



9300

SEINEBOGEN



585 kW Diesel (Stage V)



552 kW Diesel (Stage II)

615 kW (Electro)

90 t



41 m



PORTCAB

9300E

Harbour mobile crane

Stage V





9300E Harbour mobile crane. Simply reliable.



1964: SK 20 cable-operated port crane during cargo handling

Values of a family-owned company

- More than 65 years of experience in designing and constructing duty cycle cranes and draglines
- Uncompromisingly high performance in all areas
- Technology that can be mastered: High-quality components without over-engineering
- Long service life and high value retention

Your top benefits:

1 Flexible operation

Versatile applications: handling containers, bulk goods, cargo and heavy loads up to 90 t

2 Ideal crane size for many ports

The perfect fit for Feeder ships, standard ships, Handysize, Handymax, Supramax

3 Innovative technologies - modern, energy-saving drives

Diesel-hydraulic with proven Green Efficiency technology
Electro-hydraulic powered by eGreen technology



4 Top-notch, effective handling performance

Powerful winches, high lifting speeds of up to 100 m/min
Superimposed movements of the grab closing, rope lift and slewing thanks to high power reserves

5 High safety standards

Low ground pressure thanks to broad outrigger area and large outrigger plates
Homogenous load transmission into the ground through individual load balance on 14 sets of wheels

6 Maximum comfort - ergonomically optimized work setting

Ideal conditions in the Portcab for the crane operator



7 Simplicity for top availability - Keep it simple

Proven technology and module components keep complexity under control
Manageable control through mechanical, hydraulic or electrical standard components

Robust Steel Construction

- Stable lattice boom for lifting high loads at a wide reach
- High base frame, round tower design, designed for long service life

Perfect Accessibility:

- Easy access to all maintenance and service points of the Powerpack as well as the winch house: noise insulated and weather protected
- Safe ascent and descent thanks to railings and platforms

An Innovation for the Harbour Mobile Crane:

- Comfortable & safe workplace in the large Portcab at a viewing height of up to 21.2 m thanks to the stable and adjustable Skylift cab elevation

- 2 x powerful LED spotlights (in series)

Powerful

- Rotator 90 t

Mobility & Safety

- Low, evenly distributed ground pressure levels due to load balance on all 14 wheels sets incl. all-wheel steering



9300E Portcab Highlights



Features:

- Spacious operator's cab, developed for port applications with excellent visibility, C5 corrosion protection, sound insulation and cushioned to minimize vibration
- Air suspended operator's seat with lumbar support, headrest and ergonomic adjustments
- Seat heating
- Ergonomic proportional joystick, adjustable with the armatures, separate joystick for travel function
- Safety lever to avoid unintentional joystick activation
- Large 10,2" Monitor with surveillance cameras (1x rear, 1x left, 1x right, 1x winch house): optional zoom camera for boom head/hook
- Electric air condition & heating system with optimised de-icing and de-mist function, adjustable cab temperature and filtering of fresh air via internal air filters
- Additional trainer's seat with seat belt
- Diagnostic system
- 12V, 24V, USB and 240V (electric version) charging sockets
- Tainted double glazing for side windows

9300E First Class Comfort & Safety

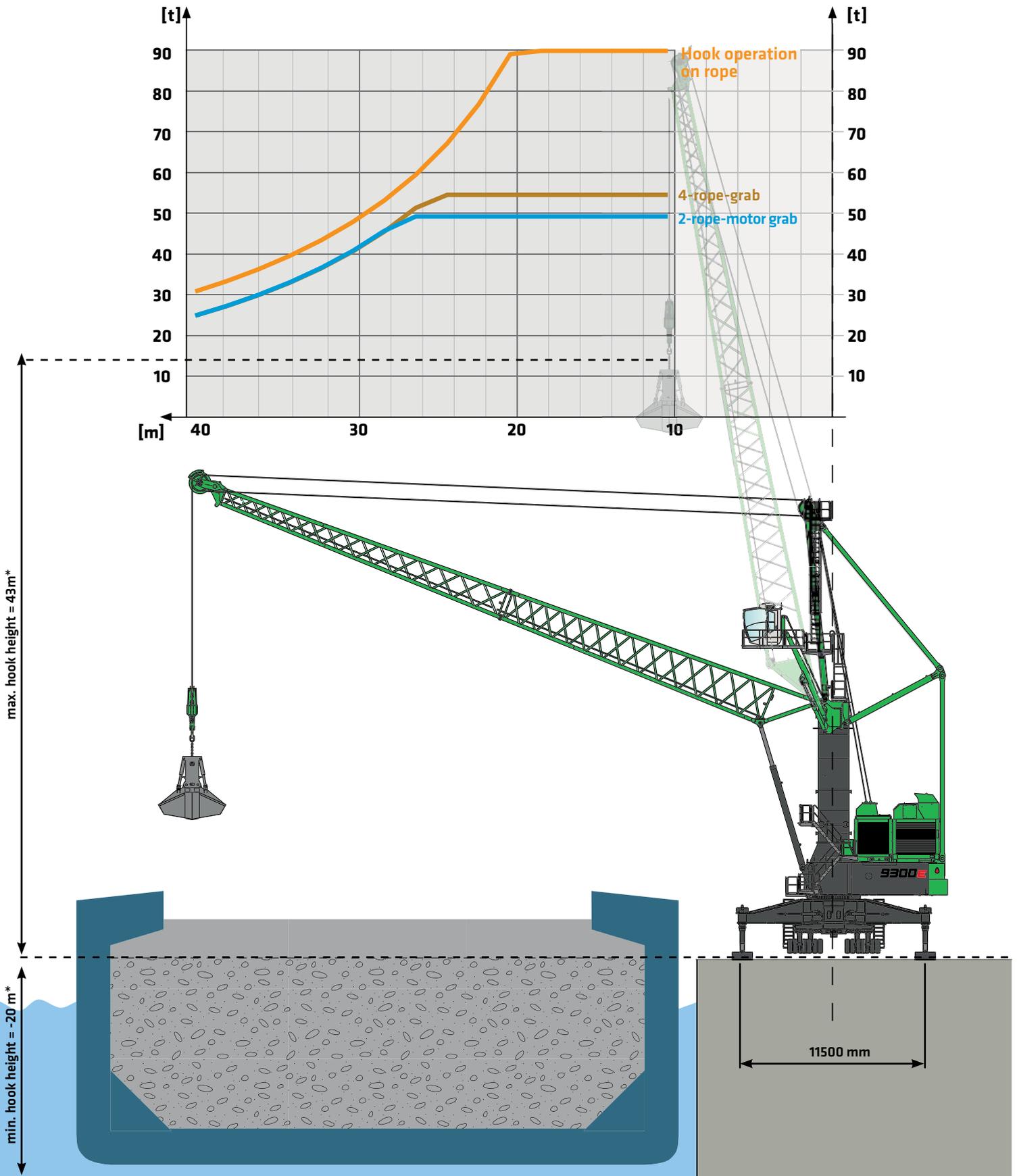


- Access to Portcab at a height of just 9 m
- Safe and comfortable raising to working position in just a few seconds thanks to Skylift 1100 cab elevation
- Ideal overview of the work area thanks to 21.2 m eye level
- Ideal position to operate and maneuver the machine in the lower cab position
- Excellent view into the ship thanks to variable cab positioning

21.2 m
eye level



9300E Bulk cargo handling



8 * depends on grab size

Subject to technical change.

9300E High Performance in Bulk Cargo Handling

Four key advantages:

- 1. Keeps you in control:** Our systems support the operator, to ease the daily work routine.
- 2. You remain independent:** Our technology enables the operator to service the machine on his own without expert tools.
- 3. Built for the harbour:** Sea climate resistant coating and noise-reducing sandwich panels with high quality coating
- 4. Your benefit:** An integrated approach, from consultation to commissioning and training: We are only satisfied once you are.

	Hook operation Load capacity on rope*	Grab operation			
		4-rope grab		2-rope-motor grab*	
% tipping load	75%	67%	50%	67%	50%
Radius [m]	[t]	[t]	[t]	[t]	[t]
10,0	90,0	54,8	54,8	49,1	49,1
11,0	90,0	54,8	54,8	49,1	49,1
12,0	90,0	54,8	54,8	49,1	49,1
13,0	90,0	54,8	54,8	49,1	49,1
14,0	90,0	54,8	54,8	49,1	49,1
15,0	90,0	54,8	54,8	49,1	49,1
16,0	90,0	54,8	54,8	49,1	49,1
17,0	90,0	54,8	54,8	49,1	49,1
18,0	90,0	54,8	54,8	49,1	49,1
19,0	90,0	54,8	54,8	49,1	49,1
20,0	89,2	54,8	54,8	49,1	49,1
22,0	76,9	54,8	51,1	49,1	49,1
24,0	67,3	54,8	44,7	49,1	44,2
26,0	59,6	51,8	39,6	49,1	39,2
28,0	53,2	46,3	35,4	45,8	35,1
30,0	48,0	41,7	31,9	41,3	31,6
32,0	43,5	37,8	28,9	37,5	28,7
34,0	39,6	34,5	26,4	34,2	26,2
36,0	36,3	31,6	24,2	31,4	24,0
38,0	33,4	29,1	22,2	28,9	22,1
40,0	30,9	26,8	20,5	26,8	20,5

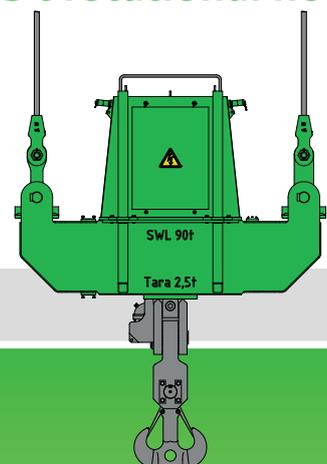
Please note:

- The specified load ratings given apply when the machine is on a firm and level surface.
- The loading ratings are given in tons and apply 360 degrees.
- The load capacities are in observance of standards ISO 4305 Tab. 1+2 as well as the tilt angle method (4° tilt angle).
- The weight of the load handling equipment (hooks, suspension gear, grab, 40' spreader, etc.) should be deducted from the load capacities.
- The load ratings apply to outrigger-supported working.

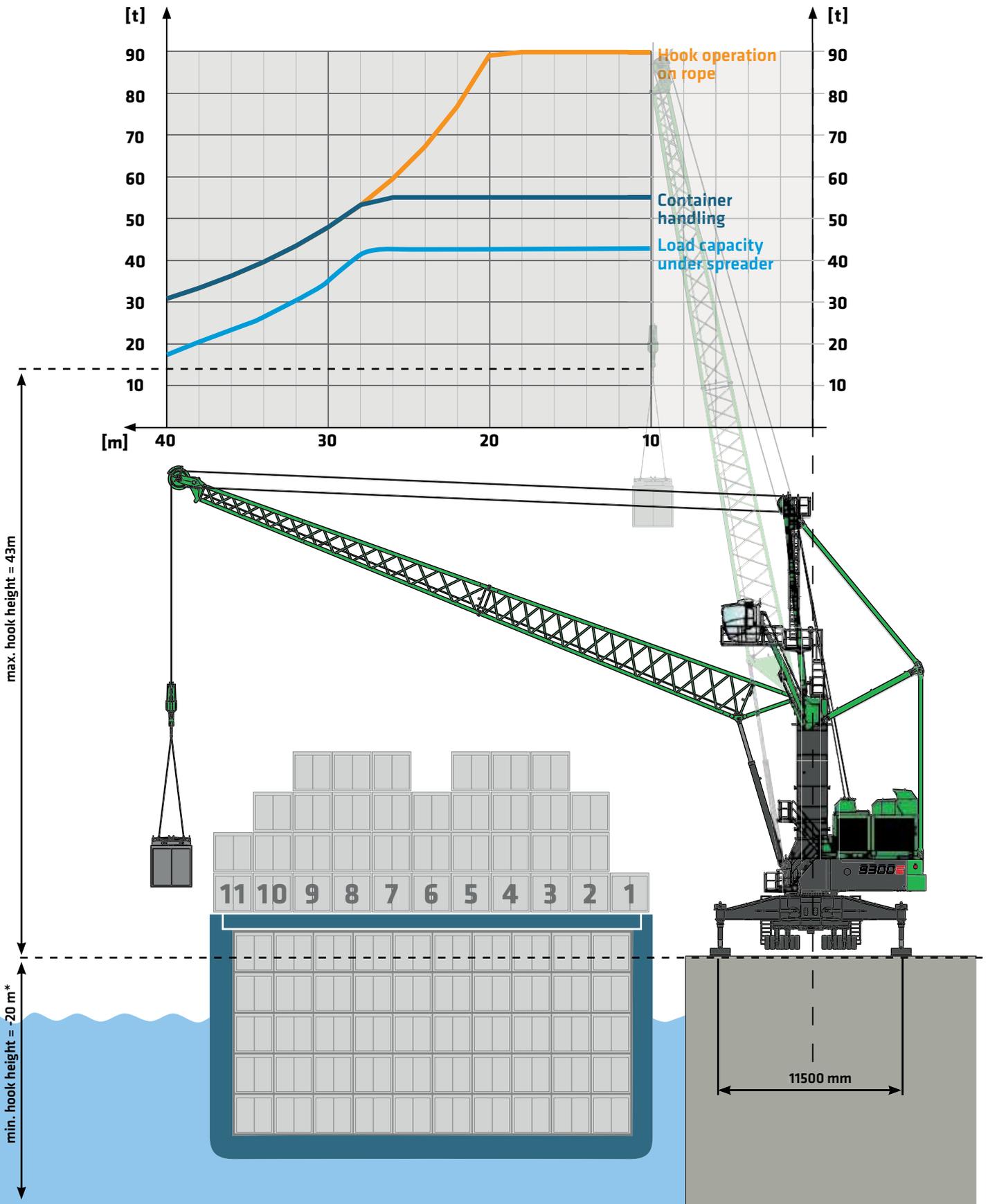
All specifications are preliminary.

Subject to technical change.

*minus 2.5 t rotational hook



9300E Container Handling



10 * 4-rope operation: -16 m

Subject to technical change.

9300E High Performance in Container Handling

Four key advantages:

- 1. Designed & Made in Germany:** Decades of experience in material handling in ports ensures high performance.
- 2. Ideal Accessibility for Service & Maintenance** thanks to spacious and easy-access motor Powerpack and winch house.
- 3. Keep it simple:** Take advantages of our „keep it simple“ approach. Technology configured to simplicity and controllability ensures that you will enjoy high machine reliability and availability.
- 4. Stay flexible:** High-performance 90-ton rotational hook enables the flexible use of bulk cargo grabs or semi/fully automatic spreaders.

	Hook operation Load capacity on rope*	Container handling Load capacity on rope*	Load capacity under fully automatic 40' spreader*
% tipping load	75%	75%	75%
Radius [m]	[t]	[t]	[t]
10,0	90,0	55,0	42,0
11,0	90,0	55,0	42,0
12,0	90,0	55,0	42,0
13,0	90,0	55,0	42,0
14,0	90,0	55,0	42,0
15,0	90,0	55,0	42,0
16,0	90,0	55,0	42,0
17,0	90,0	55,0	42,0
18,0	90,0	55,0	42,0
19,0	90,0	55,0	42,0
20,0	89,2	55,0	42,0
22,0	76,9	55,0	42,0
24,0	67,3	55,0	42,0
26,0	59,6	55,0	42,0
28,0	53,2	53,2	40,2
30,0	48,0	48,0	35,0
32,0	43,5	43,5	30,5
34,0	39,6	39,6	26,6
36,0	36,3	36,3	23,3
38,0	33,4	33,4	20,4
40,0	30,9	30,9	17,9

Rotational hook weight 2.5 t
Fully automatic 40' spreader weight approx. 10.5 t (max. payload: 42 t)

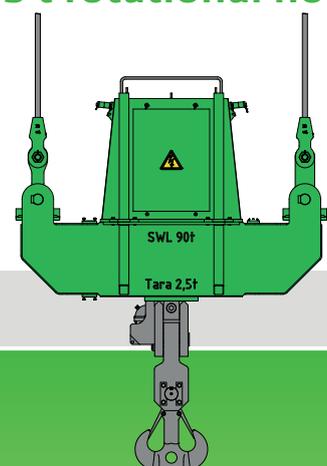
Please note:

1. The specified load ratings given apply when the machine is on a firm and level surface.
2. The load ratings are given in tons and apply 360 degrees.
3. The load capacities are in observance of standards ISO 4305 Tab. 1+2 as well as the tilt angle method (4° tilt angle)
4. The weigh of the load handling equipment (hooks, suspension gear, grab, 40' spreader, etc.) should be deducted from the load capacities.
5. The load ratings apply to outrigger-supported working.

All specifications are preliminary.

Subject to technical change.

*minus 2.5 t rotational hook



9300E Technical data, equipment

DIESEL POWERPACK

Power	Stage V: Rated Power: 597 kW at 1800 rpm Operating point: 585 kW at 1600 rpm Stage II: Rated Power: 570 kW at 1800 rpm Operating point: 552 kW at 1600 rpm
Model	CAT C18 Direct injection, turbocharged, charge air cooling, reduced emissions, ECO-mode, automatic idle
Cooling	water-cooled
Air filter	Dry filter with integrated pre-separator, automatic dust discharge, main element and safety element, contamination indicator
Electr. System	24 V
Batteries	2 x 155 Ah , battery disconnect switch
Options	<ul style="list-style-type: none"> ■ Low temperature package ■ Additional noise insulation package

ELECTRO POWERPACK

Option	<ul style="list-style-type: none"> ■ Power: 615 kW / 690 Volt / 50 Hz Total connected load 1100 kVA, machine side fuse 1000 A (also with Generator) at 690 V - engine start up via frequency converter ■ Advantages: lowest operating costs, low-noise and virtually vibration-free work, long service life of the hydraulic components
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CAB PORTCAB

Cab type:	Large dimensioned Portcab
Cab elevation:	Skylift 1100, stepless, for safe and comfortable lifting up to operational height
Eye level	21.2 m

UPPERCARRIAGE

Design	Stable, torsion-resistant, precision-crafted box design, service-friendly concept and clearly arranged components within the walk-in Powerpack and winch house with hydraulically liftable Powerpack roof. Isolated airflow for dust discharge
Central lubrication	Automated central lubrication system for equipment and slewing gear
Cooling system	Compact 3-circuit cooling system with large cooling capacity, thermostatically regulated fan drive for oil and water cooler reduces energy consumption significantly, regular cleaning intervals
Fuel tanks	<ul style="list-style-type: none"> ■ 2.250 l (uppercarriage) ■ 4.500 l (undercarriage)

EQUIPMENT

Design:	stable lattice boom (3 main tubes)
Boom length:	41.0 m
Height pivoting point:	16.2 m
Boom adjustment:	Luffing cylinder with lowering brake valve
Adjusting speed:	0-60 m/min

UNDERCARRIAGE

Design:	Stable star undercarriage with 14 axles, of which 5 axles are driven
Load balance:	Automated, via corresponding level control for even ground pressure distribution
Speed:	0 -5 km/h
Ground support:	4 stable outriggers with standard dimensions 5.5 m (length) x 1.3 (width) = 7.15 m ²

9300E Technical data, equipment

LOAD CAPACITIES & CLASSIFICATION

according to F.E.M. 1.001 - 1998

Working mode:	Load capacity:	Classification:
4-rope grab	< 40.1 t	A 8
4-rope grab	< 50.8 t	A7
2-rope motor grab	< 36.0 t	A8
2-rope motor grab	< 45.7 t	A7
Container handling	< 55.0 t	A6
Crane operation, Heavy Load	< 90.0 t	A4

SLEWING DRIVE

Gear	2 x compact planetary gear with bent-axis hydraulic engine, integrated brake valves
Parking brake	spring loaded multi-disk brake
Slewing ring	strong, 3-row roller slewing ring, sealed, externally geared with pinion tooth lubrication
Slewing speed	0-1.6 rpm, stepless

WINCHES

**Lifting gear
2-rope machine:** 1 x double winch 90 t

Tractive force: 2 x 450 kN

Rope diameter: 42 mm

Rope speed: 0-100 m/min

**Lifting gear
4-rope machine:** 2 x double winch, 45 t each

Tractive force: 2 x 225 kN (2x)

Rope diameter: 36 mm

Rope speed: 0-100 m/min

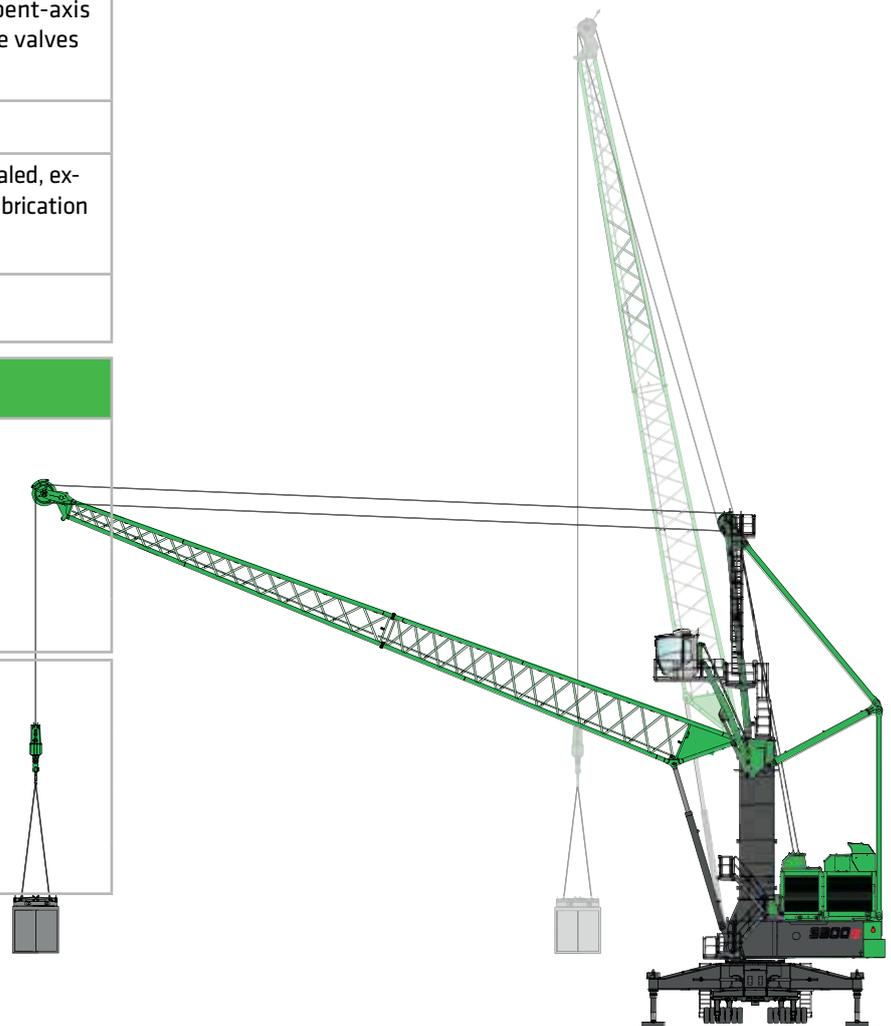
OPERATING WEIGHT

Mass: **ca. 290 t**
Basic machine incl. lattice boom, ropes, counter weight, outriggers, without load carrying devices

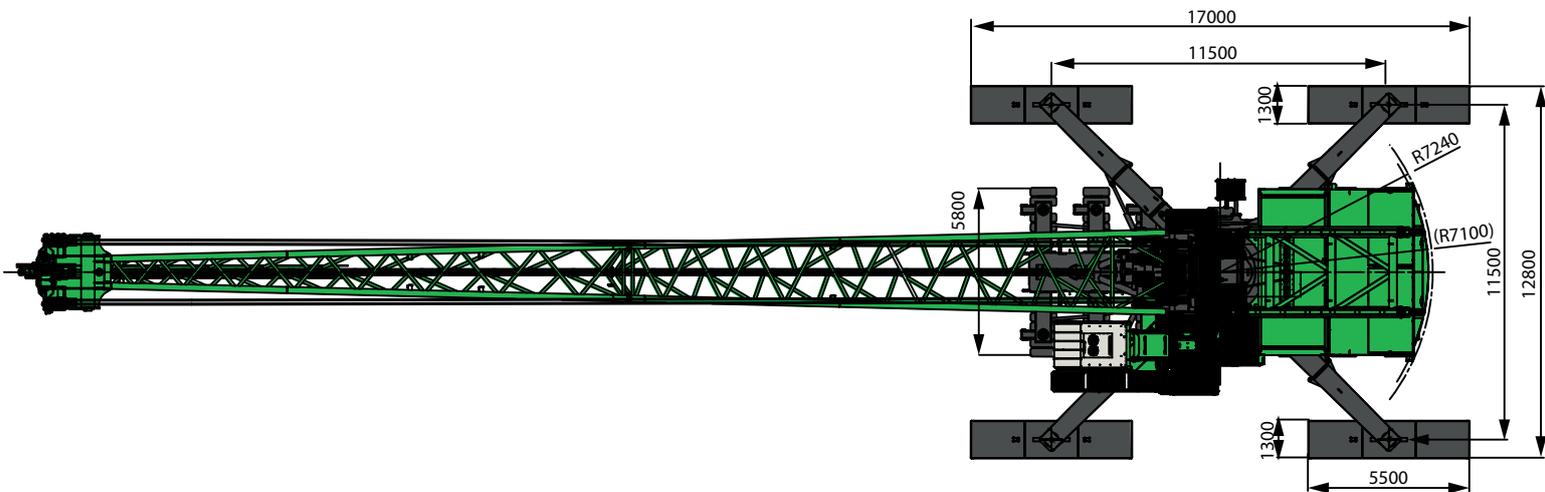
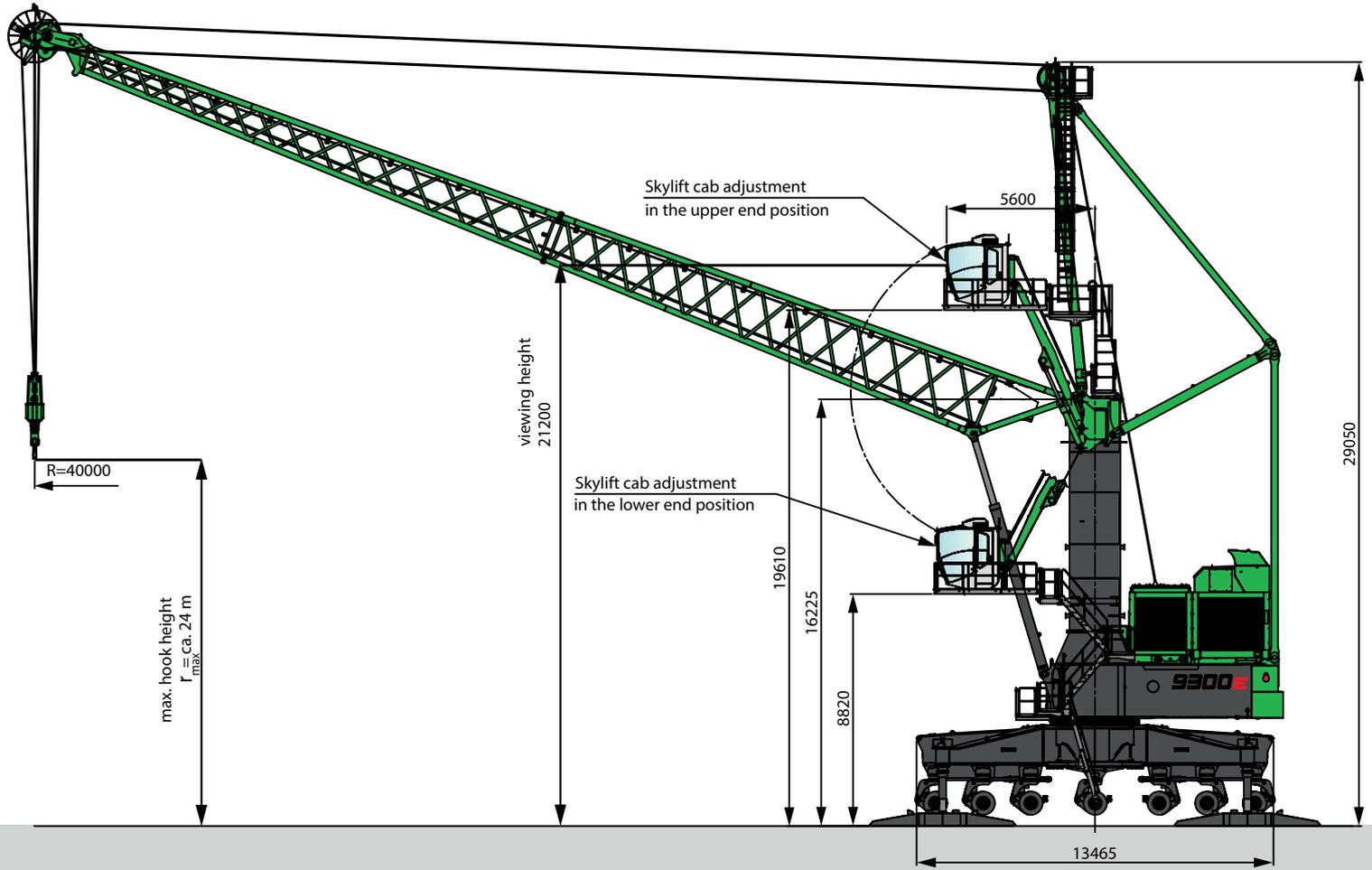
Please note: The operating weight varies depending on the respective equipment and attachments

Ground pressure:

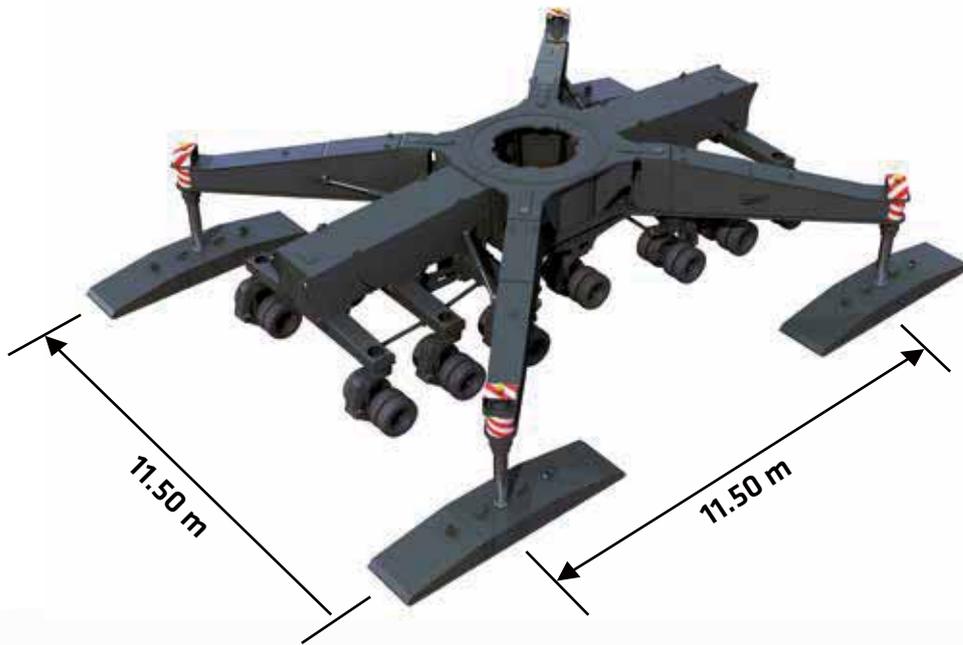
- Even load distribution to the overall surface area below the machine: 1.35 t/m²
- max. load per wheel: 6.5 t
- rated load per wheel: 5.5 t



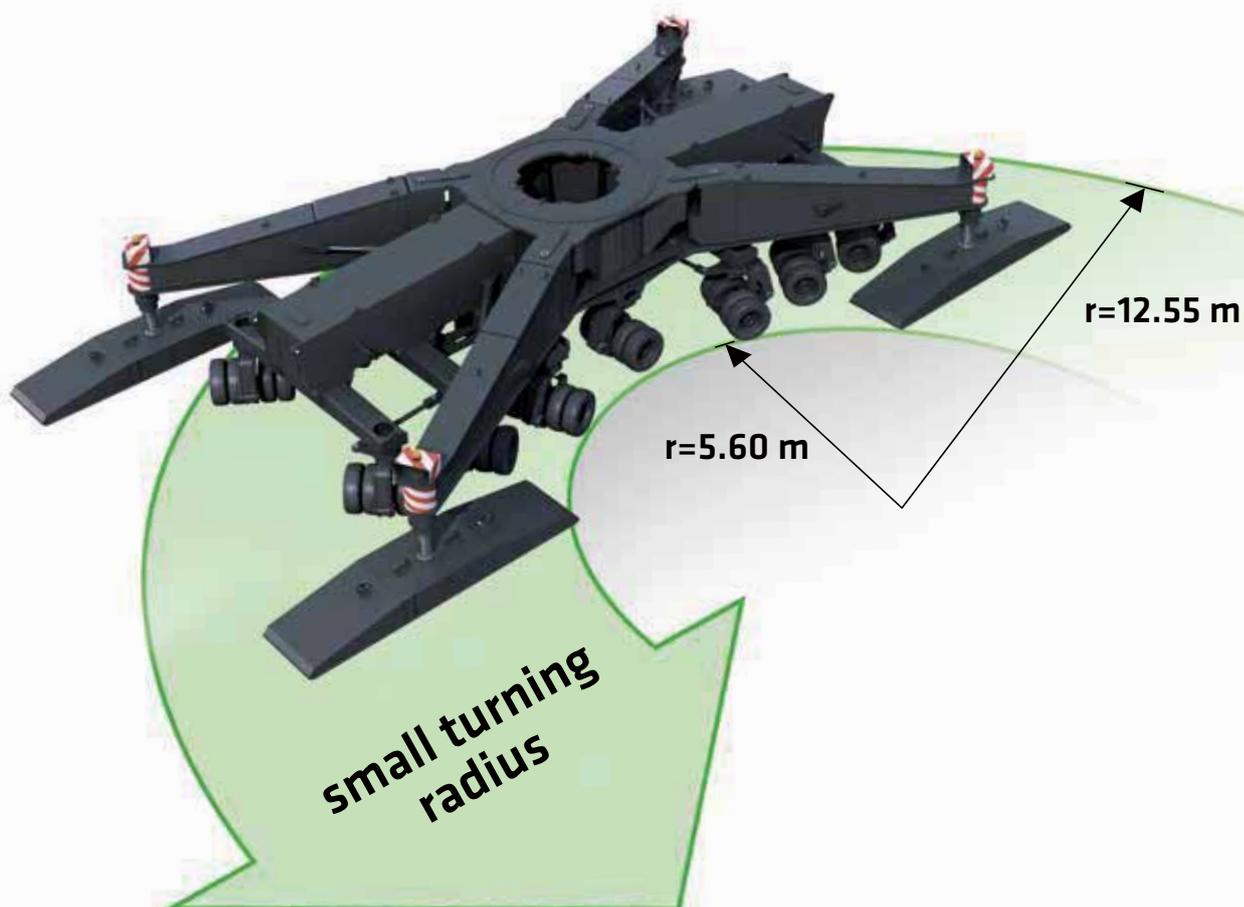
9300E Dimensions



9300E Maneuverability. Simplicity in practice.



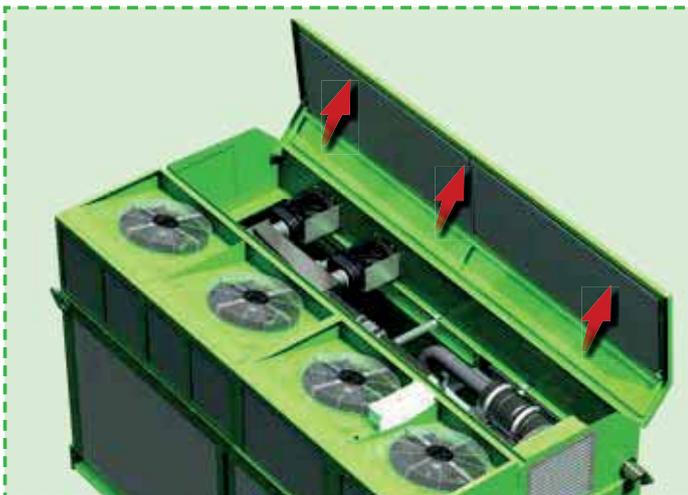
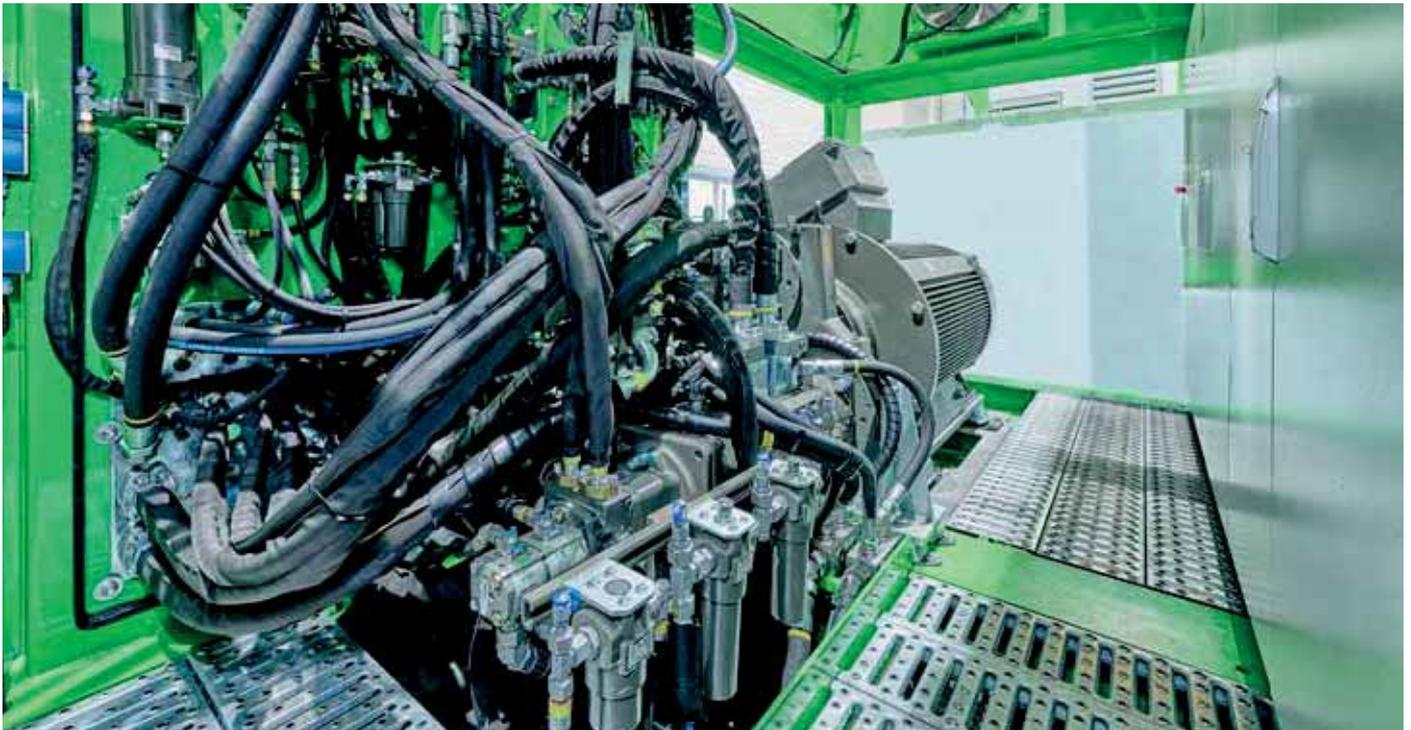
- Stable star undercarriage with ideal force transmission into the ground
- High stability thanks to large, starshaped outrigger area
- Even ground load distribution thanks to 56 tires on 14 axles with individual load balance through corresponding level regulation
- Simple, reliable and quick maneuvering thanks to all-wheel steering
- Very good agility and maneuverability: small turning radius



9300E SENNEBOGEN Powerpacks

Easy maintenance, ideal accessibility

- Weather-independent, protected in the closed SENNEBOGEN Powerpack compartment
- Ideal accessibility to all machine components
- Optimized ventilation and filtering system, perfectly suited for handling bulk goods
- Manageable technology
- Clearly arranged electrical components in the control cabinet
- Hydraulically liftable Powerpack cover for quick and easy maintenance
- Central measuring points in the hydraulic system
- Isolated air flow dust discharge

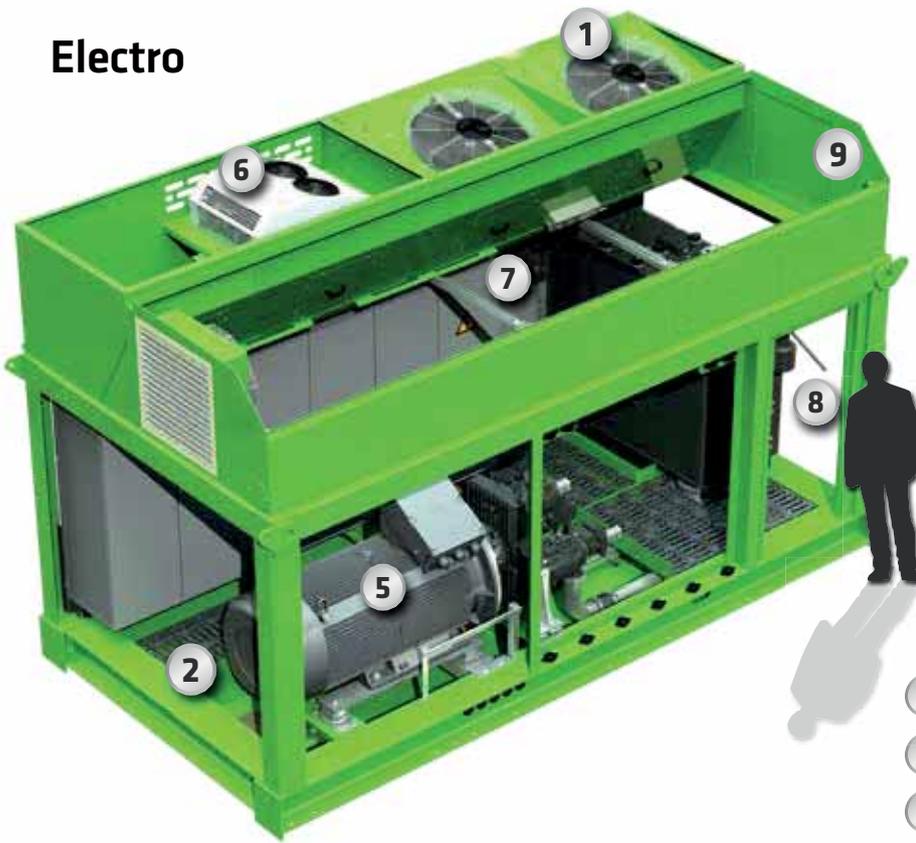


Liftable maintenance cover



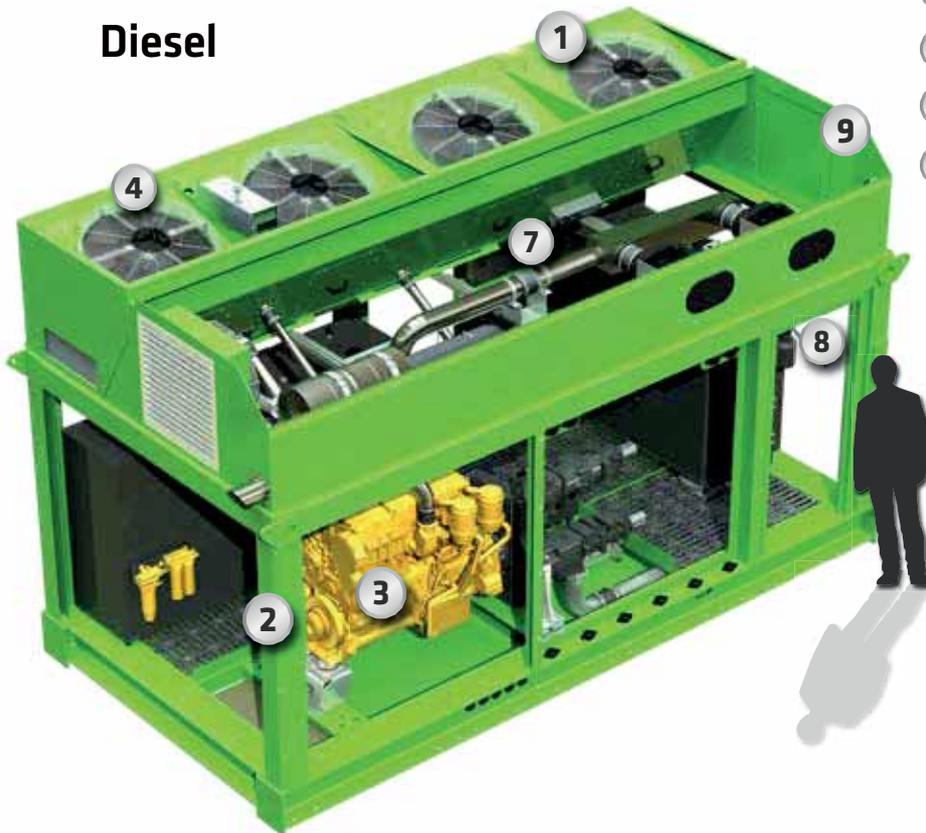
Isolated air flow

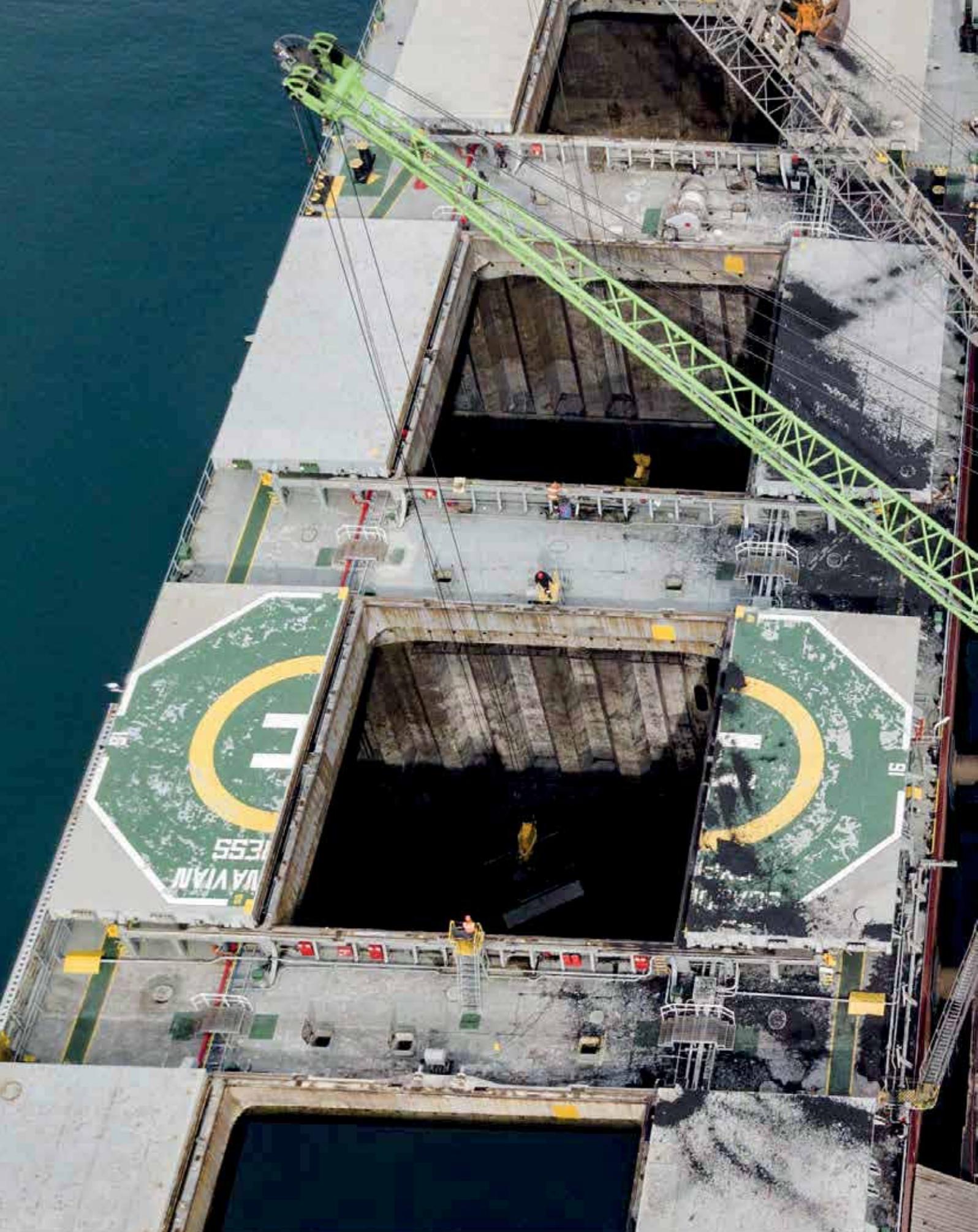
Electro

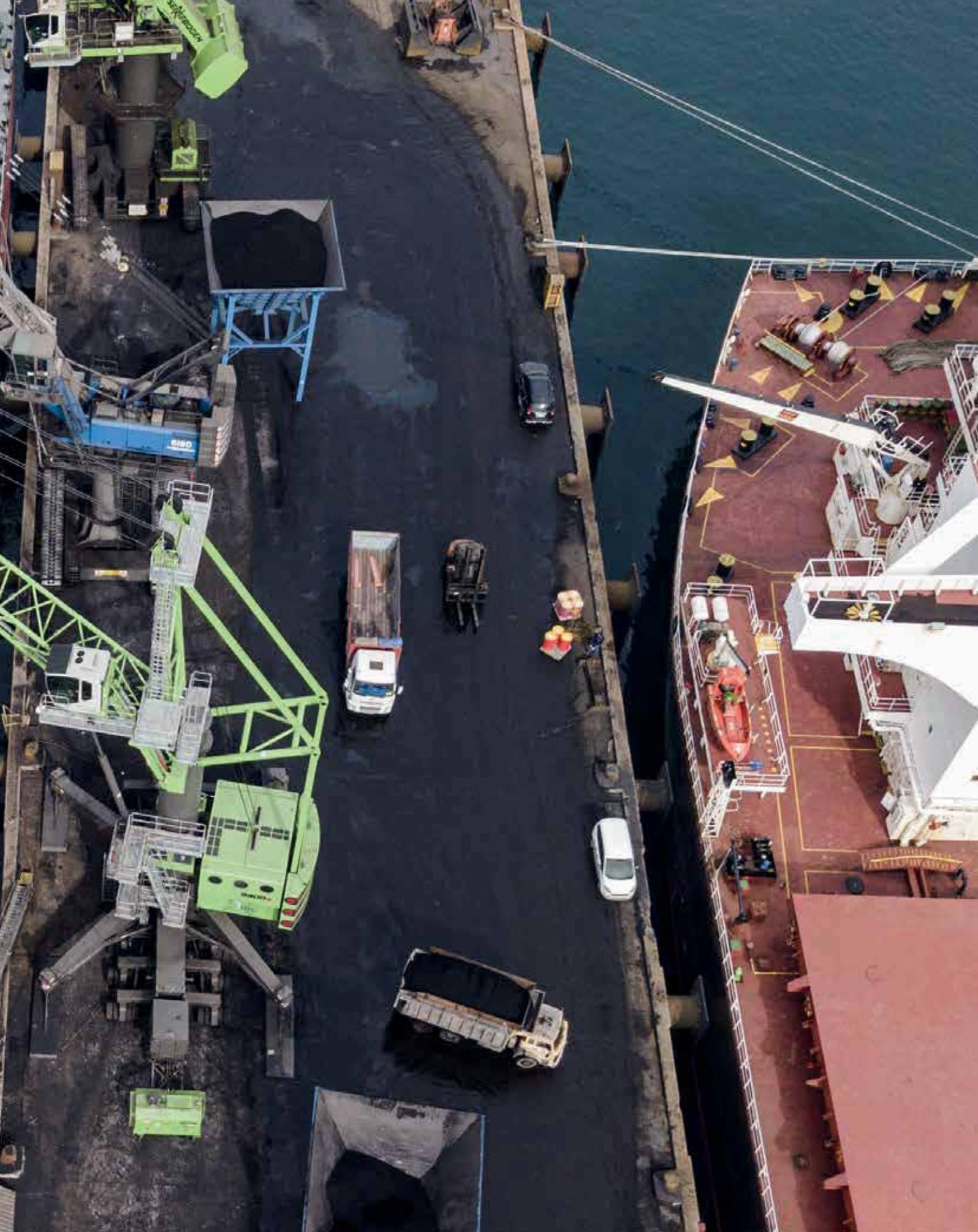


- ① Oil cooler
- ② Fresh air intake
- ③ Diesel engine
- ④ Diesel engine cooler
- ⑤ Electric engine
- ⑥ Air conditioning system
- ⑦ Control cabinet
- ⑧ Central lubrication system
- ⑨ Hydraulically liftable Powerpack cover

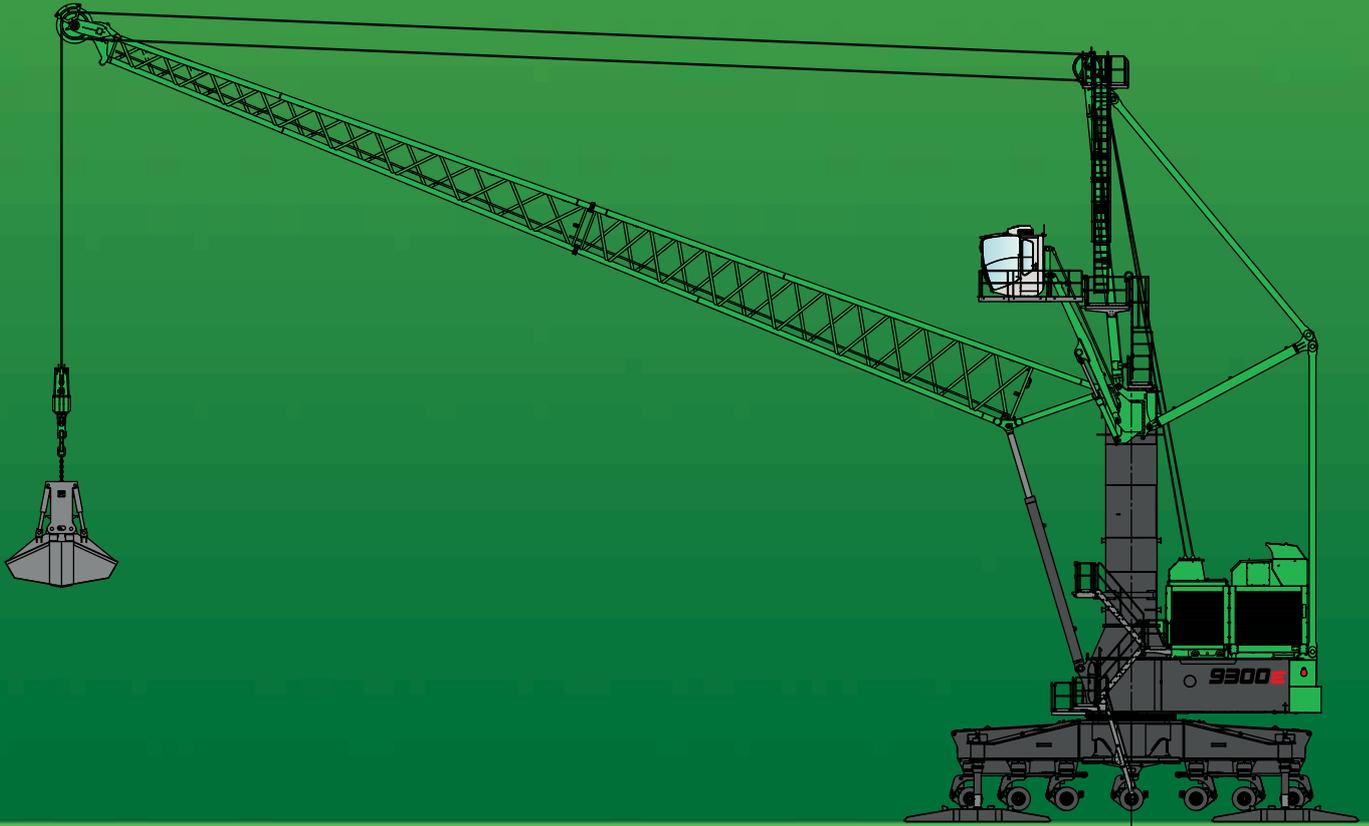
Diesel







9300E



This catalog describes machine models, scope of equipment of individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik GmbH. Machine illustrations can contain optional equipment and supplemental equipment. Actual equipment may vary depending on the country to which the machines are delivered, especially in regard to standard and optional equipment and tolerances.

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