

## PRECISE POWER

PERFECTION AS A FOUNDATION. EFFICIENCY AS A BENCHMARK.

CONSTRUCTION MACHINERY



## CRAWLER EXCAVATOR SY245

Engine MITSUBISHI D06FRC

Rated power 147 kW / 2100 rpm

Operating mass **25500 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 leading producers, having sold more than **450 000** excavators **worldwide**. 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 **four-year warranty** as a guarantee of how powerful and robust our products are.

## **450 000**

**EXCAVATORS SOLD** 

### **WORLDWIDE**

5-7%
TURNOVER FOR RESEARCH
AND DEVELOPMENT

## FOUR-YEAR WARRANTY\*









## THE SPECIALIST WHEN IT COMES TO VERSATILITY

With the SANY SY245H crawler excavator, you get more done. No matter where used – it applies its power with precision. This is because every detail is specifically designed for the tough conditions on construction sites. This excavator is a real all-rounder and a specialist in every discipline, from quick loading to precise digging and powerful demolition work.

What particularly sets it apart is its ability to control its tremendous power with great precision – for maximum productivity and therefore a fast return on investment.

#### TOP PROPERTIES

## IT IS AS LOW IN CONSUMPTION AS IT IS POWERFUL IN PERFORMANCE

The highly efficient engine with common rail technology guarantees excellent performance. Four different operating modes for the various operating conditions precisely adjust the engine and hydraulic power to the requirements. This improves the excavator's response behaviour. Fuel consumption and emissions, which were already very low, have been

further reduced to meet Stage III emissions standard. Another benefit ensuring higher efficiency whilst reducing component costs is the fact that the machine still operates without an exhaust gas recirculation system.

#### **DIMENSIONS**

Agile power – the SY245H works through its programme quickly and with great power. This excavator has great power reserves in its 23+ tonnes. The machine is mounted on a stable HD undercarriage so that it can be used to the full.

#### **USER EXPERIENCE**

Comfortable workstation - the cabin of the SY245H leaves nothing to be desired. All of the controls are within easy reach from the airsuspension seat which supports the driver's back. Maintenance and service support is also easy to reach: Thanks to the large and easily accessible service doors and clear layout of the most important components, this work is quick and easy to complete.

#### **QUALITY**

Durable and robust - the SY245H can be used whenever the going gets tough. This means that it must be able to withstand a great deal. No problem for the SY245H, as with its reinforced, extremely robust undercarriage and particularly clean, robot-welded seams, it is exactly the right excavator for hard day-to-day work on construction sites.



#### **SAFETY**

Safety as a production factor- it is only possible to work cost-effectively if you work safely. This is why the large safety package has everything included as standard, from LED working lights to the rotating beacon, and from the boom safety valve to the overload warning for lifting

#### **COMPONENTS**

High quality and tried-&-tested - the water-cooled Mitsubishi diesel engine with common rail technology guarantees reliable performance, even under tough working conditions. The complete package is rounded off by the finely tuned Kawasaki hydraulic system.

#### **ECONOMY**

Power and efficiency - the smart hydraulic control system adapts the pump power to the available engine power. This means greater efficiency and lower fuel consumption, thereby providing excellent cost-effectiveness.





#### **ECONOMY**

#### **Changed well**

The hydraulic quick-coupler line is already included ex-works as standard and is incorporated into the operating concept. The powerful hydraulic system is factory-equipped with numerous functions that help the crawler excavator achieve maximum flexibility. In addition, one of the machine's new features makes changing tools even easier and quicker. When switching from hammer to shear hydraulics, the hammer valve is switched by pressing the key on the display. The attachment devices can therefore be switched completely from the cab, in conjunction with the respective quick coupler systems.



## 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

### EFFICIENCY, COST-EFFECTIVENESS AND USER EXPERIENCE



USFR FXPFRIFNCF

## THE NEW COMFORT ZONE

For drivers to fully concentrate on their work, they first need to be sitting comfortably. The individually adjustable, air-suspension seat offers a comfortable workstation from which all of the controls are within easy reach. At the forefront, alongside the ergonomic controls, is the 10" touch display. This displays razor-sharp images from both cameras, and has intuitive controls which allow all relevant machine parameters to be set with great ease, in all common European languages. Naturally, the consoles move up and down with the seat, thus providing the best possible protection for the operator even in the event of impacts. The flat design of the engine cover allows a view of the rear working area.

The automatic climate control system which provides pleasant temperatures even in the summer, the powerful heating, and the radio with an additional USB port for the driver's own audio devices all comes as standard, as do the large storage compartments for everything the driver needs close to hand.

#### COMPONENTS

## Improved performance thanks to optimised hydraulics

The position-controlled hydraulic system adjusts the required pressure and oil flow according to requirements. The powerful, variable piston pumps reach a flow rate of 520 l/min and therefore achieve a very high level of efficiency at a low engine speed.





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

- + Large, high-resolution touch display
- ★ Reverse camera
- + Seat with adjustable consoles
- + 5 different attachments per category programmable (name, pressure, oil flow)
- + 2 Auxiliary lines
- + Comfortable switching of hammer/shear hydraulics

USER EXPERIENCE

## Minimising maintenance times and maximising operating times

All serviceable components are easily accessible. This means that any maintenance and service support can be carried out efficiently and safely, reducing unproductive downtime and increasing machine availability.

Daily routine checks in particular can be carried out quickly, easily and safely by hand, because handrails, non-slip treads. A lot of maintenance tasks, such as cleaning the air filter, are already possible from the ground.





QUALITY

#### A very stable foundation

The machines have a great deal of work to do during their tough day-to-day work on construction sites. This is why – from the design stage, to selecting the materials used, quality and conducting the final checks – all excavators by SANY are designed to be robust. For instance, all welded seams are computer-controlled by robots – this maximum precision ensures stability and reliability.





SAFETY

## Best visibility even in poor lighting conditions

Good visibility is required for precise, quick work. In the worst-case scenario, the SY245H itself will provide sufficient lighting. The operating area is illuminated by two LED roof working lights, two LED working lights on the boom, one in the upper structure and an LED working light facing backwards. The high-quality LED working lights not only stand out thanks to their particularly good illumination, but also due to their low power consumption and extreme durability, while also being virtually maintenance-free. For enhanced safety, a reverse camera is also provided to show all poorly visible areas of the machine. With a single tap, the images can be combined or shown individually on the high-resolution display.

### **TECHNICAL SPECIFICATIONS**

#### **MOTOR**

Model	MITSUBISHI D06FRC
Туре	Direct Injection, 6-cylinder, 4 stroke with turbo charged and water-cooled
Exhaust emissions	Stage III
Rated power	147 kW / 2100 rpm
Max. torque	750 Nm / 1350 rpm
Displacement	6.373L

#### **HYDRAULIC SYSTEM**

Mainpump	Adjustable axial piston pump
Max. oilflow	520 l/min
Travelmotor	Adjustable axial piston pumps
Slewing Gear	Adjustable axial piston pumps

#### **PERFORMANCE**

Slewing speed	10.6 rpm
Max. travel speed	High 5.4 km/h, slow 3.4 km/h
Max. travel force	191 kN
Gradeability	35°
Groundpressure	52.5 kPa
Bucket digging force ISO	175 kN
Arm digging force ISO	120 kN

#### **OPERATING MASS**

SY245H 25 500 kg

#### SERVICE REFILL CAPACITIES

Fuel tank	475 L
Engine coolant	30.9 L
Engine oil	29 L
Final Drive	2 x 4.0 L
Hydraulic oil tank	277 L

#### **RELIEF VALVE SETTINGS**

Boom circuit	343 bar
Slewing circuit	290 bar
Drive circuit	343 bar
Pilot control circuit	39 bar
Powerboost	373 bar

#### UNDERCARRIAGE AND UPPER STRUCTURE

Boom length	5 900 mm
Arm length	2950 mm

#### LIFTING CAPACITIES\*

Boom	5900	mm	Arm	2950mm	,	Widthoftrack	- 600mm		Counterweight	4700Kg		
					Radiusof	loadingpoi	nt(A)			M	Maximumdistance	
			m	4.	5m	61			.5m	Loading	capacity	Distance
Heightof dingpoir		Longitu- dinal	Transverse	Longitu- dinal	Transverse	Longitu- dinal	Transverse	Longitu- dinal	Transverse	Longitu- dinal	Transverse	
m	, ,	Ī				H		픕		Ī		m
7.5m	Kg					5981	5981			5999.57	5999.57	6.15
6.0m	Kg					6083	6083	5775	5673	5669.90	5639.70	7.53
4.5m	Kg					6242	6242	5838	5682	5665.06	5010.26	8.10
3.0m	Kg			9459	9459	7856	7502	6724	5385	6120.86	4620.53	8.40
1.5m	Kg			11713	10834	8870	7118	7037	5191	5949.35	4429.29	8.50
Ground	Kg			12789	10477	9541	6859	6892	5049	6113.97	4527.26	8.26
-1.5m	Kg	11091	11091	13080	10367	9574	6879	6953	5108	6703.49	4982.43	7.75
-3.0m	Kg	17705	17705	12543	10457	9339	6974			7930.62	5867.41	6.91
-4.5mt	Kg	15261	15261	10814	10766					8623.42	8065.14	5.51

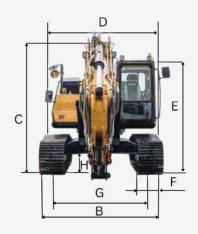
<sup>1.</sup> The lifting capacity is calculated in accordance with ISO 10560 and SAEJ 1097, where limit coefficient of hydraulic system is 0.87 and tilting limit coefficient is 0.75; and tilting limit coefficient is 0.75;

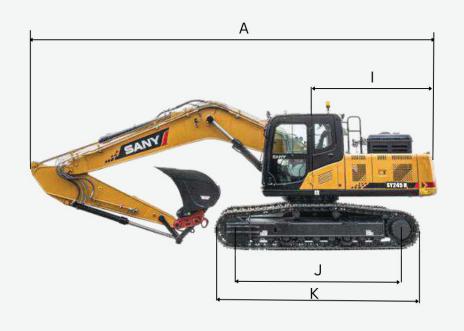
 $<sup>2.</sup> The item with the mark \verb|*"islim| ited by hydraulic pressure and the item without the mark \verb|""| is limited by stability;$ 

<sup>3.</sup> Lifting point is front support hole of bucket rod (excluding the weight of bucket). It is necessary to deduct from the above lifting capacity if additional accessory is installed such as bucket etc.

#### **DIMENSIONS**

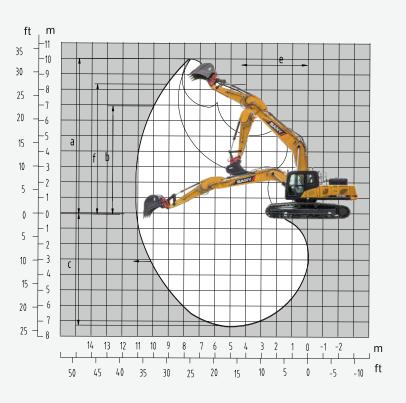
Α	Transport length	10 290 mm
В	Overall Width	3190 mm
С	Overall Height	3 255 mm
D	Upper Width	3 045 mm
Е	Overall Height (cab top)	3255 mm
F	Width of standard track shoe	600 mm
G	Track Gauge	2 590 mm
Н	Minimum Ground Clearance	470 mm
Ī	Slewing Radius of Tail	3105 mm
J	Ground Contact Length of Track	3640 mm
K	Track Shoe Length	4445 mm





#### **WORKING AREA**

A Max. dig	ging height	9745 mm
B Max. unle	oading height	6715 mm
C Max. dig	ging depth	6705 mm
D Max. dig	ging distance	10 225 mm
E Min. slev	ving radius	3 800 mm
F Overall he	eight over arm by	8016 mm



#### Versatile power

With the SANY SY245H, you do not need to worry about additional extra options. Everything you need for easy, comfortable work is included as standard.



#### OPERATORS COMFORT / CABINE

Heater	•
Automatic air conditioning C/H*	•
Radio and speaker	•
Armrests (adjustable)	•
12v outlets	•
USB port (music)	•
Airsuspension seat	•
Heated seat	•
Wiper	•
AUX 1 on joystick	•
AUX 2 on joystick	•
Sky light openable	•
Integrated cooling box	•
High resolution touch 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 600	•
Holes/loops for fixing	•

Standard equipment • Special option •

#### **WORKING LIGHTS**

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

#### **ENGINE/ENGINE COMPARTMENT**

Auto idle	•
Fuel pump	•
SCR	•
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	•

#### **SAFETY**

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

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





# THE ALLROUNDER THAT PICKS UP EVERYTHING

The SANY SY245H is a powerful all-rounder which combines flexibility and power. It can therefore perform various tasks in a wide range of applications and its robust design means that it is comfortable even with difficult tasks and tough environments.

### SAFETY AS A PRODUCTION FACTOR

The cleverly designed cab structure allows an unobstructed view of the working area, and the reverse camera that is fitted as standard provide a good overview. The LED lighting system is essential for long working days. Alongside this, optimised access to all maintenance points ensures maximum safety at all times.

### **COMFORTABLE**WORKSTATION

You know there are good **ergonomics** when you can still concentrate on your work after several hours. No problem in the cockpit of the SY245H because the seat and controls have been **designed for practical requirements**. All the machine settings can be configured using the high-resolution touch screen which is easy and intuitive to operate.

#### HIGH QUALITY AND TRIED-AND-TESTED

With its maximum torque of 750 Nm at 1350 rpm, the very strong **Mitsubishi D06FRC, six-cylinder engine** brings an incredible amount of power.

#### **DURABLE AND ROBUST**

The SY245H has to endure a lot in its tough daily construction site work. But it is well prepared for this. High-quality materials and meticulous machining provide the foundation for its long service life: For example, the reinforced undercarriage and precise, welded seams. Maximum stability designed to last many decades is also guaranteed by the continuous plate on the underside of the boom.

#### **AGILE POWER**

The SY245H works through its programme quickly and yet powerfully. This excavator has huge **power reserves** in its 25+ tonnes. The machine is mounted on a **stable HD undercarriage** so that it can be fully utilised.

#### **EFFICIENCY AND POWER**

The smart hydraulic control system adapts the pump power to the available engine power. This reduces fuel consumption, engine wear and exhaust gas emissions.

The comprehensive standard functions of the hydraulic system make the machine perfect for virtually all tasks.

#### **TECHNICAL HIGHLIGHTS**

Engine	MITSUBISHI D06FRC
Rated power	147 kW / 2100 rpm
Max. torque	750 Nm / 1350 rpm
Max. travel speed	5.4 km/h
Slewing Speed	10.6 rpm
Mainpump	Adjustable axial piston-pump
Max. oilflow	520 I/min

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.



Vertu Equipment 0800 837 888 www.vertuequipment.co.nz info@vertuequipment.co.nz Auckland 510 Ellerslie-Panmure Hwy Mount Wellington

Tauranga 67 Hull Road, Mount Maunganui

Christchurch 52 Hickory Place, Islington

