvement, materials and specifications are subject to change without notice. Machines shown in photos may include options.

Configuration

Engine	Cab	Undercarriage
High power engine	Automotive Grade cab	Reinforced travel motor protection plate
Dynamic optimization intelligent control	Tempered light-limited glass windows	Reinforced lower frame
Water cooler	Silicone rubber shock absorber	Track tensioner
24V/7.8kW starter motor	Top, front upper window and left window (openable)	Idler
Desert air filter	Rear window emergency exit	Sprockets and upper rollers
DC air filter	Wiper (with washer)	Reinforced track chain (with pin shaft seal)
Engine oil filter	Multifunctional Air Suspension Seat	650mm track shoes (double grouser)
Triple fuel filter	Footrests, floor mats	Reinforced double-layer side steps
Engine oil cooler	Speakers, rearview mirrors	Protective bottom cover
Radiator sub tank	Seat belt, fire extinguisher	
Auto idle system	Cup holder, compartment lamp	
	Escape hammer	
	Storage boxes, documentbags	
	Pilot control cut-off lever	
	Fully automatic air conditioner	
	Emergency stop switch	
	Top protection guard + frontlowerprotection guard	
	Shoe box	

● Standard configuration

○ Optional equipment

Configuration

Hydraulic system	Digging equipment	Upper Structure
Control valve (with main relief valve)	Flange pin	Fuel level sensor
Control valve backup port	Cast connecting rod	Hydraulic oil level gauge
Oil suction filter	Fully automatic centralized lubrication system	Toolbox
Drain filter	Dust-proof sealing ring (both bucket pins are configured)	Swing parking brake
Oil return filter	Reinforced fully welded box boom	Rearview mirror (right side)
Pilot filter	Reinforced all-welded box stick	Rear view camera
Hydraulic shock absorber blind pipe	Forged boom front fork	Cab warning light
Independent oil cooler	Chisel bucket teeth/point bucket teeth	
	Reel type lubrication system	
Alarm lights	Monitor Screen	Others
Controller failure	Standard GPS	Large capacity battery
Abnormal pump pressure	10-inches touch screen	Lockable engine hood
Abnormal pilot pressure for each action	EVI system	Lockable fuel filler cap
Abnormal power supply voltage	Hour meter, fuel tank level gauge	Non-slip treads, handrails and walkways
Insufficient fuel	Engine coolant temperature gauge	Walking direction marks on the lower frame
Engine failure	Engine oil pressure gauge	
Low oil pressure	Smart safe box	
Coolant temperature is high	Bluetooth voice call	
High hydraulic oil temperature	Fuel tank level gauge	Safety
Oil return filter blockage alarm	Urea tank level gauge	Emergency stop switch
Post-processing regeneration prompts and alarms	Coolant temperature gauge	Signal/Alarm Horn
Abnormal pilot pressure in each action	Hydraulic oil temperature gauge	Rearview mirror
Solenoid valve abnormality alarm	Switch between left and right hands	Rear window emergency safety exit
Power supply voltage abnormality alarm	One-touch start/stop switch	Battery negative switch
Relay abnormality monitoring	Walking correcting	Panoramic camera
Fuse abnormality monitoring	Home mode	
	limp mode	

● Standard configuration

○ Optional equipment