



**885G** / Hybrid

# SENNEBOGEN

PRELIMINARY

## 885G

HYBRID

# PORT MATERIAL HANDLER

WITH A REACH  
OF UP TO 38 M



 **PORTCAB** /  ca. 320 t /  38 m /  597 kW /  500 kW

# 885G

► HYBRID

# The material handling giant.

State-of-the-art technology in the port - the material handler with an operating weight of up to 320 t and a reach of up to 38 m impresses especially in inland ports with the highest precision and speed in the handling of general cargo and bulk material. Thanks to the proven Green Hybrid energy recovery system, the machine operates particularly efficiently and economically even in the most demanding port operations.





## A long-term investment

The G-series is characterised by robust components, and an intelligent and resource-efficient machine design - the machine retains its value over the long-term, even with demanding continuous use.

---

## Energy efficiency

Appreciated around the world, thanks to drives that are resource- and environmentally-friendly and the Green Hybrid energy recovery system - whether with diesel drive or as an electric version.

---

## Modular variety

Unique machine variety - we build the perfect machine to meet the needs of your port.

---

## Maximum comfort

The spacious Portcab 2.0 is designed with the needs of the operator in mind - comfortable and spacious with sophisticated features.

---

## Maintenance & Service

Intelligent fleet management and machine status monitoring via the SENtrack portal as well as unique accessibility of machine components.

---

## Occupational safety

Thanks to the precisely controlled movements and the numerous safety features, you can work effortlessly and safely throughout your day.

---



# AN INVESTMENT THAT PAYS OFF.

The durability and reliability of the SENNEBOGEN Green Line is based on decades of experience in the design of high-quality crane and material handling technology. We can find the perfect solution for every port application, ensuring you can handle general cargo and bulk materials in an efficient and resource-saving way.



Low operating costs thanks to energy efficient electric drives and energy recovery through the Green Hybrid system



Manageable and service-friendly technology for maximum machine availability



Consistent performance thanks to robust steel construction, and high-quality drive and control components from renowned manufacturers



High handling capacity of up to 1,800 t per hour\* reduces the berthing time of ships



Sophisticated technology thanks to the consistent further development up to the 6th generation of the G-series – for demanding material handling



Durable and robust in extreme weather and harsh operating conditions, works equally well in the cold of the Arctic Circle or the heat of Dubai

\* The specified handling capacity is a reference value that can be achieved with the appropriate grab for the machine (see Attachments catalog). Actual handling capacities depend on the individual loading and unloading situation in the port and are the result of various parameters (e.g. lifting height, angle of rotation, ship shape, grab fill level, grab).





# LATEST GENERATION MATERIAL HANDLING TECHNOLOGY

The **G**-serie.



# GREEN HYBRID – THE MOST SOPHISTICATED ENERGY RECOVERY TECHNOLOGY ON THE MARKET



## GREEN HYBRID ENERGY RECOVERY TECHNOLOGY



Energy recuperation through safe & smart design: Watch the video to find out how the SENNEBOGEN Green Hybrid system makes port handling even more efficient.

<https://www.sennebogen.com/green-hybrid>

Save up to

# 30%

energy with 255 kW system output  
of the Green Hybrid system



1  
Boom lowers,  
gas compresses



2  
Energy storage module consisting  
of hydraulic cylinder and nitrogen  
accumulator



3  
The nearly constant force trans-  
mission throughout the cylinder  
cycle supports the next boom lift

## SENNBOGEN GreenHybrid

Protects the  
environment,  
saves energy,  
reduces your costs.

- System advantages: large system volume and constant force transmission over the entire cylinder cycle
- System stability through constant pressure and temperature control
- Functional safety through the use of standard hydraulic components
- System is optimally adjusted to the individual machine configuration



# A MODULAR DESIGN. NUMEROUS APPLICATIONS.

## EQUIPMENT



Orange peel grab



Clamshell grab



Spreader



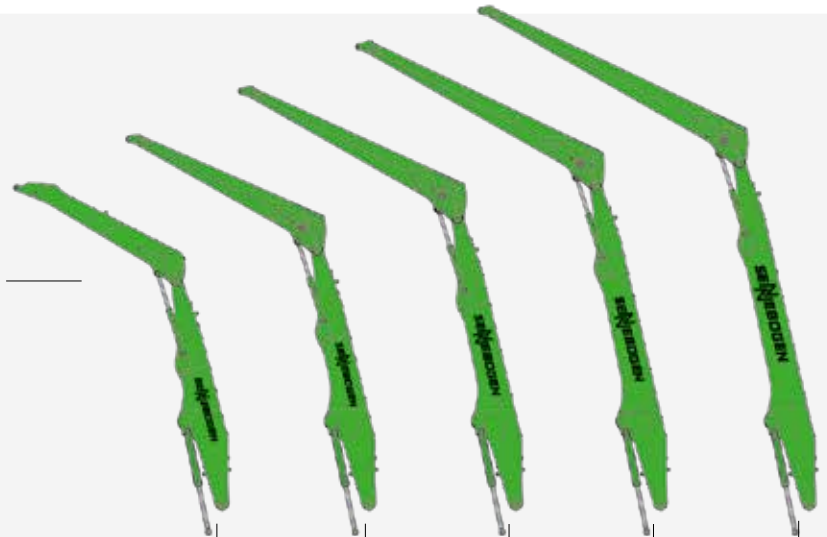
Loading hook



Coil hook



Quick coupler



K24

K28  
Port

K32  
Port

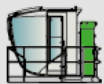
K35  
Port

K38  
Port

K = Compact boom

Port equipment for longer reach and/or more load capacity

## CAB



PORT CAB

Portcab 2.0

## CAB ELEVATION



Skylift G1300/700



Skylift G1100

## UPPERCARRIAGE



Diesel-hydraulic drive



Electro-hydraulic drive



Motorized cable reel



Transformer

## UNDERCARRIAGE



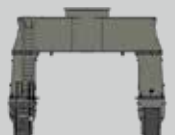
Pylon max. 6 m



Pylon max. 6 m



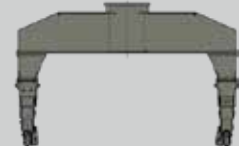
Pylon max. 6 m



Crawler gantry PR400/840

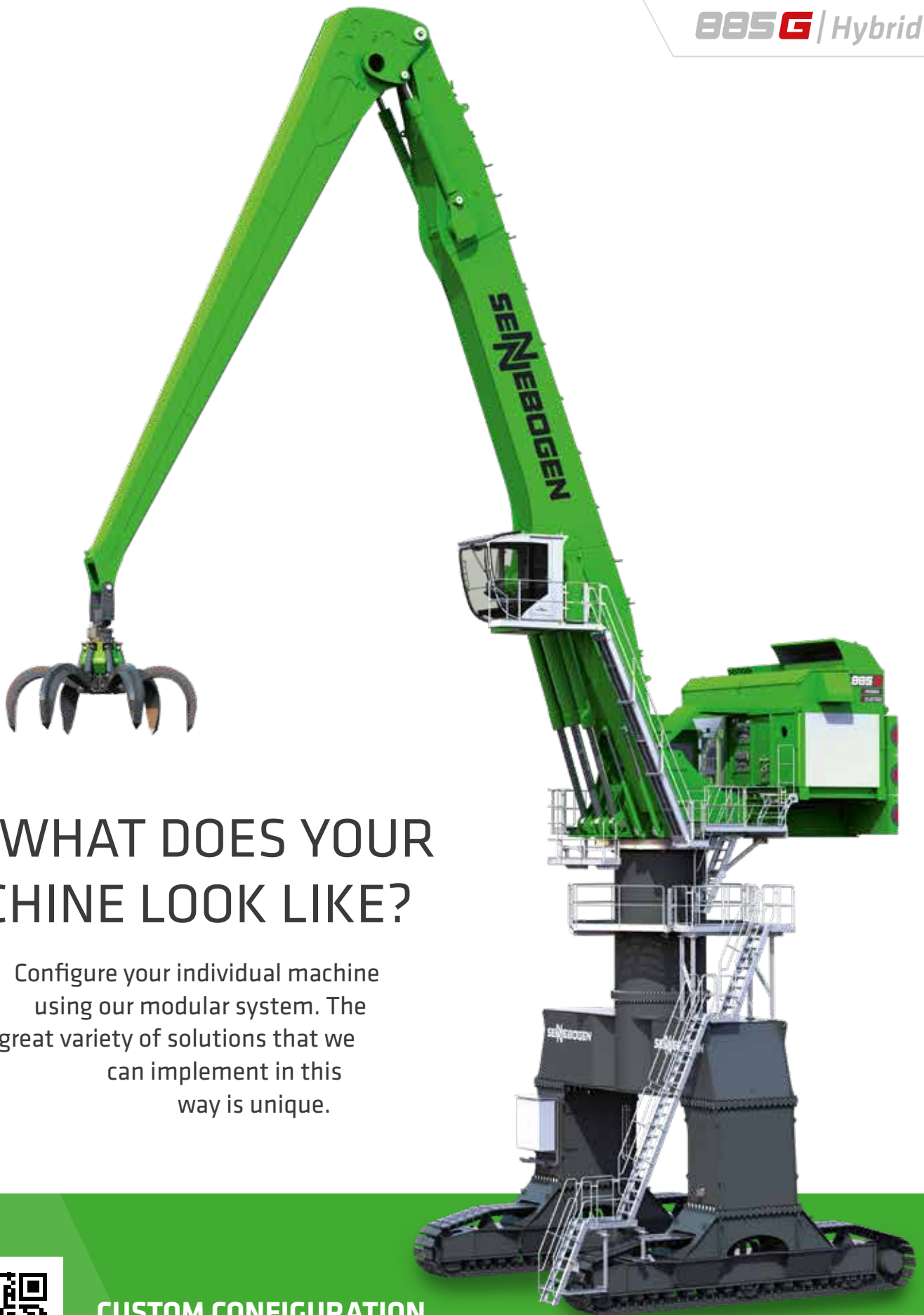


Mobile gantry PM400/840



Rail gantry\*





## WHAT DOES YOUR MACHINE LOOK LIKE?

Configure your individual machine using our modular system. The great variety of solutions that we can implement in this way is unique.



### CUSTOM CONFIGURATION

More than 16,000 unique material handling solutions can be delivered through SENNEBOGEN's modular machine design - watch the video now!

→ [www.sennebogen.com/versatility](http://www.sennebogen.com/versatility)

# REAL COMFORT.



## Everything in view

The spacious cab with panoramic view gives you a practical overview of your work area. The window in the floor makes it possible to carry out precise loading operations even in close proximity. The safety cameras provide support and allow you to monitor the critical areas conveniently via the monitoring system in the cab.

## Easy control

The intelligent SENCON control system gives you quick and easy feedback on the machine's condition. Thanks to the intuitive user interface, it has never been easier to monitor energy consumption and utilization, control the desired working modes and contribute towards reducing operating costs.

## For your health

Operators spend many hours in their working position. The back-friendly comfort seat, adjustable armrests, joysticks that sit comfortably in the hand, and the optimally arranged controls make daily work as easy as possible.

## Pleasant indoor climate

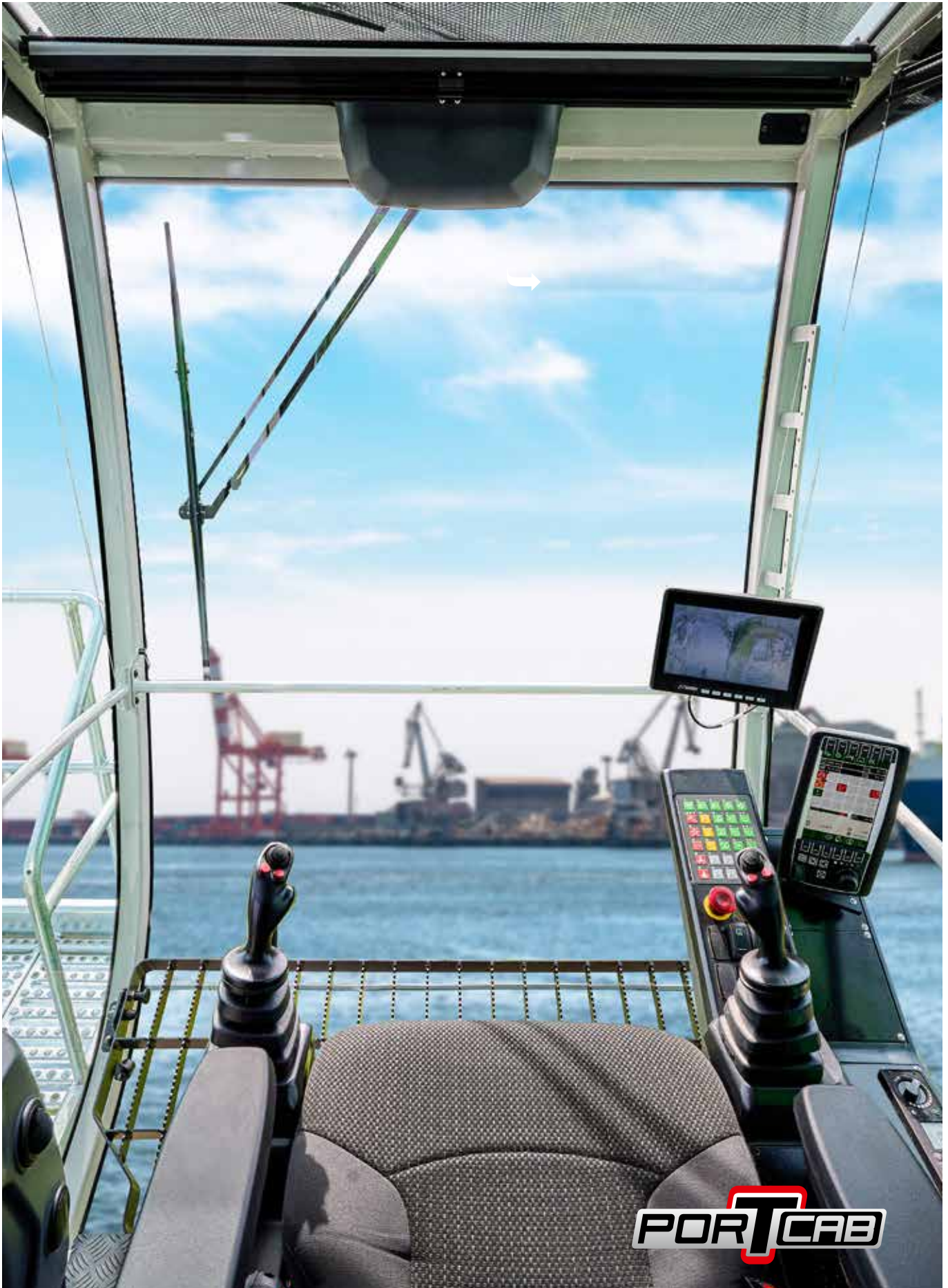
Whether in warmer areas or in ports with sub-zero temperatures, you can enter a work space with a comfortable temperature every day and concentrate on the essentials of work thanks to automatic heating and air conditioning.

**“The development of the Green Line machines is based on user feedback in order to create the best operating experience.”**

ALI GÜLYAZ,  
Designer Green Line







**PORT CAB**

# CAB HIGHLIGHTS



The large capacity cab for the best all-round view of the port

**IN SERIES**



ENTRANCE	Easy access through wide cab door
OPERATOR'S SEAT	Air suspended, with lumbar support, headrest and plenty ergonomic adjustments, heated
ARM AND FOOT RESTS	Easily adjustable, according to the user
WINDSHIELD	Generous windshield, tinted double glazing for safety windows
FLOOR WINDOW	Large safety glass floor window for best visibility into the hull
WIPERS	Parallelogram wipers for harsh weather conditions on the windshield Wipers for skylight
AIR CONDITIONER	Heating/air conditioning system with fresh air and recirculating air filter
LARGE 10,2" MONITOR	Camera-supported monitoring of the danger area (rear, right)
FOLDAWAY SEAT	Additional trainer's seat with seat belt
RADIO PREPARATION	✓
SENCON CONTROL AND DIAGNOSTIC SYSTEM	✓
<b>OPTIONS</b>	
AIR-CONDITIONED SEAT	✓
RADIO	✓
COOLING BOX FOR FOOD AND DRINKS	✓
SPEAKER SYSTEM	✓
SUN PROTECTION PACKAGE	✓



# ALWAYS THE RIGHT VIEWING ANGLE

The name 'Skylift' can be taken literally! Depending on the version and undercarriage being used, the flexible cab adjustment allows you to look into a ship's hull from around 22 metres. Thanks to a sophisticated system of steps, ascents and railings, access to the cab and maintenance points on the uppercarriage is safe and comfortable.



# EFFECTIVE FLEET MANAGEMENT

## 1. Reduce service costs

The dashboard is used to monitor the machine and its main operating parameters (temperatures, consumption). If key figures deviate significantly from the target value, the user is informed immediately.

## 2. Reduce consumption

You will receive daily updated insights into your fleet processes: Easily identify and optimize times when machines are idle or change set parameters when machines are underloaded to reduce consumption.

## 3. Improve productivity

With just a few clicks, you can identify and optimize machine capacity, analyse routes if required and thus make your port processes more profitable.

## 4. Safeguard your investment

Practical alarm messages inform you about critical machine conditions. In the event of irregular movements, the machine can also easily be deactivated remotely.

**“What if you could receive real-time data from all your machines with just one click and so increase your productivity? SENNEBOGEN’s SEN-track telematic system makes this possible.”**





# MAINTENANCE AND SERVICE.

## KEEP IT SIMPLE. WITH MANAGEABLE TECHNOLOGY.



Reliable and practical technology makes life easier. Where electronics add no value, we rely on hydraulics and electrical systems.



We make you happy, not reliant. With cost-effective components and fewer process steps, you can take care of the machine on your own.



The most important components, such as the accumulator module or the electrical distributor, are all easily accessible from a central point for straightforward checking and troubleshooting.



The SENCON control system supports you with diagnostics and makes troubleshooting easier. So your machine is back in action more quickly.



All maintenance and service points are clearly arranged and easily accessible. The clear labeling of components makes finding your way around easy.

# TECHNICAL DATA, EQUIPMENT

## MACHINE TYPE

MODEL (TYPE) 885 Hybrid

## DIESEL ENGINE

TYPE	<b>Stage V:</b> CAT C18 <sup>1</sup> Rated power: 597 kW / 1800 rpm Operating point standard: 597 kW / 1800 rpm Operating point ECO: 590 kW / 1650 rpm <b>Stage II:</b> on request  both: Automatic idle/stop
COOLING	water-cooled incl. fuel pre-filter
DISPLACEMENT	18 l
NUMBER OF CYLINDERS	6
BATTERIES	2x 210 Ah, battery disconnect switch
ELECTRICAL SYSTEM	24 V
OPTIONS	Engine block heater Electric fuel pump

## TANK CAPACITIES

FUEL	2250 l, Optional additional tanks
HYDRAULIC-TANK	2170 l
COOLANT	ca. 120 l
ENGINE OIL	ca. 40 l
CENTRAL LUBRICATION SYSTEM	Automatic central lubrication for equipment and slewing ring, display of fault and empty message via SENCON

## UPPERCARRIAGE

DESIGN	Torsion-resistant box design, precision crafted, steel bushings for boom mounting, service-friendly design, sea climate resistant coating, camera package (right/rear), telematic system SENtrack
COOLING SYSTEM	Compact 3-circuit cooling system with large cooling capacity, thermostatically regulated fan drive for oil and water cooler reduces energy consumption and noise emissions Fan reversal for easy and regular cleaning
OPTIONS	LED lighting package Swing bearing brake via foot pedal Fire extinguisher Low temperature packages Electrical Hydraulic tank preheating Magnet generator 30/33 kW

## ELECTRIC DRIVE

OPTIONS	Type: 500 kW, standard with 400 V / 50 Hz Transformer Cable reel
---------	--





# TECHNICAL DATA, EQUIPMENT

## HYDRAULIC SYSTEM

Load-sensing/ LDUV hydraulic system, hydraulically operated work functions

DELIVERY RATE	1800 l
OPERATING-PRESSURE	up to 320 bar
CONTROL SYSTEM	Proportional, precision electric actuation of work movements, joystick control for the work functions, additional functions via switches and foot pedals
SAFETY	Hydraulic circuits safeguarded with safety valves
	Pipe fracture safety devices
	Emergency lowering of the equipment in the case of engine standstill
OPTIONS	Bio-oil filling
	Tool Control for programming pressure/ rate of up to 10 tools
	Load torque warning with capacity display
	Overload safeguard with shutdown

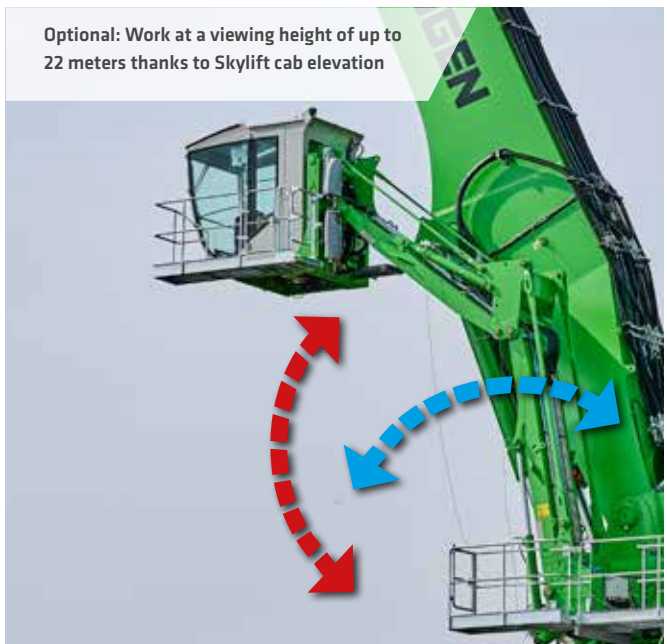
## CAB

CAB TYPE	Portcab 2.0, can be elevated by 11 m
CAB FEATURES	SENNEBOGEN Portcab 2.0 - large, special operator's cab with outstanding all-around visibility, large floor window at the front, high-performance heating and climate system Comfortable, air-suspended seat and seat belt, additional training seat, control elements according to the latest ergonomic standards, roof and floor window made from bulletproof glass, sun protection for roof and side windows, control and diagnostic system SENCON
OPTIONS	Bullet proof windshield
	Safety side window and rear window
	Polycarbonate safety glass
	Wipers for lower front window/skylight
	Sun blinds on the side windows
	Speaker system with gooseneck microphone
	Radio
Cooling box	

## SLEWING DRIVE

GEARBOX	Compact planetary gear with bent-axis hydraulic engine, integrated brake valves
SLEW BRAKE	Spring-loaded multi-disk brake
SLEWING RING	3-row roller slewing ring, sealed. Externally geared slewing ring with 360° grease drip tray and pinion lubrication
SLEWING SPEED	0-4,2 rpm, stepless
TORQUE	565 kNm

Optional: Work at a viewing height of up to 22 meters thanks to Skylift cab elevation



<sup>2</sup> Vibration level: Max. Hand/Arm (acc. ISO 5349-2001) < 2.5 m/s<sup>2</sup> and max. body (acc. ISO/TR 25398:2006) < 0.5 m/s<sup>2</sup>

# TECHNICAL DATA, EQUIPMENT

## CRAWLER GANTRY



Crawler gantry undercarriage PR300/750 with hydraulic travel drive on each chassis side integrated in the chassis frame by an axial piston engine via compact planetary gears, spring-loaded parking brake, hydraulically ventilated multi-disk brake, flat track shoes 1200 mm

TRAVEL SPEED 0-1,5 km/h

OPTION max. 6 m Pylon

## MOBILE GANTRY



Stable and agile mobile gantry undercarriage PM300/750 with 20 wheel sets and integrated 4-point support, automatic load compensation via corresponding level control for even floor relief. Simple, reliable maneuvering thanks to all-wheel steering on all wheel sets and crab steering, small turning radius

TIRE TYPE 80 x 285/70 R19.5

BRAKES hydraulic

TRAVEL SPEED 0-3,8 km/h

OPTION max. 4 m Pylon

## RAIL GANTRY

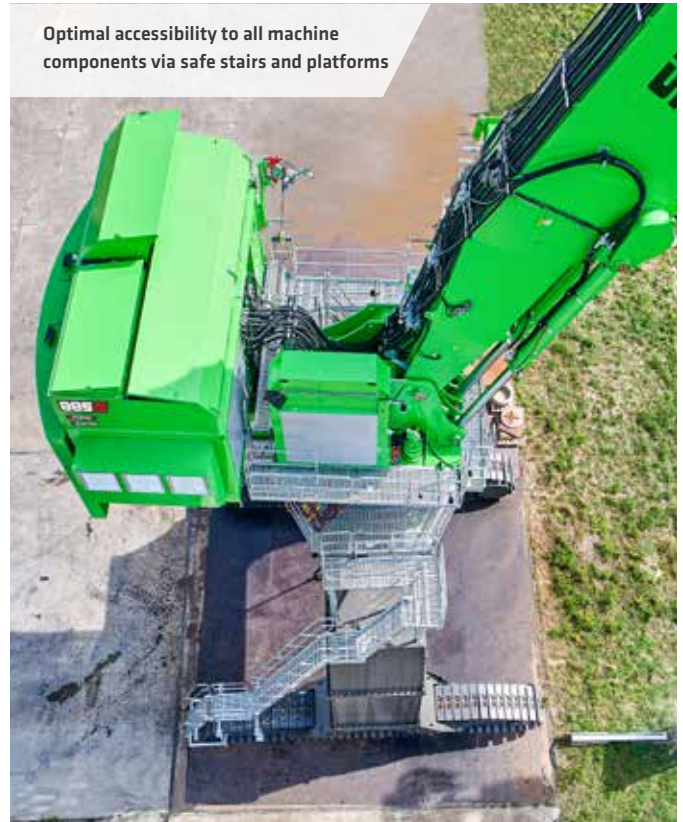


Customized rail undercarriage, dimensions according to customer requests

TRAVEL SPEED 0-2,4 km/h


OPTION max. 6 m Pylon


Optimal accessibility to all machine components via safe stairs and platforms

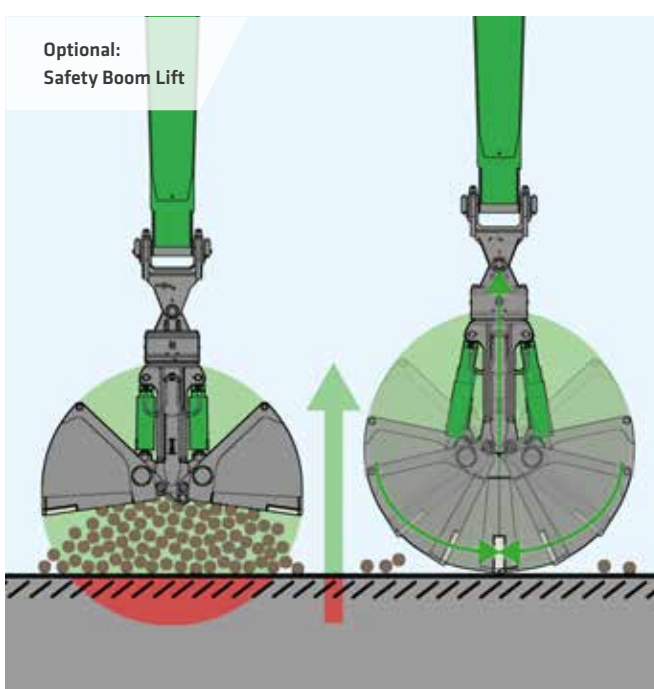
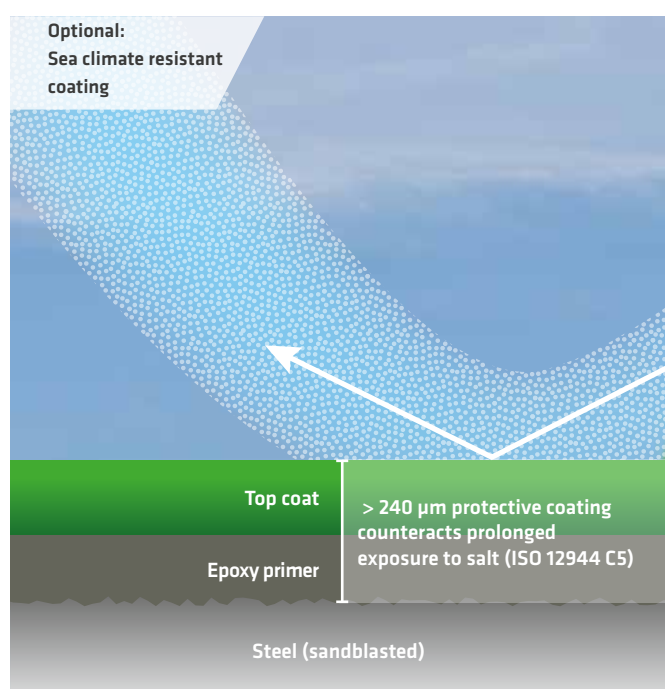




# TECHNICAL DATA, EQUIPMENT

EQUIPMENT 	
REACH	up to 38 m
CYLINDERS	Hydraulic cylinders (incl. hybrid cylinder) with high-quality sealing and guide elements, end position damping, sealed-bearing points All cylinders coated, nickelplated and chromium-plated in a way that is suitable for maritime climates, pipe rupture safety device (lifting cylinder)
CENTRAL LUBRICATION	Automatic central lubrication system
OPTIONS	Safety Boom Lift for equipment Lift limitation / stick limitation adjustable to the stop settings LED lighting Stick mounted camera

OPERATING DATA 	
OPERATING WEIGHT	<b>250-320 t</b>
NOTE	Operating weight varies by model and equipment.



# LOAD RATINGS K24 HEAVY DUTY

The load ratings are given as information only. Please contact our regional sales partners or portdivision@sennebogen.de for a detailed project study.



PR300/760



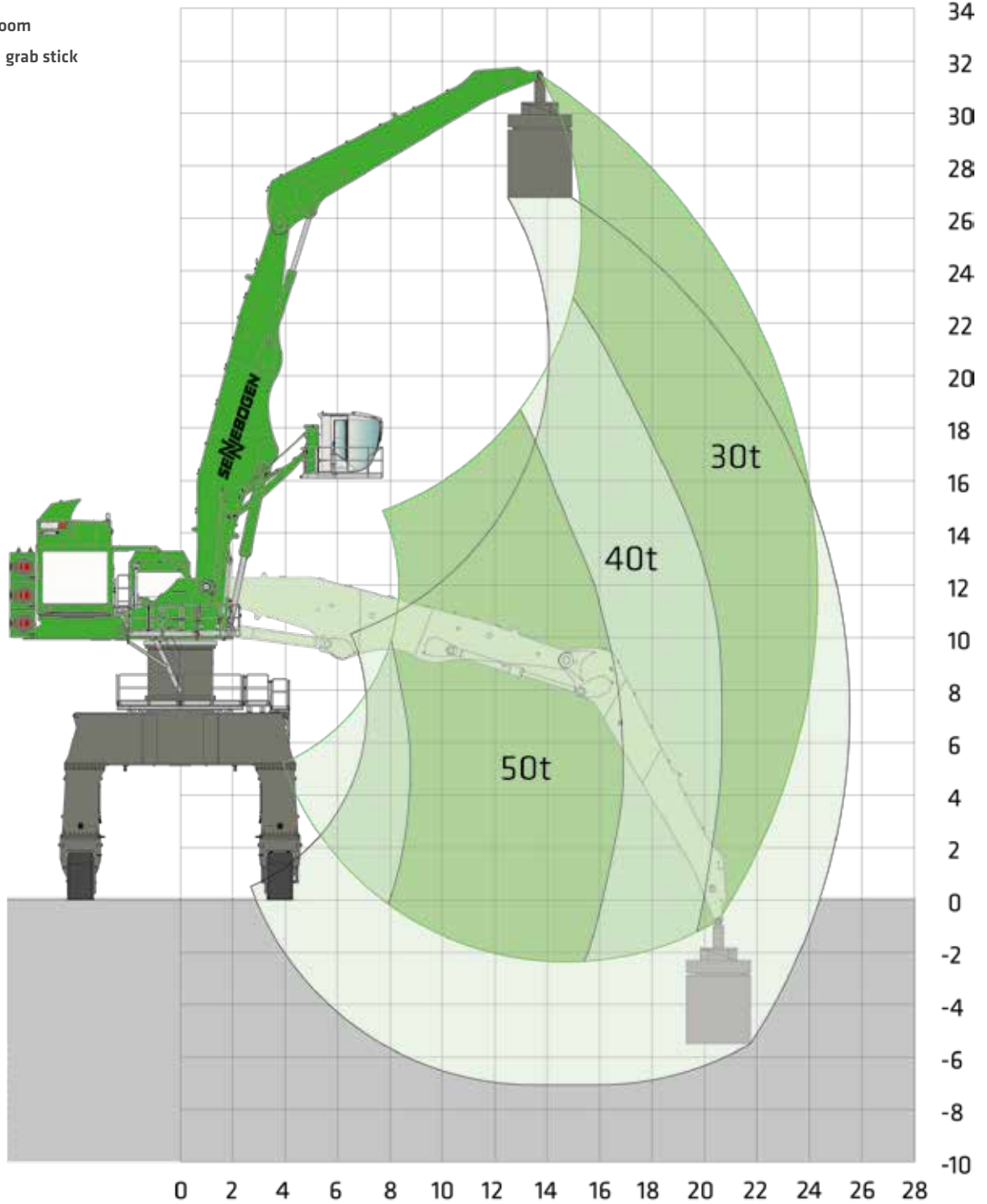
SKYLIFT G1300/700 with PORTCAB 2.0, 11 m elevating, stepless, hydraulic



Pylon extension 2,0 m



14 m boom  
11,5 m grab stick



20220808081836

**Notes:**

All values are in tons (t) and are 75% of the static tipping load or 87% of the hydraulic lifting force in accordance with ISO 10567, and apply at the required operating temperature in the Green Hybrid system. They apply on firm and level ground and 360° slewing. Attachments such as orange peel grabs, magnets, etc. are included in the load capacity. In accordance with harmonized EU standard EN 474-5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.



# LOAD RATINGS K28 PORT

The load ratings are given as information only. Please contact our regional sales partners or portdivision@sennebogen.de for a detailed project study.



PR300/760



SKYLIFT G1300/700 with PORTCAB 2.0,  
11 m elevating, stepless, hydraulic

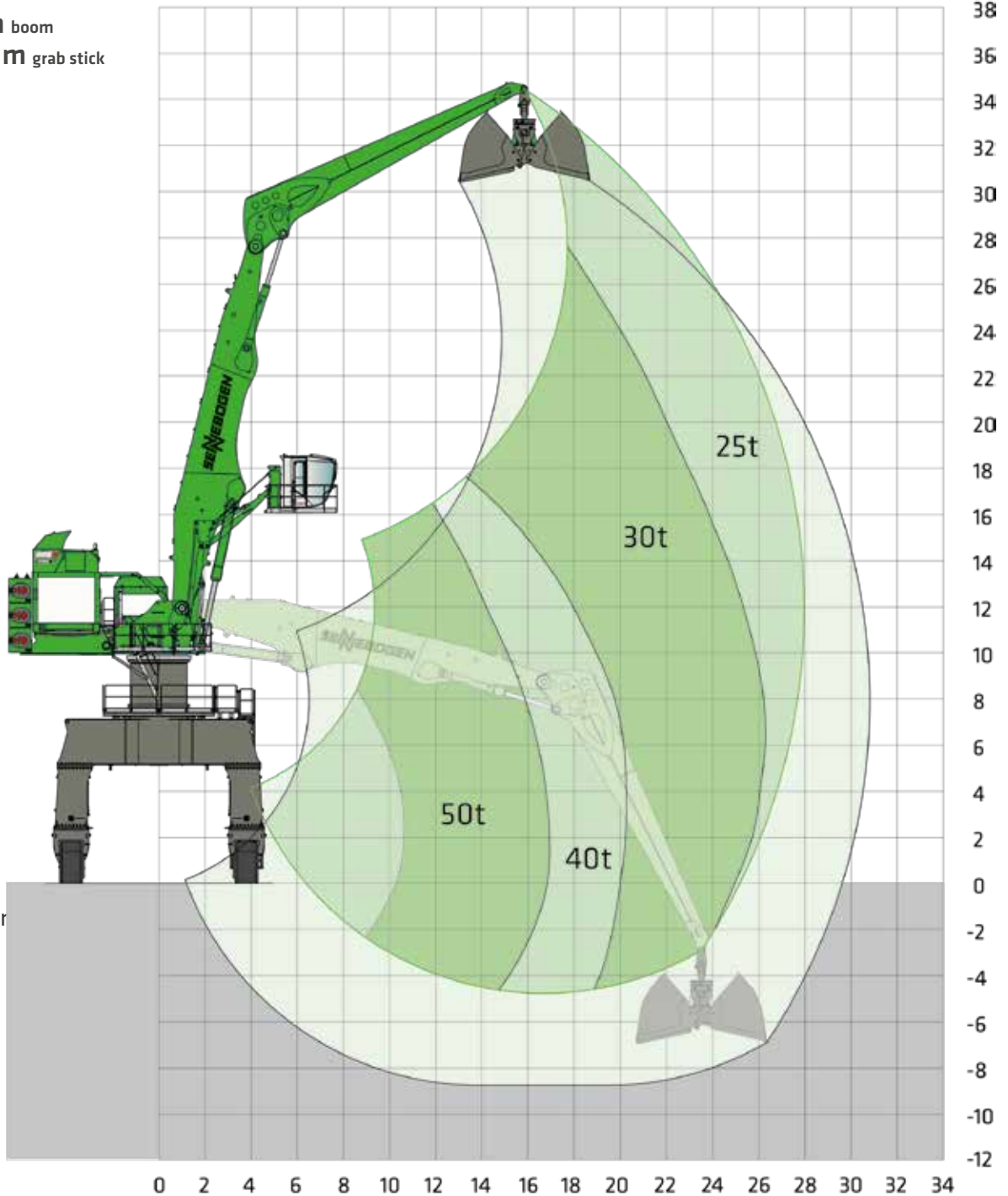


Pylon extension  
2,0 m



16 m boom  
13,5 m grab stick

Machine shown in mirror image



202208105452

**Notes:**

All values are in tons (t) and are 75% of the static tipping load or 87% of the hydraulic lifting force in accordance with ISO 10567, and apply at the required operating temperature in the Green Hybrid system. They apply on firm and level ground and 360° slewing. Attachments such as orange peel grabs, magnets, etc. are included in the load capacity. In accordance with harmonized EU standard EN 474-5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.

# LOAD RATINGS K35 PORT

The load ratings are given as information only. Please contact our regional sales partners or portdivision@sennebogen.de for a detailed project study.



PM300/760



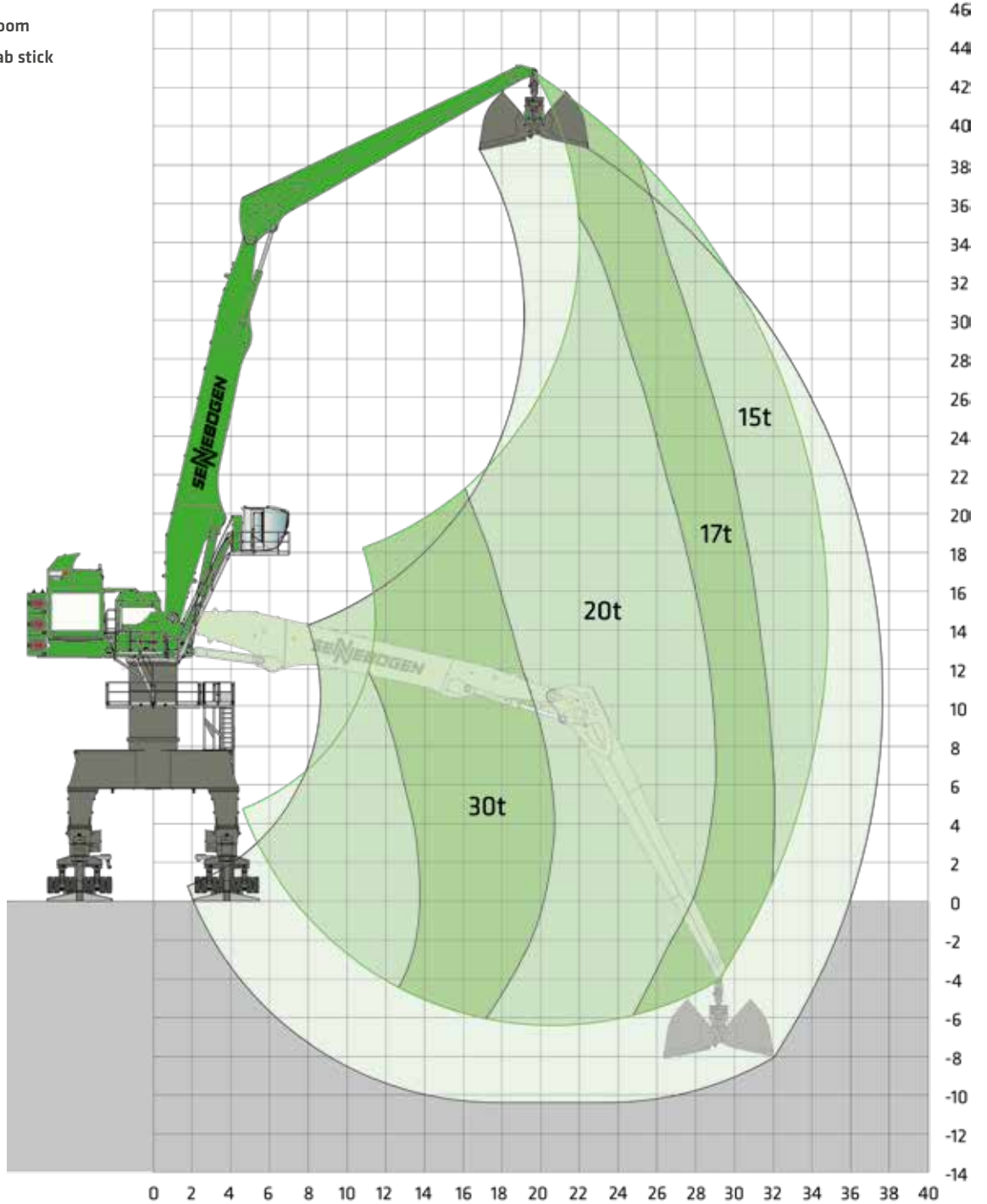
SKYLIFT G1100 with PORTCAB 2.0,  
11 m elevating, stepless, hydraulic



Pylon extension  
4,0 m



20 m boom  
17 m grab stick



Machine shown in mirror image

20220808080901

**Notes:**

All values are in tons (t) and are 75% of the static tipping load or 87% of the hydraulic lifting force in accordance with ISO 10567, and apply at the required operating temperature in the Green Hybrid system. They apply on firm and level ground and 360° slewing. Attachments such as orange peel grabs, magnets, etc. are included in the load capacity. In accordance with harmonized EU standard EN 474-5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.

LOAD RATINGS



# LOAD RATINGS K38 PORT

The load ratings are given as information only. Please contact our regional sales partners or portdivision@sennebogen.de for a detailed project study.



**RAIL GANTRY**



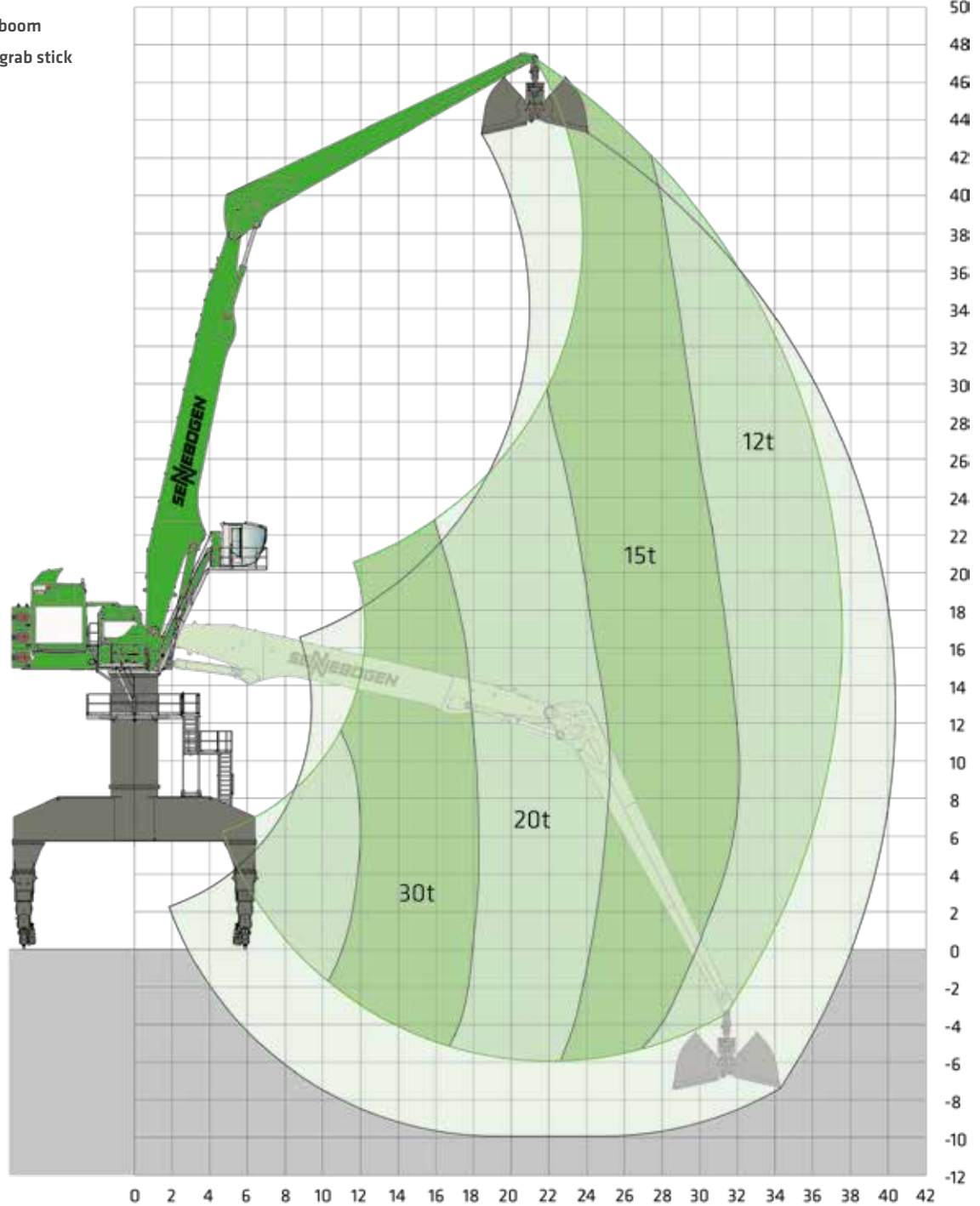
**SKYLIFT G1100 with PORTCAB 2.0, 11 m elevating, stepless, hydraulic**



**Pylon extension 6,0 m**



**21,5 m boom  
18,5 m grab stick**



Machine shown in mirror image

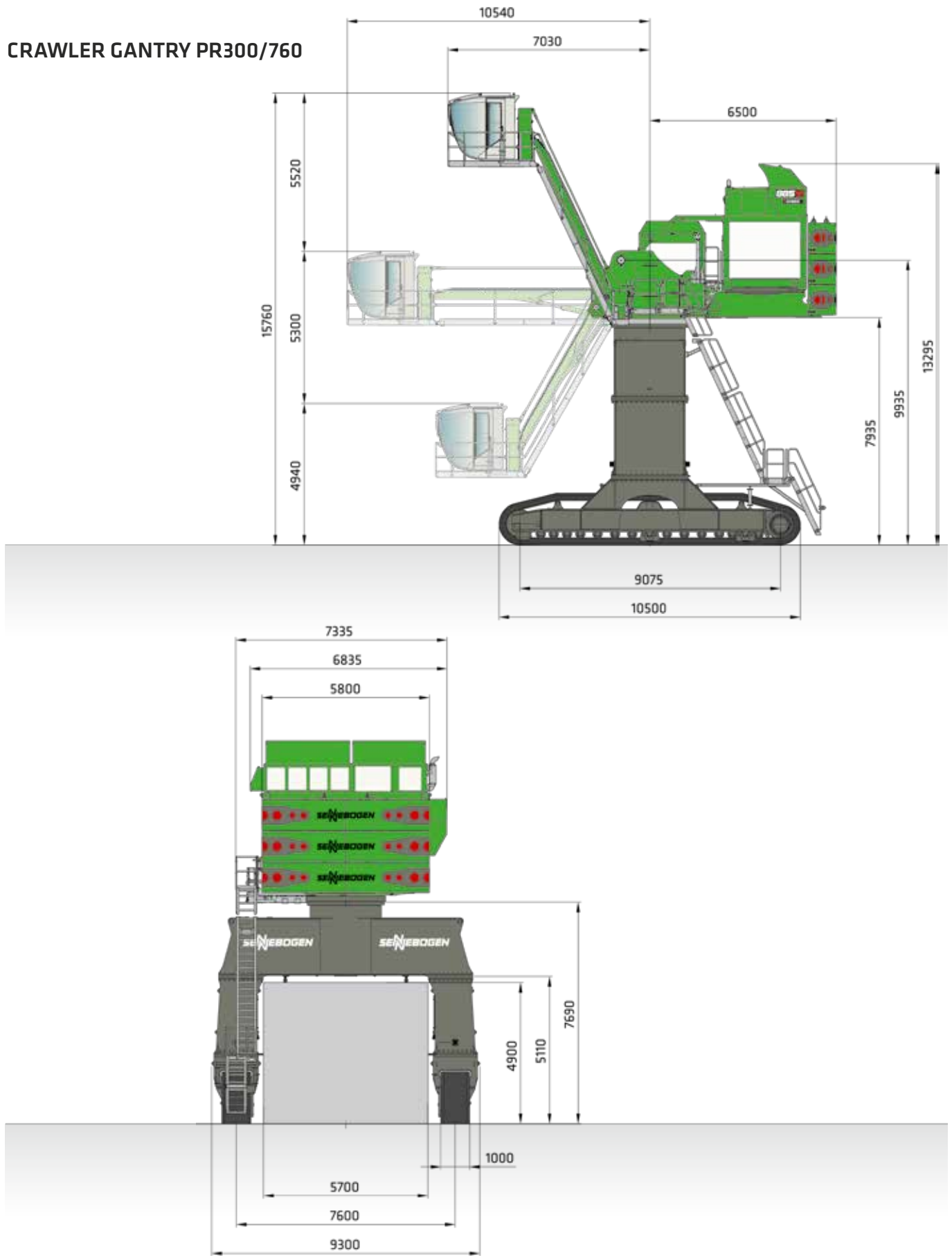
20220808081328

**Notes:**

All values are in tons (t) and are 75% of the static tipping load or 87% of the hydraulic lifting force in accordance with ISO 10567, and apply at the required operating temperature in the Green Hybrid system. They apply on firm and level ground and 360° slewing. Attachments such as orange peel grabs, magnets, etc. are included in the load capacity. In accordance with harmonized EU standard EN 474-5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.

# CRAWLER GANTRY DIMENSION

CRAWLER GANTRY PR300/760

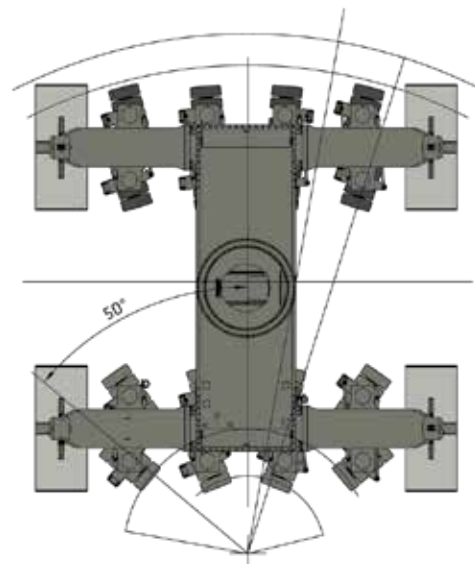
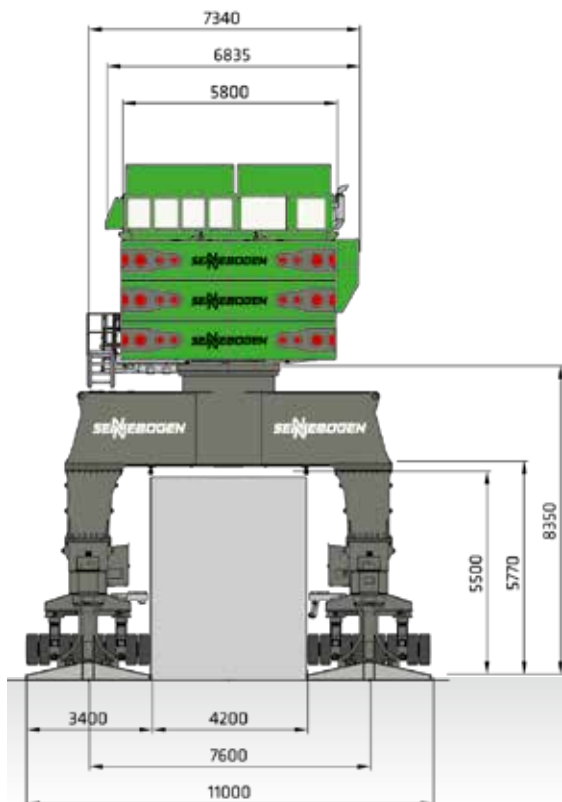
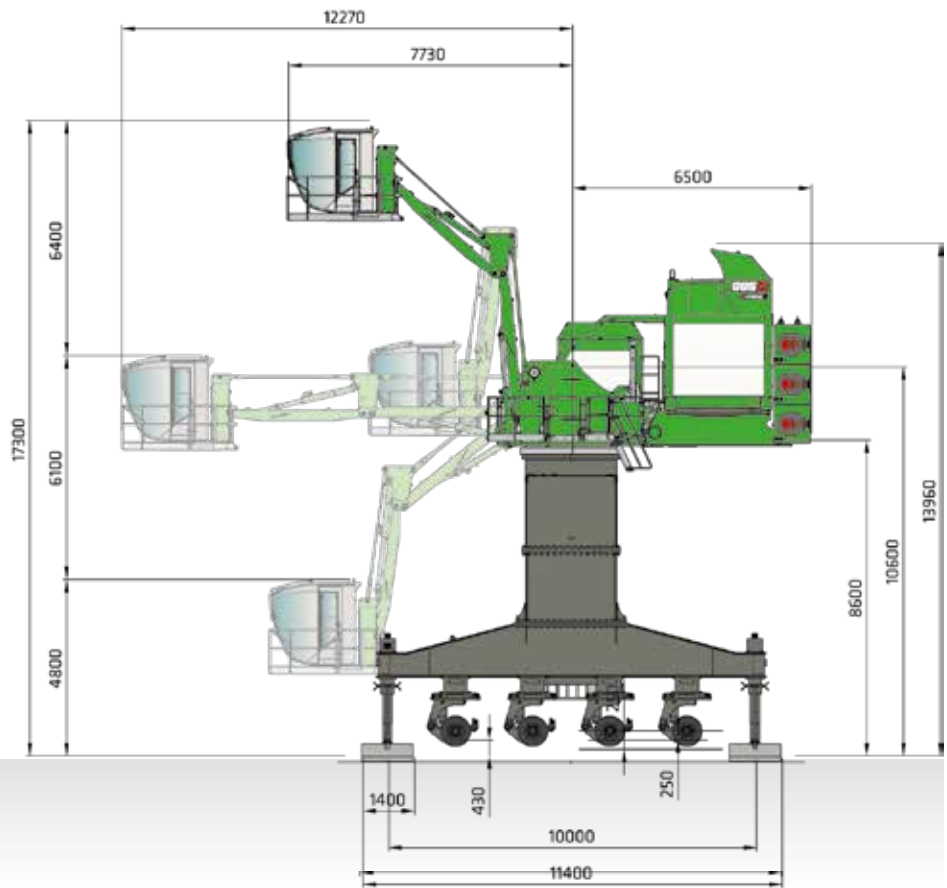


DIMENSIONS



# MOBILE GANTRY DIMENSIONS

## MOBILE GANTRY PM 300/760





### SENNEBOGEN ACADEMY

Increase your knowledge because success is based on knowledge. In the SENNEBOGEN ACADEMY we place great importance on ensuring it flows powerfully.  
↳ [www.sennebogen-academy.com](http://www.sennebogen-academy.com)



### SERVICE AND MAINTENANCE

Comprehensive customer service. And supply of spare parts. Service is a TOP priority for us.  
↳ [www.sennebogen.com/customer-service](http://www.sennebogen.com/customer-service)



### SENtrack

Efficient fleet management with SENtrack: use information that would otherwise stay hidden and increase your efficiency.  
↳ [www.sennebogen.com/sentrack](http://www.sennebogen.com/sentrack)



### RENTAL & USED

Discover the unique range of rental machines available from SENNEBOGEN Rental & Used. Find your rental machine here:  
↳ [www.sennebogen-rental-used.com](http://www.sennebogen-rental-used.com)

## JOIN OUR OPERATORS' CLUB

The spotlight is on you and your machine! We focus on exclusive information, sharing experiences with other SENNEBOGEN operators as well as fun and enthusiasm.

All the benefits here ↳ [www.sennebogen.com/operators-club](http://www.sennebogen.com/operators-club)





# MOVE BIG THINGS WITH US



over **70**  
years of  
experience

**100%**  
family company

over **2000**  
experienced  
specialists worldwide

**4**  
production plants  
in Germany

over **180**  
sales and service partners  
worldwide

**27**  
different material  
handlers



Telehandler  
4-5.5 t

Balancer  
130-300 t

Material handler  
17-420 t

Duty cycle crane  
13.5-300 t

Crawler crane  
50-300 t

Telescopic crane  
16-130 t

Port crane  
300 t

# 885G | Hybrid

Bestell-Nr. 407163  
885-G-102205

This catalog describes machine models, the scope of equipment of individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik GmbH. Machine illustrations may contain optional and supplementary equipment. Actual equipment may vary depending on the country to which the machines are delivered, especially in regard to standard and optional equipment. All product designations used may be trademarks of SENNEBOGEN Maschinenfabrik GmbH or other supplying companies, and any use by third parties for their own purposes may violate the rights of the owners.

Please contact your local SENNEBOGEN sales partner for information concerning the equipment variants offered. Requested performance characteristics are only binding if they are expressly stipulated upon conclusion of the contract. Delivery options and technical features are subject to change. All information is supplied without liability. Equipment is subject to change, and rights of advancement are reserved. © SENNEBOGEN Maschinenfabrik GmbH, Straubing, Germany. Reproduction in whole or in part only with written consent of SENNEBOGEN Maschinenfabrik GmbH, Straubing, Germany.

**SENNEBOGEN**  
**Maschinenfabrik GmbH**  
Hebbelstraße 30  
94315 Straubing, Germany

 [www.sennebogen.com](http://www.sennebogen.com)

**MOVE BIG THINGS**

## SALES SENNEBOGEN

Green Line Sales

 +49 (0) 9421 / 540 - 146

 [materialhandling@sennebogen.de](mailto:materialhandling@sennebogen.de)

## SPARE PARTS CENTER

Spare parts orders

 [spareparts@sennebogen.de](mailto:spareparts@sennebogen.de)

## AFTER SALES

Technical support

 [service@sennebogen.de](mailto:service@sennebogen.de)

