

SENEBOGEN



97 kW



21.8 t



10 m



MAXCAB

B18E

Material handling machine

Tier IVf emission standards

B18E Advanced. The E-Series.



1962: rope-driven S833 with elevated operator cab

What makes up the E-Series

- 60 years of experience in designing and constructing hydraulic material handling machines
- Uncompromisingly high performance in all areas: focus on material handling
- Technology that can be mastered: high-quality components without over-engineering
- Long product service life and high value retention

Your top benefits:

1 Green Efficiency
Save fuel – reduce operating costs
Work quietly – protect operator and environment



2 Peak performance
Durable mechanical systems – stressed parts optimized
High speeds – high load capacities

3 Maximum operating comfort
Comfortable maXcab operator cab – relaxed work
SENCON – SENNEBOGEN Control System

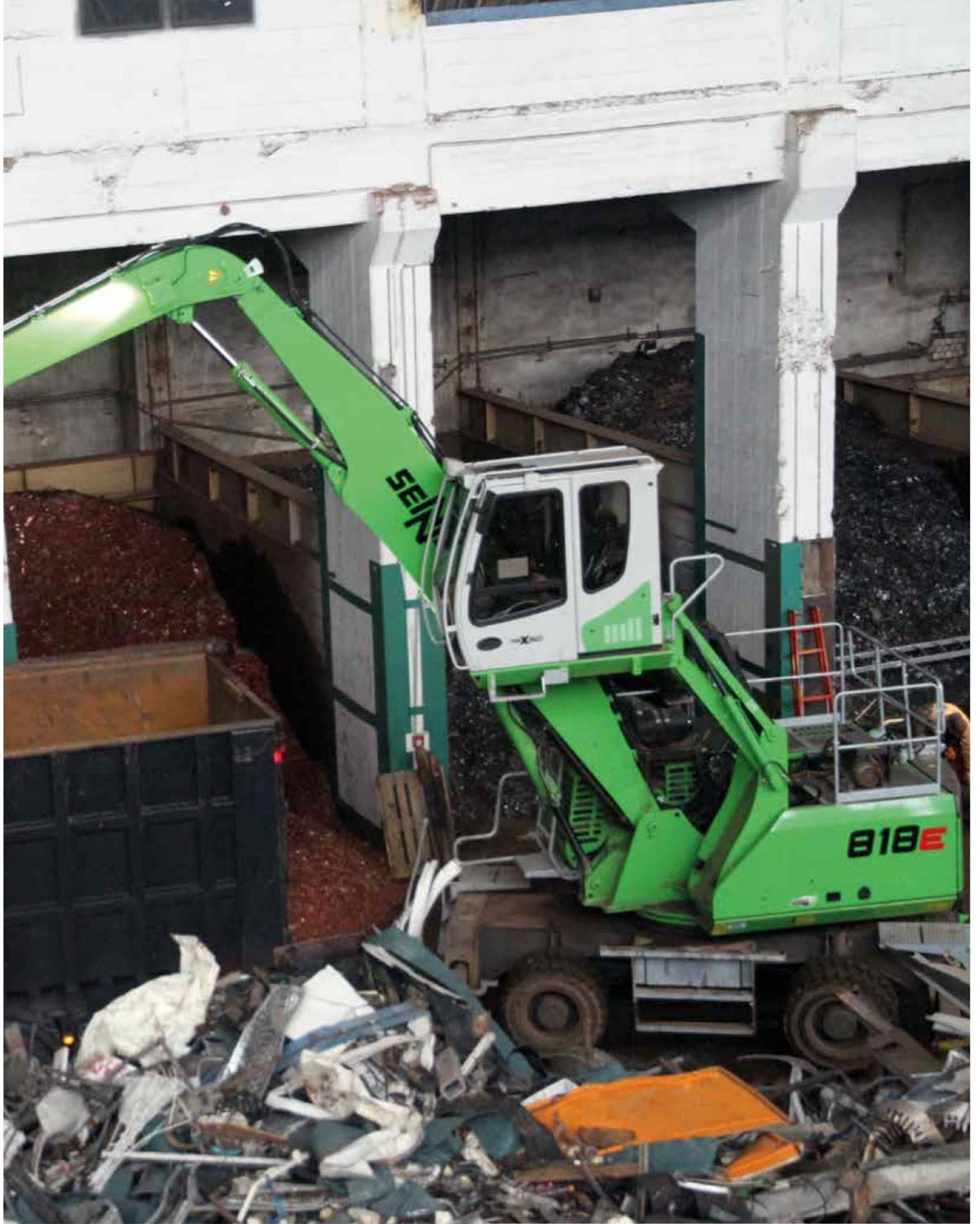


4 Maximum safety
Safe entry and exit – no-slip steps
State-of-the-art cameras – entire work area in view

5 Maintenance and service made easy
Easy fault diagnosis – central reading points
Easy maintenance – clear labeling

6 Consultation and support
3 production sites – 2 subsidiaries
120 sales partners – over 300 service stations





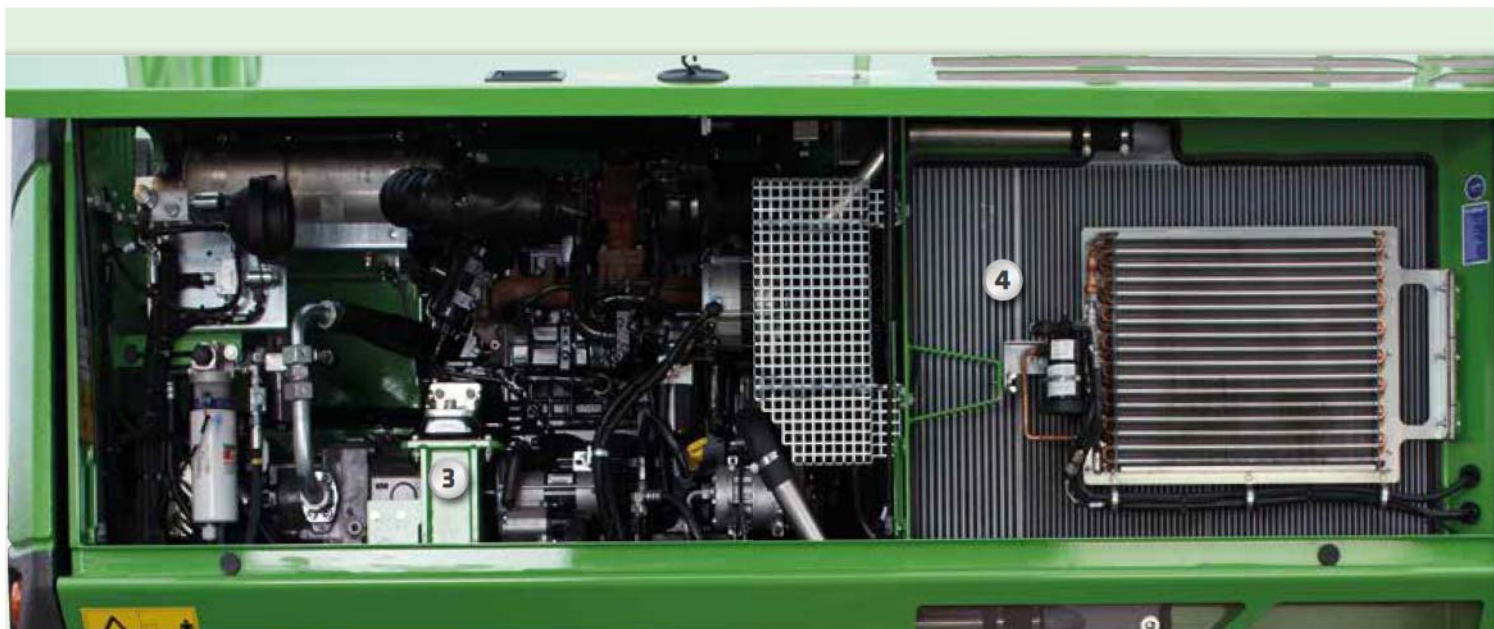
818E The E-Series. At a glance.



Work	Idle		Stop
1800 ECO RPM	1400 RPM	800 RPM	0 RPM
0 s	5 s	8 s	5 min

Four ways to save fuel

- Up to 20% savings: working in Eco Mode with reduced engine speed
- Idle automation reduces speed to 40% of operating speed
- Stop automation switches the engine off when not needed
- Optimized engine settings, reduced specific fuel consumption, state-of-the-art exhaust aftertreatment



Quiet operation

- Consistently quiet operation thanks to decoupled engine mounts and soundproofing in the doors
- Sound pressure level reduced by up to 4.5 dB; sound power level according to 2000/14/EC up to 2 dB lower than required

3

High-capacity cooling

- Constant, reliable performance thanks to large-dimensioned and robust fans and coolers
- Charge air, water and oil coolers with top-notch efficiency thanks to axial-piston pump and motor control and on-demand thermostatic control

4



Maximum safety

- No-slip work surfaces 1
- 2 cameras to the right and rear
- Step grid with railing* next to cab sliding door 2



Smart cooler technology

- Standard features: automatic, fast and strong fan reversal for blowing out coolers and continuous cooling capacity 5
- Side-by-side coolers, easily accessible and clean cooling technology
- Fuel savings through optimized fan operation 6

Powerful hydraulic system

- Strong pumps with power reserves
- Top efficiency thanks to large-dimensioned hydraulic valves and lines
- Extra-long change intervals of 4,000 operating hours through initial fill-up with HVLDP oil with extended service life when using SENNEBOGEN HydroClean* 7

* Optional, see page 7

818E The E-Series. Pure comfort.

maXcab comfort cab

- Air-suspension comfort seat with heater
- Convenient joystick control
- Hinged front window
- Sliding door, platform in front of cab
- Color monitor for right-side and rear-facing camera feeds
- SENNEBOGEN OptiMode: various modes to optimize performance



Platform with railing*

- Safety when entering and exiting the cab
- Sliding door makes entering and exiting easy and safe



Automatic climate control

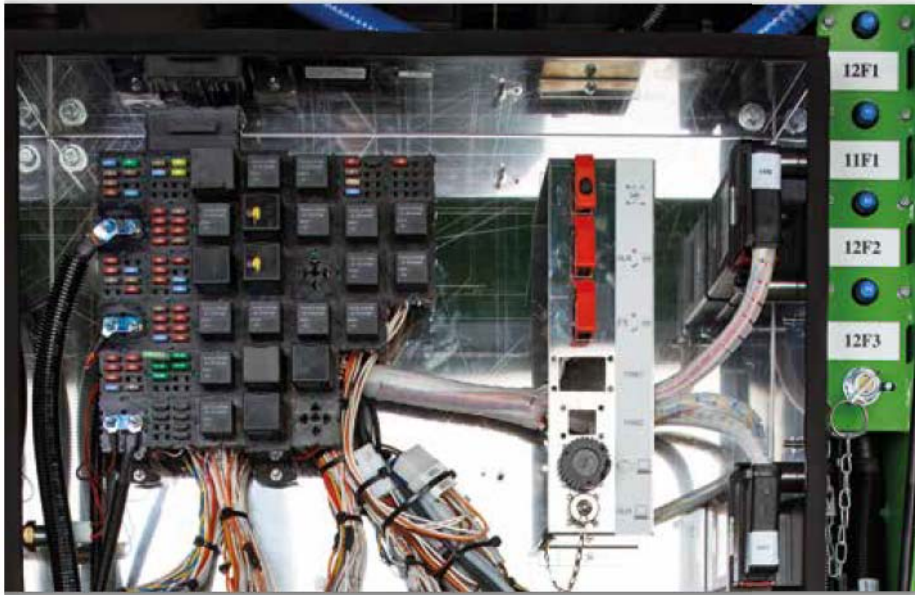
- Consistently pleasant cab climate thanks to 10 evenly distributed air vents
- Central controls make operation easy



SENCON

- Clear menu
- Determine operating values without the need for additional instruments
- Fast troubleshooting thanks to detailed messages

818E Maintenance and service made easy



Optimized for maintenance

- Fast and easy troubleshooting thanks to straightforward and clearly labeled electrical distributor
- Easy access to all service points on the machine
- Automatic central lubrication for equipment and slewing gear raceway



HydroClean*

- Optimal protection of hydraulic components thanks to 3 µm micro-filter
- Cleaner hydraulic oil, longer service life



Central reading points

- Easily accessible, central reading points
- Quickly inspect entire hydraulic system



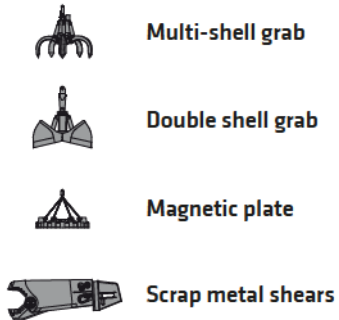
Clear labeling

- All parts labeled with a unique part number
- Easy and reliable spare parts ordering

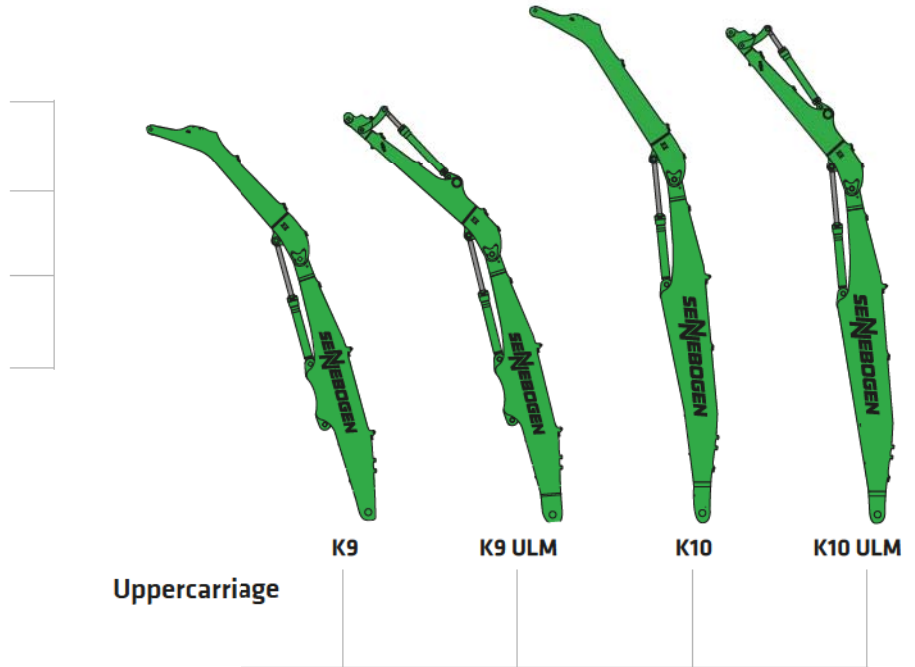
* Optional

818E Modular design – versatile solutions

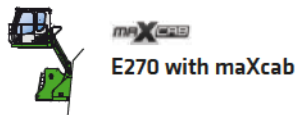
Attachments



Equipment options (others available upon request)





Cabs





Uppercarriage



-  Diesel-hydraulic drive
-  Electrohydraulic drive

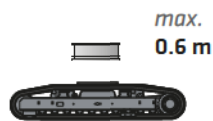
Options

-  Engine line drum
-  Transformer

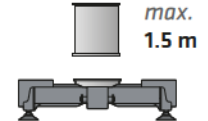
Undercarriage variants



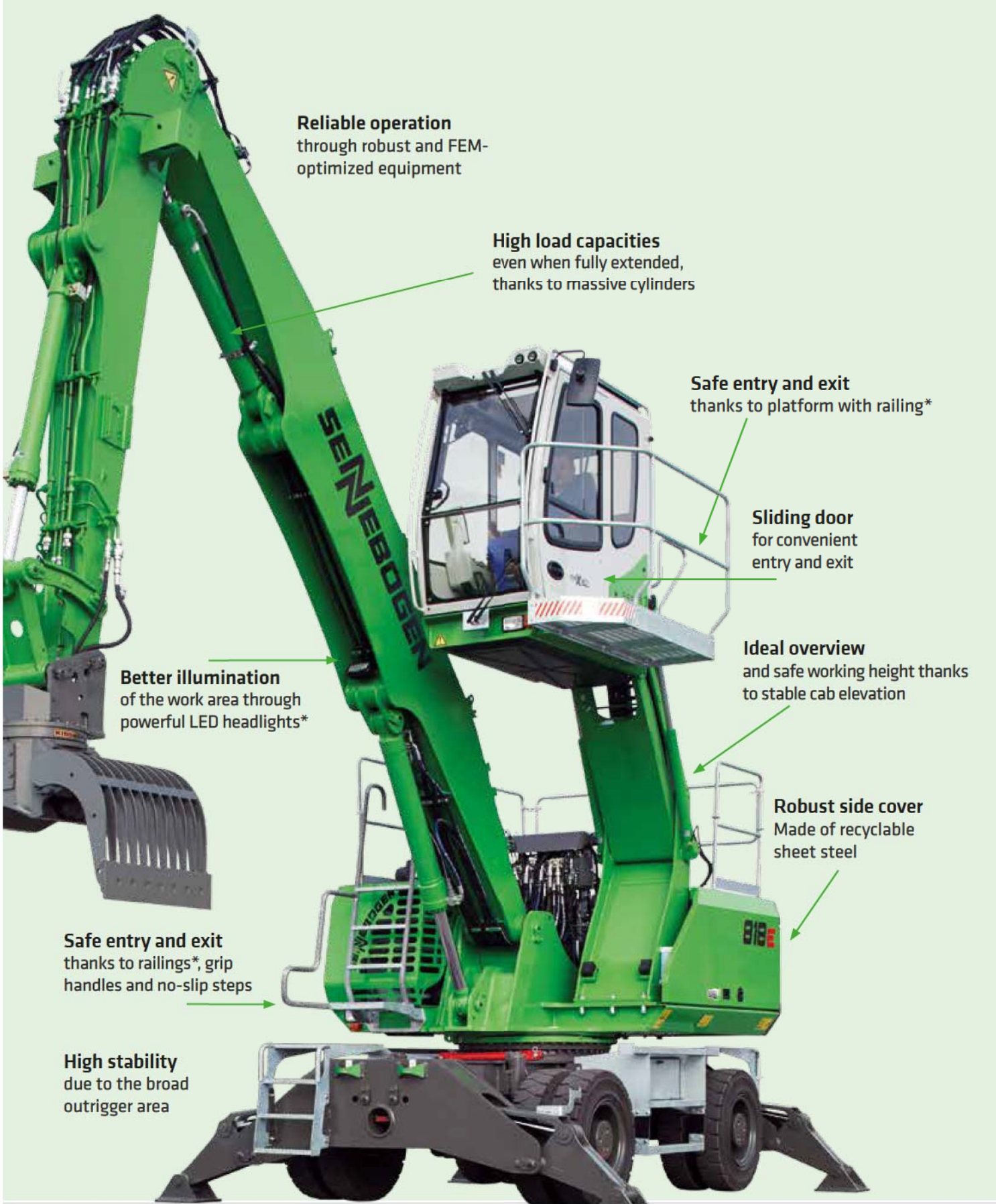
Mobile M



R25/240 crawler*



4-point underframe



Reliable operation
through robust and FEM-
optimized equipment

High load capacities
even when fully extended,
thanks to massive cylinders

Safe entry and exit
thanks to platform with railing*

Sliding door
for convenient
entry and exit

Ideal overview
and safe working height thanks
to stable cab elevation

Robust side cover
Made of recyclable
sheet steel

Better illumination
of the work area through
powerful LED headlights*

Safe entry and exit
thanks to railings*, grip
handles and no-slip steps

High stability
due to the broad
outrigger area

* Option

818E Technical data, equipment

MACHINE TYPE

Model (type) **818**

ENGINE

Power	818 M: 97 kW / 130 hp at 2200 rpm
Model	Cummins QSB 4.5 Tier IIIa/IVf Direct injection, turbo-charged, charge-air cooler, reduced emissions, Eco Mode, idle automation
Cooling	Water-cooled
Air filter	Dry air filter with cyclonic pre-filter, safety element, contamination indicator
Fuel tank	330 l
DEF tank	30 l
Electrical system	24 V
Batteries	2 x cold-start high-performance batteries
Options	<ul style="list-style-type: none"> ■ Engine block heater ■ Electric fuel pump ■ Jump-start terminals

UPPERCARRIAGE

Design	Torsion-resistant upper frame with end shields all the way from boom linkage to counterweight for optimized force transmission, precision-crafted, steel bushings for boom bearings, lockable storage compartment, outstanding design, very low noise emissions
Central lubrication	Automatic central lubrication for equipment and slewing gear raceway
Electrical system	Central electrical distributor, battery disconnect switch
Options	<ul style="list-style-type: none"> ■ Slewing gear brake via foot pedal ■ Peripheral uppercarriage railing for additional safety ■ LED lighting package ■ Fire extinguisher ■ Special paint finish / maritime climate varnishing for harbor use ■ Electric hydraulic tank preheater with uppercarriage power socket ■ Low-temperature package (oils, battery heater, hydraulic oil preheater, cab preheater, engine preheater) ■ Platform with railing next to cab ■ Hydraulically driven magnetic generator 9 kW

HYDRAULIC SYSTEM

Load-sensing/LUDV hydraulic system for work and travel functions	
Pump type	Swashplate-type variable-displacement piston pump, load pressure-independent flow distribution for simultaneous, independent control of work functions
Pump control	Zero-stroke control, on-demand flow control – the pumps only pump as much oil as will actually be used, pressure purging, load limit sensing control
Operating pressure	max. 350 bar
Filtration	High-performance filtration with long change interval
Hydraulic tank	260 l
Control system	Proportional, precision hydraulic actuation of work movements, 2 hydraulic servo joysticks for the work functions, additional functions via switches and foot pedals
Safety	All hydraulic circuits secured with safety valves, hydraulic accumulator for emergency lowering of attachment and cab in the case of engine failure, pipe-fracture safety valves for stick cylinders and hoist cylinders
Options	<ul style="list-style-type: none"> ■ Bio-oil – environmentally friendly ■ ToolControl for programming pressure/rate for up to 10 tools ■ Additional hydraulic circuit for shear attachment ■ Load moment warning with capacity utilization indicator with/without shutdown ■ Electronic overload safeguard with overload shutdown ■ SENNEBOGEN HydroClean 3 µm hydraulic microfilter system

SLEWING DRIVE

Gearbox	Planetary gearbox with axial piston motor and integrated brake valves
Parking brake	Spring-loaded, hydraulically vented safety multi-disk brake
Slewing ring	Oversized slewing ring
Slewing speed	0-8 rpm, variable. Hydraulic brake valves integrated in motor ensure wear-free braking.

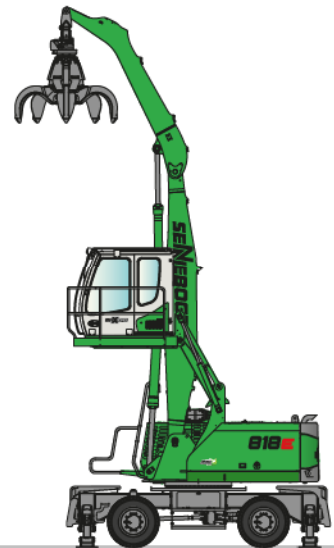
818E Technical data, equipment

CAB <small>MAXCAB</small>	
Cab type	Hydraulically elevating cab E270
Cab equipment	Sliding door, excellent ergonomics, automatic climate control, heated, air-suspension comfort seat, fresh/circulating air filter, joystick control, 12 V/24 V connections, SENCON
Options	<ul style="list-style-type: none"> ■ Auxiliary heating system with timer ■ Activated carbon filter in cab for fresh/circulating air ■ Steering wheel with adjustable steering column ■ Sliding window in operator door ■ Armored-glass windshield ■ Armored-glass sunroof ■ Polycarbonate safety side and rear panels ■ Windshield wiper with washer for bottom front/roof glass panel ■ Rolling shade for roof window and windshield ■ Protective roof grating ■ FOPS protective roof grating ■ Protective front grating ■ maXcab industrial cab with single-piece armored windshield ■ Radio kit/radio and CD with speakers

ATTACHMENTS	
Design	Sealed and soiling-protected box design with oversized bearing points for long service life. Oversized bearing points with low-maintenance, sealed special bushings, precision-crafted
Cylinders	Special hydraulic cylinder with hydraulic end position damping, optimized kinematics for high lifting power. The material handling attachment is specifically designed for high-performance applications.
Central lubrication	Automatic central lubrication system
Options	<ul style="list-style-type: none"> ■ Ball valves on the hydraulic lines - open and close grapple ■ Multi-coupling ■ Adjustable hoisting limiter/stick limiter

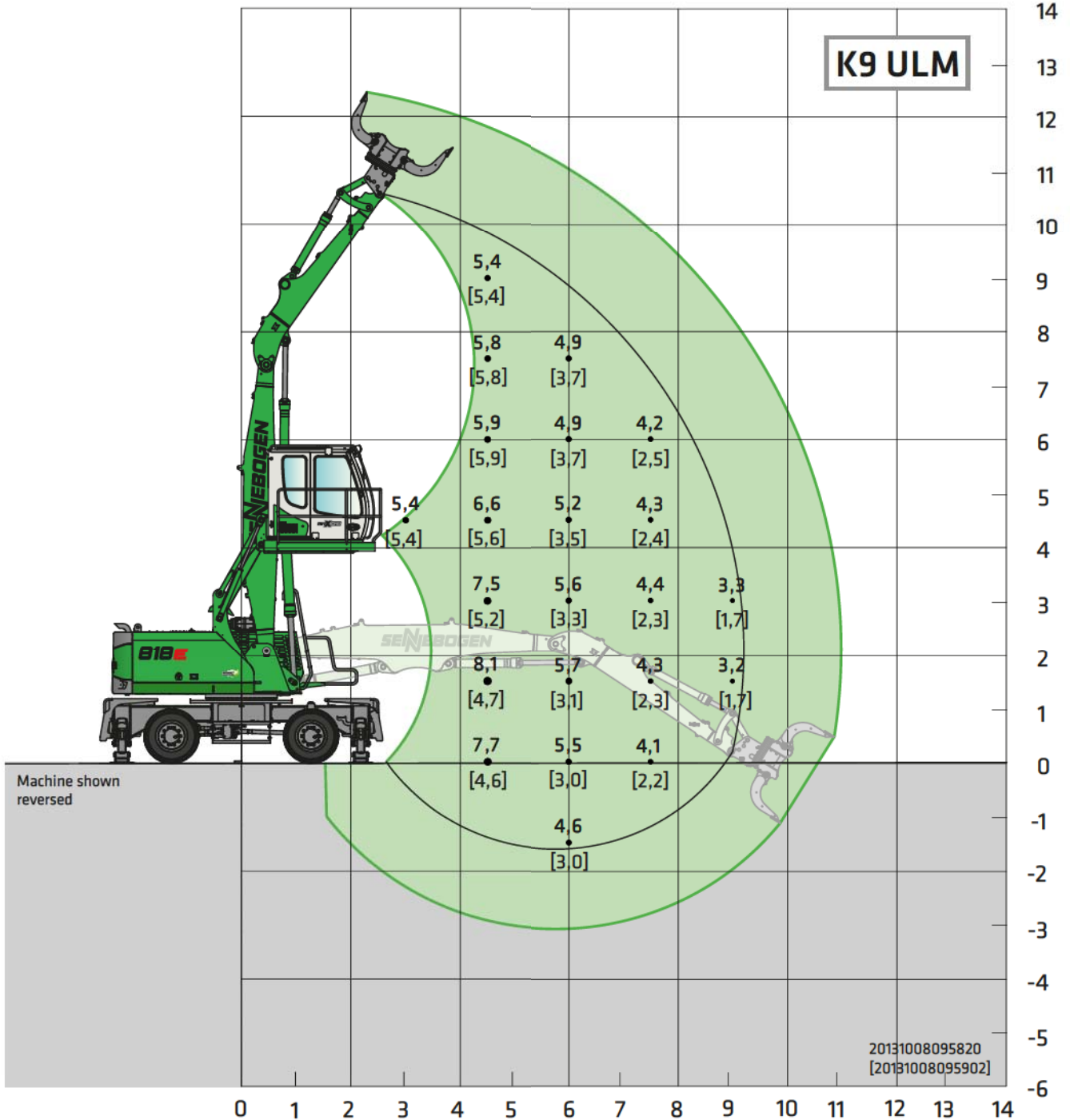
UNDERCARRIAGE	
Design	Strong undercarriage with 4-point outrigger support or combination of stabilizer blade and claw support (option), hydraulically locking pendulum steering axle. Pendulum axle cylinder with pipe-fracture safety valves
Drive	All-wheel drive powered by a variable-displacement hydraulic motor with direct-mounted, automatically actuated brake valve and 2-stage power shift transmission. Strong planetary axles with integrated steering cylinder, 2-circuit multi-disk service brake.
Parking brake	Spring-loaded multi-disk brake
Tires	8 x 10.00-20 solid rubber
Speed	Stage I: 0-5.5 km/h ; Stage II: 0-20 km/h
Options	<ul style="list-style-type: none"> ■ 8 x 10.00-20 pneumatic tires ■ Individual outrigger actuation ■ Additional pushing blade for 4-point outrigger (front or rear) ■ 2-point claw support and stabilizer blade (front or rear) ■ Protection for travel drive/towing pintle

OPERATING WEIGHT	
Mass	818 M with 4-point outrigger, K9 compact loading attachment and 600 l multi-shell grab Approx. 21,800 kg
Notice	Operating weight varies by model and equipment.



818E Load ratings

M



Undercarriage

MP21E

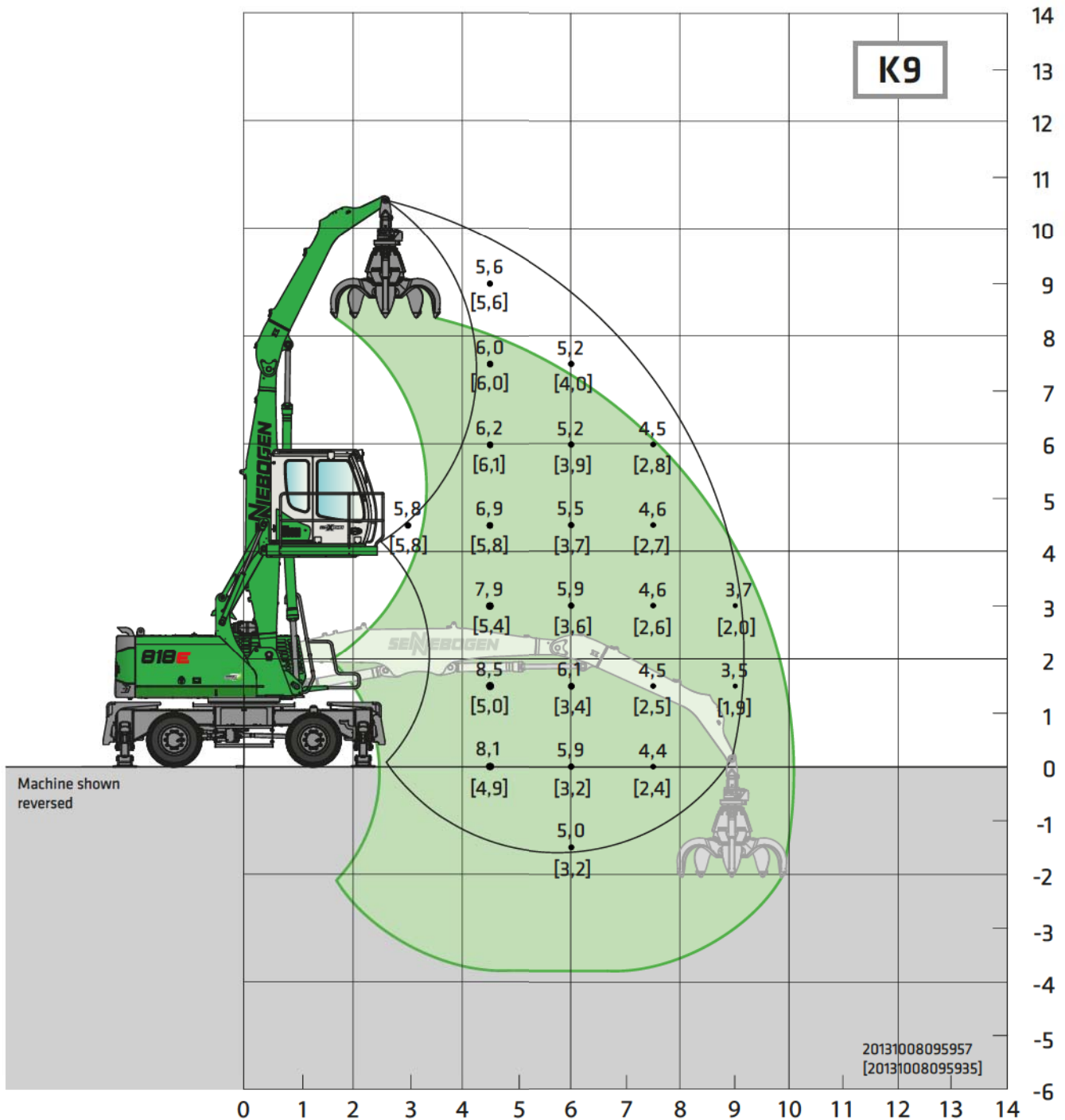
Compact boom
Dipperstick

5.3 m
3.8 m ULM

Cab

maXcab E270,
hydraulically elevating

All load ratings are in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grapple, magnet, load hook, etc. are part of the specified load ratings. The ratings constitute 75% of the static tipping load or 87% of the hydraulic lifting power in accordance with ISO 10567. In accordance with EU standard EN 474-5, 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 apply for a machine with deployed 4-point outrigger support and for 360° slewing. Load ratings in square brackets [] apply for blocked pendulum axle, undeployed outriggers, free-standing, and 360° slewing.

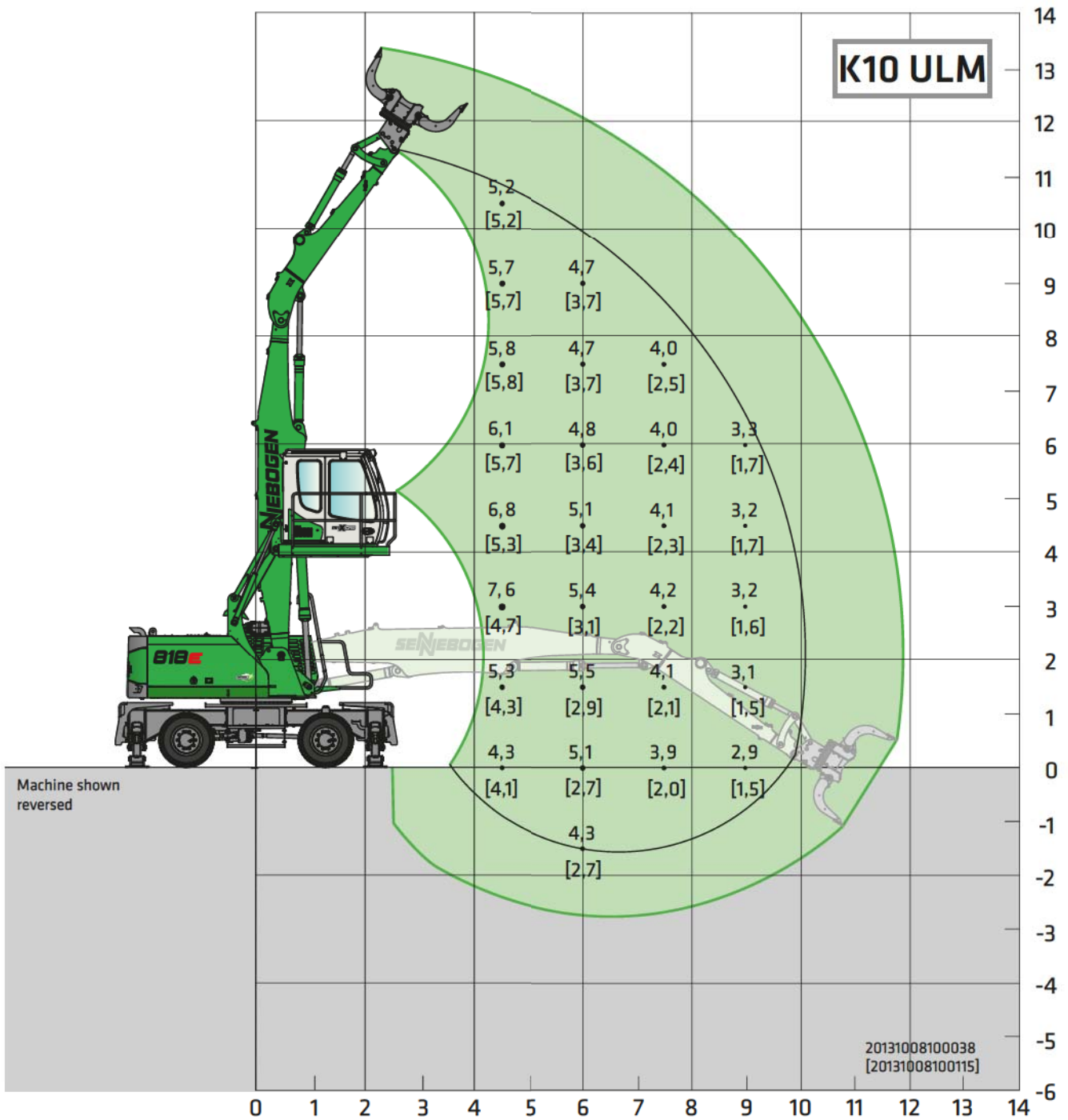


Undercarriage	MP21E	Compact boom Dipper stick	5.3 m 3.8 m	Cab	maXcab E270, hydraulically elevating
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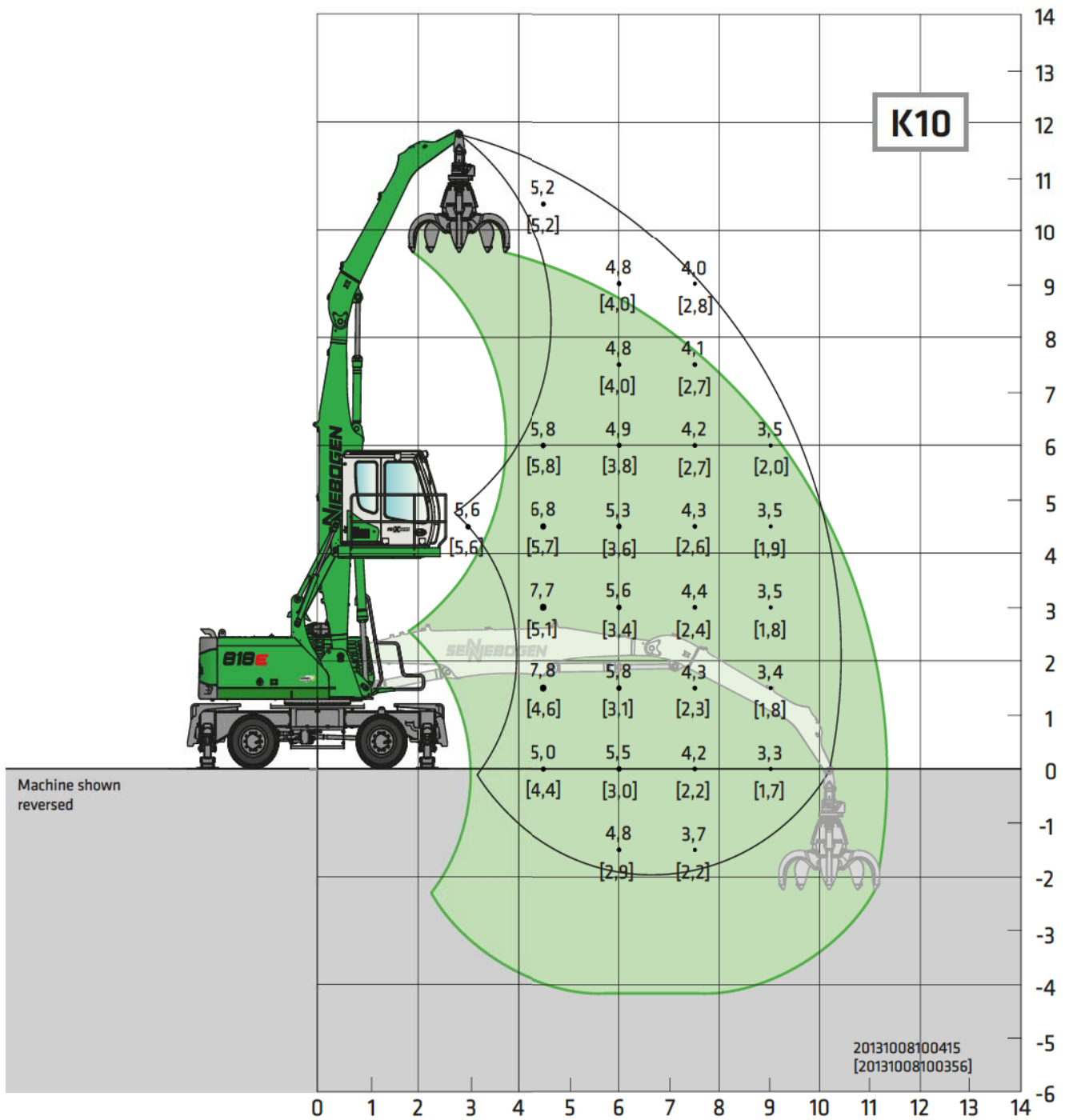
818E Load ratings

M



Undercarriage	MP21E	Compact boom Dipper stick	6.2 m 3.8 m	Cab	maXcab E270, hydraulically elevating
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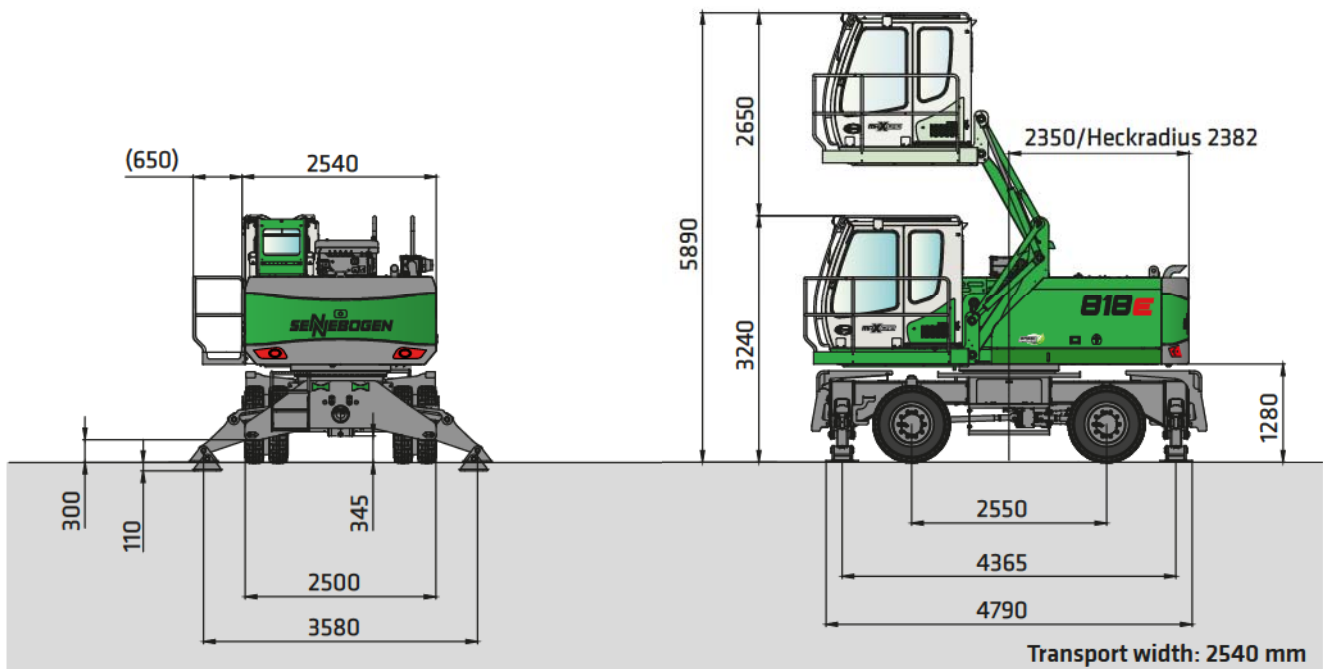


Undercarriage	MP21E	Compact boom	6.2 m	Cab	maXcab E270,
		Dipper stick	4.2 m		hydraulically elevating

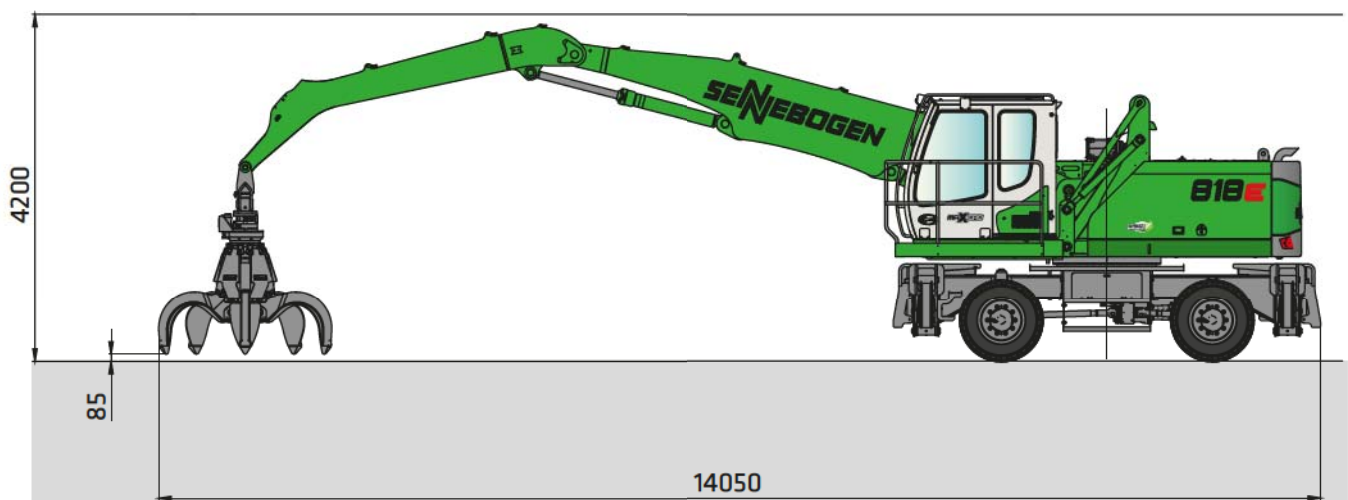
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818E Transport dimensions

M



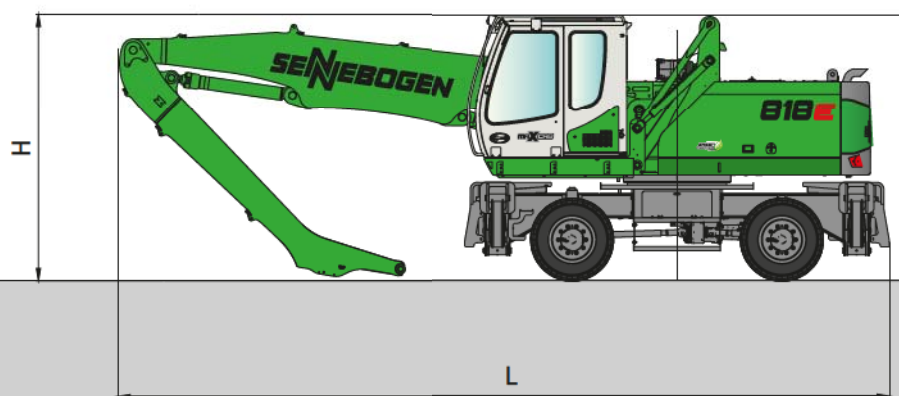
818 M with MP21E undercarriage and type E270 hydraulically elevating cab



818 M with 6.2 m K10 compact boom and 4.2 m dipperstick with SENNEBOGEN multi-shell grapple

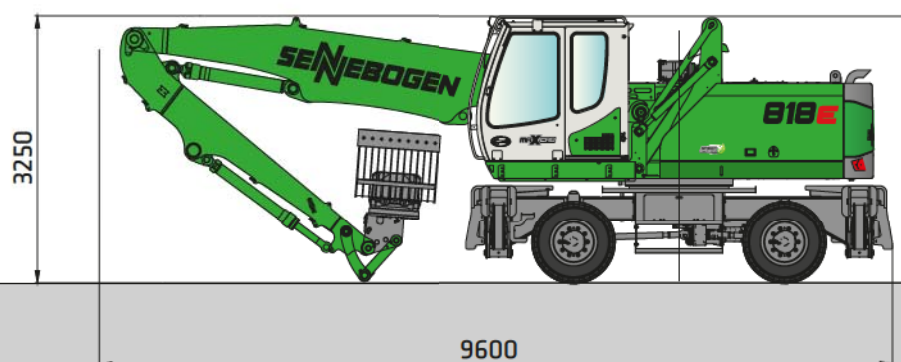
818E Transport dimensions

M



818 M with undercarriage MP21E

	Load boom	Grapple stick	Transport length (L)	Transport height (H)
K9 ULM	5.3 m	3.8 m ULM	8.7 m	3.25 m
K9	5.3 m	3.8 m	8.7 m	3.25 m
K10 ULM	6.2 m	3.8 m ULM	9.6 m	3.25 m
K10	6.2 m	4.2 m	9.6 m	3.25 m



818 M with 6.2 m K10 compact boom ULM and 3.8 m dipperstick

B18E Recommended grapples

SGM multi-shell grab (4 shells)



Design / size	Grapple capacity	Weight ¹		Max. load capacity
		Shell shape		
		HO	G	
SGM	l	kg	kg	t
400.30-4	400	1275	1385	4.0
600.30-4	600	1300	1435	
800.30-4	800	1345	1510	

SGM multi-shell grab (5 shells)



Design / size	Grapple capacity	Weight ¹		Max. load capacity
		Shell shape ²		
		HO	G	
SGM	l	kg	kg	t
400.30-5	400	1465	1525	4.0
600.30-5	600	1490	1580	
800.30-5	800	1540	1650	

Double-shell grab SGZ



Design / size	Grapple capacity	Weight ¹	Max. load capacity
		kg	
1000.40	1000	1270	4.0
1200.40	1200	1360	

Magnetic plates

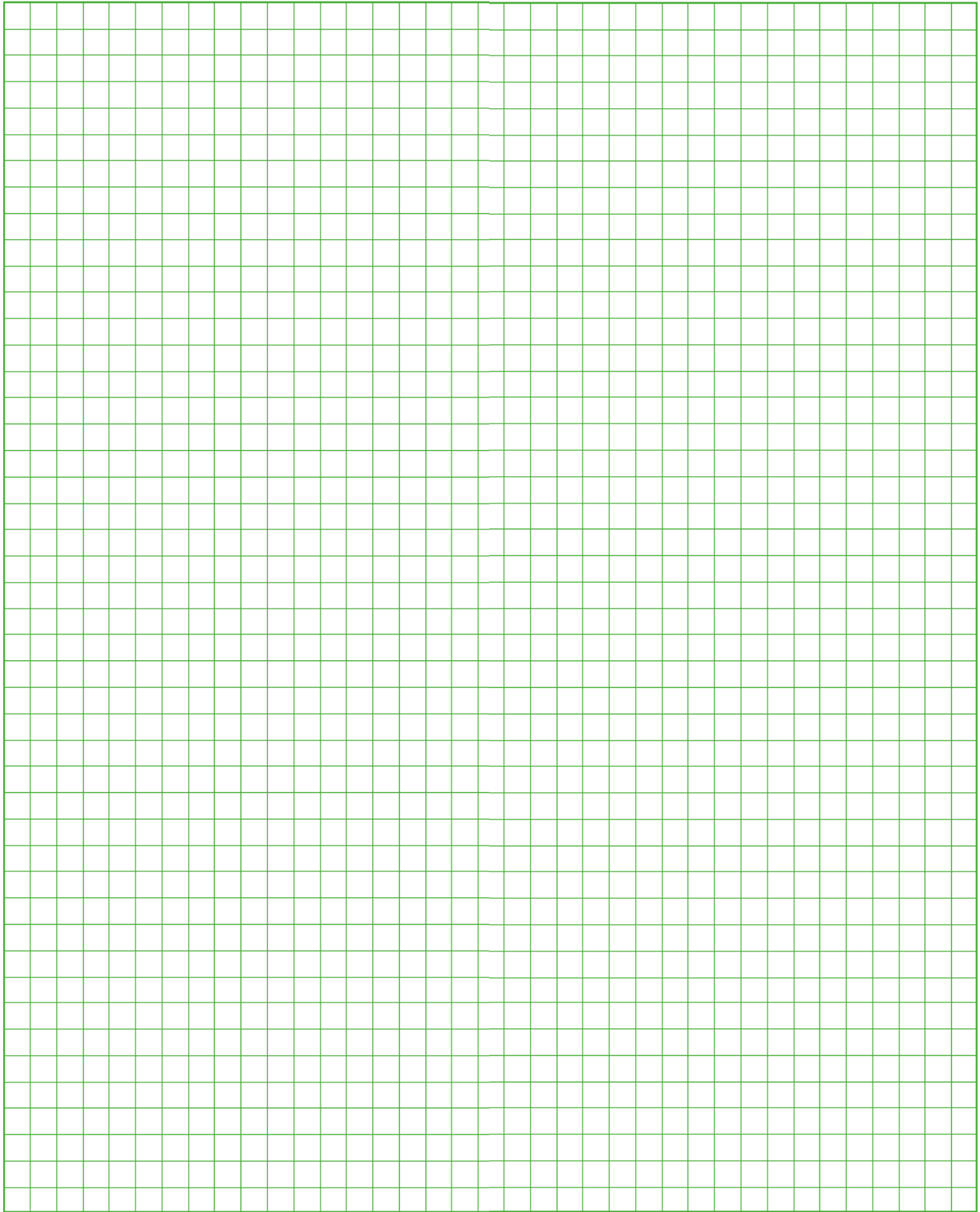


Type series / model	Power	Deadweight	Breakaway force	Load-bearing capacity in kg
WOKO	kW	kg	kN	Slab (safety factor 2)
S-RLB 10	4.8	730	190	9500
S-RLB 11.5	5.5	1060	240	12000
S-RLB 12.5	8.8	1310	280	14000
Recommended magnetic generator: 9 kW				

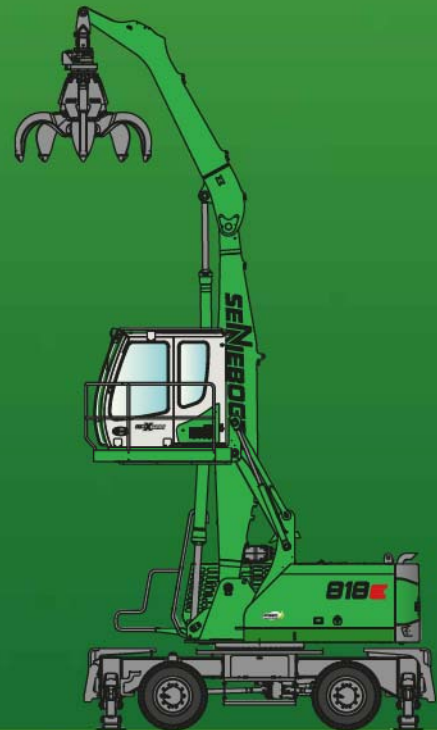
*) Available upon request

¹ Weight information without grapple suspension, stick bolts, hose system

² Half-open shells: shell sheet steel width 400 mm, 500 mm wide for 1250 l capacity and higher



818E



This catalog describes machine models, scopes of equipment of individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik. 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.

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