



227 kW (Stage IIIa)

231 kW (Stage V)

200 kW (Electro)



53 t



20 m



MAXCAB

840E

Mobile material handler

840E Advanced. The E-Series



1962: Rope-driven S833 with elevated operator cab

What makes up the E-Series

- More than 65 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

Safe 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 usability

Comfortable Maxcab operator cab - relaxed work
SENCON - work program selection made easy



4

Maximum safety

Safe entry and exit - no-slip steps
State-of-the-art camera - entire work area in view

5

Maintenance and service made easy

SENNEBOGEN Control System SENCON - easy fault diagnosis
Easy Maintenance - clear labeling

6

Consultation and support in your area

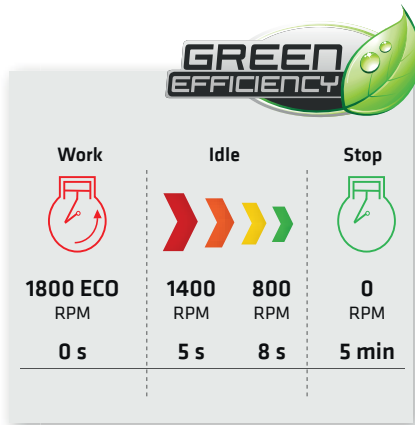
3 production sites - 2 subsidiaries
more than 130 sales partners - worldwide and also in your area





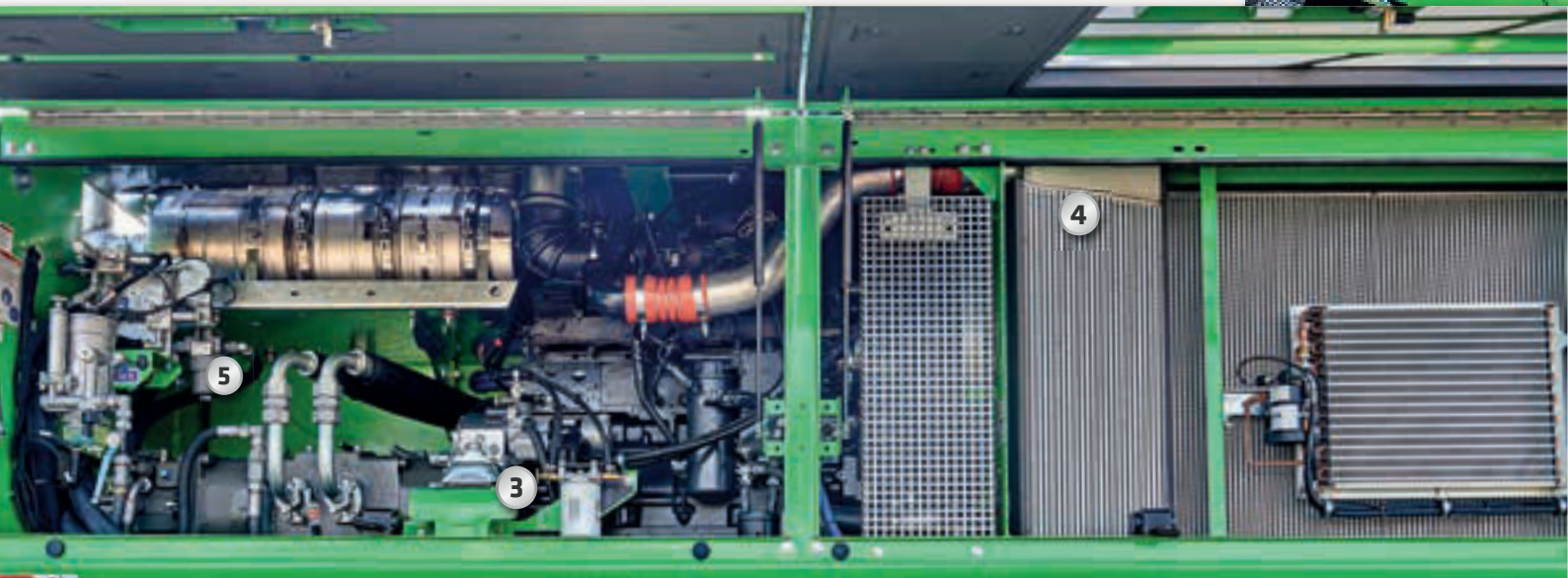
Subject to technical changes. Further options available upon request.

840E The E-Series. At a glance.



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 settings of engine and hydraulics reduces fuel consumption



Quiet operation 3

- Consistently quiet operation thanks to decoupled engine mounts and soundproofing in the doors
- Soundpower level according to 2000/14/EC up to 2 dB lower than required

High-capacity cooling 4

- Constant, reliable performance thanks to large-dimensioned and robust fans and coolers
- Water and oil coolers with top-notch efficiency thanks to axial-piston pump and motor control and ondemand thermostatic control
- Fan reversal for cleaning in series



Maximum safety

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

Powerful hydraulic system **5**

- 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 special oil with extended service life when using SENNEBOGEN HydroClean*



The premium cab.

Panoramic view

Features

- optimum cab climate with automatic air conditioning system, partial tinted glass
- pleasant and equal temperature dispersion by means of 9 nozzles
- panoramic view
- climatic comfort seat with air suspension and air conditioning*
- very quiet through optimized noise insulation
- Highest safety & comfort with sliding door, wide door opening
- ergonomically arranged operating controls for fatigue-free and relaxed working
- 12 V, 24 V, and USB charging sockets hands-free telephone preparation, document box
- various options: electric cooler behind`s, protective covers, seat air conditioning

Our SENNEBOGEN joysticks

- consoles and ergonomic joysticks that move with the seat
- pleasant grip through ergonomic design
- precise control of all movements through direct and sensitive function activation
- quick access to all operating controls through optimized design of all push-buttons and switches

840E Maintenance and service made easy.



Optimized for maintenance

- Fast and easy diagnosis 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



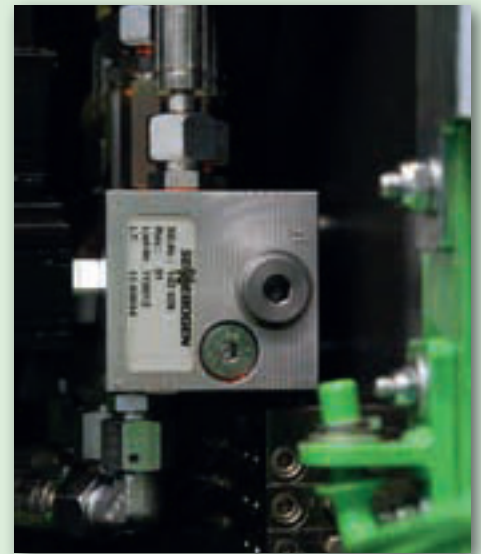
Hydro Clean*

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



Central measuring points

- Easily accessible
- Quickly inspect entire hydraulic system






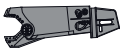
Clear labeling

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

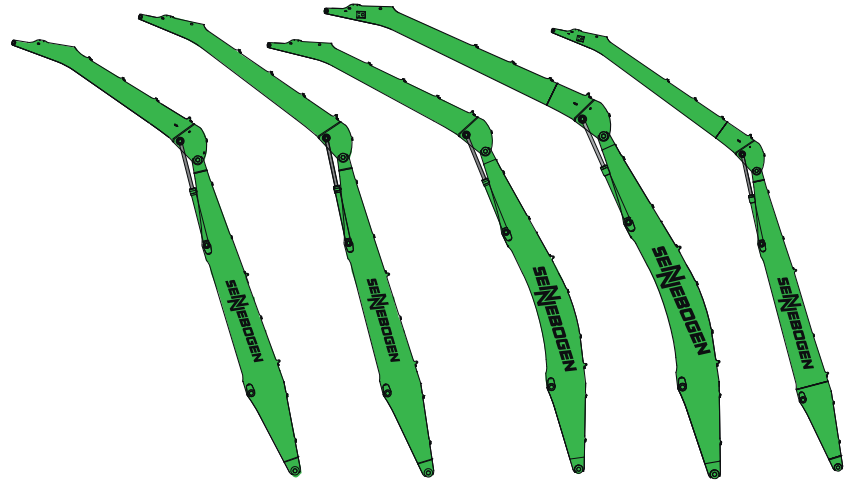
* Option

840E Modular structure - versatile solutions

Attachments

-  Orange peel grab
-  Clamshell grab
-  Magnet plate
-  Scrap metal shears

Equipment (additional equipment on request)



Cabs

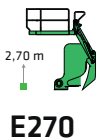
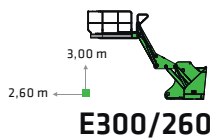


Maxcab



Maxcab Industry

Cab elevation



K17 K18 B18 B19 K20

Uppercarriage



Diesel-hydraulic drive



Electro-hydraulic drive

Options

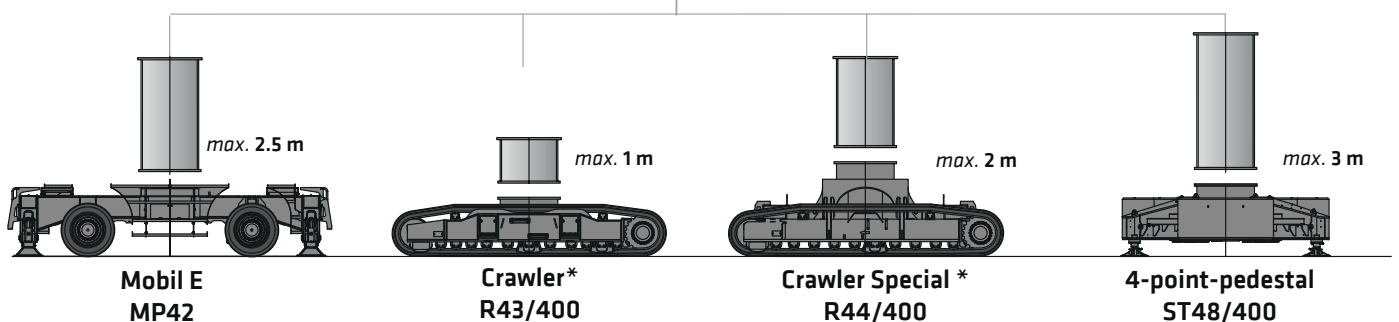


Motorized cable reel

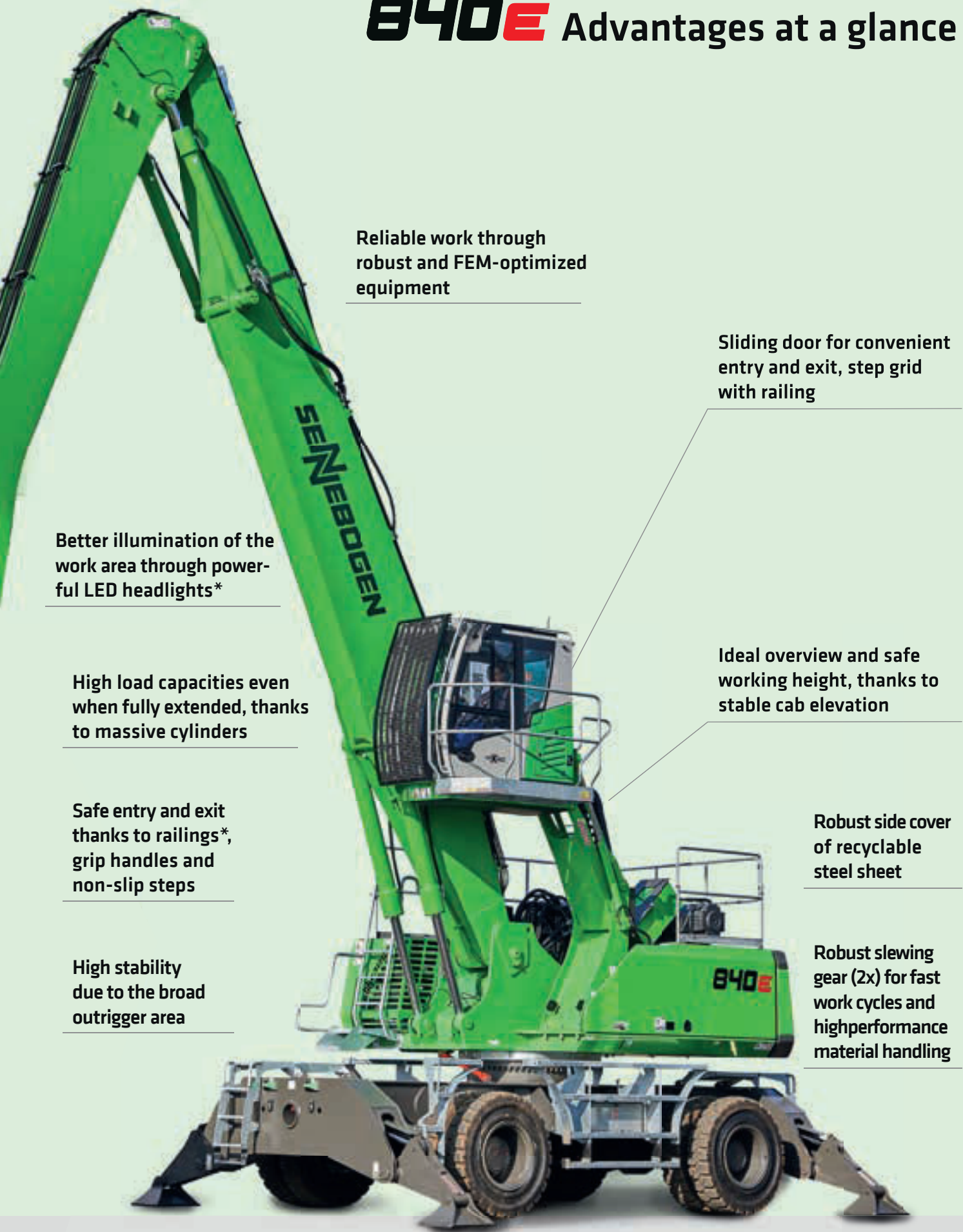


Transformer

Variants undercarriage



840E Advantages at a glance



Reliable work through robust and FEM-optimized equipment

Sliding door for convenient entry and exit, step grid with railing

Better illumination of the work area through powerful LED headlights*

Ideal overview and safe working height, thanks to stable cab elevation

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

Safe entry and exit thanks to railings*, grip handles and non-slip steps

Robust side cover of recyclable steel sheet

High stability due to the broad outrigger area

Robust slewing gear (2x) for fast work cycles and highperformance material handling

* Option

840E Technical data, equipment

MACHINE TYPE

Model (type) **840**

MOTOR

Power	Stage V: Rated Power: 231 kW at 2100 rpm 237 kW at 2000 rpm / 242 kW at 1800 rpm Stage IIIa: Rated Power: 227 kW at 2000 rpm 254 kW at 1800 rpm
Model	Cummins L9 Direct injection, turbo charged, charge air cooling, reduced emissions, ECO mode, idle automation, stop automation, fuel pre-warming
Cooling	Water-cooled, direction of rotation changeover of the cooler fan
Diesel filter	With water separator and heater
Air filter	Dry filter with integrated pre-separator, automatic dust discharge, main element and safety element, contamination indicator
Fuel tank	625 l
DEF tank	75 l
Electr. system	24 V
Batteries	2 x 150 Ah , battery disconnect switch
Options	<ul style="list-style-type: none"> ■ Engine block pre-warming at temperatures under -20 °C ■ Electric fuel pump

UPPERCARRIAGE

Design	Torsion-resistant box design, precision crafted, steel bushings for boom bearing arrangement Extremely service-friendly concept, engine installed in the longitudinal direction
Central lubrication	Autom. central lubrication for equipment and slewing ring raceway
Electrical	Central electrical distributor, battery disconnect switch
Cooling system	3-circuit cooling system with high cooling output, thermostatically regulated fan drive for oil cooler and water cooler, fan reversal for cleaning
Options	<ul style="list-style-type: none"> ■ Slewing gear brake via foot pedal ■ Hand rail at the upper structure ■ LED light packages ■ Fire extinguisher ■ Sea climate resistant coating

Options

- Electrical hydraulic tank pre-warming at temperatures under -20 °C Low temperature packages
- Hydraulically-driven magnetic generator 20 kW
- Telematic system SENtrack DS



HYDRAULIC SYSTEM


Load sensing / LUDV hydraulic system, hydraulic, pilot-controlled work functions, load limit sensing control	
Pump type	Variable-displacement piston pump in swash-plate design, 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
Delivery rate	maximum 740 l/min
Operating pressure	to 350 bar
Filtration	High-performance filtration with long-term change interval
Hydraulic tank	500 l
Control system	Proportional, precision hydraulic activation of work movements, 2 hydraulic servo joysticks for work functions, supplemental functions via switches and foot pedals
Safety	Hydraulic circuits with safety valves, secured emergency lowering of the equipment at engine standstill, pipe fracture safety valves for lift cylinder and stick cylinder
Options	<ul style="list-style-type: none"> ■ Bio-oil filling ecologically sound ■ Tool Control for easy change of attachments ■ Supplemental hydraulic circuit for attachment of shears ■ Load moment warning with overload shutdown ■ Overload safeguard with overload shutdown ■ 3 µm micro filter system SENNEBOGEN HydroClean


SLEWING DRIVE



Gearbox	Compact planetary gear with bent-axis hydraulic motor, integrated brake valves
Parking brake	Spring-loaded disk brake
Slewing ring	External gear slewing ring with 360° protection and pinion tooth lubrication
Slewing speed	0-8 RPM, stepless


840E Technical data, equipment

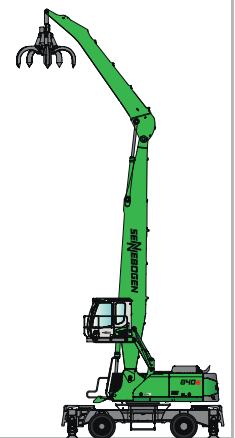
 CAB 	
Cab type	Hydraulically elevating cab E270
Cab equipment	Sliding door, excellent ergonomics, climate automation, seat heater, air-suspension comfort seat, fresh air filter / circulating air filter, joystick steering, 12 V / 24 V connections, SENCON
Options	<ul style="list-style-type: none"> ■ Active seat air conditioning ■ Auxiliary heating system with timer ■ Cabs with active carbon filter ■ Bullet proof windshield ■ Bullet proof skylight ■ Safety side window and rear window ■ Sun protection for skylight and windscreen ■ Protective roof grating ■ FOPS protective roof grating ■ Protective front grating ■ Radio with speakers ■ Maxcab Industry with undivided armored glass windshield ■ Electric cooling box

 EQUIPMENT	
Design	Decades of experience, state-of-the-art computer simulation, highest level stability, longest service life, large-dimensioned bearing points, sealed special bearing bushes, precision-crafted, quick-release couplings on the grab connections - open/closed/rotate
Cylinders	Hydraulic cylinders with high-quality sealing and guide elements, end position damping, sealed bearing points
Options	<ul style="list-style-type: none"> ■ Ball valves on the hydraulic lines grab open, closed, rotate ■ Kinematic position II for greater working depth ■ Sea climate resistant coating ■ Float position for equipment ■ Lift limitation / stick limitation adjustable for the stop settings, for example in the hall

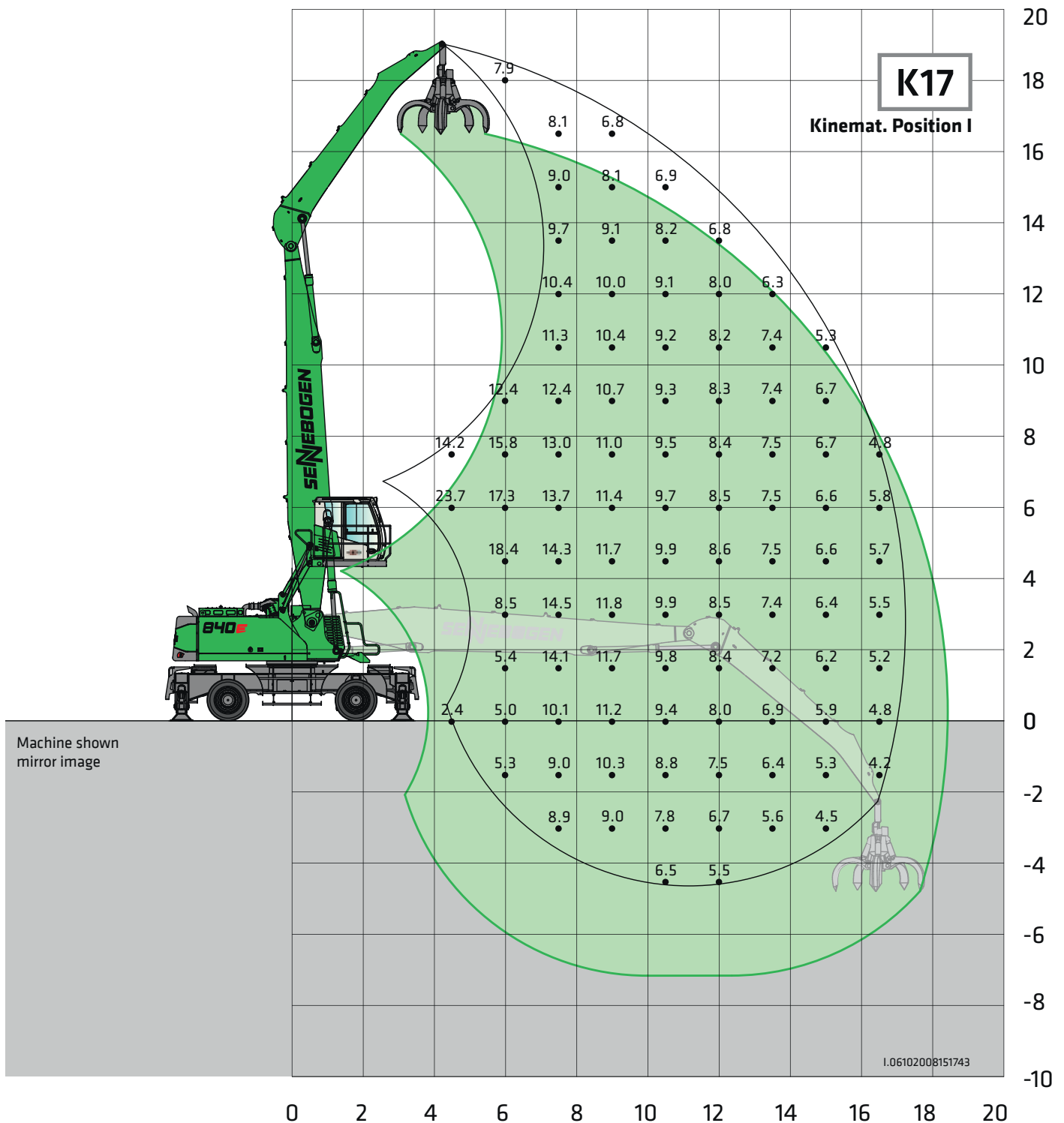
 UNDERCARRIAGE	
Design	Mobile undercarriage with integrated 4-point outrigger, steering axle as hydraulically locking pendulum axle, pendulum axle cylinder with pipe fracture safety valves, type MP42
Drive	All-wheel drive powered by a variable-displacement hydraulic motor with direct-mounted, automatically actuated brake valve and planetary axles with integrated steering cylinders, service brake in 2-circuit system
Parking brake	Spring-loaded disk brake
Tires	12.00-24 , 8x, option: 14.00-24 , 8x
Speed	0-14 km/h , stepless
Options	<ul style="list-style-type: none"> ■ Individual activation of the outriggers for firm stance on uneven substrate ■ Protection for travel drive ■ Shunting coupling

 ELECTRIC DRIVE 	
Option	<ul style="list-style-type: none"> ■ Power: 200 kW, 400 V, 50 Hz Total connected load 340 kVA, machine-provided 400 A fuse (alternatively 425 A with magnet system) for 400 V – star-delta connection motor start ■ Advantages: Lowest operating costs, quiet and virtually vibration-free work, long service life of hydraulic components

 OPERATING WEIGHT	
Mass	approx: 53,000 kg Basic machine 840 M with attachment K18 and 600 l orange peel grab
Note	The operating weight varies depending on the design.



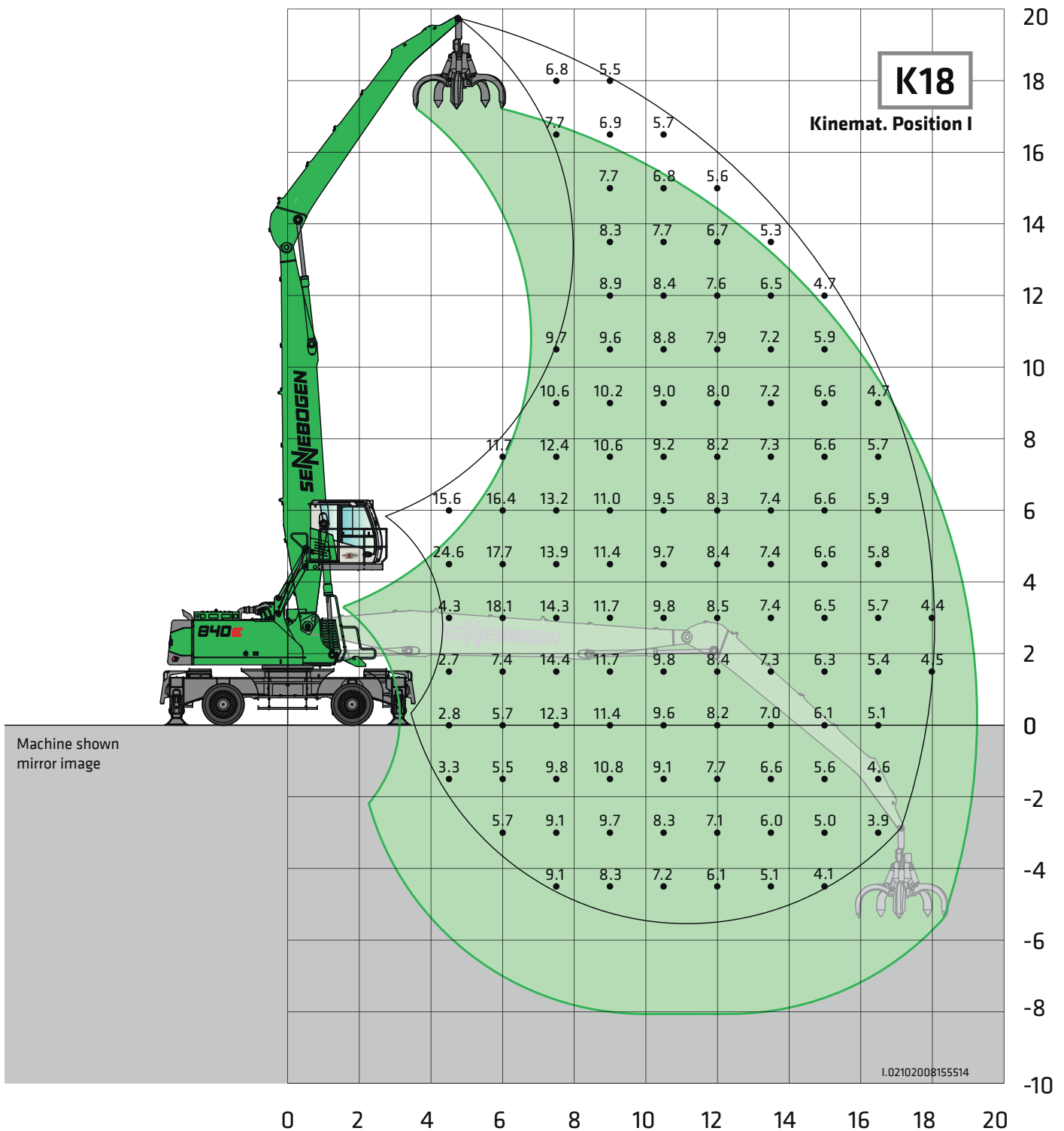
840E Lift capacities



Undercarriage	MP42E	Compact boom	10.6 m	Cab	Maxcab E270,
		Grab stick	7.1 m		hydraulically elevating

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera are part of the specified load ratings. The specified values are 75% of the static tipping load or 87% of the hydraulic lifting force, in accordance with ISO 10567. In accordance with the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

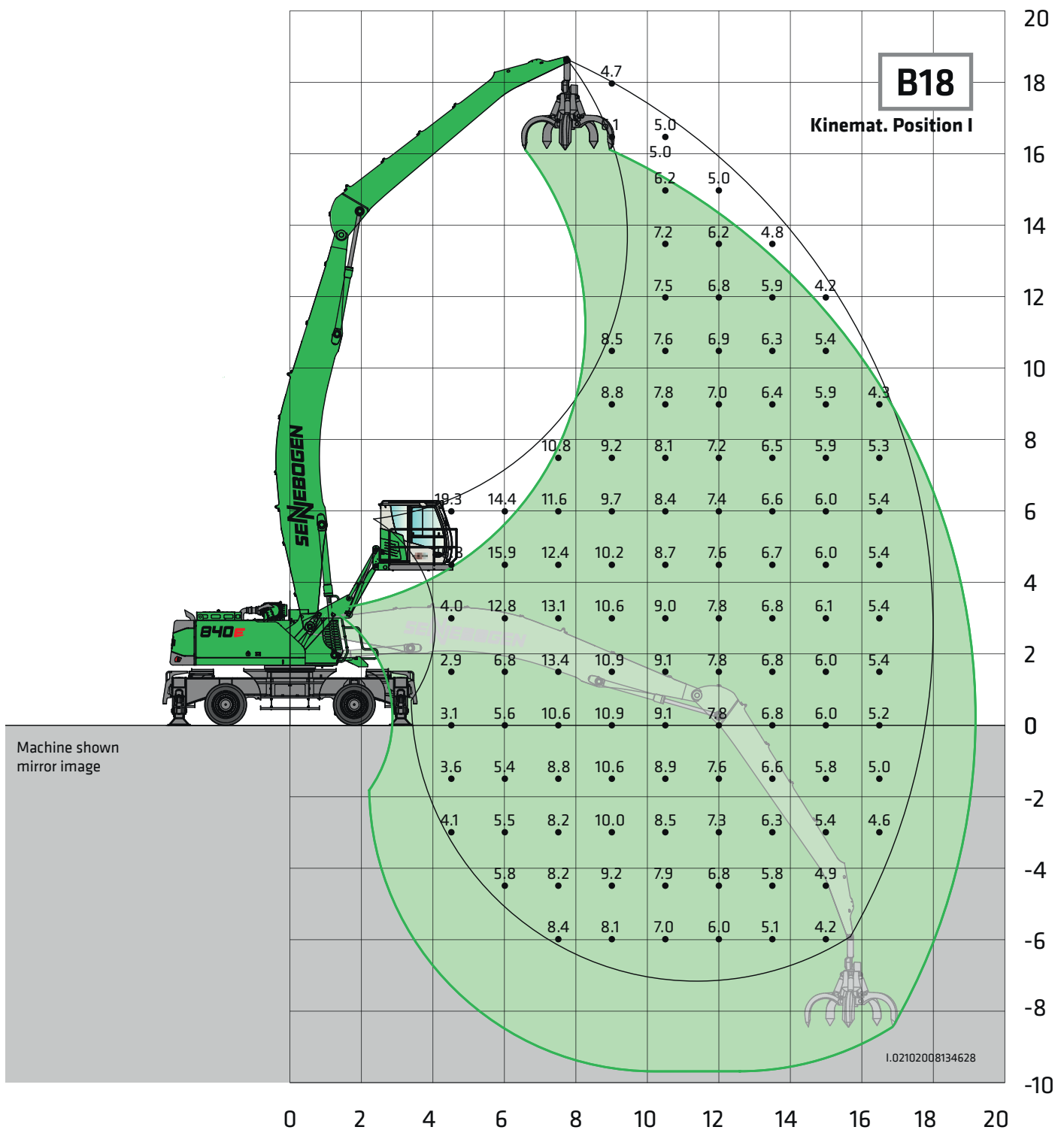
840E Lift capacities



Undercarriage	MP42E	Compact boom	10.6 m	Cab	Maxcab E270,
		Grab stick	8.0 m		hydraulically elevating

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera are part of the specified load ratings. The specified values are 75% of the static tipping load or 87% of the hydraulic lifting force, in accordance with ISO 10567. In accordance with the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

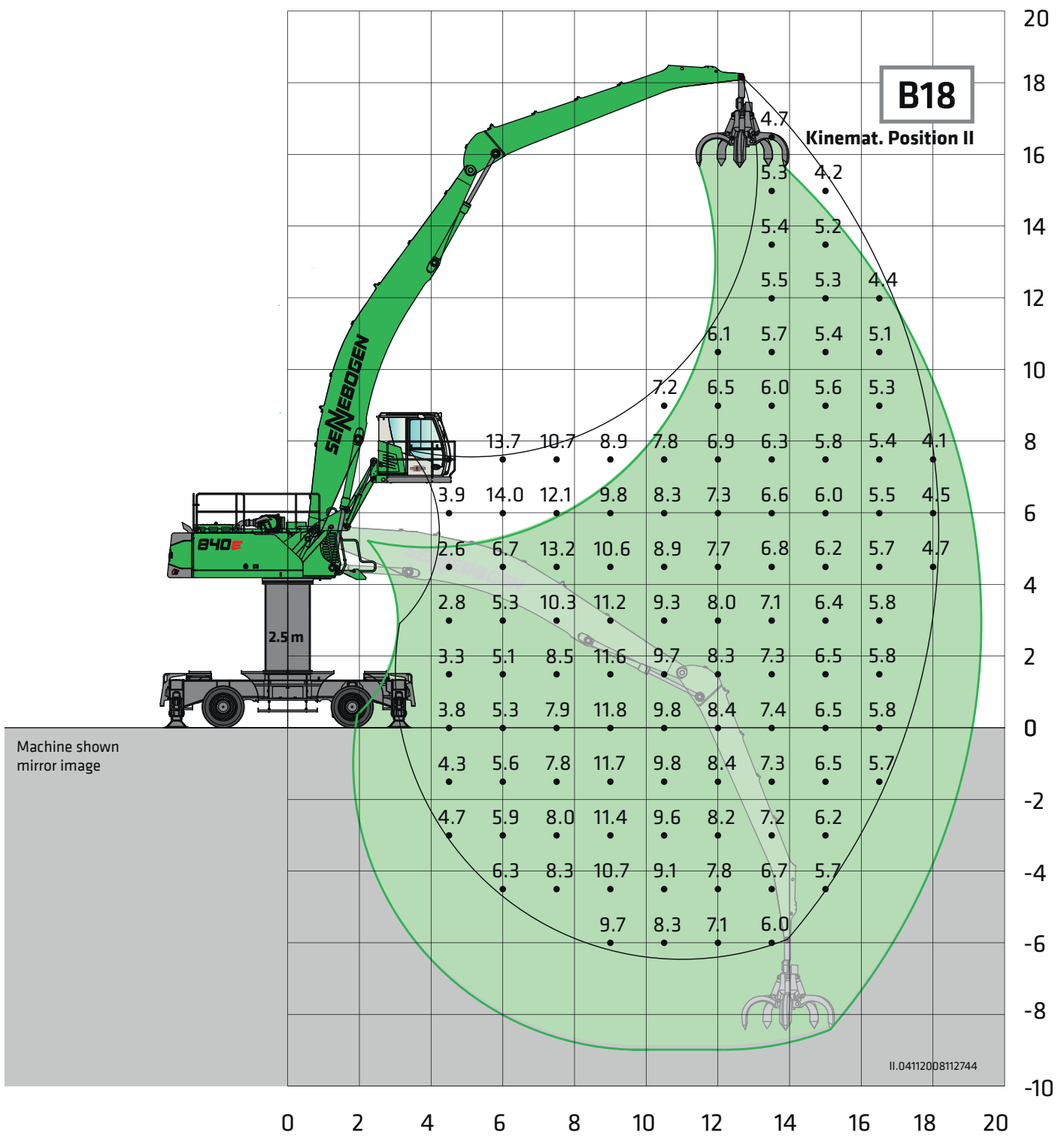
840E Lift capacities



Undercarriage **MP42E** **Compact boom** **11.0 m Banana** **Cab** **Maxcab E300/260, hydraulic elevating and forward moving (option)**
Grab stick **8.0 m**

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera are part of the specified load ratings. The specified values are 75% of the static tipping load or 87% of the hydraulic lifting force, in accordance with ISO 10567. In accordance with the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

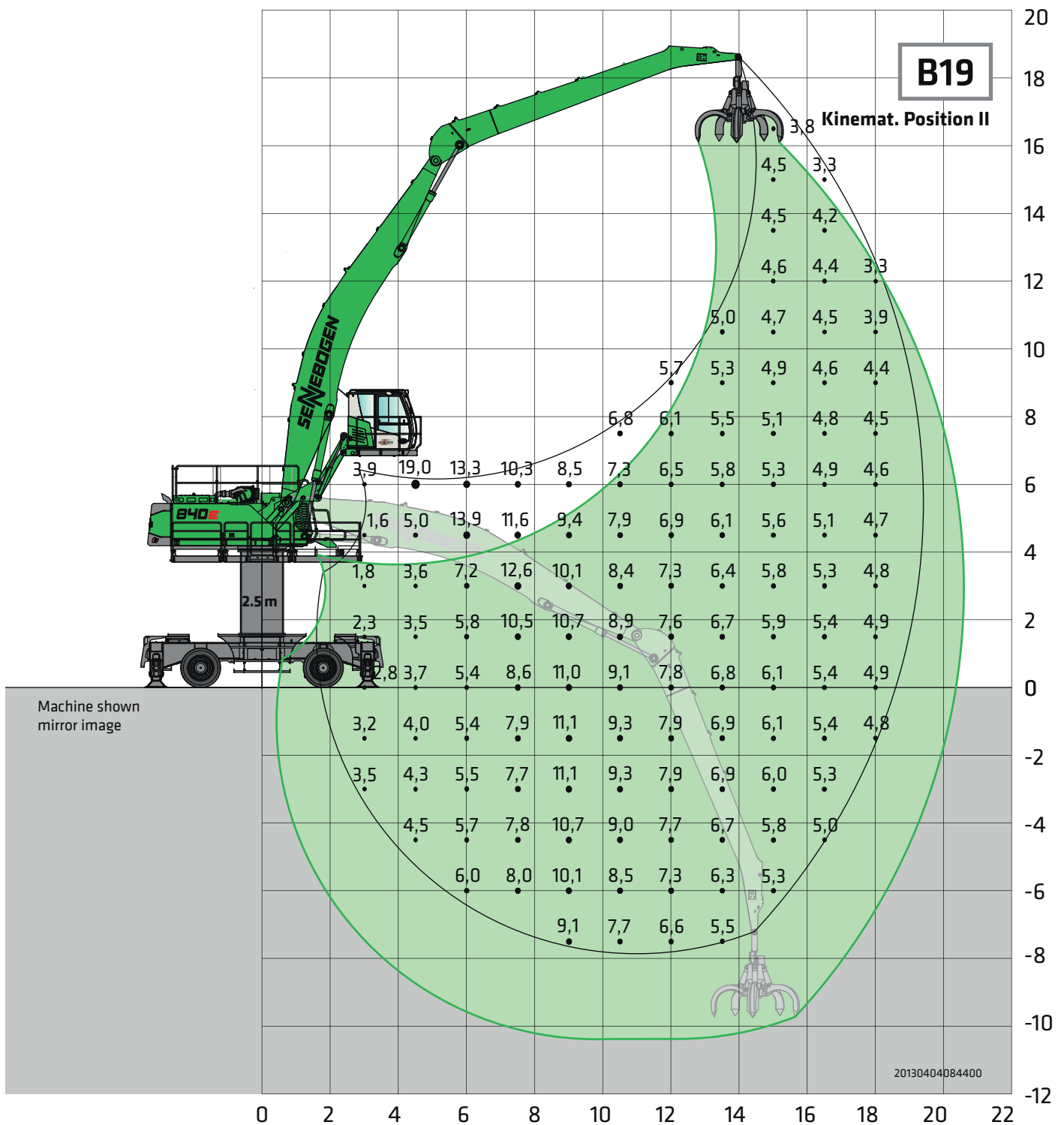
840E Lift capacities



Undercarriage Pylon	MP42E 2.5 m	Compact boom Grab stick	11.0 m Banana 8.0 m	Cab	Maxcab E300/260, hydraulic elevating and forward moving(option)
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All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera are part of the specified load ratings. The specified values are 75% of the static tipping load or 87% of the hydraulic lifting force, in accordance with ISO 10567. In accordance with the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

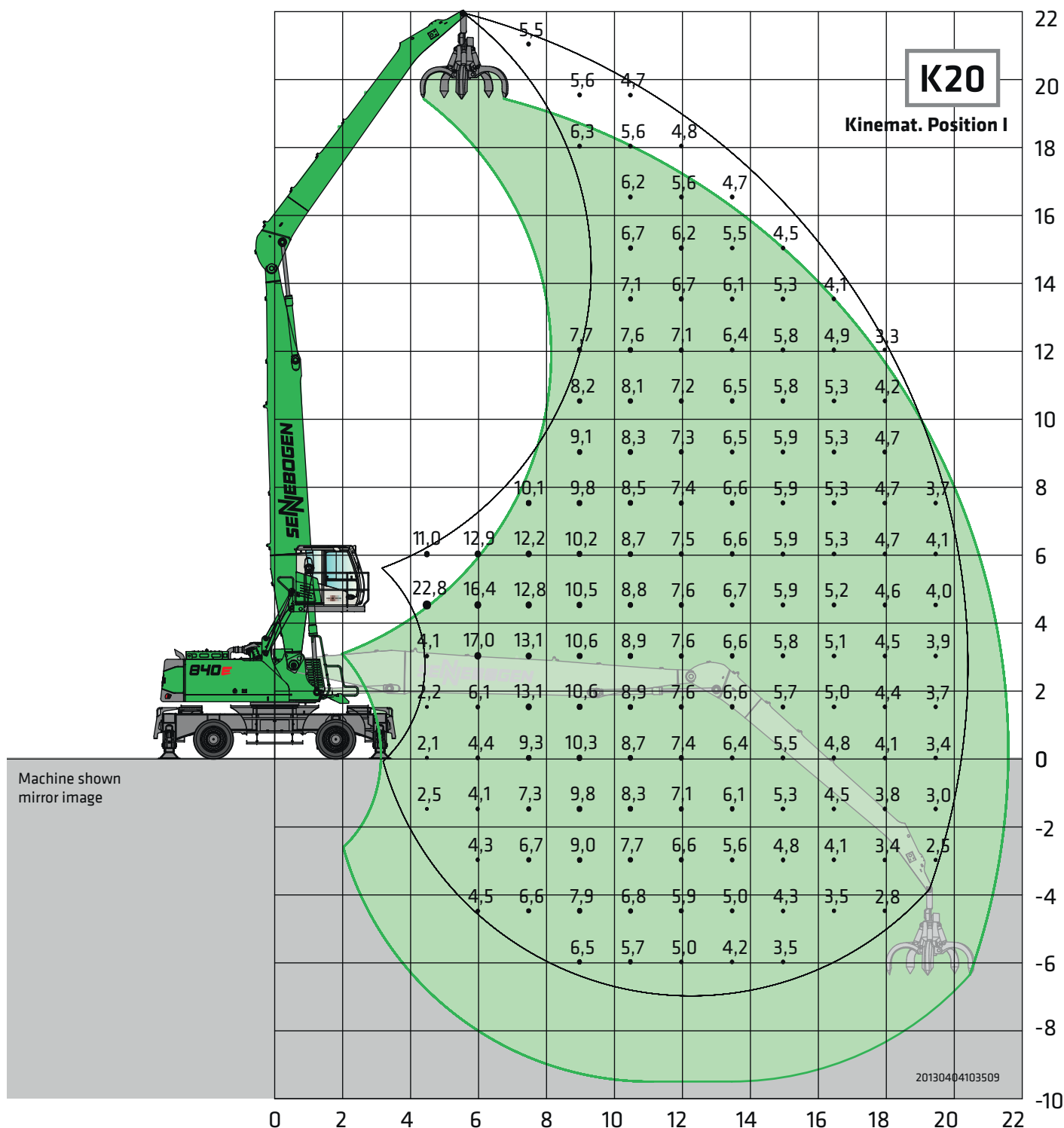
840E Lift capacities



Undercarriage Pylon	MP42E 2.5 m	Compact boom Grab stick	11.0 m Banana 9.4 m	Cab	Maxcab E300/260, hydraulic elevating and forward moving (option)
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All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera are part of the specified load ratings. The specified values are 75% of the static tipping load or 87% of the hydraulic lifting force, in accordance with ISO 10567. In accordance with the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

840E Lift capacities



Undercarriage	MP42E	Compact boom	11.7 m	Cab	Maxcab E270,
		Grab stick	9.4 m		hydraulically elevating

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera are part of the specified load ratings. The specified values are 75% of the static tipping load or 87% of the hydraulic lifting force, in accordance with ISO 10567. In accordance with the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

840E Grab recommendation

Orange peel grab SGM (4 shells)



Design / size	Grab content	Weight ¹		max. piled density
		Shell shape		
		HO	G	
SGM	l	kg	kg	t/m³
400.40-4	400	1570	1720	2.0
600.40-4	600	1600	1790	
800.40-4	800	1685	1930	
1000.40-4	1000	1755	2085	
1250.40-4	1250	1850	2200	
800.50-4	800	2245	2490	
1000.50-4	1000	2345	2585	
1500.50-4	1500	2475	2830	
2000.50-4	2000	2660	3075	

Orange peel grab SGM (5 shells)



Design / size	Grab content	Weight ¹		max. piled density
		Shell shape ²		
		HO	G	
SGM	l	kg	kg	t/m³
400.40	400	1820	1920	2.0
600.40	600	1910	2035	
800.40	800	1960	2140	
1000.40	1000	2040	2290	
1250.40	1250	2180	2415	
800.50	800	2420	2610	
1000.50	1000	2480	2655	
1500.50	1500	2645	2930	
2000.50	2000	2800	3160	
2500.50	2500	3130	3615	
3000.50	3000	3250	3875	
3500.50	3500	3420	4140	

Clamshell grab SGZ



Design / size	Grab content	Weight ¹	max. piled density
SGZ	l	kg	t/m³
1500.50	1500	1950	2.6
2000.50	2000	2200	
2500.50	2500	2300	2.0
3000.50	3000	2490	
4000.50	4000	2880	1.6

Magnetic plates



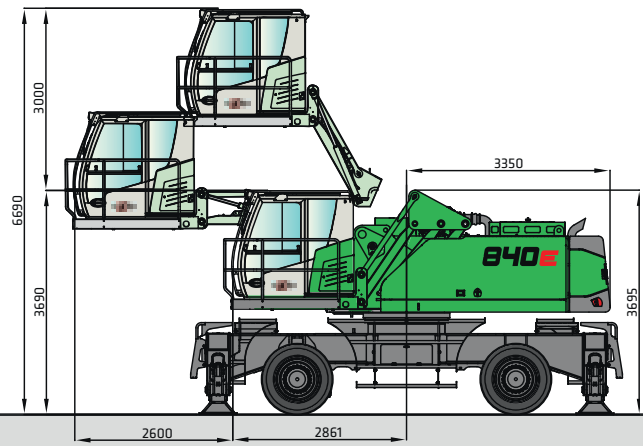
Type series / model	Power	Deadweight	Pull-off strength	Load-bearing capacity in kg
WOKO	kW	kg	kN	Bramme (safety factor 2)
S-RSL 15	12.2	1950	360	18000
S-RSL 17	17.0	2500	460	23000
S-RLB 13,5	10.0	1700	300	15000
S-RLB 15	11.7	2400	380	19000
S-RLB 17	17.8	3300	640	32000
Recommended magnetic generator 20 kW				

*) On request

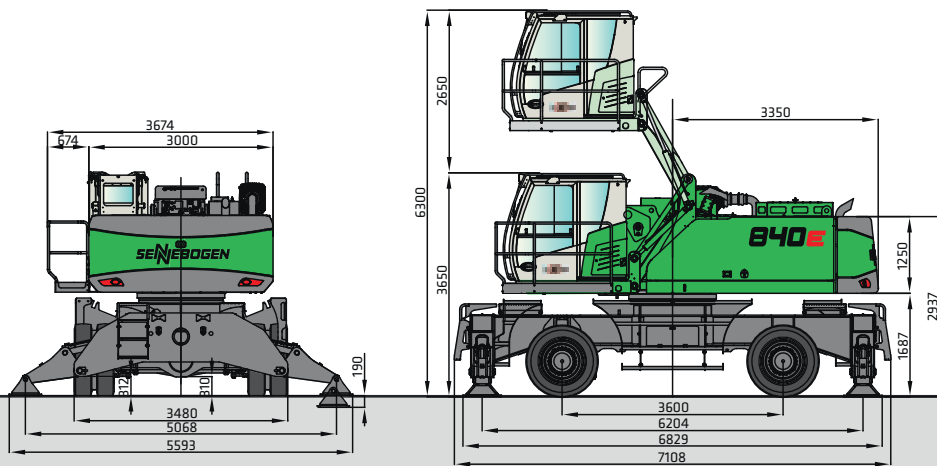
1) Weight information without grab suspension, stick bolts, hose system

2) Half-open shells: Shell sheet steel 400 mm wide, from content 1250 l shell sheet steel 500 mm wide

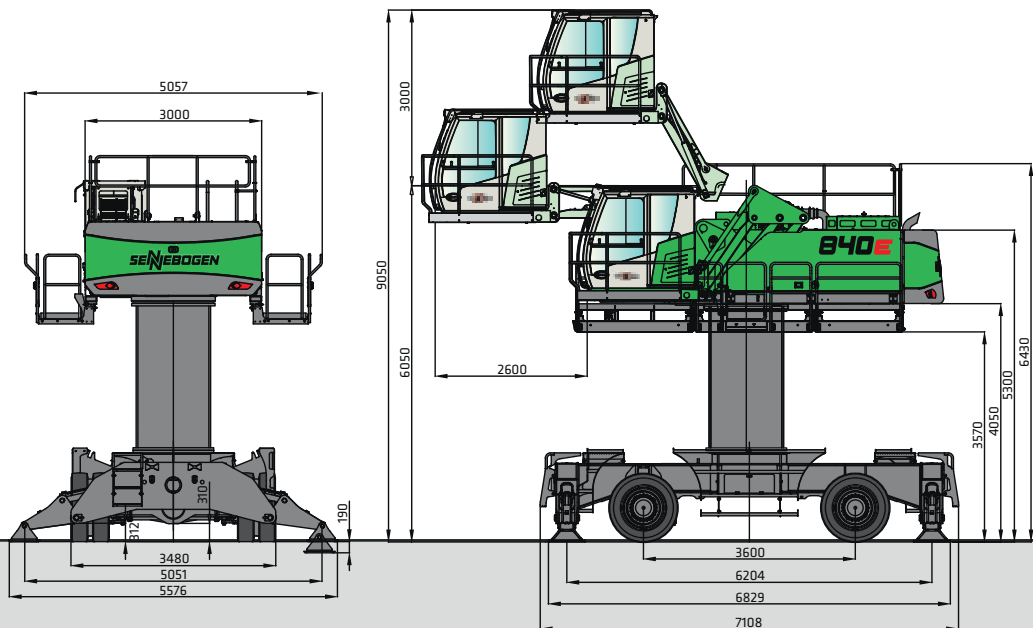
840E Dimensions



840 M with cab type E300/260, can be elevated and moved forward hydraulically



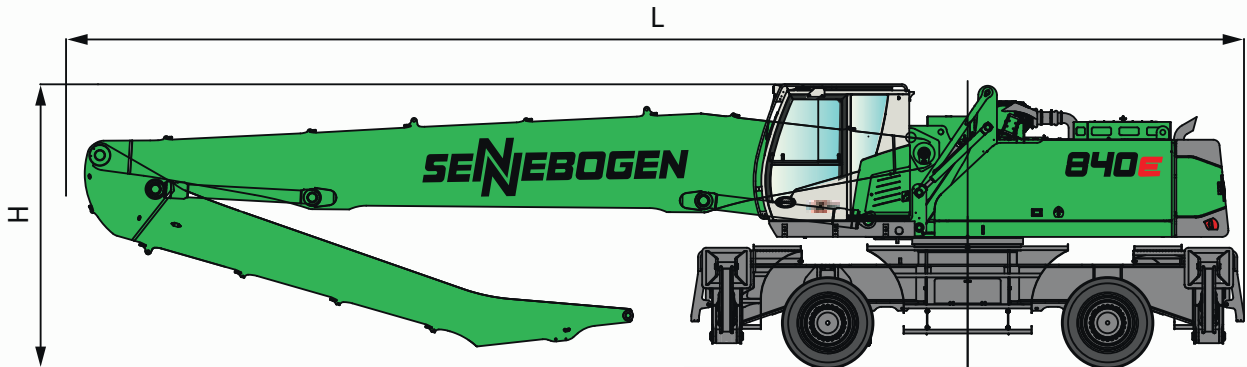
840 M with hydraulically elevating cab type E270, transport width 3500 mm



840 M with cab type E300/260, hydraulic elevating and forward moving

840E

M



Transport dimensions 840 M with undercarriage type MP42E

	Load boom	Grab stick	Transport length (L)	Transport height (H)
K17	10.6 m	7.1 m	15.2 m	3.65 m
K18	10.6 m	8.0 m	15.2 m	3.65 m
B18	11.0 m banana	8.0 m	15.5 m	3.7 m
B19	11.0 m banana	9.4 m	15.5 m	3.65 m*
K20	11.7 m	9.4 m	16.2 m	4.2 m (3.65 m*)

* Stick is dismantled

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 in a tolerance range depending on the country to which the machines are delivered, especially in regard to standard and optional equipment

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GO FOR GREEN

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