

SMHW48G5

**SANY**

Quality Changes the World

# SIMPLY MOVE MORE

NO MATTER HOW FAR.  
NO MATTER HOW HIGH.  
NO MATTER HOW HEAVY.



## MATERIAL HANDLER **SMHW48G5**

Engine  
**CUMMINS L9**  
Performance  
**252 kW / 1 800 rpm**  
Operating weight  
**45,000 – 48,000 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. We are one of the world's leading manufacturers of excavators, with more than 500,000 units produced worldwide. Our vast breadth of expertise in producing standard excavators is also reflected in the quality of our material handlers. 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 PRODUCED  
**WORLDWIDE**

**5–7%**  
TURNOVER FOR RESEARCH  
AND DEVELOPMENT

**5 YEAR**  
**WARRANTY\***

Quality Changes the World

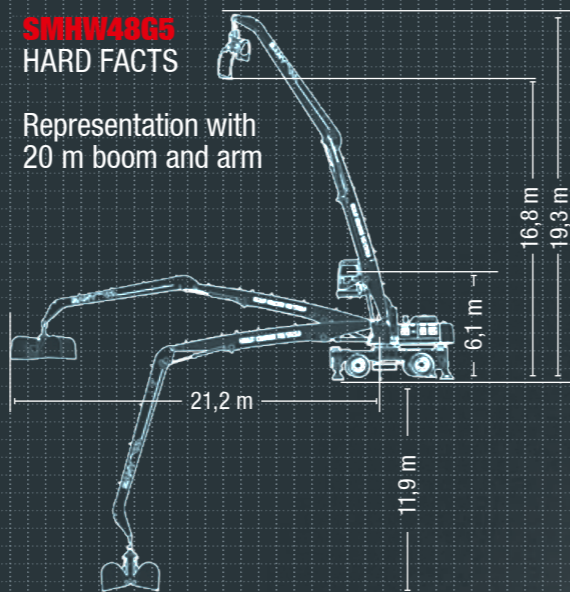
\* with participating distribution partners



**SMHW48G5**

### SMHW48G5 HARD FACTS

Representation with  
20 m boom and arm



## A POWERHOUSE FOR EXTRA HARD WORK

The SMHW48G5 is a versatile material handler that can be deployed wherever large quantities of material need to be moved. It's a real powerhouse that impresses on account of its high efficiency and cost effectiveness. One of its signature features is its high load capacity, which allows even the greatest of tasks to be handled swiftly. No matter whether the SMHW48G5 is deployed in a port or a timber yard, for materials handling or for sorting tasks on a demolition site, to handle recycling material or scrap – the range of task-appropriate attachment devices guarantee the maximum in performance and reliability for any application.



**BOOM**

**Higher, deeper, further –** The SMHW48G5 covers all kinds of applications with a single boom and stick design per length. Two hinge positions are available to choose from – one allows the material handler to reach particularly low into deep areas, while the other is best suited for work at height. The SMHW48G5 is available with a total of six different boom lengths, ranging from 11.5 m to 20 m.

**COMPONENTS**

**Reliability is our trump card –** Reliability and a long service life don't just come about by chance: They are the result of the quality of the premium components and the experience of leading international suppliers. Some of the components used include CUMMINS engines, tried and tested hydraulic pumps and valves from Kawasaki, axles from Meritor, a subsidiary of CUMMINS, and gearboxes from Dana.

**HYDRAULICS**

**Rely on powerful pressure –** The high-quality hydraulic pumps from Kawasaki generate a hydraulic pressure of 340 bar and a maximum oil flow of up to 696 litres per minute. Thanks to their very high dimensioning, the hydraulic valves achieve excellent efficiency and ample reserve capacity when doing so.

**CAB**

**A high flyer –** The cab and its lifting device are specially designed for material handlers. It can be quickly and safely hydraulically extended to up to 6.12 m (eye level of the operator). It therefore provides the best possible view for the operator, while also ensuring optimum safety through the exemplary protective grille with its narrow bars as well as the headlights that are integrated into the roof.

**PRODUCTIVITY WITH PINPOINT ACCURACY**

Boasting the most powerful engine in its class and a substantial lifting capacity, the SANY material handler sets the benchmark in handling high quantities of material per hour. The weight of the machine also reflects its robustness and stability: In comparison to other machines with a 3200 mm wheel-base, it is markedly compact. The combination of this aspect with the two-wheel steering grants the material handler the best possible manoeuvrability, allowing it to make swift and nimble movements on any site with limited space.

**Maximum quality to make you feel good!**

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

\* With participating partners



**COOLING**

**Always stay cool –** To ensure that the SMHW48G5 can continue to reliably deliver high performance, the engine cooling system is dimensioned particularly generously. The fan reversal also guarantees excellent self-cleaning of the system.

**ENGINE**

**We've got the power –** The proven, speed-stable CUMMINS engine (EU Stage V) produces a powerful torque of 1 526 Nm at 1 400 rpm. It's plenty enough to put it right at the top of its class for rapid work and speed of material handling.

**SUPPORT**

**A perfectly balanced design –** The wide square support base provides the machine with excellent stability. Stable covers protect the piston rods of the support cylinders from damage. The individually controllable supports have wide base plates that distribute the load evenly across the ground.





**Our highlights – The added benefits SANY offers you:**

- + A machine that's particularly compact for its performance class
- + High load capacity
- + Large working range
- + Comfortable cab
- + Multifunctional joysticks
- + Comprehensive safety equipment supplied ex works



SAFETY

**Completely safe in any situation**

The windscreen is fitted with a non-obscuring protective grille to protect against falling objects, while maintaining plenty of free space to allow for easy window cleaning. The integrated headlights guarantee the best possible view of the work area even in the poorest lighting conditions.

Protection from dazzling sunlight is provided by the sun blinds on the roof panel and windscreen as well as the sliding curtains at the back and on the sides.



USER EXPERIENCE

**EVERYTHING WITHIN REACH AND IN SIGHT**

All the instruments are clearly laid out and can be viewed and reached with ease. The ergonomic configuration and optimised allocation of the individual buttons and switches allow all the machine's functions to be operated directly. Controls for less frequently used functions are housed in the side panel.

The joystick can be used to steer the machine with pinpoint accuracy, and the lack of a steering column means that the driver has an unobstructed view of what's ahead of them. The ground speed of the vehicle is controlled via a pedal as usual. Specially assigned buttons can also be used to select the supports, which are lowered and retracted by means of a separate joystick.



USER EXPERIENCE

**A comfortable workspace**

The cab has been designed with ergonomic aspects in mind and already comes equipped with a number of convenient features ex works. This makes it easier for the operator to carry out focused work, even over long periods of time.

These features include automatic air conditioning with a ventilation system, as well as a comfortable seat that the two multifunctional joysticks move in sync with to remain in the desired position.



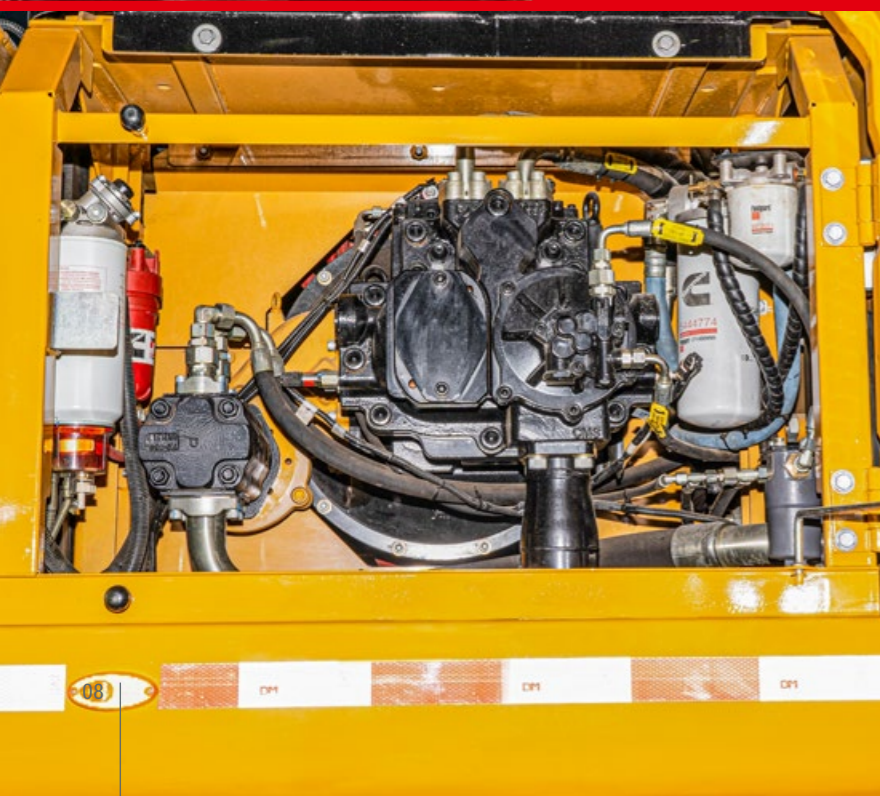
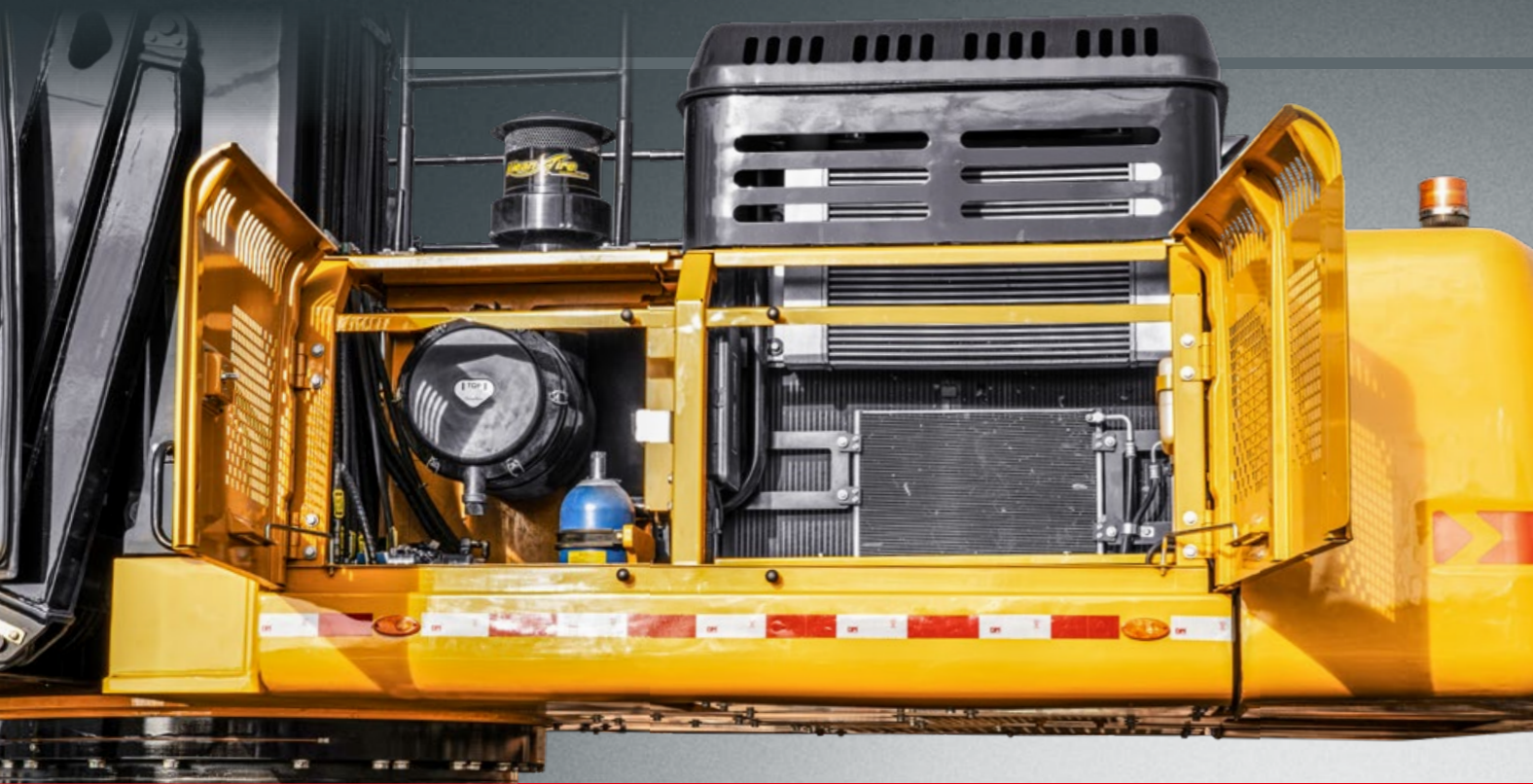
MAINTENANCE

# SIMPLE AND UNCOMPLICATED

In order to guarantee the performance and operational readiness of our machines, we make it as simple as possible for the operators to carry out their day-to-day routine inspections and all other maintenance and service work.

This is ensured first and foremost by the safe access to the engine compartment that is provided by the hand rails and anti-slip surface, as well as a maintenance platform on the chassis.

The wide service doors allow unrestricted access to all maintenance-relevance parts, such as the cooling package or the water separator of the fuel line.



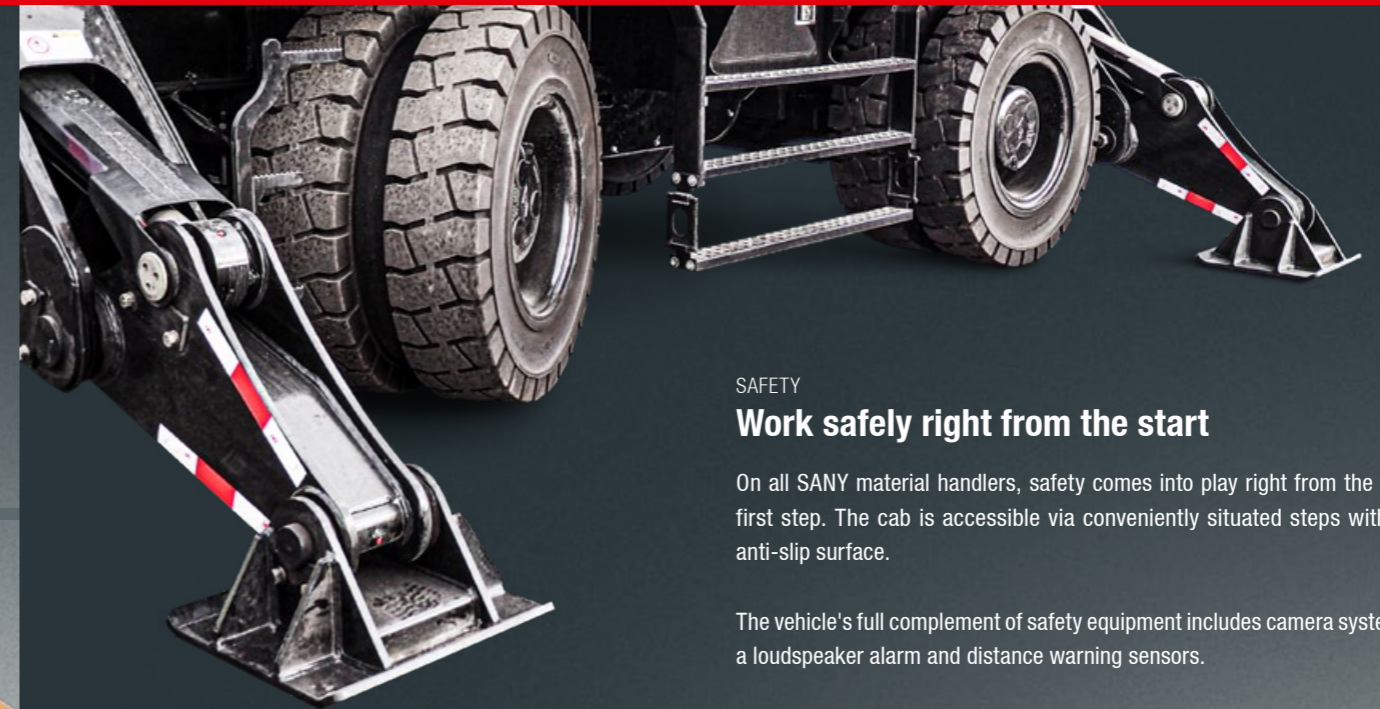
COMPONENTS

## Productive over the long term

Certain components are particularly strained through rigorous use on a daily basis. However, you can rely on us at SANY to give this issue the special attention it requires.

The large maintenance covers allow filters to be changed quickly and easily on the highly reliable dual filter system.

The superstructure, boom and swivel ring are lubricated via an automatic lubrication system, which reduces service time and costs.



SAFETY

## Work safely right from the start

On all SANY material handlers, safety comes into play right from the very first step. The cab is accessible via conveniently situated steps with an anti-slip surface.

The vehicle's full complement of safety equipment includes camera systems, a loudspeaker alarm and distance warning sensors.

COMPONENTS

## MODULAR SYSTEM

We offer the right solution for every application. To find out more, speak to your local dealer.

TRANSMISSION



Diesel engine



Electric motor

UNDERCARRIAGE



Mobil

PYLONS



1 000 mm



1 500 mm



2 500 mm



## GENERAL PARAMETERS

Model	SMHW48G5
Total weight	45,000–48,000 kg
Operating weight (with 18 m arm)	47,200 kg
Available arm sizes	11.5–20 m

## ENGINE

Manufacturer	CUMMINS
Model	L9
Engine power	252 kW / 1 800 rpm
Max. torque	1 526 Nm / 1 400 rpm
Emissions standard	EU Stage V
Displacement/number of cylinders	8.9 l/6
Diesel fuel capacity	540 l
AdBlue fluid	80 l

## AVAILABLE COMBINATIONS

Arm	Boom	Stick
11.5 m	7.0 m	4.5 m
14.6 m	8.6 m	6.0 m
16.1 m	8.6 m	7.5 m
17.1 m	9.6 m	7.5 m
18.0 m	10.5 m	7.5 m
20.0 m	10.5 m	9.6 m

## GEARBOX

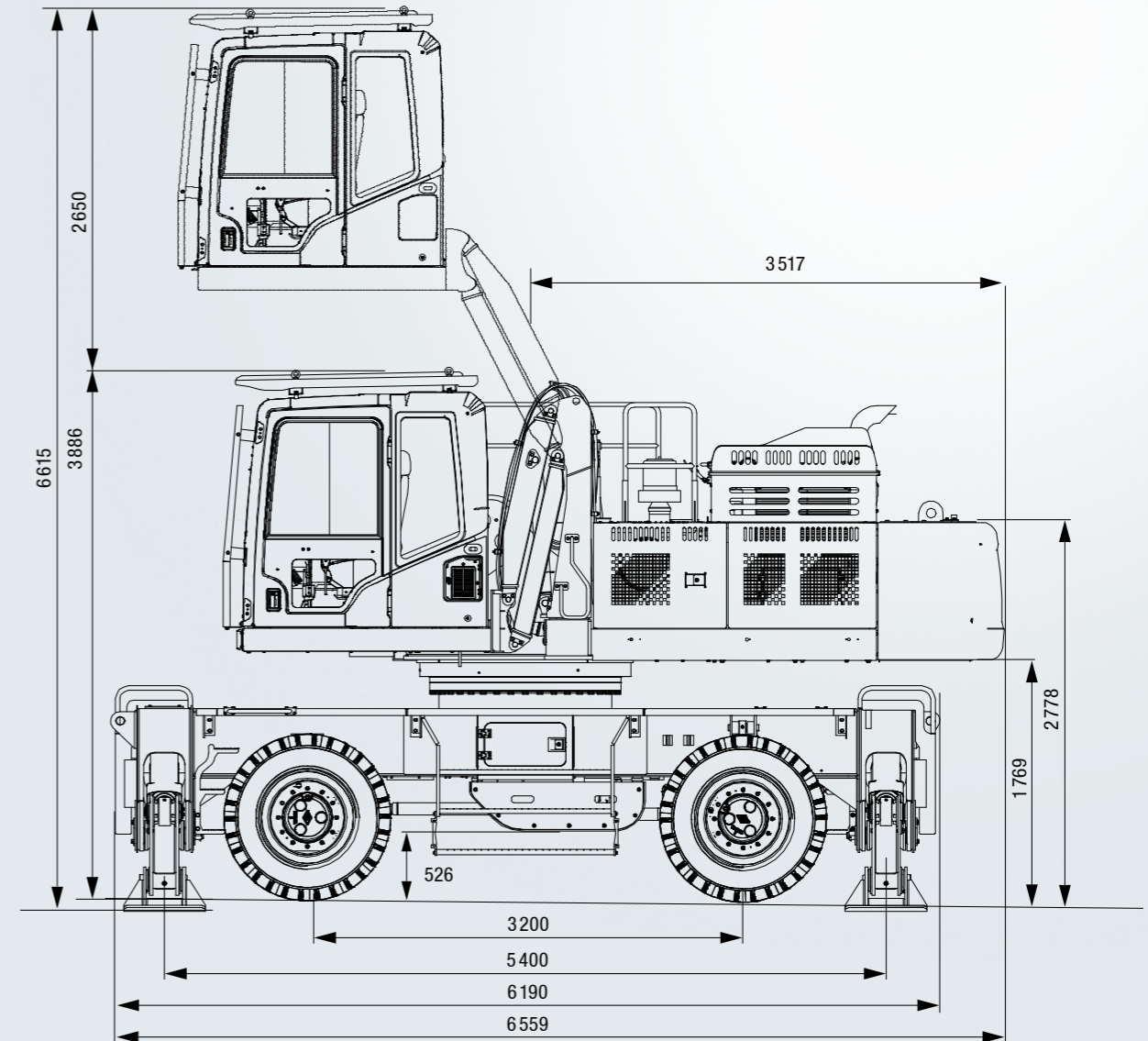
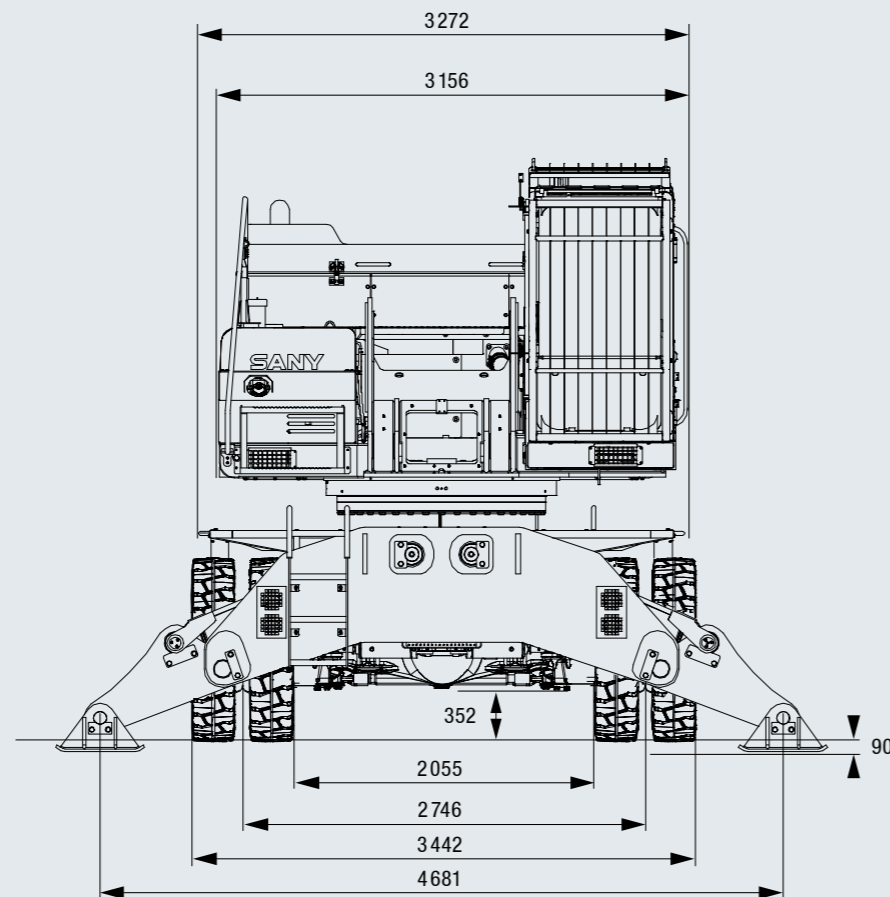
Max. travel speed	20 km/h
Climbing power	35 %
Gearbox type	Hydrostatic drive, 0–5 km/h, 0–20 km/h
Gearbox model	DANA 360
Axles	DANA 245, both axles with steering and drive
Steering types	All-wheel steering, front-wheel steering, rear-wheel steering, crab steering

## HYDRAULIC SYSTEM

Hydraulic pressure	340 bar
Total conveyed volume of the hydraulic pumps	387 ml/r
Max. oil flow	696 l/min
Hydraulic oil tank	340 l
Filling quantity of the hyd. system	360 l–380 l

## DIMENSIONS

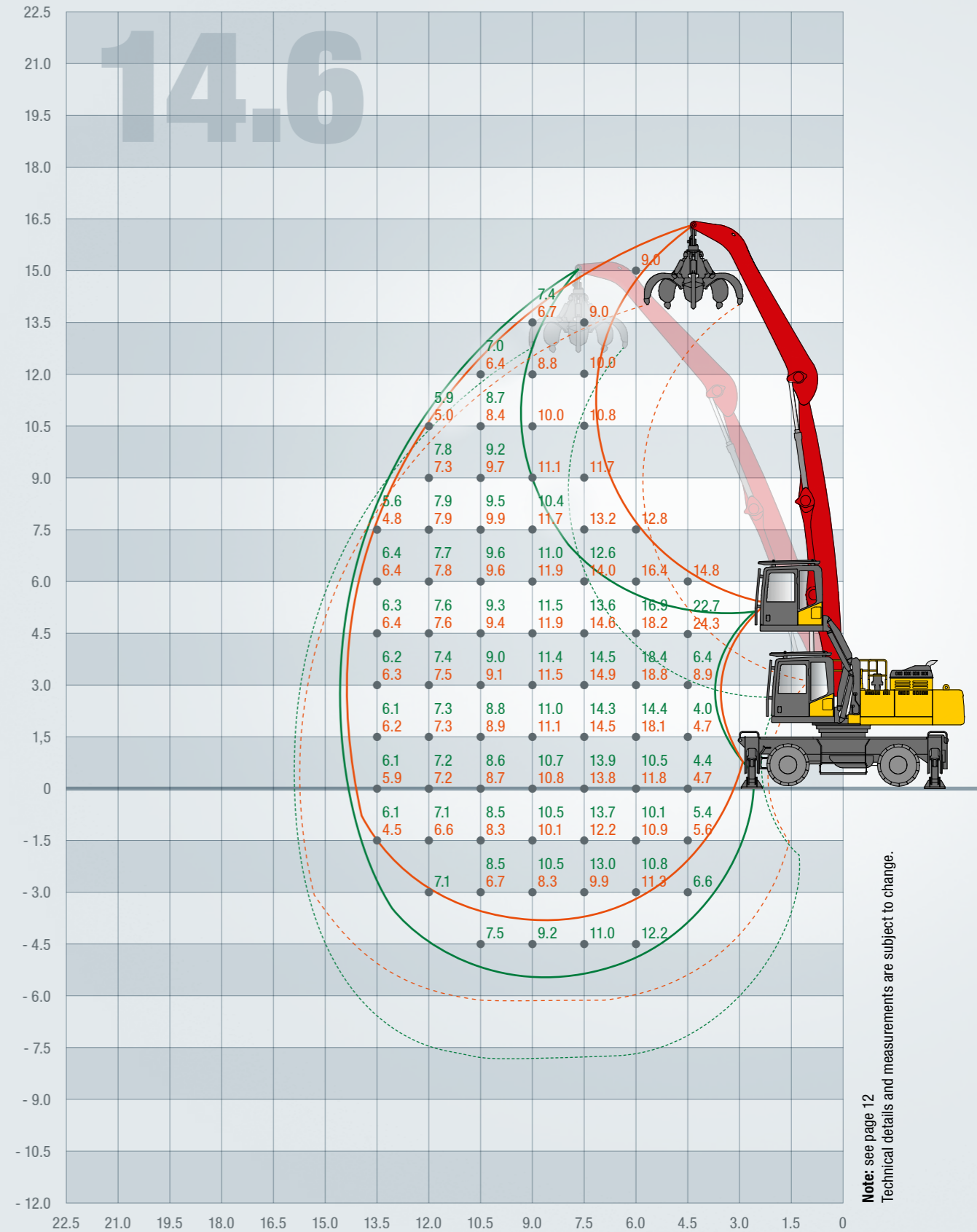
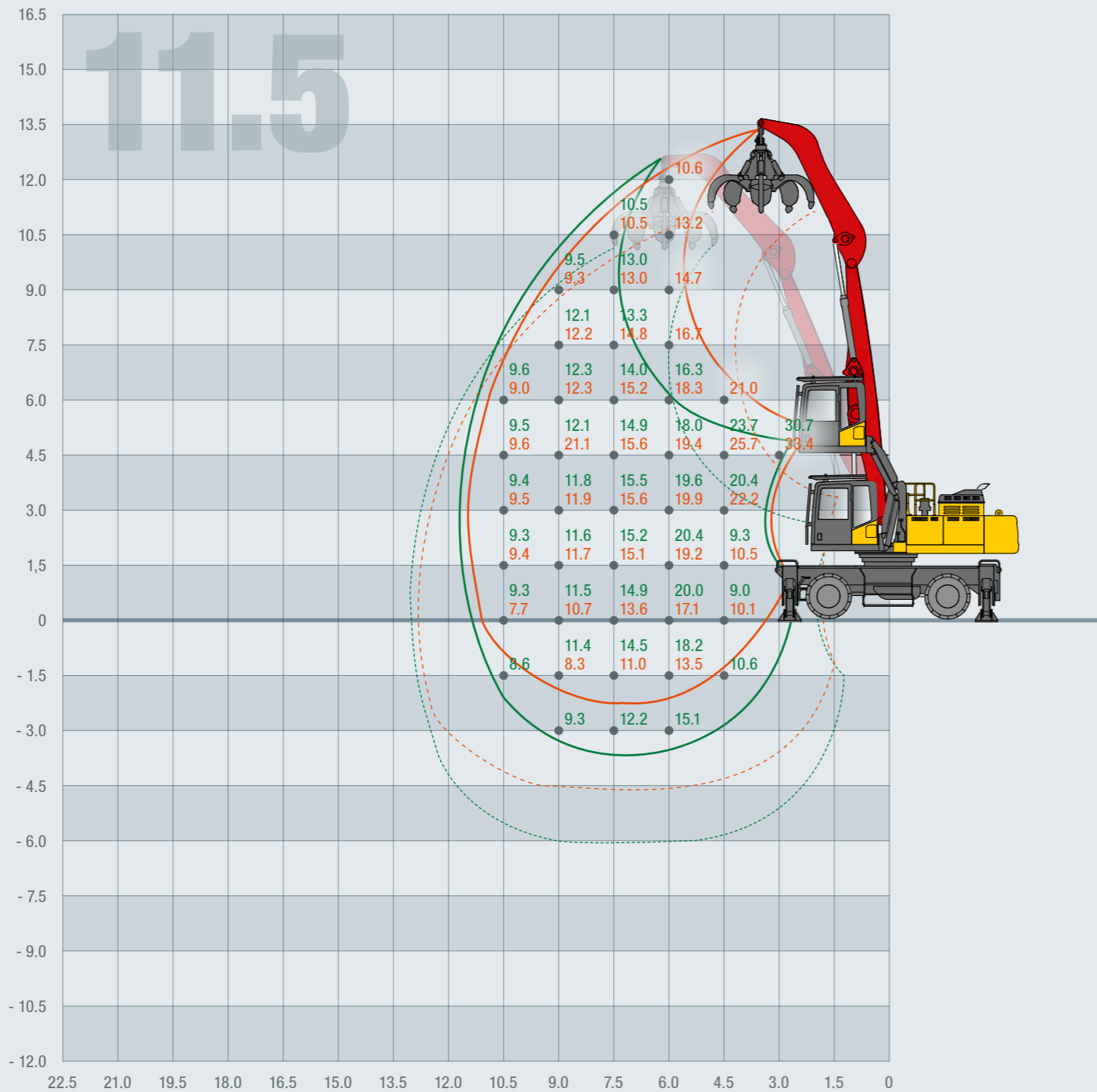
Tail swing radius	3 517 mm
Support width (lengthways)	5 400 mm
Support width (crosswise)	4 681 mm
Undercarriage width	3 272 mm
Superstructure width	3 156 mm
Width across tyres	3 442 mm
Track width	2 746 mm
With cab height lowered and supports retracted	3 886 mm
Wheelbase	3 200 mm
Ground clearance under gearbox	526 mm
Transport dimensions without boom and arm	6 560 x 3 210 x 3 735 mm
Transport dimensions with 18 m boom and arm	14 585 x 3 210 x 3 815 mm
Maximum cab height	6 615 mm
Cab lifting range	2 650 mm
Eye height of driver (cab in highest position)	6 120 mm



**Note:**

The values for lifting capacity are specified in tons (t) at a hydraulic pump pressure of 340 bar. As per ISO 10567, the values for lifting capacity correspond to 75% of the tipping load or 87% of the hydraulic lifting force. These values apply to the complete 360° swivel range on a level and firm surface, and to wheeled machines with the four supports lowered. The values specify the lifting capacity at the end of the arm. The weight of the attachment must be deducted from the values for lifting capacity in order to obtain the usable value. In accordance with EN 474-5, the machine has pipe burst safety valves on the boom cylinders and arm cylinders and is equipped with an overload warning system.

Technical details and measurements are subject to change.



Note: see page 12  
Technical details and measurements are subject to change.



**11.5M**  
LOWER FULL-FLOATING AXLE  
POSITION FOR BOOM  
INCREASED GRIPPING HEIGHT



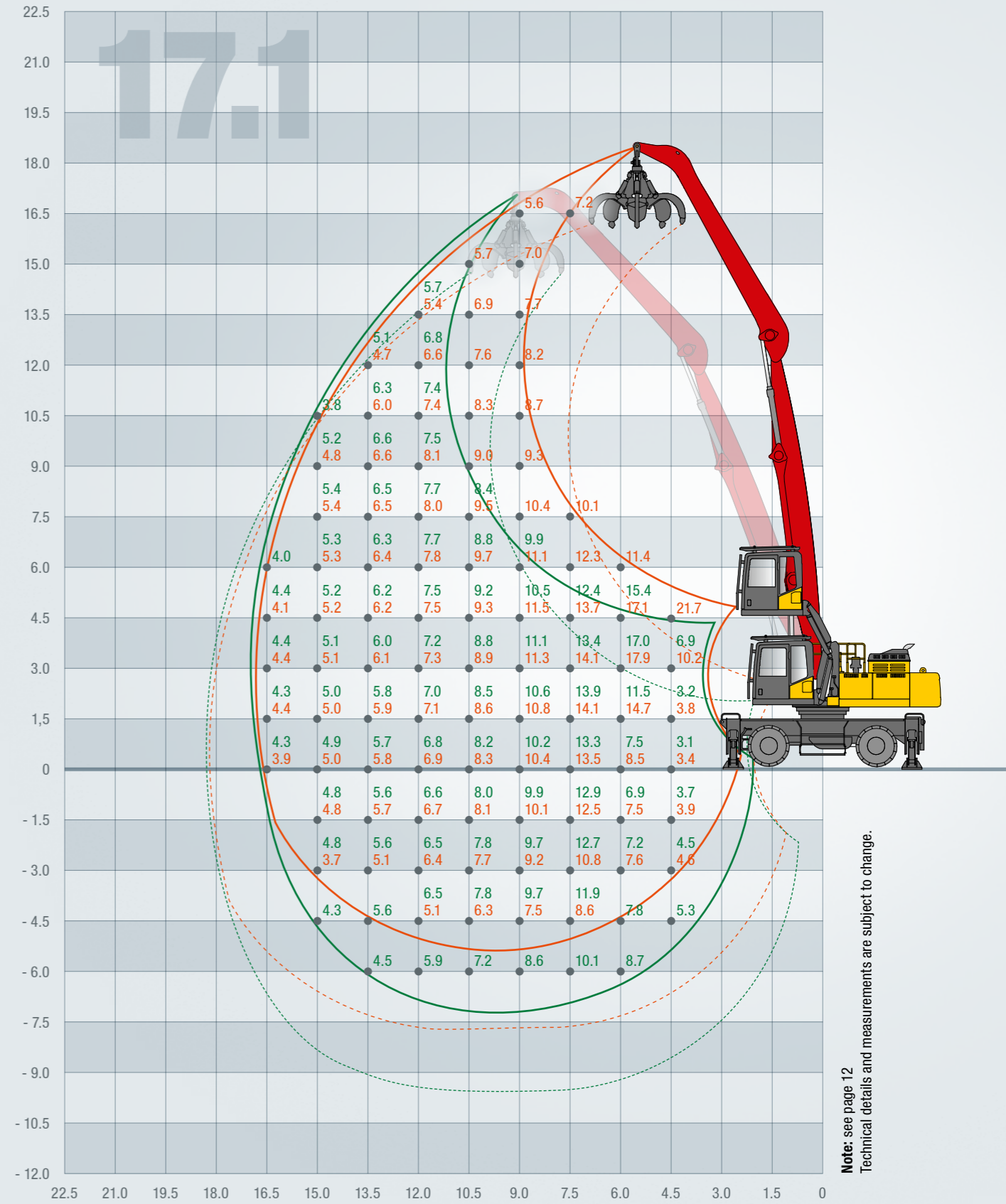
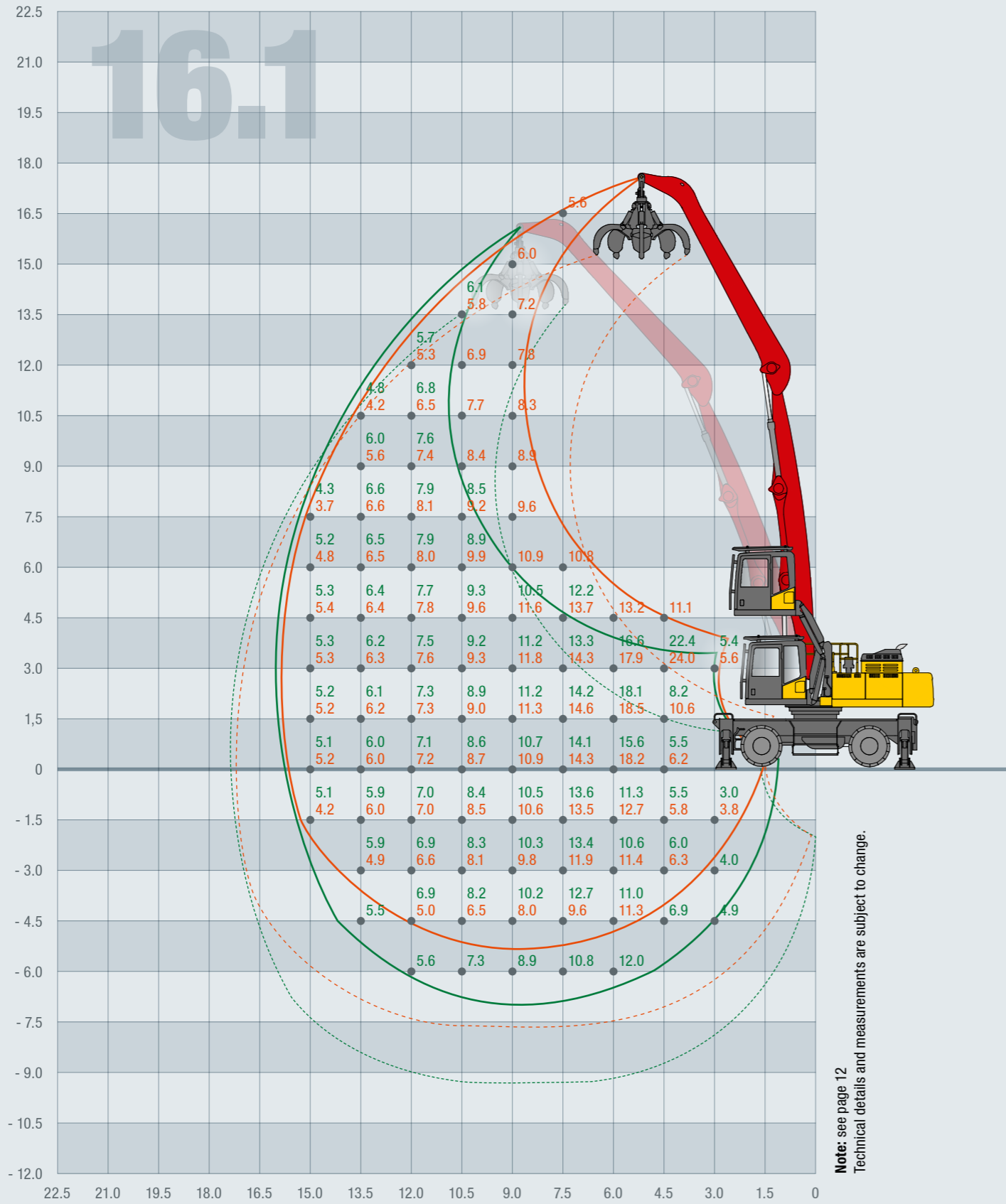
**11.5M**  
UPPER FULL-FLOATING  
AXLE POSITION FOR BOOM  
INCREASED GRIPPING DEPTH



**14.6M**  
LOWER FULL-FLOATING AXLE  
POSITION FOR BOOM  
INCREASED GRIPPING HEIGHT



**14.6M**  
UPPER FULL-FLOATING  
AXLE POSITION FOR BOOM  
INCREASED GRIPPING DEPTH



**16.1 M**  
**LOWER FULL-FLOATING AXLE POSITION FOR BOOM**  
INCREASED GRIPPING HEIGHT



**16.1 M**  
**UPPER FULL-FLOATING AXLE POSITION FOR BOOM**  
INCREASED GRIPPING DEPTH



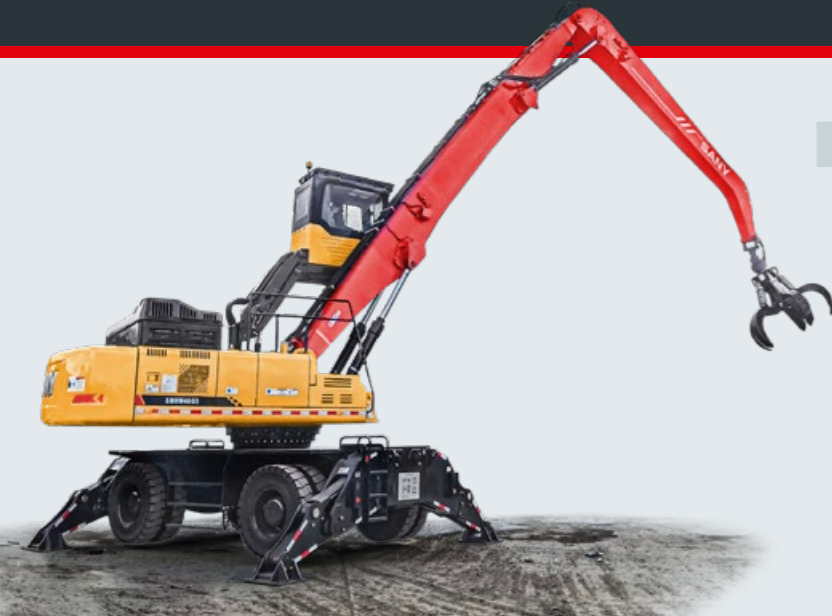
**17.1 M**  
**LOWER FULL-FLOATING AXLE POSITION FOR BOOM**  
INCREASED GRIPPING HEIGHT



**17.1 M**  
**UPPER FULL-FLOATING AXLE POSITION FOR BOOM**  
INCREASED GRIPPING DEPTH







## ENGINE

<b>Output</b>	CUMMINS L9; 252 kW; EU emission standard Stage V, six 8.9 l cylinders; 1526 Nm at 1400 rpm; turbocharger; charge air cooler ●
<b>Fuel system</b>	Double filter with 10 µm and 5 µm; water separator; electrical fuel feed pump ●
<b>Exhaust gas treatment</b>	Diesel particulate filter and SCR system (AdBlue) ●
<b>Cooling</b>	Water-cooled, with fan reversal ●
<b>Air filters</b>	Pre-filter, main filter, safety element ●
<b>Start-up aid</b>	Heating element in airflow to -20°C ● Engine block pre-warming for temperatures below -20°C ●

## SUPERSTRUCTURE

<b>Structure</b>	Box design engine installed in the transverse direction, easy access to engine and hydraulics area for maintenance, circumferential handrail and anti-slip steps ●
<b>Connection of boom</b>	Upper full-floating axle position for boom; increased digging depth; lower full-floating axle position for boom; increased reaching height ●
<b>Lubrication</b>	Automatic central lubrication for superstructure, boom and arm and slewing ring ●
<b>Rotary drive</b>	Closed slewing ring, heavy-duty gear ring, drive and brake ●

## UNDERCARRIAGE

<b>Axles</b>	Four-wheel drive and two-wheel steering, Meritor axles ●
<b>Transmission</b>	Hydrostatic travel drive, two-stage powershift transmission; speed ranges 0–5 km/h and 0–20 km/h ●
<b>Tyres</b>	Eight solid rubber tyres 12.00 x 24 ●
<b>Support</b>	Four swivelling supports, can be controlled individually or as a group, large support plates, protected cylinder rods ●
<b>Brakes</b>	Disc brakes in protected position on wheel flanges, parking brake: Spring-loaded disc brake on rear axle of drive shaft ●
<b>Lubrication</b>	Central lubrication banks for manual smearing ●
<b>Other</b>	Integrated maintenance platform, access ladder at front and rear, step access to cab in centre of vehicle with clever suspension system on the lowest step, additional access at the left front wheel/right rear wheel ●

## CAB

<b>Height</b>	Cab hydraulically adjustable in height to 6120 mm at eye level ●
<b>Heating, AC</b>	Ventilation with automatic air conditioning and heating system, fresh air and recirculation filters, defroster nozzles ●
<b>Seat</b>	Comfort seat, high seat backrest, Grammer Actimo XL with air cushioning, neck support, left- and right-hand armrests ●
<b>Controls</b>	Two multifunctional joysticks, proportional control system for the main functions, steering and travel direction via joystick control ●
<b>Steering</b>	Integrated into a multifunctional joystick ●
<b>Door</b>	Hinged door with sliding window, operation of door lock on the inside at medium height and on the outside in a low position, door can be locked in 180° open position ●
<b>Protection</b>	High-vision protective grille over the windscreen and roof panel with narrow bars for the best possible visibility, integrated headlights ●
<b>Glass</b>	Continuous panel on the right-hand side. Upper part of the windscreen can be opened ●
<b>Display</b>	Seven-inch colour display, on-board diagnostics ●
<b>Sun protection</b>	Sun blinds on the windscreen and roof panel ●

## ELECTRICS

<b>Voltage</b>	24 V, various protection systems ●
<b>Lights</b>	LED work lamps: Four on the cab roof, two on the boom, two on the arm, two on the counterweight, H3 headlights at the front (with full beam and dipped beam), indicators, tail lights on the undercarriage (with protective grille), two service lights on the rear of the cab roof, rotating beacon on cab roof and counterweight ●
<b>Safeguards</b>	Arm collision protection, tilt protection, engine protection, eco engine control, battery separation function ●
<b>Camera</b>	Multiple camera systems with recording functionality, distance sensors at rear ●
<b>Batteries</b>	2x 12 V/165 Ah ●
<b>Other</b>	Weighing system, external loudspeaker alarm ●

## HYDRAULICS

<b>System</b>	Load sensing, pressure and flow control ●
<b>Pumps</b>	Kawasaki variable displacement pumps, 387 ml/r, max. oil flow 696 l/min, 340 bar ●
<b>Filtration</b>	170 µm suction filter, 10 µm double filter in return flow, 5 µm load-sense filter ●
<b>Controls</b>	Kawasaki tandem valve block. Control via two multifunctional joysticks ●
<b>Boom, arm</b>	Pipe burst safety valves on the boom and arm cylinders, four supply pipelines for the gripper with shut-off valves on the arm ●

Standard equipment ● Special option ●

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

# A SERVICE YOU CAN RELY ON

Just as we do with our machines, we 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 reliability,

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.



### The added benefits SANY offers you:

- ✦ Fast supply thanks to the central warehouse near Cologne
- ✦ 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.



## An extra helping of technology

Our standard machines come with a variety of extras ex works that leave nothing to be desired. For example, the total of ten LED work lamps or the two service lights make your work considerably easier.

## HIGHLIGHTS **SMHW48G5**

# A REAL POWERHOUSE

The list of requirements for material handlers is long. Efficiency, performance and reliability are right at the top – the SMHW48G5 satisfies all these and more with an optimum working range, as well as excellent value for money in terms of both the initial purchase and the subsequent operation.



### ALWAYS STAY COOL

SANY material handlers prove their qualities every day in a wide variety of applications. This is why they are equipped with features such as a generously dimensioned cooler package and a reversible fan that blows the cooler free of dirt – for lasting maximum performance and a long service life.

### HIGHER, DEEPER, FURTHER

SANY offers the widest selection of boom and arm combinations. The two positions of the swivel axis also allow for the selection of high and low work areas, specifically at ranges from 11.5 m to 20 m. This flexibility gives SANY materials a decisive advantage even on the second-hand market.

### WE'VE GOT THE POWER

With its 8.9 litre displacement and charge air cooler, the CUMMINS engine is most powerful in its class and additionally fulfils the requirements of EU Stage V. Thanks to its power reserves, the engine can also maintain the required speed at peak loads and consequently provide the best conditions for handling the highest capacity of materials.

### RELY ON POWERFUL PRESSURE

The powerful hydraulic pumps with their generously dimensioned valves always provide the exact amount of power that the moment calls for. This ensures that the driver can work continually, smoothly and precisely, while also relieving the engine and saving fuel and reducing CO<sub>2</sub> emissions in the process.

### RELIABILITY IS OUR TRUMP CARD

High-quality materials, precise workmanship (including that of highly precise welding robots) and premium components from leading international manufacturers – these are the ingredients that make up SANY's recipe for maximum quality. This in turn allows you to rely on the performance and operational readiness of your SMHW48G5 for a long time to come.

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.

### TECHNICAL HIGHLIGHTS

Engine	CUMMINS L9, EU Stage V
Power	252 kW / 1 800 rpm
Max. torque	1 526 Nm / 1 400 rpm
Max. travel speed	20 km/h
Swing speed	0–8 rpm
Main pump	2x variable displacement axial piston pumps with electrical control
Max. oil flow	696 l/min

# SANY

Quality Changes the World

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