SY500H



# PRODUCTIVITY. SAFETY. COST EFFECTIVENESS.

#### CONSTRUCTION MACHINERY



CRAWLER EXCAVATOR

Engine CUMMINS QSX12 Rated power 298 kW / 2100 rpm Bucket capacity 2.2 m<sup>3</sup> Operating mass 52500 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 **320 000** 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.

# **320000** EXCAVATORS SOLD IN **10 YEARS**

5–7% TURNOVER FOR RESEARCH AND DEVELOPMENT

# FIVE-YEAR Warranty

Quality Changes the World



### HARD FACTS Max. bucket digging force 253 kN (ISO) Max. arm digging force 227 kN (ISO) Swingspeed 8 rpm Max. travel speed 5.4 km/h 5459 mm

# **GETS THE JOB DONE**

The SANY SY500H was developed to complete large, challenging tasks quickly and reliably. Wherever a great deal of material must be moved in a short time period, it is the perfect choice. With its even balance of power and precision, it is just the right workhorse for cost-oriented use on the construction site. On every large construction site, it gives the guarantee that extensive earth moving projects can be carried out profitably within short time periods. It is optimally equipped for tough use in harsh environments - with a solid undercarriage, high stability across all components and a powerful transmission.

#### **TOP PROPERTIES**

#### QUALITY **EXTREMELY TOUGH**

Whether used for extraction in a stone or gravel quarry - these machines are in great demand wherever large amounts of material must be moved. As a robust power machine, the SY500H meets expectations with regards to quality and durability, for example, with its high-quality steel and precise and meticulously computer-controlled welded seams. Or with its safety valves, which are 100% reliable in the worst-case scenario.

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#### DIMENSIONS Improved stability, increased transferable force

The SY500H features an extremely stable and robust frame. The large stand space provides the basis for the driver to work safely and precisely, even on uneven ground, and offers the best standing properties – meaning power can be used optimall

#### **USER EXPERIENCE**

the displays are easy to read.



#### Absolute reliability for peace of mind!

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

#### COMPONENTS

#### Maximum power, maximum productivity

The large-volume Cummings engine delivers the required power at all times. This also saves time and money on the construction site. And the perfect harmony of hydraulics, engine and equipment guarantees a high level of fuel efficiency and productivity.



#### QUALITY

For the toughest conditions – gets down to work and takes it all in its stride - from the bottom up, the SY500H is designed to deliver high performance, even in the toughest conditions. Made for the long term.

#### SAFETY

Totally safe - In addition to the extensively glazed driver's cab, the standard rear camera guarantees excellent visibility on all sides with no blind spots. The reinforced cab structure in accordance with ROPS/FOPS specifications ensures a safe work environment for the machine operator.

#### COMPONENTS

A true power package - with its almost 12-litre displacement, the Cummins engine is the foundation of high productivity. The high torque in the low engine speed range delivers superior performance whilst at the same time guaranteeing low fuel consumption.



Productivity centre - power is nothing without control. This is why the spacious, comfortable driver's cab is designed so that all the controls are convenient to reach and

#### **ECONOMY**

Always the right power - digging, loading, moving... Every task makes special demands of the machine. With the intelligent choice of working modes, the components of the SY500H can always be adjusted optimally with regards to fuel consumption and performance.

HANDLINA

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#### DIMENSIONS

Stable basis - the robust undercarriage is designed down to the last detail to provide the highest levels of stability and reliability. Even under the toughest working conditions, the high-quality construction guarantees continuous operating hours and a long service life.

#### EFFICIENCY, COST-EFFECTIVENESS AND USER EXPERIENCE

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## **ERGONOMIC CAB AS A PRODUCTION** FACTOR

The driver's cab in the SY500H attracts special attention. It combines the safety and ergonomics factors, offering the driver the best conditions for relaxed and fatigue-free work. The focus here is on the comfortable, heated, air-suspension driver's seat with high backrest that provides lumbar support and the easily accessible controls.

The joystick control allows for precise work in any situation and the large, easy-to-read display shows all of the key parameters clearly at a glance. The powerful heating and the automatic airconditioning system guarantee the ideal climate. Also provided on-board as standard: Radio and 12 V jack, plenty of stowage space and storage options.



#### USER EXPERIENCE

#### The large cover reveals everything you need

Service and maintenance are essential for maintaining performance and productivity. This doesn't mean, however, that these tasks must be time-consuming. The powerful engine of the SY500H is therefore easily accessible, positioned under the large engine bonnet on the superstructure. This means all engine parts required for service

and maintenance can be accessed quickly and safely. All other components that must be regularly checked and serviced are easily accessible via large maintenance covers. This makes maintenance and service quick and easy, saves operating costs and increases machine availability.

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#### ECONOMY

#### Productivity at the touch of a button

An optimal balance between performance and fuel efficiency can easily be achieved with the preselectable work modes - for every task. This prevents a reduction in the engine speed and performance, as well as uneconomically high engine speeds. It ensures fast, efficient work. And protects the components, extending the service life.



### ECONOMY MOVING MORE

You can rely on the water-cooled six-cylinder engine with common rail injection in every respect. It scores highly with exemplary values not only when it comes to reliability and performance, but also when it comes to consumption. Lower fuel consumption thanks to the latest SCR emissions technology reduces not only ongoing operating costs but also emissions. The two variable displacement axial piston pumps also guarantee a maximum flow of 360 I twice per minute. The power of the hydraulic pump is thereby always automatically adjusted to the actual energy that is required.





#### Our highlights - the added benefits SANY offers you:

- + Comfortable driver's cab
- + Total safety package, including camera
- + Air-suspension driver's seat
- + Powerful, large-volume engine
- + Heating and automatic air conditioning system



#### TECHNICAL SPECIFICATIONS

ENGINE	
Model	CUMMINS QSX12
Тур	Water-cooled, 6 cylinder, with commonrail and Adblue
Exhaust emissions	Stage IV
Rated power	298 kW / 2100 rpm
Max. torque	2034 Nm / 1 400 rpm
Displacement	11 800 ccm
Batteries	2 × 12 V / 200 Ah

#### HYDRAULICSYSTEM

Mainpump	2 x variable piston pump with electronic positive control
Max. oilflow	2 × 360 l/min
Travelmotor	Variable displacement axial piston moto
Swingmotor	Axial-piston motor

#### RELIEF VALVE SETTINGS

Implement circuit	343 bar
Power boost	373 bar
Swing circuit	269 bar
Travle circuit	343 bar
Pilot pressure	39 bar

#### SERVICE REFILL CAPACITIES

Fuel tank	680 I
Engine coolant	49.19
Engine oil	33
Drive (per side)	15
Adblue	46.3
Hydraulic oil tank	480 I

#### PERFORMANCE

Swingspeed	8 rpm
Max. travel speed	High 5.4 km/h, slow 3.1 km/h
Max. travel force	339 kN
Bucket capacity	2.2 m <sup>3</sup>
Groundpressure	0.83 kg/cm <sup>2</sup>
Gradeability	35°
Bucket digging force ISO	253 kN
Arm digging force ISO	227 kN

#### UNDER AND UPPER STRUCTURE

Boom length	7 000 mm
Arm length	3 350 mm
Bottomrollers	9
Toprollers	2
Rotation device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake

#### **OPERATING MASS**

SY500H



#### LIFTING CAPACITIES

	Radius									
Load	3.0	)m	4.5	5 m	6.0	) m	7.5	m	9 m	1
point height	<b>)</b>	5	-		>—€		<b>&gt;~</b> 3		<b>&gt;3</b>	
6.0 m kg		-					11055	11 0 55	10587	8042
4.5 m kg			18642	18642	14279	14279	12192	10338	11 087	7843
3.0 m kg			23570	19988	16675	16435	13511	9852	11791	7588
1.5 m kg			16257	16257	18626	12724	14705	9433	12473	7354
Ground kg			20366	20366	19732	12327	15515	9153	12928	7194
-1.5 m kg	15054	15 054	26578	18598	19928	12202	15750	9040	12900	7 155
-3.0 m kg	25395	25395	24999	18849	19161	12298	15157	9108		
-4.5 m kg	29297	29297	22004	22004	17031	12629	12794	9465		

#### DIMENSIONS (TRANSPORT)

Α	Transport length	12 103 mm
_	1 0	12 103 11111
B	Transport width	3596 mm
С	Upperstructure carriage	3292 mm
D	Height over cabin/ROPS	3476 mm
E	Height of Boom – transport	3600 mm
F	Overall length of crawler	5459 mm
G	Tail length	3736 mm
Н	Track gauge	2740 mm
I	Track height	1 220 mm
J	Track pads width	600 mm
K	Min. ground clearance	560 mm
L	Counterweigth clearance	1 355 mm
M	Engine cover height	3160 mm
N	Tail swing radius	3736 mm
0	Center distance of tumblers	4412 mm

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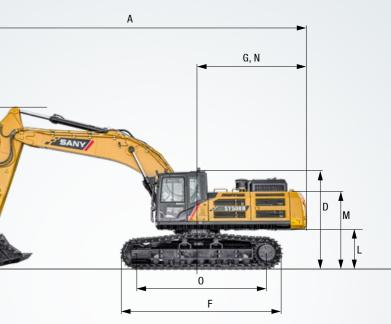
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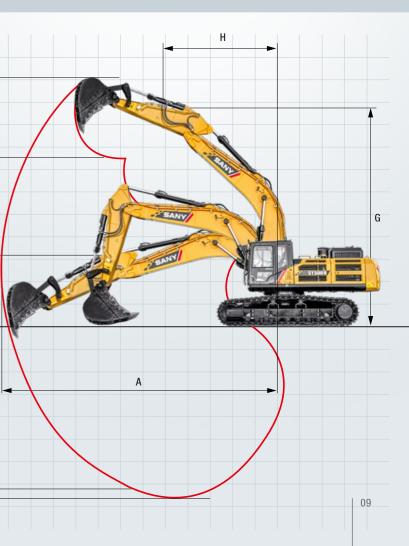
#### WORKING AREA

A Max. digging reach	12035 mm
B Max. digging depth	7 705 mm
C Max. digging height	10929 mm
D Max. dumping height	7647 mm
E Min. dumping height	2833 mm (3350 mm ARM)
F Max. vertical digging depth	6 278 mm
G Overall height over arm by min. swing radius	9 103 mm
H Min. swing radius	5216 mm









#### EQUIPMENT

#### **Complete powerhouse**

The SY500H does not just impress with its performance. When it comes to equipment, this machine is in the top class. Everything you would expect from an excavator in the 50--tonne class is included on-board as standard.

#### **OPERATORS COMFORT / CABINE**

#### Heater Automatic air conditioning C/H\* Radio and speaker Armrests (adjustable) Airsuspension seat • Heated seat Wiper . Sprayer f. wiper AUX 1 on Joystick . AUX 2 on Joystick Removable front-window Sky light openable ٠ Integrated cooling box

#### 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	٠
Rotation line proportional on Joystick with piping	•
Flow adjustment for attachments	•
UNDERCARRIAGE	
Steel tracks 600	•
Holes/loops for fixing	•

#### ARBEITSBELEUCHTUNG

Lights – front (LED)	•
Lights – boom (LED)	•
Lights - platform (LED)	•

#### **ENGINE**

Auto idle	•
Diesel filter	•
DOC	•

#### HYDRAULIC SYSTEM

Swing brake	•
2 speed travel	•
Piping for additional hydraulic function AUX 1	•
Piping for additional hydraulic function AUX 2	•
Hydr. Pre-pressure operating joysticks	•
Mainfilter	•

#### SAFETY

Battery master switch	•
Travel Alarm	•
Warning beacon	•
Camera	•
Handrails	•
Lockable hoods	•
Lockablge fuel cap	•

## **A SERVICE YOU CAN RELY ON**

Just as we do with our excavators, we also demand high quality for efficiency, cost-effectiveness and safety. Your SANY dealer is and reliability of our service products. This underlines our equipment's performance in terms of their durability and their ensure that your machine continues operating efficiently in the excellent price-performance ratio. After all, maintenance is crucial long term.

#### SANY - flexible, fast and always there for you

Rapid assistance, tailored advice and a reliable supply of original parts - that is what we mean by a premium service.

#### GERMANY Cologne

#### Standard equipment • Special option

The standard and special options differ depending on the country in which the crawler excavator is delivered. If you have any questions, please contact your dealer directly. \* The air conditioner contains fluorinated greenhouse gases: Refrigerant type: HFC-134a, Global warming potential: 1 430, Quantity: 0.9 kg, CO<sub>2</sub>e: 1,29 t

#### Parts supply quick and reliable

With the purchase of a SANY crawler excavator you have made an investment in the future. Fast availability of spare parts is your guarantee of minimal downtimes and failure times.



#### Detailed information in black and white

Handbooks and documents are available for all SANY crawler excavators, and these can help you with operation, maintenance, servicing and repairs. These include operating and maintenance instructions and technical specifications.

#### SANY SERVICE

happy to help you with a comprehensive range of services to



#### The added benefits SANY offers you:

- + Fast supply thanks to the central warehouse near Cologne
- + More than 15,000 spare parts to make your machine highly reliable
- + Expert knowledge for optimal supply for your machine
- + Thanks to SANY's special training programme, our dealers are always kept up-to-date so that they can face all technical challenges.

# <image>

# DELIVERS HIGH PERFORMANCE

Cost-effectiveness is an easy calculation – maximum productivity at minimal cost. In this way, the SY500H is a real maths genius. It impresses with its efficient operation, in other words, its high performance and low fuel consumption. Durability and low investment costs. Availability and fewer maintenance requirements.

#### FOR THE TOUGHEST CONDITIONS

The SY500H is built to deliver maximum performance reliably, even in difficult places. It does this boldly, thanks to its **robust construction** and **high-quality welded seams**. Also a sign of superior stability and durability: The **well thoughtout hydraulic system**.

#### **STABLE BASIS**

**Stability** isn't everything. But without it, there can be nothing. Therefore, the undercarriage is built to be **particularly stable**.

#### PRODUCTIVITY CENTRE

For concentrated, low-fatigue work, the driver's cab is equipped to be particularly **spacious** and **comfortable**. Included here is exemplary **protection against sound and vibration**.

#### COMPREHENSIVE PROTECTION

Safety begins at the point of entry – with stable hand rails and anti-slip tread surfaces. Further features in the safety package: Best visibility on all sides, camera and safety valves.

#### A TRUE POWER PACKAGE

Efficient productivity in its greatest form – the **large-volume Cummins engine** leaves no doubt that even the largest tasks can be completed quickly and safely. Its proven **common rail technology** delivers an exemplary **high torque**, allowing for economical use of the fuel.

#### **ALWAYS THE RIGHT POWER**

Efficiency has many faces when it comes to the SY500H: A **high-performance engine**, which holds back impressively with regards to consumption. The intelligent **choice of working modes** for optimal engine power at all times. An **efficient**, **powerful hydraulic system**. This keeps operating costs to a minimum and contributes to the savings effect.

#### **TECHNICAL HIGHLIGHTS**

Engine	CUMMINS QSX12
Rated power	298 kW / 2 100 rpm
Max. torque	2034 Nm / 1 400 rpm
Max. travel speedt	5.4 km/h
Swingspeed	8 rpm
Mainpump	2 x variable-piston-pump with electronic positive control
Max. oilflow	2 x 360 l/min



" A MACHINE THAT HAS WHAT IT TAKES!" Joël Launnay – SAS VALTINÉE machine operator

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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