

SRSC45G5
SRSC45H9G5

SANY

Quality Changes the World



READY FOR ACTION

HIGHER, FURTHER, MORE EFFICIENT AS STANDARD AND AS HYBRID



REACH STACKER
SRSC45G5
SRSC45H9G5 HYBRID

Load capacities at row 1 / 2 / 3
45 / 31 / 15 t
Wheel base
6,000 mm
Engine
VOLVO EU STAGE V
Rated power
265 kW

SANY

**Performance comes from quality.
Quality comes from experience.**

SANY Europe is part of the SANY Group, a globally leading manufacturer of construction machinery, harbour equipment and wind turbines. Our aim is always to deliver products that are tailored to the national market concerned. Equipped with high-performance, innovative technology. With our own steel construction and spreader production, SANY has the world's largest production of reach stackers. And a potent, Europe-wide dealer network that provides local support for users in sales, service and maintenance.

> 4,000
UNITS SOLD IN
12 YEARS

5–7%
REVENUE FOR RESEARCH
AND DEVELOPMENT

5 YEARS
WARRANTY*

Quality Changes the World

* Only from participating dealers



GREATER EFFICIENCY AT EVERY TERMINAL

The high-performance SANY reach stackers are in their element wherever there is a lot to be moved. The power units have a 6 meter wheel base and are the first choice for efficient handling in all terminals. They score, for example, with unrivalled manoeuvrability and speed when stacking. They are also highly flexible in their equipment, optionally with toplift or intermodal spreader.

Furthermore, these SANY reach stacker are optionally available as hybrid versions, which combine high performance with outstanding economical benefits. With its movable counterweight, the hybrid reach stacker can, when required, offer a flexible expansion of the lifting capacity by an additional tonne.

SRSC45G5 | H9

TOP PROPERTIES

EFFICIENCY

STATE OF THE ART AND ALSO AS HYBRID

SANY reach stackers have exactly the right capacity for use in the container terminal. Their unrivalled compact design and intelligent container positioning during travel make it easy to manoeuvre in tight aisles. To this end, the spreader with the container can even be positioned above the front axle.

This exemplary weight distribution gives great stability and allows tight turning manoeuvres. Optimal preconditions for safe and fast working. Another benefit: An economical diesel drive or hybrid version for even greater fuel efficiency.



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LIFTING CAPACITY

The SANY extra-tonne – A little more is always welcome when it comes to lifting capacity. That is why SANY gives the option of adding an other tonne to the lifting capacity for the 2nd and 3rd rows with the movable counterweight on the hybrid version.

PRODUCTIVITY

The time-saver machine – exactly the right performance at the container terminal. Convincing with its sheer power when stacking heavy container in the first and second rows, with agility and fast manoeuvring, even in tight aisles, and with fast cycle times thanks to high-performance hydraulics and precise joystick control. Support is provided by automatic systems for locking the twist locks and telescopically extending the spreader, and a fully automatic powershift transmission with torque converter.

EFFICIENCY

Powerful – the powerful and economical 11-l engine and the efficient 5-speed gearbox allow the most powerful and efficient engine rpms to be used frequently while travelling. Increased speed of the hydraulic pump at reduced engine speed also reduced fuel consumption.



QUALITY

Long-term investment – Good stability in the steel construction and in the spreader give SANY reach stackers their extraordinary robustness. High-quality transmission and hydraulic components from leading manufacturers (Volvo, Dana, Kessler, Parker), quality electronics from IFM and a premium joystick ensure that SANY reach stackers continue to perform over a long time.

OPERATING COMFORT

Comfort leads to efficiency – The largest cab in its class gives the driver not only sufficient space, but also a wide range of comfort functions. The pleasant environment and the ergonomically arranged control elements allow concentrated, productive work over a long period.

SAFETY

So much is certain – The excellent stability is essential for working quickly and safely. The design is particularly robust and torsion-resistant, providing for the necessary stability with or without a load and intelligent weight distribution. Moreover, the driver can rely on numerous safety systems, including an extensive range of sensors, when the cab is moved to the front-most position.



Absolute reliability – for peace of mind!

SANY's 5-year warranty* gives you the assurance that you can fully count on your equipment.

* Only from participating partners



Our highlights – the added benefits SANY offers you:

- + Compact, high-performance reach stacker
- + Large, comfortable driver's cab
- + Robust and extremely durable thanks to solid steel construction
- + Extensive safety equipment
- + Movable counterweight

USER EXPERIENCE

COMPLETE COMFORT, COMPLETE CONTROL

The power of the SANY reach stackers is also plain to see behind the steering wheel: The largest cab in its class provides a lot of comfort. This includes air conditioning as standard and a driver's seat with comfortable neck support, high backrest and armrests. A Grammer premium seat with seat heating, electrical adjustment and lumbar support is also optionally available, as is a co-driver's seat. The noise insulation in the cab exceeds the requirements of the strictest industrial standards, making the working environment even more comfortable and preventing the early onset of driver fatigue. The entire machine control is located on the control console on the right-hand armrest and the steering wheel column, putting everything within easy reach. The high-precision Elobau multifunction joystick makes exact, efficient work possible in all situations. For example, it allows several hydraulic commands at the same time, and supports precise control for fast cycle times. The cab itself can be

moved electro-hydraulically to put the driver in a position where his view of the working area is unobstructed at all times.

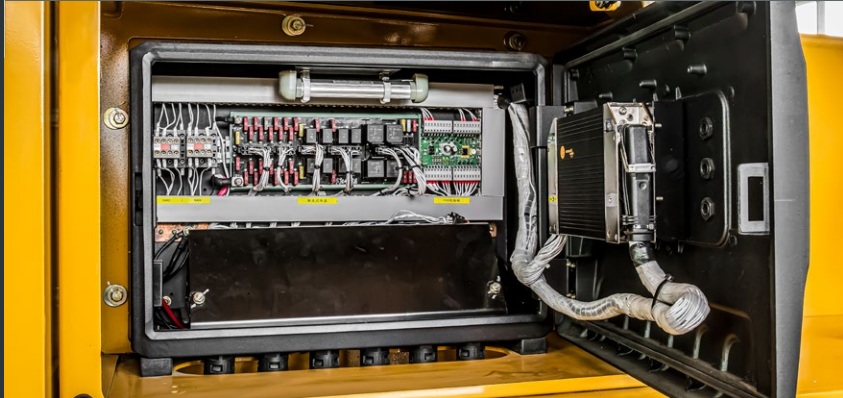


SAFETY

Safe. Safer. SANY.

Joystick control for the boom and the spreader is implemented with two independent CAN buses. Safety also when it comes to stability: Intelligent weight distribution and the robust chassis provide for the best stability in its class. Optional tyre pressure monitoring guarantees that nothing is overlooked when it comes to stability.

The driver receives information from the main display and from the head-up display about how much load capacity has been utilised, another factor for safe and fast working. He can thus quickly move the spreader with a container within the safe load range. What's more, to protect the driver, the rotation of the spreader is limited to 30° as soon as the cab is moved out of the safe rear position.



MAINTENANCE

The easy way

The dipsticks for the engine and gear oil are easily accessible in front of the driver's cab. The air filter is just as easy to service and exchange.

Practical: The large service hatches on the side of the machine for uncomplicated service control.



EFFICIENCY

FLYING HIGH

The unrivalled engine output and intelligent load distribution allow up to five loaded containers to be stacked in the 1st and 2nd row. Up to four partially loaded containers are possible in the 3rd row. The lightweight spreader employed on the hybrid reach stacker is now also used on the standard series. The streamlined design makes the spreader a tonne lighter – a lot of weight that no longer has to be moved up and down. Furthermore, the low self-weight of the

spreader allows weight to be saved with the counterweight.

The Loadsense hydraulics feature automatic engine speed adjustment, allowing not only short lifting and lowering times; they also switch the hydraulic system to stand-by to save fuel when the hydraulics are not in operation.



DIMENSIONS

Compactness as a concept

Compact dimensions, uncompromising performance – the properties of the SANY reach stackers cannot be described more accurately than that. With a wheel base of 6,000 mm, it offers a perfect combination of agility and safety. Manageable dimensions for fast manoeuvring in tight spaces on the one hand; ideal weight distribution for the optimum stability and weight saving on the other. SANY thus raises the benchmark for efficiency in container handling by another notch.

EFFICIENCY

AWARD-WINNING

The narrow boom head is about half a tonne lighter than the broad boom head of the predecessor model range. That saves fuel whenever a container is lifted. This advantage of the hybrid machines is now also available on the standard machines. This weight reduction improves fuel efficiency, saving a great deal of fuel in the course of a working day. One of many reasons why SANY reach stackers were given the IFOY Award.



PRODUCTIVITY

Maximum operating times, minimum downtimes

SANY reach stackers prove their reliability in tough practical operations worldwide. Within 10 years of operation, they reach more than 50,000 working hours, clocking up an excellent total operating time. Downtimes for maintenance, service or repairs are extremely low compared to the useful machine hours.

QUALITY

Inner and outer values

All structural components, for example the complete steel construction, the chassis and the boom, are from our own production and are subject to strict quality control. All components in the drive train, hydraulics and electronics are sourced from prominent European brand-name manufacturers. That gives the user the certainty that he can rely on maximum quality down to the finest detail. Plus, design modifications are possible in-house at any time.

SAFETY

MORE LIGHT, MORE VISIBILITY, MUCH MORE SAFETY

The large glass area at the front, the generous roof glass and the set-back cab pillars allow very good all-round vision. The rear-view camera allows safe reversing by transmitting the view onto a separate colour display that also shows distance markings and provides visual and acoustic signals from the distance sensors. Optional spreader cameras provide an improved view of the twist locks, if required. Another option is a bird-view camera system with multifunction

display and recording for even greater safety in the immediate manoeuvring environment.

SANY reach stackers are equipped as standard with 18 LED lights for optimum visibility in every environment, day and night. These are complemented by the optimised access lighting for even illumination without dazzle when accessing the cab.

EFFICIENCY

Economy in every direction

The powerful Volvo-Penta engine (EU Stage V) provides ample torque from its 11 litres of displacement. The maximum engine output is available at just 1,400 to 2,100 rpm. This allows the engine to work powerfully yet economically at mid-range speeds. The Volvo engine harmonises perfectly with the fully automatic TE-30 5-speed powershift transmission, guaranteeing not only gentle pulling away and quick acceleration, but also fuel-efficient operation without loss of performance. In other words, the speed remains in the medium range even when changing gear – the engine can work largely at fuel-efficient speeds. Moreover, the torque converter guarantees gentle pulling away, manoeuvring and gear changes.

The engine speed is automatically raised and lowered for hydraulic operation. And the radiators are distributed to several positions in the vehicle to ensure good cooling performance with low power being demanded by the fans and low noise emissions.



Three displays are perfectly arranged to allow information to be quickly registered. The main display with all machine and performance data is integrated in the console. The head-up display with information about the spreader is in the direct field of view of the driver on the front edge of the roof window when positioning the spreader and the display for the rear-view camera is located on the left side of the console.



3 EFFICIENCY BENEFITS!

SANY is the first manufacturer to offer a truly economical hybrid system in the reach stackers. The SANY hybrid version works in line with a simple motto: Move more – consume less. That guarantees users a true competitive edge.

#1

For the SANY reach stacker with economical hybrid system, we have taken the hydro-pneumatic technology of energy recuperation that has proven its worth in other fields and modified it to account for the requirements of container loading. The principle is quite simple: When the boom is lowered, energy is recuperated and hydro-pneumatically stored without transformation loss. To raise the boom, this pressure is applied directly to the rear lifting cylinder, supplying up to 70 kW of additional power. The result: less engine output for raising containers means significant fuel savings. The additional lifting cylinders of the hybrid system allow a narrower design for the front lifting cylinders. This makes lifting faster and enables the hybrid reach stacker to handle more containers with lower total diesel consumption.

#2

The streamlined mono-frame design of the spreader reduces the weight by 700 kg compared to the standard SANY and by 2,000 kg compared to the classic ELME spreader. The symmetrical body also reduces torsional loads on the internal components. The narrow boom head reduces weight and saves another 500 kg. This has a dual effect for the vehicle: Every reduction in weight at the front allows weight to be saved in the rear ballast. And every tonne saved on the spreader reduces the vehicle weight by two tonnes, which then no longer has to be moved when manoeuvring.

#3

The new 5-speed gearbox measurably improved the engine-gearbox package. This makes it possible to remain longer in the fuel-economical engine speed range. The converter lock-up is activated here to enhance efficiency. When shifting up to the next gear, the engine speed does not drop so far and remains in the high-performance yet economical range.

Advantages of the H9 Hybrid

- + 10 – 23% more container movements per hour
- + 20% fuel saving per container handled
- + Amortisation in just 1 – 2 years

The SANY H9 Hybrid – An excellent choice

When the SANY hybrid reach stacker was launched in 2019, it was given the Innovation Award by the British Forklift Truck Association. One year later, it was honoured by the international IFOY organisation with the IFOY Award (International Intralogistics and Forklift Truck of the Year Award). All award-winning product advantages were carried over to the hybrid reach stacker with the current emissions standard V.



Lifting cylinder

Additional power of up to 70 kW thanks to economical hybrid system.

Accumulators

Several hydro-pneumatic pressure accumulators provide energy for lifting the boom.

ENGINE

Model	VOLVO TAD1181VE	
Rated power	265 kW/ 2,100 rpm	
Torque	1,785 Nm/ 1,400 rpm	
Emissions standard	EU Stage V	

GEARBOX

	SRSC45G5	SRSC45H9G5
Gearbox type	TE30	TE30 with converter lock-up
Forward/reverse gears	F5/R3	F5/R3

AXLE

Drive axle	Kessler D102
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SPREADER AND BOOM

Side-shift	+/- 800 mm
Rotation angle	+105° / -195°
Mechanical slope compensation	-2° / +2°
Max. lift height (SANY spreader)	15,100 mm
Max. lift height (ELME spreader 817)	15,250 mm
Max. lift height (ELME spreader 857)	14,910 mm
Boom angle	0°–60°

TYRES

Type/size	18.00-25
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SERVICE PARAMETERS

	SRSC45G5	SRSC45H9G5
Fuel tank capacity	560 l	520 l
AdBlue tank	45 l	45 l

AXLE WEIGHTS

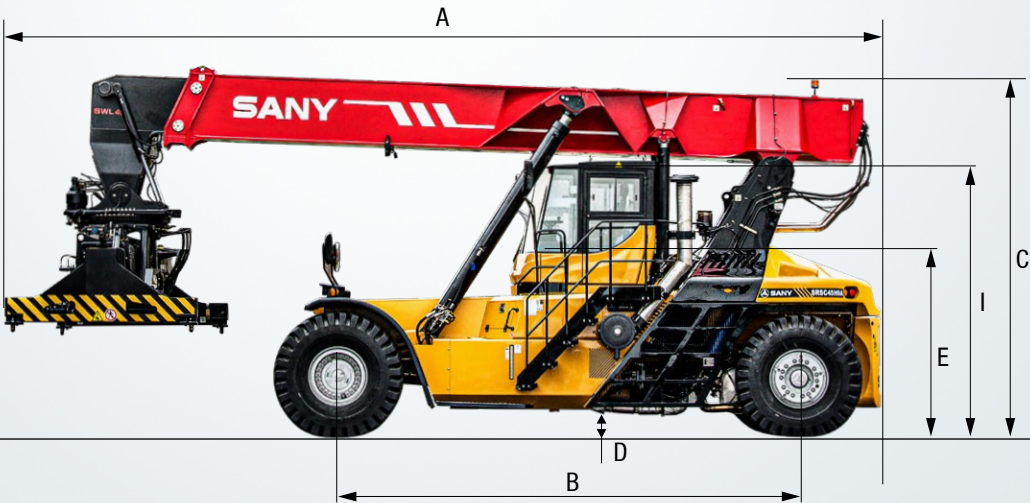
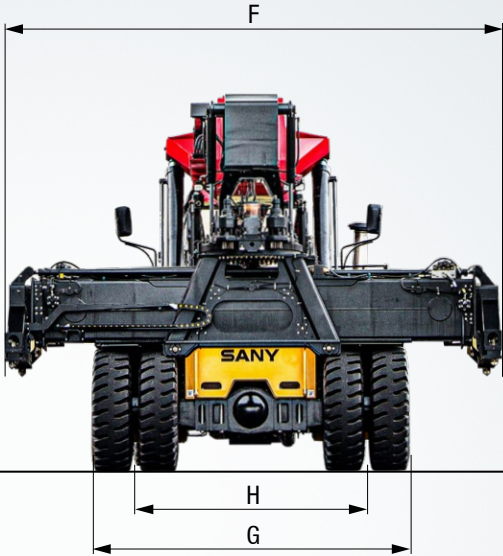
SRSC45G5		
with SANY spreader SDJ450H9	Total weight	71,800 kg
	Axle weight without load (front/rear)	34,300 / 37,500 kg
	Axle weight with load (front/rear) on L1	101,000 / 15,800 kg
	Axle weight with load (front/rear) on L2	93,200 / 9,600 kg
	Axle weight with load (front/rear) on L3	77,200 / 9,600 kg
SRSC45H9G5		
with ELME spreader 817	Total weight	72,400 kg
	Axle weight without load (front/rear)	35,100 / 37,300 kg
	Axle weight with load (front/rear) on L1	101,800 / 15,600 kg
	Axle weight with load (front/rear) on L2	94,200 / 9,200 kg
	Axle weight with load (front/rear) on L3	78,400 / 9,000 kg
SRSC45H9G5		
with SANY spreader SDJ450H9	Total weight	70,500 kg
	Axle weight without load (front/rear)	33,500 / 37,000 kg
	Axle weight with load (front/rear) on L1	99,700 / 15,800 kg
	Axle weight with load (front/rear) on L2	92,500 / 9,000 kg
	Axle weight with load (front/rear) on L3	77,800 / 8,700 kg
SRSC45G5-P		
with ELME spreader 857	Total weight	78,300 kg
	Axle weight without load (front/rear)	43,500 / 34,800 kg
	Axle weight with load (front/rear) on L1	110,000 / 13,000 kg
	Axle weight with load (front/rear) on L2	97,100 / 8,200 kg
	Axle weight with load (front/rear) on L3	82,000 / 7,300 kg

PERFORMANCE PARAMETERS

Load capacity	45,000 kg
Stacking levels with 8' 6" containers	5
Stacking levels with 9' 6" containers	5
Lifting speed without/with load	460 / 260 mm/s
Lowering speed without/with load	600 / 400 mm/s
Travel speed without/with load	25 / 21 km/h
Gradeability without/with load	46 / 28%
Noise level inside cab	72 dB
Noise level outside cab	107 dB

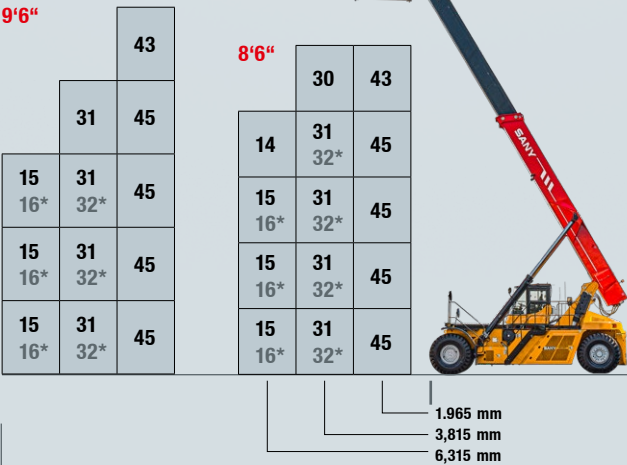
DIMENSIONS

A	Total length	11,290 mm
B	Wheel base	6,000 mm
C	Max. height, including rotating beacon light	4,950 mm
D	Ground clearance	350 mm
E	Seat height	2,504 mm
F	Transport width	6,042–12,175 mm
G	Transport width at front	4,188 mm
	Transport width at rear	3,380 mm
H	Track width at front	3,033 mm
	Track width at rear	2,790 mm
I	Cab height	3,635 mm
J	Aisle width with 20' container	11,300 mm
K	Aisle width with 40' container	13,600 mm
L	Turning radius	8,100 mm
M	Turning radius, outer with 40' container	9,670 mm
N	Turning radius, inner with 40' container	3,830 mm

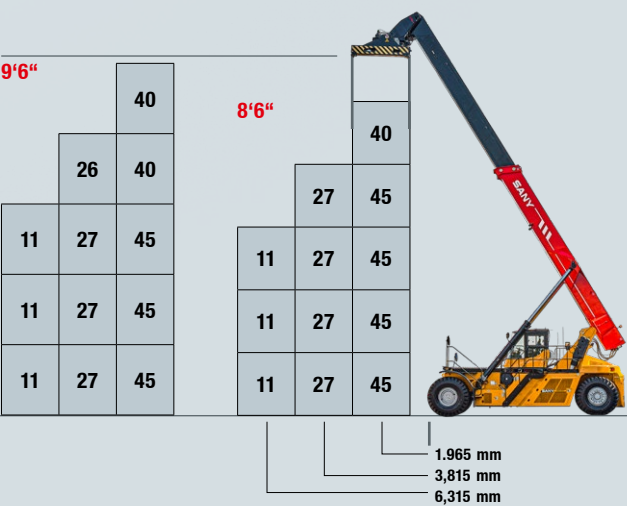


SRSC45G5 / SRSC45H9G5*

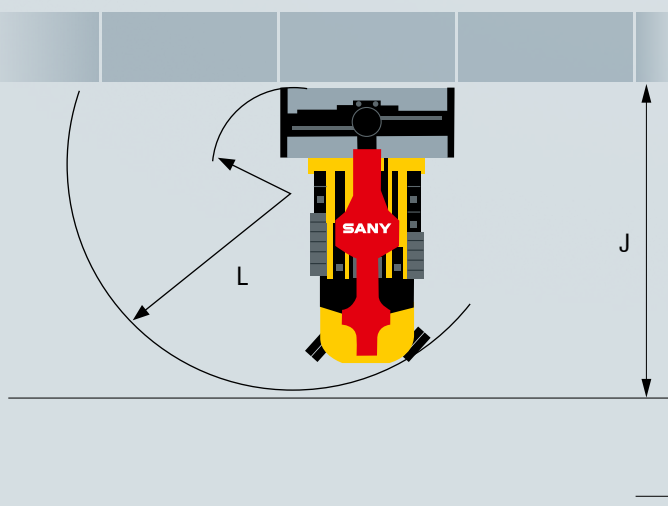
* only for SRSC45H9G5 incl. counterweight



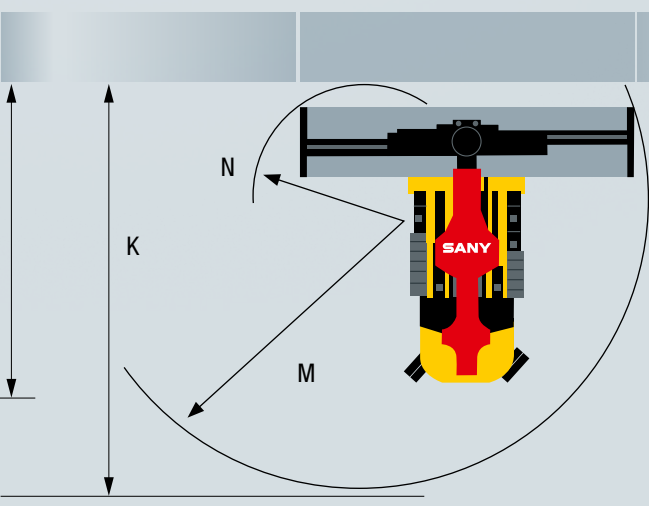
SRSC45G5-P



20' CONTAINER



40' CONTAINER



Complete package with many options

SANY reach stackers are excellently equipped from the factory when it comes to driver comfort, safety and performance. A series of optional equipment features are available for maximum flexibility and optimal adaptation for the task at hand – from a movable counterweight for additional lifting capacity to the winter package for cold climatic regions.



OPERATING COMFORT / CAB

- | | |
|---|---|
| Optimum vision thanks to narrow cab pillars | ● |
| Grammer Actimo XL driver's seat, air sprung | ● |
| Convenient entry/exit thanks to pivoting steering column | ● |
| 7-inch colour display with high resolution | ● |
| 3.5-inch colour display on the roof panel for displaying the spreader | ● |
| Fire extinguisher | ● |
| Co-driver's seat | ● |

SAFETY

- | | |
|---|---|
| Rear-view camera with separate display | ● |
| Rear distance sensors, visual and acoustic output | ● |
| Safety package in spreader | ● |
| Joystick with CAN safety for fail-safe control of boom and spreader movements | ● |
| Automatic parking brake | ● |
| Automatically activated speed limitation | ● |
| 360° camera system with multifunction display | ● |
| Tyre pressure monitoring | ● |

FURTHER MACHINE EQUIPMENT

- | | |
|---|---|
| Movable counterweight for 1 tonne additional lifting capacity | ● |
| Various auxiliary heating systems | ● |
| Automatic central lubrication system | ● |

Standard equipment ● Special option ●

The standard and special options differ according to the country in which the mini excavator is delivered. If you have any questions, please contact your dealer directly.

SPREADER

- | | |
|---|---|
| Choice of various spreaders: ELME 817 Innovation and SANY SDJ450H9, Top-Lift for 20 and 40-foot ISO containers, with twist-lock display | ● |
| Automatic telescope mechanism | ● |
| Pendulum damping cylinder | ● |
| +/-2° mechanical slope compensation | ● |
| -195°/+105° angle of rotation, +/-30° limit of rotation with the cab in the front-most position | ● |
| Intermodal spreader ELME 857, 30-foot stop, power pile slope, overheight legs, spreader camera, etc. | ● |

WORKING LIGHTS

- | | |
|---|---|
| 8 LED front headlights: low beam, high beam, cornering lights | ● |
| 4 LED headlights on boom | ● |
| 2 LED headlights on spreader | ● |
| 4 LED headlights for ambient lighting to the sides and rear | ● |
| LED rotating beacon, limiting lights, brake light, turn signals | ● |
| Further LED headlights, maintenance lamp, cab access light, reading light | ● |

ELECTRONICS

- | | |
|---|---|
| Fully automatic powershift transmission with torque converter | ● |
| Stop automatic at idle, automatic engine speed adjustment | ● |
| Several CAN bus systems, on-board diagnosis | ● |
| Battery master switch, protection systems for correct machine operation, seat contact switch, filter blockage indicator | ● |

A SERVICE YOU CAN RELY ON

We demand the same high quality and reliability of our service products as we do of our machines. 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 will gladly help you with a comprehensive range of services to ensure that your machine continues to operate 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.



The added benefits SANY offers you:

- + Fast supply thanks to the central warehouse near Cologne
- + More than 15,000 spare parts for high machine reliability
- + 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.

Parts supply – fast and reliable

By purchasing a SANY reach stacker, you have invested in the future. Fast availability of spare parts means minimal downtime and maximum uptime.



Detailed information in black and white

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



HIGHLIGHTS **SRSC45G5** | **H9**

AGILE POWER UNITS

SANY reach stackers package together with the complete know-how and experience of the world's largest producer of reach stackers. The new models redefine standards, not only when it comes to load capacity and manoeuvrability. They are also unrivalled in terms of driver comfort and work safety.



THE SANY EXTRA-TONNE

Some reach stackers quickly come up against their limits in the 2nd and 3rd rows. The intelligent weight distribution and movable counterweight gives the hybrid version the ability to increase its lifting capacity by a tonne.

THE TIME-SAVER MACHINES

Speed is an important factor for efficient work and productivity. Sany reach stackers are configured precisely for this fast working - with high-performance engines for the travel speed, hydraulics and with compact dimensions gives unrivalled agility that allows fast working in tight container aisles.

SO MUCH IS CERTAIN

Good drive comfort and optimum stability are guaranteed by the robust and torsion-resistant design. Intelligent weight distribution is especially impressive when loaded, allowing fast working with unrivalled stability.

POWERFUL

The complete drive train is perfectly configured. The 11-l engine with its 265 kW generates an impressive 1,785 Nm or torque at 1,400 rpm. And the 5-speed gearbox makes it easy for the driver to work in the optimum engine rpm range.

LONG-TERM INVESTMENT

Our own high quality standards are the benchmark at SANY - from the design, to the choice of material, to production. This is guaranteed with our own steel construction and high-quality components sourced from leading European suppliers.

COMFORT LEADS TO EFFICIENCY

In the cab, everything revolves around comfort and work ergonomics for the driver. With the largest cab in its class, SANY reach stackers offer a perfect all-round view, a comfortable driver's seat and ergonomically arranged control elements that allow safe and pleasant working.

Three extras for the SANY H9 Hybrid

The H9 hybrid version impresses with its unrivalled energy efficiency and improved handling performance. Crucial for this: a highly efficient hybrid system that recuperates part of the energy when the boom is lowered. The innovative design for the spreader and the narrow boom head, which allow a substantial weight saving, and the new 5-speed gearbox that makes high-performance yet economical operation possible.



Fork Lift Truck Association

Winner



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

Quality Changes the World

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