

SY390H

**SANY**

Quality Changes the World



# IMPRESSIVELY EFFICIENT

HIGH PERFORMANCE. LOW CONSUMPTION.

CONSTRUCTION MACHINERY



**CRAWLER EXCAVATOR**  
**SY390H**

Engine  
**CUMMINS L9-C**  
Rated power  
252 kW / 2 100 rpm  
Bucket capacity  
1.9 m<sup>3</sup>  
Operating mass  
40 150 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 **five-year warranty** as a guarantee of how powerful and robust our products are.

# 450 000

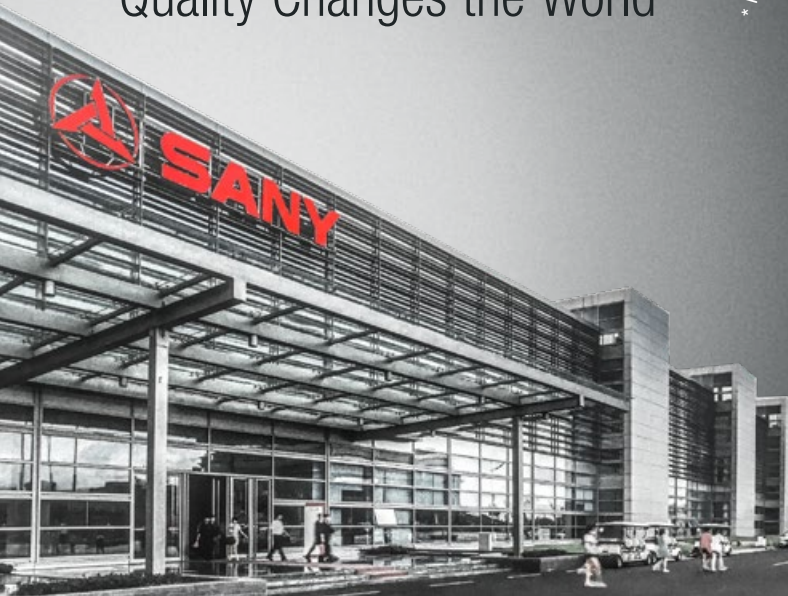
EXCAVATORS SOLD  
**WORLDWIDE**

# 5–7%

TURNOVER FOR RESEARCH  
AND DEVELOPMENT

# FOUR YEAR WARRANTY\*

Quality Changes the World



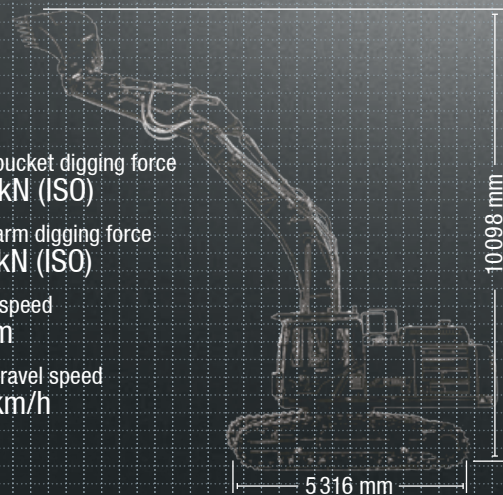
## SY390H HARD FACTS

Max. bucket digging force  
233 kN (ISO)

Max. arm digging force  
184 kN (ISO)

Swingspeed  
9 rpm

Max. travel speed  
5.2 km/h



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



**SY390H**

# A NEW DIMENSION IN PRODUCTIVITY

Whether its in civil engineering, demolition work or extraction – the SANY SY390H stands out as a sturdy all-rounder for heavy-duty applications in terms of performance, quality and robustness. In production, new technologies meet solid craftsmanship – and high-quality materials meet precise manufacturing methods. The result? Machines that offer you lasting and reliable productivity. And all this with an impressive price/performance ratio.



# TOP PROPERTIES



COMPONENTS

## SMART VENTILATION

To ensure that the engine does not overheat, even at maximum output, the SY390H is equipped with a powerful, electronically controlled fan. An integrated coupling ensures that the fan only starts to run when it is actually needed. This saves fuel, decreases noise levels and reduces emissions. Only main components from well-known brand manufacturers are used; for example, the tried and tested Kawasaki hydraulic system.

### QUALITY

**Always reliable** – Optimum weight distribution was developed for the arm and boom, enabling maximum lifting capacity. New, high-strength cast parts at the points of most stress on the equipment reduce load stress and improve durability.

### USER EXPERIENCE

**So comfortable, so productive** – The spacious cab is equipped with a comfortable, fully adjustable seat and adjustable consoles. This, along with some other features, such as the 10" touch display, makes the SY390 a comfortable work space.

### DIMENSIONS

**Stable base** – The heavy-duty undercarriage provides stability in any situation. It is equipped with a triple chain guard and double-bearing of the top rollers as standard. Ideal conditions, then, for maximum service life, even with constant, heavy-duty use.



### SAFETY

**Looking good** – Two cameras (rear and side) provide the driver with a comprehensive view of the working environment. The images from the cameras can be shown either individually or combined on the HD display. The flat bonnet also allows a clear view to the rear.

### COMPONENTS

**High degree of efficiency** – The powerful CUMMINS unit, in combination with the corresponding exhaust treatment, guarantees full performance for every task. The drive without exhaust gas recirculation ensures efficient combustion.

### ECONOMY

**Maximum productivity** – Select the optimum operating mode according to the specific application, and choose between high performance or minimum fuel consumption. The incredible productivity is also a result of its high level of flexibility. For this reason, the SY390H is equipped with two auxiliary control circuits as standard.

## DIMENSIONS

### Stable in every situation

Anyone who wants to really tackle the tough everyday conditions of the construction site needs excellent stability. With the SY390H, the sturdy HD undercarriage is the perfect base. With its low centre of gravity and sophisticated balance, it can make full use of its impressive capacity. A triple chain guard and two stem shoes as standard equipment complete the robust undercarriage design.



## SAFETY

# SAFETY DOWN TO THE TINIEST DETAIL

A rear camera and a side camera are installed ex works as standard. The images from the cameras can be displayed on the HD monitor, either individually or in various combinations, and provide an accurate image of the environment to ensure the highest level of safety. In poor lighting conditions, six work spotlights provide excellent illumination. The maintenance-free LED lights stand out thanks to their exceptional illumination and low power consumption, thereby saving the battery. Sturdy loops for secure transport and a maintenance platform with non-skid surface and a non-slip rail are included in the standard equipment along with emergency lowering. The latter allows the equipment to be lowered if the drive unit were to fail. The comprehensive safety package is completed by protective grilles on the roof and in the lower section of the cab window. These protect both persons and the machine, particularly when working on stony terrain or during demolition work.



### Absolute reliability – for peace of mind!

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

\* With participating partners

## QUALITY

### Because quality counts

Crawler excavators are high-performance machines that have to prove themselves again and again in the tough conditions of the construction site. We therefore make no compromises when it comes to quality. Clean robot-controlled welded seams and high-quality hydraulic line piping ensure that you can rely on your SANY. In addition, the all-round reinforcement of the upper structure and the all-metal panning protects against expensive damage – more minor damage can simply be straightened out when needed.

# EFFICIENCY, COST-EFFECTIVENESS AND USER EXPERIENCE

USER EXPERIENCE

## A DRIVER'S CAB THAT LEAVES NOTHING TO BE DESIRED

The SY390H cab has been designed down to the last detail to enable safe, fatigue-free operation. Its extensive insulation provides excellent protection for the driver against noise and dust. The airsuspension seat is the central element - it can be adjusted in various directions and therefore allows easy access to the controls and a perfect overview. Perfect for quick and accurate operation: the consoles are connected to the seat and move along with it. Some of the other elements adding to the comfort include heated seating, automatic air conditioning, a refrigerated compartment, a radio and a USB port.



USER EXPERIENCE

### Spacious and practical

On the 10" touch display, the operator can, at any time, quickly and reliably call up the most important information and unit statuses. This includes the HD images of the two cameras fitted as standard. Simple handling, intuitive menu navigation and a choice of languages prevent incorrect operation. What's more, you can even reliably operate the 10" touch display when wearing gloves.



USER EXPERIENCE

### Simplicity is key in maintenance

Regular inspection and maintenance work ensure a good performance and service life of the machine. We therefore make these tasks as easy as possible for the operator. The lubrication block allows quick, convenient lubrication of multiple lubrication points in one operation. The air filter is easily accessed from the ground and the oil dipstick above the operator's platform.



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

- + Large, high-resolution 10" touch display
- + 2 cameras
- + Seat with adjustable consoles
- + 2 auxiliary control lines
- + Programmable attachment devices
- + Automatic switching of the hydraulic system in hammer operation
- + Heavy Duty undercarriage and equipment
- + Very high engine power



### ECONOMY

## Maximise performance, minimise consumption

The water-cooled six-cylinder engine gives all the power necessary to really get stuck into excavation, quarrying or demolition. Furthermore, not only does the unit meet the strict requirements of Emission regulation Stage V, it is also extremely fuel-efficient and quiet.



# TECHNICAL SPECIFICATIONS

## ENGINE

Model	CUMMINS L9-C
Typ	Water-cooled, 6 cylinder, with commonrail and Adblue
Exhaust emissions	Stage V
Rated power	252 kW / 2 100 rpm
Max. torque	1 526 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 × 352 l/min
Travelmotor	Variable displacement axial piston motor
Swingmotor	Axial piston motor
Max. oilflow (AUX1)	550 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	600 l
Engine coolant	36 l
Engine oil	21 l
Drive (per side)	8.5 l
Adblue	85 l
Hydraulic oil tank	540 l

## PERFORMANCE

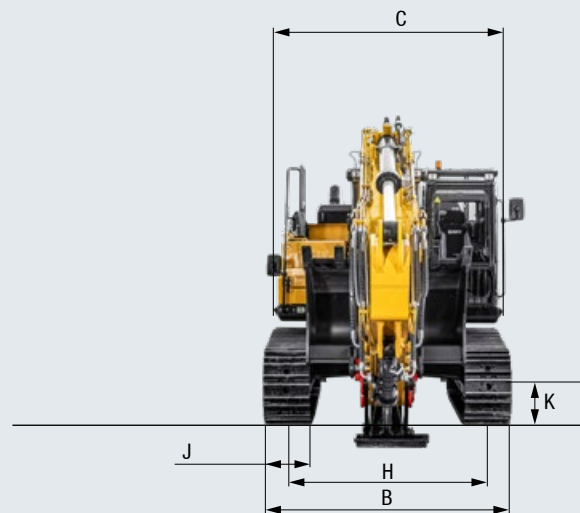
Swingspeed	9 rpm
Max. travel speed	High 5.2 km/h, slow 3.1 km/h
Max. travel force	245 kN
Gradeability	35°
Bucket capacity	1.9 m <sup>3</sup>
Groundpressure	0.7 kg/cm <sup>2</sup>
Bucket digging force ISO	233 kN
Arm digging force ISO	184 kN

## UNDERCARRIAGE AND UPPER STRUCTURE

Boom length	6 500 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

SY390H 40 150 kg



## LIFTING CAPACITIES\*

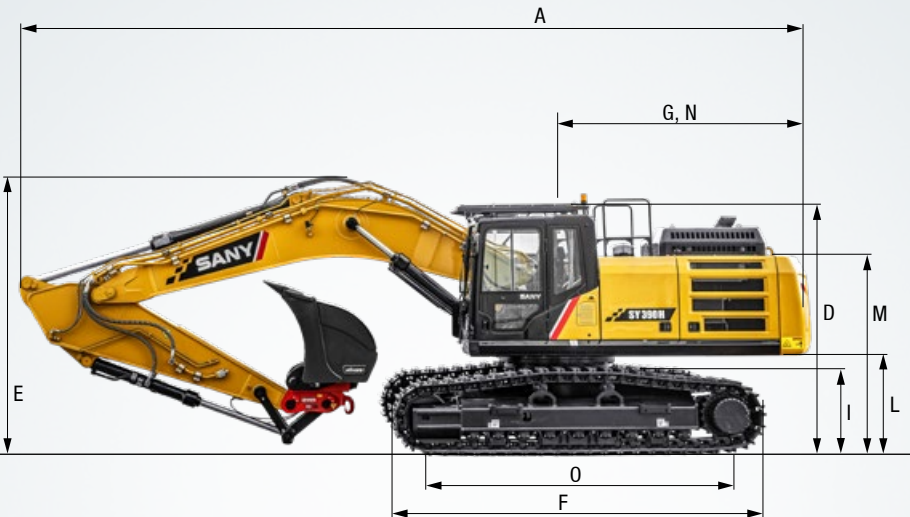
Load point height	Radius								Max. digging reach		
	3.0 m		4.5 m		6.0 m		7.5 m		Capacity	mm	
7.5 m kg	9640	9640	8267	8267	7444	7444	6971	6256	6927	5920	7743
6.0 m kg	14043	14043	10058	10058	8284	8284	7322	6034	6918	4828	8583
4.5 m kg			12556	11495	9436	7827	7889	5702	6974	4225	9096
3.0 m kg			14685	10229	10542	7190	8476	5359	7054	3907	9338
1.5 m kg			15501	9616	11245	6742	8888	5087	7122	3802	9331
Ground line kg	10317	10317	15232	9458	11369	6525	8958	4935	7120	3904	9074
-1.5 m kg	17574	17717	14166	9547	10835	6512	8484	4933	6940	4269	8541
-3.0 m kg	15804	15804	12168	9839	9403	6700	6783	5173	4824	4824	7680
-4.5 m kg			10634	8518	8518	5723	5723				6353

\* at 600 mm track pads width



## DIMENSIONS

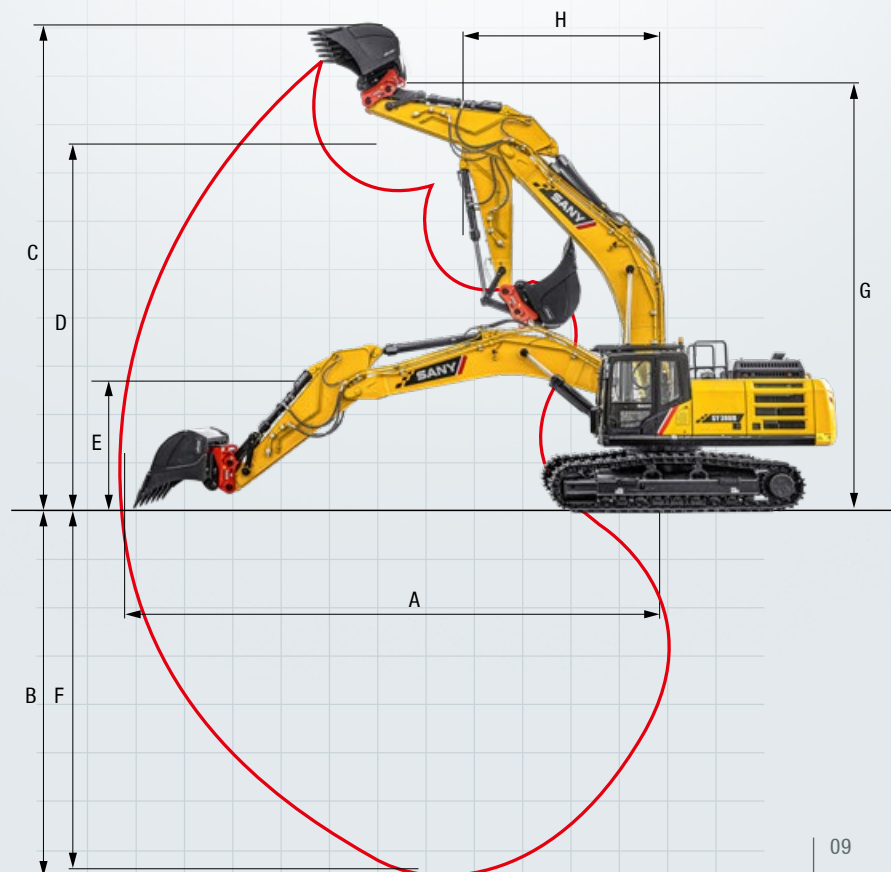
A	Transport length	11 432 mm
B	Transport width*	3 190 mm
C	Overall width of upper structure	3 107 mm
D	Height over cabin/ROPS	3 783 mm
E	Height of Boom – transport	3 783 mm
F	Overall length of crawler	5 316 mm
G	Tail length	3 552 mm
H	Track gauge	2 590 mm
I	Track height	1 123 mm
J	Track pads width	600 mm
K	Min. ground clearance	524 mm
L	Counterweight clearance	1 418 mm
M	Engine cover height	2 794 mm
N	Tail swing radius	3 552 mm
O	Center distance of tumbler	4 140 mm



\* at 600 mm track pads width

## WORKING AREA

A	Max. digging reach	11 022 mm
B	Max. digging depth	7 473 mm
C	Max. digging Height	10 098 mm
D	Max. dumping height	7 746 mm
E	Min. dumping height	2 770 mm
F	Max. vertical digging depth	7 304 mm
G	Overall height over arm by min. swing radius	8 949 mm
H	Min. swing radius	4 176 mm



## Already with many extras ex works

The SY390H is equipped with many extras as standard. From the comfortable operator's cab to the automatic switching of the hydraulics, many features make day-to-day operation more efficient and safer.



### OPERATORS COMFORT / CABINE

Automatic air conditioning C/H*	●
Radio and speaker	●
Armrests (adjustable)	●
12v outlets	●
USB port (music)	●
Airsuspension seat	●
Heated seat	●
Sky light openable	●
Integrated cooling box	●
10" touch display	●
ROPS/FOPS cabin with front protection	●
Rubberfloor	●

### 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 on Joystick with piping	●
Rotation line proportional on Joystick with piping	●
Flow adjustment for attachments	●
Pressure adjustment for attachments	●
Ram protection on both sides of the upper structure	●

### UNDERCARRIAGE

Steel tracks 600	●
Holes/loops for fixing	●

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

### WORKING LIGHTS

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

### ENGINE/ENGINE COMPARTMENT

Auto idle	●
Fuel pump	●
DPF	●
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	●
Camera on right side	●
Handrails	●
Lockable hoods	●
Lockable fuel cap	●

## 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.



# A SERVICE YOU CAN RELY ON

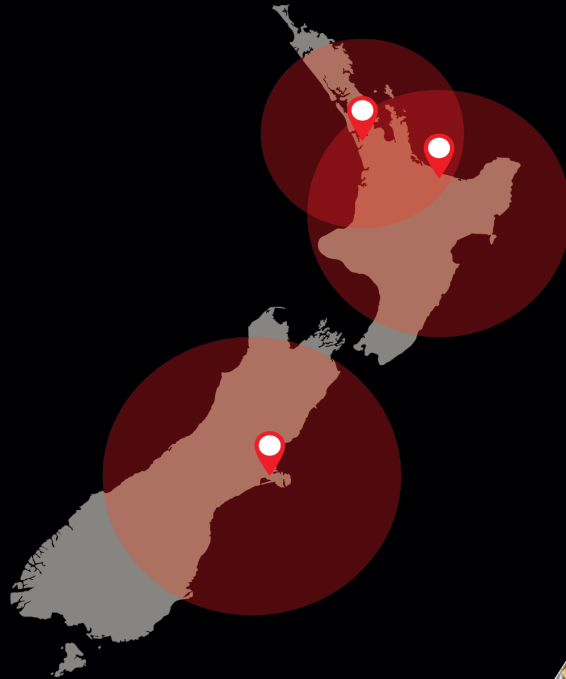
In the event of a breakdown during your warranty period, Vertu will come to your site as soon as possible to get your machine back up and running. If the repair cannot be undertaken on-site or in good time, Vertu will arrange a similar replacement while your machine is repaired under warranty.

## National Service Representative

Our national service network partnerships provide certainty that you are supported with service and parts, wherever you are located.

## 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.



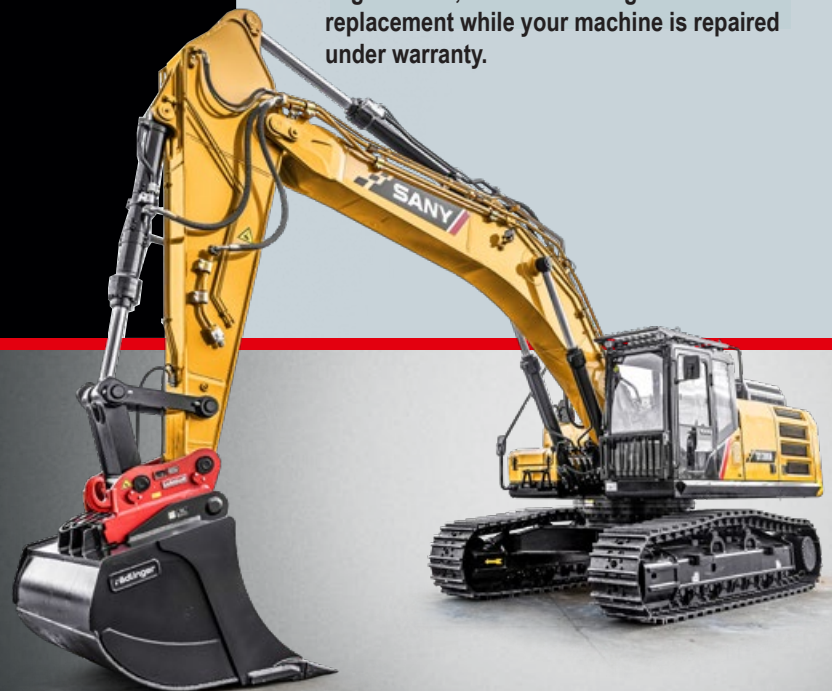
## Parts and Inventory

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:

- + Site visits to get your machine back up and running as soon as possible.
- + Significant inventory of SANY genuine and after market parts and attachments
- + Expert knowledge including SANY trained technicians
- + If a repair cannot be undertaken on-site or in good time, Vertu will arrange a similar replacement while your machine is repaired under warranty.



## 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.



# FLEXIBLE POWERHOUSE

The SY390H makes it easy for you to work efficiently. And with as much flexibility as you've always wanted. With the automatic switching of the hammer valve and the individually programmable attachment devices, even challenging attachment devices can be changed over quickly and easily. This makes operation more efficient and requires fewer compromises when changing tasks. A flexible powerhouse, the SY390H is a real hero at work, powering through a lot of work, wherever it is put to use.

## STABLE FOUNDATION

The "H" on the SY390 stands for "Heavy Duty". Or for high-quality and robust. So, the HD undercarriage is not only a guarantee of stability even in tough conditions, but also the basis for maximum service life and maximum performance.

## SO COMFORTABLE, SO PRODUCTIVE

You can feel really comfortable in this cab. Large, clearly laid out, ergonomic. With an individually adjustable seat, adjustable consoles and a large 10" touch display.

## YOU CAN RELY ON

The arm and boom have been designed with optimum weight distribution for maximum lifting capacity. The areas that are subject to most stress in the tough everyday conditions of the construction site are made of high-strength cast parts. This reduces load stress and increases service life.

## LOOKING GOOD

To ensure that the driver always has a clear view of the entire working environment, the SY390H has a camera installed at the rear and one on the side. The display shows the images in high definition, either individually or combined. Even the rear view is unhindered, thanks to the flat engine bonnet.

## OPTIMISED EFFICIENCY

The SY390H tackles work with great power. The 252 kW CUMMINS diesel engine and powerful Kawasaki hydraulics stand up to even the toughest challenges, combining dynamics with precision.

## MAXIMUM PRODUCTIVITY

With every job, the SY390H proves its flexibility again. For each individual task you can select the most suitable operating mode: high performance or minimum fuel consumption. Furthermore, two standard auxiliary control circuits add to its exemplary flexibility.

## TECHNICAL HIGHLIGHTS

Engine	CUMMINS L9-C
Rated power	252 kW / 2 100 rpm
Max. torque	1 526 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 352 l/min



**"PRECISE AND POWERFUL"**

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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