

**MACHINERY  
SPECIALISTS  
L I M I T E D**

**SANY**

Quality Changes the World



# **STRONG POWERFUL**

REMARKABLY PRODUCTIVE. EXTREMELY COMFORTABLE.

CONSTRUCTION MACHINERY



**CRAWLER EXCAVATOR  
SY305H**

Engine  
Isuzu GH-6HK1  
Rated power  
212kW/ 2000rpm  
Bucket capacity  
1.7 m<sup>3</sup>  
Operating mass  
32265 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.

**320 000**

EXCAVATORS SOLD IN

**10 YEARS**

**5–7%**

TURNOVER FOR RESEARCH  
AND DEVELOPMENT

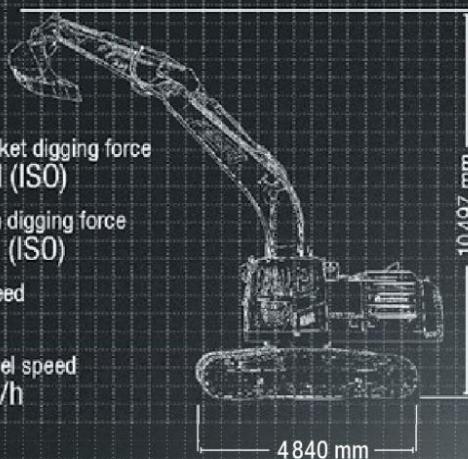
**FOUR-YEAR  
WARRANTY \***

Quality Changes the World

\* Applicable in certain markets, please check with your local dealer.



**SY305**  
**HARD FACTS**



Max. bucket digging force  
204 kN (ISO)

Max. arm digging force  
153 kN (ISO)

Swingspeed  
9 rpm

Max. travel speed  
5.2 km/h





# MOVE MORE WITH LESS EFFORT

The SANY SY305 crawler excavator makes no compromises. It works powerfully wherever maximum performance is required for excavation work and in civil engineering. The machine's high-quality technology and robust components form the basis for reliable and quick operation, meaning that the vehicles can be used continually. This prevents downtime and also reduces maintenance and servicing time. You can therefore complete

all of the work at the construction site on time and on budget. Maximum productivity is also the result of the machine's high degree of flexibility. This is not only thanks to the extensive standard features – with two cameras, two auxiliary proportional control circuits and the pre-installed quick-change mechanism – but also the easy changeover of the work tools used and the associated hydraulic settings.

## TOP PROPERTIES

### ECONOMY

# TOP PERFORMANCE WITH MAXIMUM COST-EFFECTIVENESS

The drive unit supplies the necessary power to cover power peaks without any difficulty. Furthermore, the unit not only meets the strict requirements of Stage V emission standards, it is also particularly fuel-efficient and quiet. A reason for this is the fact that the electronically controlled clutch fan only switches on if necessary and therefore operates precisely according to requirements.

### COMPONENTS

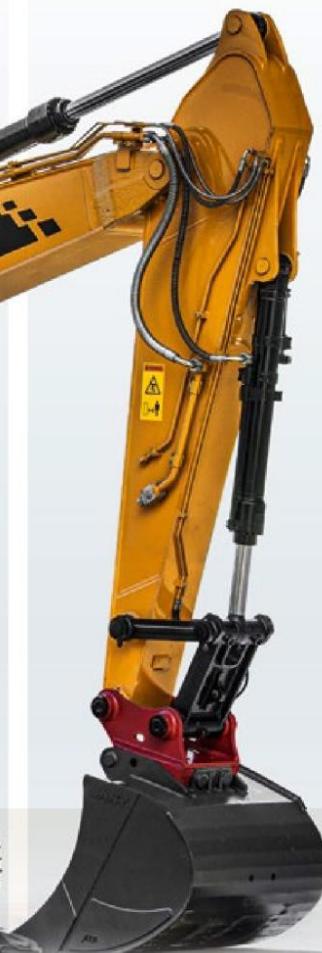
**Power in every situation** – the powerful ISUZU unit not only stands out thanks to its compact design, but also, above all, its very high degree of efficiency.

### DIMENSIONS

**Stable foundation** – while the machine is one of the heaviest in its class, operators also have optimal visibility to the rear thanks to the flat design.

### USER EXPERIENCE

**Everything under control** – the high-resolution 10" touch display means that the operator has everything in reach – even when wearing gloves. The display offers a clear overview and easy, intuitive menu navigation.



### SAFETY

**Two eyes are better than one** – the rear and side cameras mean that the operator has a view of everything. Moreover, the images from the cameras can either be individually shown on the large display or in combinations.

### QUALITY

**Lasting quality** – the daily working environment at construction sites is tough. To ensure that SANY excavators can withstand these rigours in the long term, they are designed and produced with particular care. Among other elements, this includes incorporating clean piping and precisely positioned welded seams.

### ECONOMY

**Maximum efficiency or maximum performance** – with the SANY SY305C, you have the choice for every application and can select the optimal operating mode for the task you are currently working on. Furthermore, the extensive standard features make the machine a real price-performance champion.



## SAFETY

**Good lighting for good visibility**

If it starts to get dark, the machine has eight LED work spotlights which provide the best possible illumination.

The rear and side cameras transmit the images of the surrounding area to the high-resolution monitor as standard. This ensures that the driver always has the best possible view of the working area and travel path.

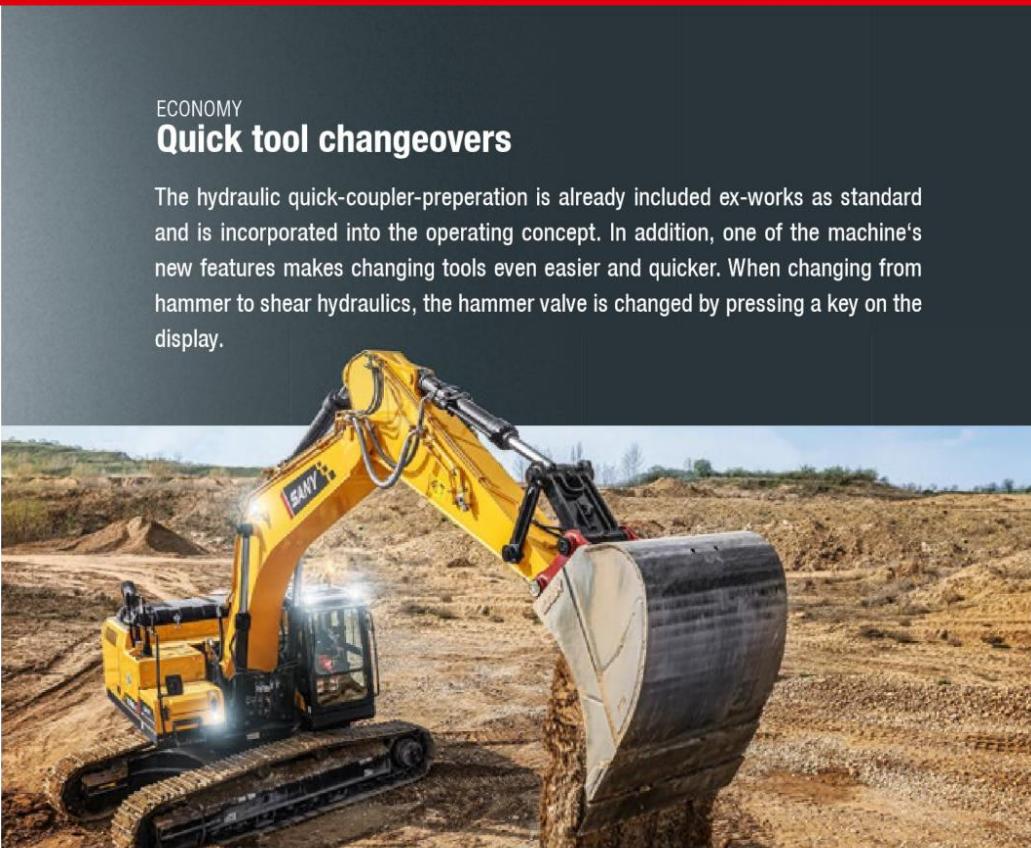
Another element for improved safety is the machine's maintenance platform. It has an anti-slip surface and non-slip handrail, which ensure a secure grip even in wet conditions.



## ECONOMY

**Quick tool changeovers**

The hydraulic quick-coupler-preperation is already included ex-works as standard and is incorporated into the operating concept. In addition, one of the machine's new features makes changing tools even easier and quicker. When changing from hammer to shear hydraulics, the hammer valve is changed by pressing a key on the display.

**Absolute reliability – for peace of mind!**

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

\* With participating partners

## ECONOMY

**Everything in sight and within reach**

To enable efficient work at the construction site, you can, for example, save the required working pressures and oil flow for up to five attachment devices for each category. Simply enter the name of the tool in the large, high-resolution 10" touchscreen display and assign the required value to the tool. This makes it quick and easy to change attachment devices on the construction site – enabling significant time and cost savings. In addition, the large touch display allows you to intuitively navigate through the simple menu structure and to monitor all of the important parameters.



## USER EXPERIENCE

# INNOVATIONS SET THE MACHINE APART

From the first time an operator sits in the new SANY SY305 they know that it offers a first-rate user experience. From first sight, it is apparent that the driver's cab is impressive. Let's take the clear 10" touch display as an example. Its high-resolution screen not only displays a considerable amount of information, it also shows the images from the two cameras. The touch display can also be used for various operating functions, meaning that many of the features are easy to control using just a finger.

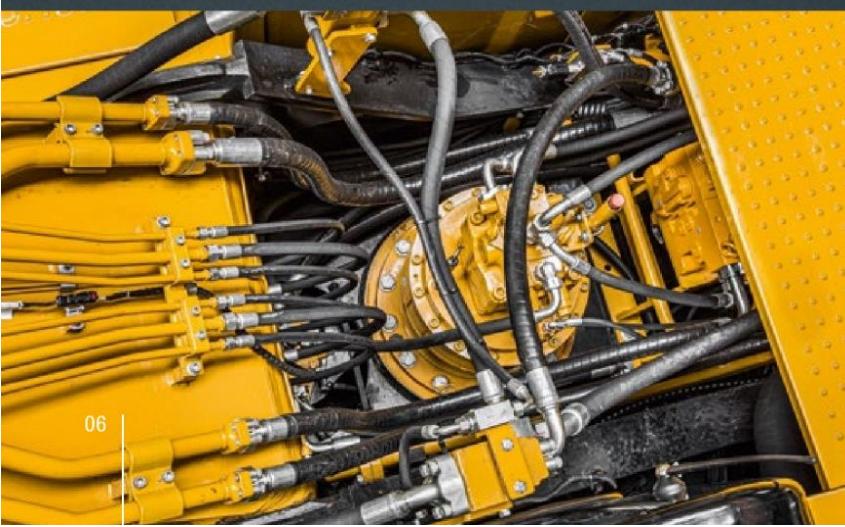
Moreover, the seating position of the air-suspension driver's seat with integrated seat heating can be continuously adjusted. The control elements connected to the seat can be used to make any adjustment, further adding to the ergonomics and user experience.



## COMPONENTS

## The right kind of pressure

The Kawasaki hydraulic system offers a high performance you can rely on. It applies exactly the right hydraulic pressures required for your task. The first and second proportional auxiliary lines are fitted ex-works as standard. Their pressure and power output per litre are individually adjustable. It is also very easy to save these values for each attachment device via the display menu and they can be quickly retrieved at any time.



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

- +
- 10" high-resolution touchscreen display
- +
- 2 cameras
- +
- Seat with adjustable control panels
- +
- 5 different attachment devices can be programmed for each category (name, pressure, oil flow)
- +
- 2 proportional auxiliary lines as standard
- +
- Convenient switching of hammer/shear hydraulics

## USER EXPERIENCE

**Easy to maintain and durable**

All of the wear parts for the SANY SY305C have been designed to have a particularly long service life. For instance, the oil and fuel filters have long maintenance intervals and are positioned outside of the engine compartment. We've also made the daily routine check a whole lot easier. The dipstick, air filter and coolant level can be easily checked from the ground.



## USER EXPERIENCE

**Comfortable workstation**

The cab's insulation, which has been further optimised, provides the driver with increased protection from noise and dust. This creates the conditions for more relaxed, fatigue-free working thanks to the quieter and cleaner driver environment. The machine also helps to ensure that snacks and drinks are kept cool even on long, hot days thanks to its automatic air conditioning system, various storage options and the large, chilled compartment behind the driver's seat.



## COMPONENTS

**RELIABLE AND EFFECTIVE**

The drive unit made by ISUZU not only embodies the highest degree of reliability, it also boasts innovative exhaust treatment. In order to comply with Stage V emission standards, the unit operates with a combination of SCR and DPF technology. The fact that the exhaust gas is not recirculated significantly increases efficiency, resulting in maximum productivity with minimal fuel consumption. Moreover, the unit has a more compact design because, among other things, additional cooling units are no longer required. This enables the package space to be kept clear for optimal visibility to the rear.

# TECHNICAL SPECIFICATIONS

## ENGINE

Model	ISUZU GH-6HK1
Typ	Water-cooled, 6 cylinder, with commonrail and Adblue
Exhaust emissions	Stage V
Rated power	212Kw/ 2000rpm
Max. torque	1 472 Nm / 1 400 rpm
Displacement	8 900 ccm
Batteries	2 × 12 V / 120 Ah

## HYDRAULIC SYSTEM

Mainpump	2 x variable piston pump with electronic positive control
Max. oilflow	2 x 280 l/min
Travelmotor	Variable displacement axial piston motor
Swingmotor	Axial-piston motor
Max. oilflow (AUX1)	500 l/min

## RELIEF VALVE SETTINGS

Implement circuit	343 bar
Power boost	373 bar
Swing circuit	275 bar
Travel circuit	343 bar
Pilot pressure	39 bar

## SERVICE REFILL CAPACITIES

Fuel tank	430 l
Engine coolant	36 l
Engine oil	21 l
Drive (per side)	10,5 l
Hydraulic oil tank	300 l

## PERFORMANCE

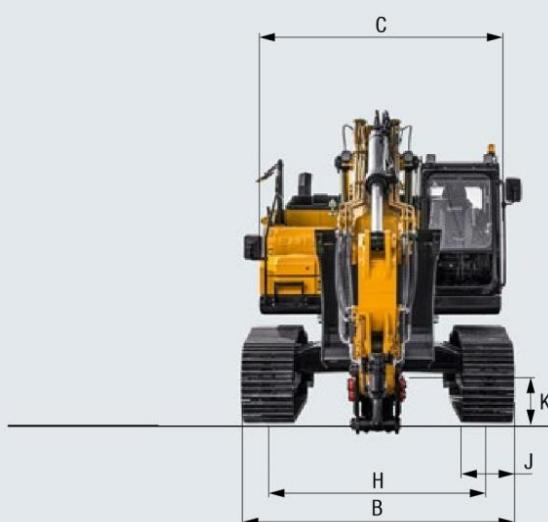
Swingspeed	9 rpm
Max. travel speed	High 5.2 km/h, slow 3.4 km/h
Max. travel force	245 kN
Gradeability	35°
Bucket capacity	1.7 m <sup>3</sup>
Groundpressure	0.6 kg/cm <sup>2</sup>
Bucket digging force ISO	204 kN
Arm digging force ISO	153 kN

## UNDER AND UPPER STRUCTURE

Boom length	6 150 mm
Arm length	3 200 mm
Bottomrollers	9
Toprollers	2
Rotation device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake

## OPERATING MASS

SY305	32 265 kg
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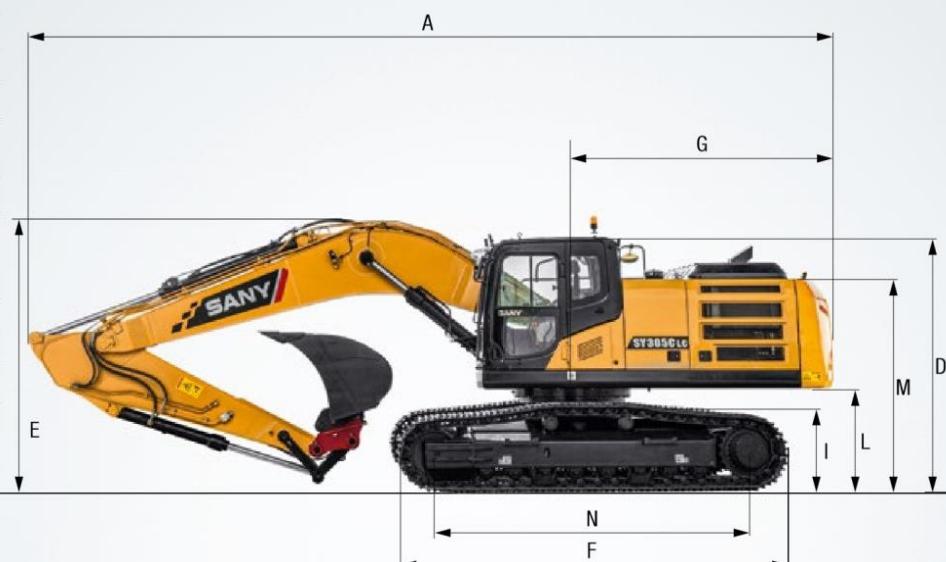
## LIFTING CAPACITIES\*

Load point height	Radius				Capacity	Max. digging reach
	3.0 m	4.5 m	6.0 m	7.5 m		
7.5 m kg					E 706 E 706	6954
6.0 m kg					7440 5592	5512 5308 7927
4.5 m kg			8777 8777	7857 5460	5478 4682	8525
3.0 m kg	13301 10813	10078	7211 8500	5270	5635 4368	8825
1.5 m kg	15494 10106	11268	6853 7696	5081	5736 4271	8860
Ground kg	16368 9767	11989	6615 7544	4941	5894 4373	8631
-1.5 m kg	12939 12939	16113 9688	10261 6514	7479 4882	6396 4727	8118
-3.0 m kg	20377 20377	14864 9777	11298 6547	8597 4940	7514 5520	7257
-4.5 m kg	16297 16297	12257 10032	9079 6748		8765 7468	5892

\* at 3 200 mm undercarriage width

## DIMENSIONS (TRANSPORT)

A Transport length	10667 mm
B Transport width	*2990 mm **3190 mm
C Upperstructure carriage	2986 mm
D Height over cabin/ROPS	3280 mm
E Height of Boom – transport	3470 mm
F Overall length of crawler	4840 mm
G Tail length	3315 mm
H Track gauge	*2390 mm **2590 mm
I Track height	1025 mm
J Track pads width	600 mm 700 mm 800 mm
K Min. ground clearance	470 mm
L Counterweight clearance	1045 mm
M Engine cover height	2640 mm
N Center distance of tumblers	3916 mm

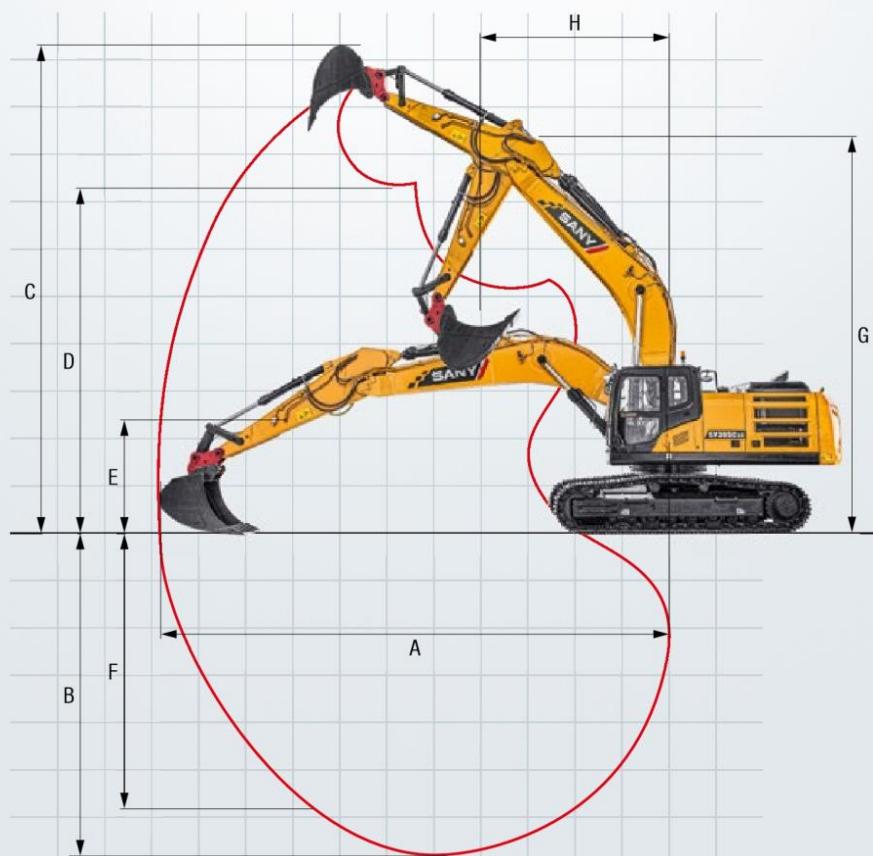


\* at 600 mm track pads width

\*\*Wide undercarriage with 600 mm track pads width

## WORKING AREA

A Max. digging reach	10870 mm
B Max. digging depth	6815 mm
C Max. digging height	10497 mm
D Max. dumping height	7359 mm
E Min. dumping height	2450 mm
F Max. vertical digging depth	5800 mm
G Overall height over arm by min. swing radius	8405 mm
H Min. swing radius	4000 mm



## Expect more from your machinery

The SY305 crawler excavator is already fitted with an excellent range of equipment ex-works. It offers maximum comfort in the driver's cab for the greatest possible flexibility for all tasks, as well as maximum efficiency, giving you a competitive edge.



### 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	●
Joysticks independently from seat adjustable	●
Sky light openable	●
10" touchscreen display	●

### 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	●
Rotation line proportional on Joystick with piping	●
Flow adjustment for attachments	●
Pressure adjustment for attachments	●

### UNDERCARRIAGE

Steel tracks	●
Holes/loops for fixing	●
HD Line	●

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.

### WORKING LIGHTS

Lights – front (LED)	●
Lights – boom (LED)	●
Lights – platform (LED)	●
Lights – back (LED)	●

### ENGINE

Auto idle	●
SCR	●

### HYDRAULIC SYSTEM

Swing brake	●
2 speed travel	●
Piping for additional hydraulic function AUX 1	●
Fuel filler pump with automatic shut-off	●
Hydr. Pre-pressure operating joysticks	●
Switchover hammer valve in display	●

### SAFETY

Battery master switch	●
Travel Alarm	●
Warning beacon	●
Camera	●
Side camera	●
Handrails	●
Lockable fuel cap	●



# A SERVICE YOU CAN REPLY ON

In the event of a breakdown during your warranty period, Machinery Specialists will come to your site as soon as possible to get your machine back up and running.

## Flexible, Fast and Always there for you

Paid assistance, tailored advice and a reliable supply of original parts all around New Zealand. That is what we mean by premium service.



## Detailed information in black and white

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

# MACHINERY SPECIALISTS LIMITED

## Parts and Inventory

As the dealer of SANY excavators, roading and construction equipment Vertu holds a significant inventory of SANY Genuine and aftermarket parts and attachments, both in New Zealand and Australia to keep you going. With direct relationships locally and internationally we can source parts quickly and as a matter of priority.



## The added benefits SANY offers you:

- ✚ Fast supply thanks to the New Zealand Vertu Locations
- ✚ 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.

# THE ALL-INCLUSIVE POWERHOUSE

With its extensive equipment, the SY305H offers an impressive price-performance ratio. Everything you need to comfortably use the powerful machine on the construction site is included ex-works.



## STABLE FOUNDATION

The SY305H's **efficient weight distribution** and **great stability** means that it cuts a good figure. Furthermore, its **precise balance** ensures that its power can always be used optimally.

## EVERYTHING UNDER CONTROL

With the SY305H, you simply need to take a seat and everything is within reach. The **comfortable driver's seat** can be independently adjusted in many directions and gives you the highest degree of **ergonomics** and **operating safety** thanks to the **synchronised controls**.

## TWO EYES ARE BETTER THAN ONE

The two **cameras installed as standard** cover the entire working environment. Operators also always have good visibility to the rear thanks to the **low design of the machine's rear**.

## POWER IN EVERY SITUATION

Rely on the first-rate performance of the tried-and-tested **6-cylinder Cummins engine**. Its power gives you the certainty of a **high performance** and also ensures **minimal fuel consumption**.

## MAXIMUM EFFICIENCY OR MAXIMUM POWER

The two **auxiliary lines are proportionally controlled**. In addition, the pressure and

power output per litre are **individually adjustable** and can be saved for certain tasks and attachment devices. This means that you always have the right **pre-configured hydraulic settings** available for every attachment device.

## TECHNICAL HIGHLIGHTS

Rated power	212 kW / 2 000 rpm
Max. torque	1 472 Nm / 1 400 rpm
Max. travel speed	5.2 km/h
Swingspeed	9 rpm
Mainpump	2 x variable-piston-pump with electronic positive control
Max. oilflow	2 x 280 l/min
Engine	ISUZU

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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**MACHINERY  
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