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 / 1 800 rpm**
Bucket capacity
**1.9 m³**
Operating mass
**40 000 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 **500 000** 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.

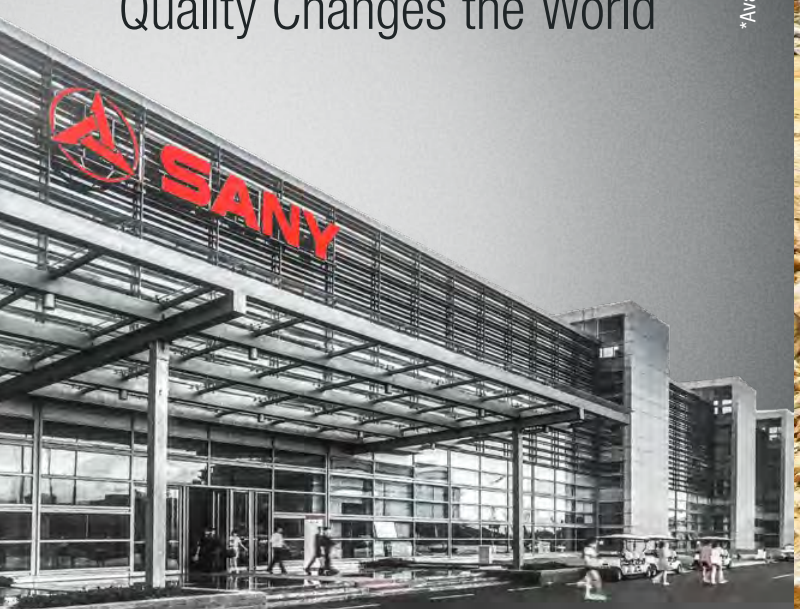
# 500 000
EXCAVATORS SOLD
**WORLDWIDE**

# 5–7 %
TURNOVER FOR RESEARCH AND DEVELOPMENT

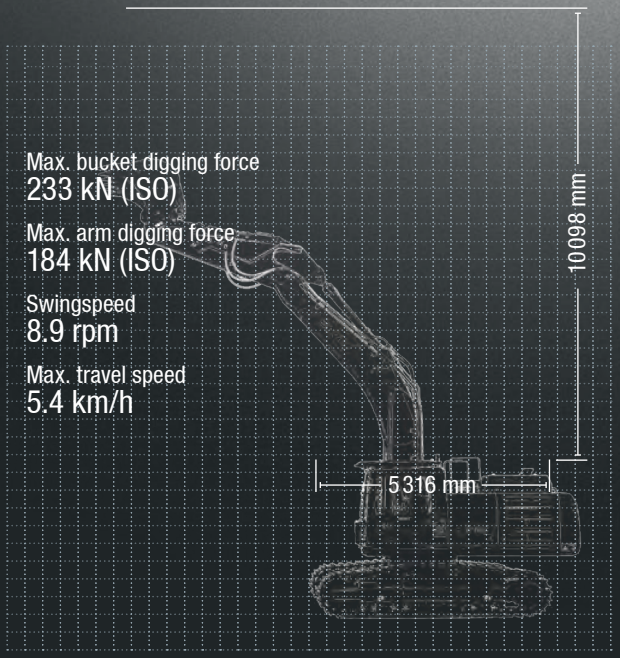
# FIVE-YEAR WARRANTY *

*Available on certain products only.

Quality Changes the World




**SY390H**
HARD FACTS

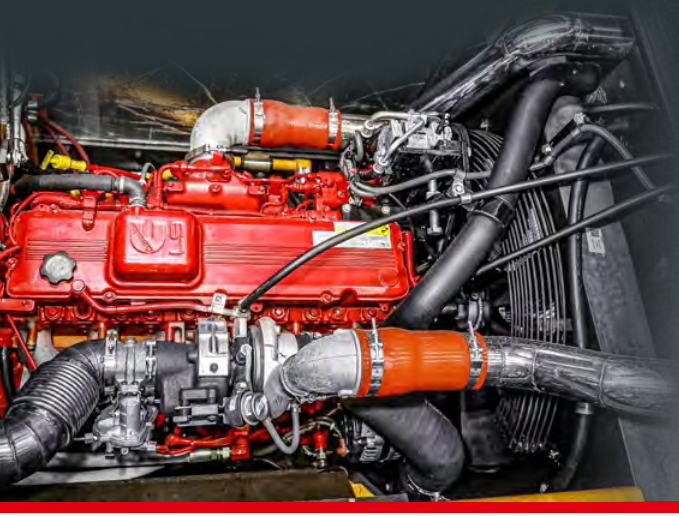





# A NEW DIMENSION IN PRODUCTIVITY

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.





COMPONENTS

# SMART VENTILATION

The key components of the SY390H and all SANY excavators are from well-known brand manufacturers. 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.

## QUALITY

**Always reliable –** A well balanced weight distribution across the machine, with our selectable boom and arm options enables maximum lifting capacity. Our high-strength cast parts 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 other standard features, such as the 10" touch display, makes the SY390H 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 on the top rollers as standard. Ideal conditions, then, for maximum service life, even with constant, heavy-duty use.




## SAFETY

**Site safety –** Two cameras (rear and side) provide the operator 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 engine, 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 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 working environment to ensure the highest level of safety. In poor lighting conditions, six LED spotlights provide excellent illumination. Secure tie-down points 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, allowing 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 the operator and the machine, particularly when working on stony terrain or during demolition work.







## Absolute reliability – for peace of mind!

SANY has earned a reputation worldwide for reliability, durability and performance but to provide peace of mind and to ensure maximum uptime all SANY excavators are backed by the SANY industry leading 5 year warranty.*

* Terms and conditions apply. Check with your local dealer for more information

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 steel panelling protects against damage.

USER EXPERIENCE

# AN OPERATOR'S CAB THAT LEAVES NOTHING TO BE DESIRED

The SY390H cab has been designed to enable safe, fatigue-free operation. Its extensive insulation provides excellent protection for the operator against noise and dust. The air suspension seat is the central element - it can be adjusted in various directions and therefore allows easy access to the controls. Perfect for quick and accurate operation: the consoles are connected to the seat and move with it. Other standard features to enhance operatror comfort include heated seating, automatic air conditioning, a refrigerated compartment, a radio and a USB port.

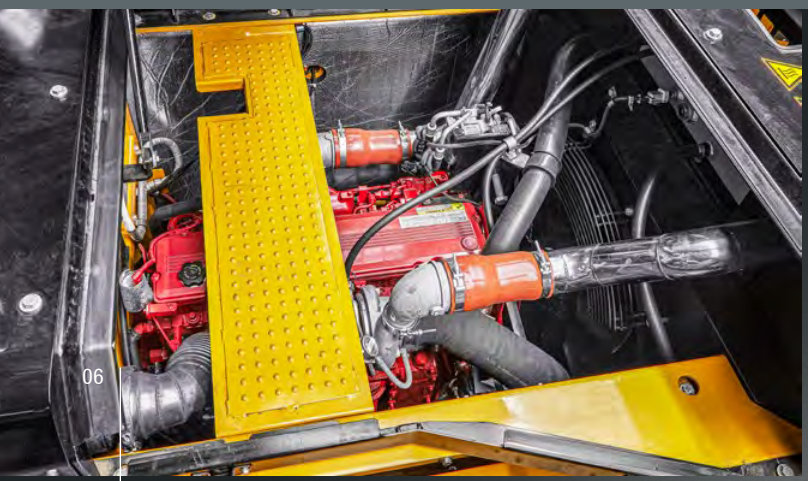



USER EXPERIENCE

## Spacious and practical

A sleek and intuitive 10" touch screen display with multiple language options has been designed with high performance and ease of use in mind.



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.

SANY PLUS ADVANTAGES

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

- Powerful stage V Cummins engine and load-sensing hydraulics
- Heavy duty undercarriage
- Two auxiliary control lines
- ROPS/FOPS certified operators cab with numerous standard features
- EVI telematics for improved fleet management
- 5 year / 5000 hour warranty



ECONOMY

## Maximise performance, minimise consumption

The water-cooled six-cylinder Stage V Cummins engine and smart hydraulic control system provides all the power necessary for excavation, quarrying or demolition and maximises on fuel economy.

ECONOMY

# FLEXIBILITY AT THE PUSH OF A BUTTON

The hydraulic quick-coupler preperation is already included as standard and is incorporated into the operating concept. The two control circuits can be individually adjusted. The desired parameters can be saved for the respective attachment and re-called at any time. The electric hammer valve makes it even easier to change attachment devices. It can be operated from the cab with the tool change and saves having to manually change over the return line in hammer operation facilitating the automatic change of attachment devices.



# TECHNICAL SPECIFICATIONS

## ENGINE

| | |
|---|---|
| Model | CUMMINS L9-C |
| Typ | Water-cooled, 6 cylinder, with commonrail and Adblue |
| Exhaust emissions | Stage V |
| Rated power | 252 kW / 2100 rpm |
| Max. torque | 1526 Nm / 1400 rpm |
| Displacement | 8900 ccm |
| Batteries | 2 × 12 V / 120 Ah |

## HYDRAULIC SYSTEM

| | |
|---|---|
| Main pump | 2 x variable-piston-pump with electronic positive control |
| Max. oil flow | 2 × 352 l/min |
| Travel motor | Variable displacement axial piston motor |
| Swing motor | Axial piston motor |
| Max. oil flow (AUX1) | 550 l/min |

## RELIEF VALVE SETTINGS

| | |
|---|---|
| Implement circuit | 343 bar |
| Power boost | 343 bar |
| Swing circuit | 310 bar |
| Travel circuit | 343 bar |
| Pilot pressure | 39 bar |

## SERVICE REFILL CAPACITIES

| | |
|---|---|
| Fuel tank | 600 l |
| Engine coolant | 44.5 l |
| Engine oil | 36 l |
| Drive (per side) | 10 l |
| Adblue | 85 l |
| Hydraulic oil tank | 415 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 m³ |
| Groundpressure | 0.7 kg/cm² |
| Bucket digging force ISO | 233 kN |
| Arm digging force ISO | 184 kN |

## UNDERCARRIAGE AND UPPER STRUCTURE

| | |
|---|---|
| Boom length | 6 500mm |
| Arm length | 2 600 / 3 200 mm |
| Bottom rollers | 9 |
| Top rollers | 2 |
| Rotation device | Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake |

## OPERATING MASS

| | | |
|---|---|---|
| SY390H | 40000 kg | Includes 75kg (165 lb) operator, full fuel tank and excludes any attachments or hitch |

## HYDRAULIC SYSTEM

| | |
|---|---|
| ISO 6395 (exterior) | 106 DB(A) |
| ISO 6395 (interior) | 73 DB(A) |

## LIFTING CAPACITIES*

| Load point height | | Radius 3.0 m | | Radius 4.5 m | | Radius 6.0 m | | Radius 7.5 m | | Max. digging reach Capacity | | Max. digging reach mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.5 m | kg | | | | | | | 7445 | 7445 | 7508 | 7508 | 7651 |
| 6.0 m | kg | | | | | 7838 | 7838 | 7674 | 7674 | 7723 | 7420 | 8523 |
| 4.5 m | kg | | | 11274 | 11274 | 9313 | 9313 | 8386 | 8386 | 7958 | 6674 | 9061 |
| 3.0 m | kg | | | 14855 | 14855 | 11028 | 11028 | 9281 | 8499 | 8215 | 6291 | 9326 |
| 1.5 m | kg | | | 17214 | 16092 | 12456 | 11002 | 10093 | 8236 | 8497 | 6172 | 9340 |
| Boden-linie | kg | | | 17899 | 15765 | 13244 | 10712 | 10601 | 8052 | 8809 | 6302 | 9106 |
| -1.5 m | kg | 15981 | 15981 | 17531 | 15727 | 13318 | 10605 | 10642 | 7976 | 9150 | 6744 | 8601 |
| -3.0 m | kg | 22155 | 22155 | 16347 | 15870 | 12638 | 10659 | 9971 | 8035 | 9513 | 7701 | 7773 |
| -4.5 m | kg | 18794 | 18794 | 14113 | 14113 | 10852 | 10852 | | | 9851 | 9851 | 6494 |

*at 700 mm track pads width

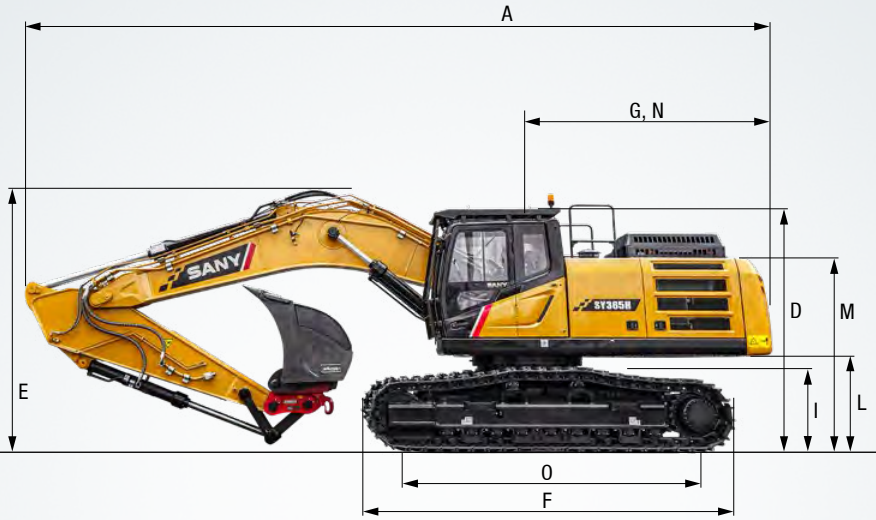
## BUCKET CAPACITIES

| Bucket type | Bucket m³ | Arm length 3.2m / Boom length 6.5m / Book length 6.5m |
|---|---|---|
| Standard rock bucket | 1.6 | ● / ● |
| Standard soil bucket | 1.8, 1.9, 2.1, 2.32 | □ |
| | 2.4, 3.2 | ◎ |

Max material density: ● 2.1T/m³ ● 1.8T/m³ □ 1.5T/m³ ◎ 1.3T/m³
Max hardness of the material: ● 9-12 ● 5-8 □ 3-4 ◎ 1-2

## DIMENSIONS

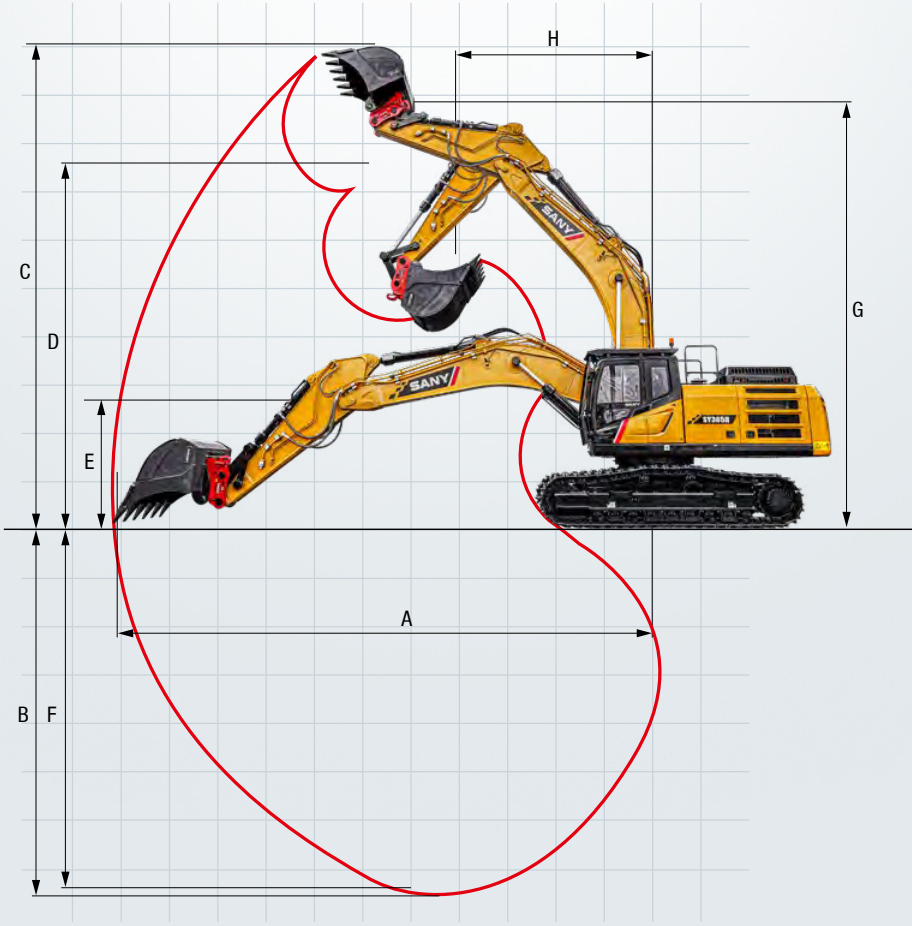
| | | |
|---|---|---|
| A | Transport length | 11 430 mm |
| B | Transport width * | 3 290 mm |
| C | Overall width of upper structure | 3 105 mm |
| D | Height over cabin/ROPS | 3 450 mm |
| E | Height of Boom – transport | 3 780 mm |
| F | Overall length of crawler | 5 315 mm |
| G | Tail length | 3 550 mm |
| H | Track gauge | 2 590 mm |
| I | Track height | 1 123 mm |
| J | Track pads width | 700 mm |
| K | Min. ground clearance | 570 mm |
| L | Counter weight clearance | 1 418 mm |
| M | Engine cover height | 2 794 mm |
| N | Tail swing radius | 3 550 mm |
| O | Center distance of tumblers | 4 140 mm |




*at 700 mm track pads width

## WORKING AREA

| | | |
|---|---|---|
| A | Max. digging reach | 10 830 mm |
| B | Max. digging depth | 7 125 mm |
| C | Max. digging Height | 10 120 mm |
| D | Max. dumping height | 7 490 mm |
| E | Min. dumping height | 2 770 mm |
| F | Max. vertical digging depth | 6 854 mm |
| G | Overall height over arm by min. swing radius | 8 830 mm |
| H | Min. swing radius | 4 180 mm |



## Fully equipped as standard

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 700 | ● |
| Tie down/Lifting points | ● |

### 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 and Side camera | ● |
| Handrails | ● |
| Lockable service doors | ● |
| Lockable fuel cap | ● |

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, $CO_2e$: 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.



# A SERVICE YOU CAN RELY ON

Just as we do with our excavators, we also demand high quality and reliability of our service products. This underlines our equipment's performance in terms of their durability and their excellent price-performance ratio. After all, maintenance is crucial for efficiency, cost-effectiveness and safety. Your SANY dealer is happy to help you with a comprehensive range of services to ensure that your machine continues operating efficiently in the 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. To locate your nearest dealer, visit https://www.sanyuk.com.



SANY PLUS ADVANTAGES

## The added benefits SANY offers you:

- Experienced dealer network throughout the UK and Ireland
- Direct sales and support route in Scotland and the south east of England.
- Dedicated ANY team based in the UK to support you and your product
- UK parts warehouse to ensure SANY machines are fully supported




## 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.

# HIGHLIGHTS SY390H




# 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 heavy duty 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

The SY390H offers a comfortable operartors 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.

## 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. 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 / 1 800 rpm |
| Max. torque | 1 526 Nm / 1 400 rpm |
| Max. travel speed | 5,4 km/h |
| Swingspeed | 9 rpm |
| Mainpump | 2 x variable-piston-pump with electronic positive control |
| Max. oilflow | 2 × 352 l/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.

SANY

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**SANY HEAVY MACHINERY (UK) LTD**

info@sanyuk.com
www.sanyuk.com

HEX - SY390 - 2202 - 03 - EN - V2