



SENEBOGEN



164 kW (Stage IIIa)



168 kW (Stage V)

132 kW (Electro)



38 - 43.5 t



14 - 17 m

MAXCAB

830E

Mobile material handling machine

Stage V

830E 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 diagnosis
Easy Maintenance - clear labeling

6

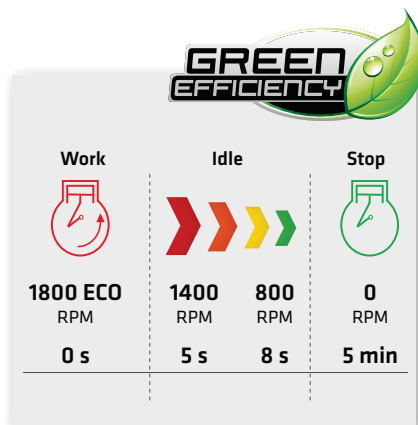
Consultation and support in your area

3 production sites - 2 subsidiaries
more than 150 sales partners - worldwide and also in your area



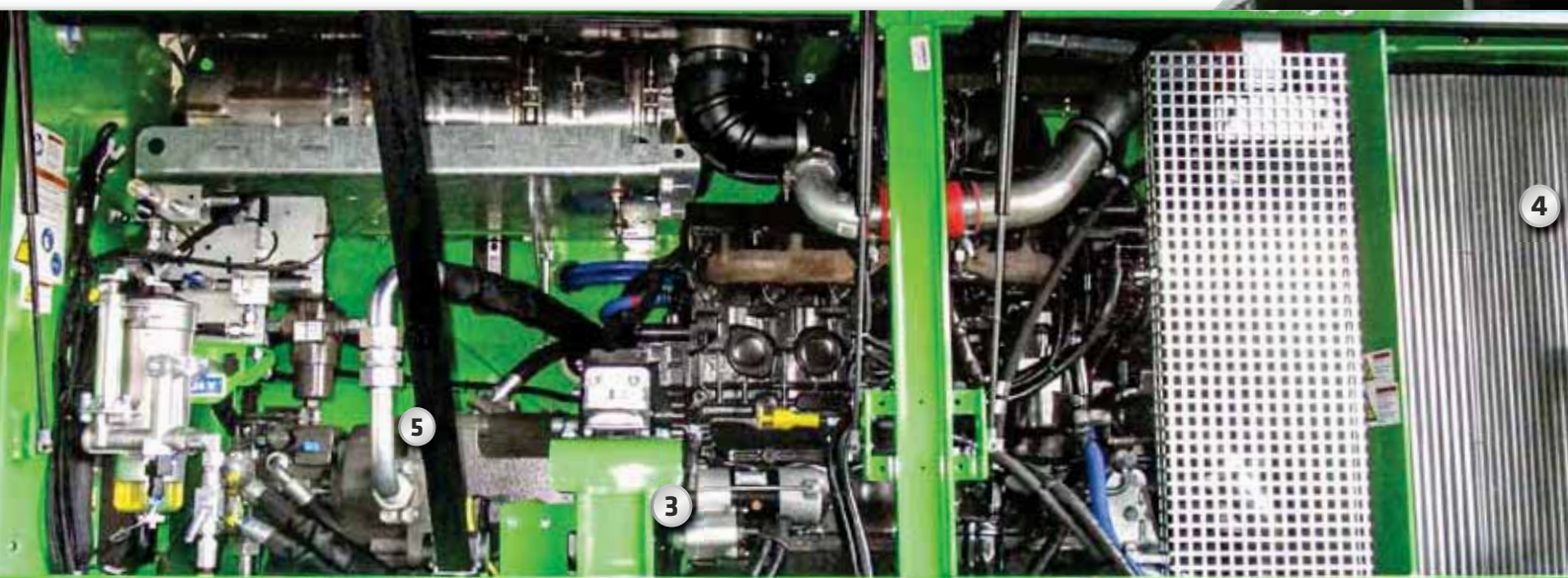


830E The E-Series. At a glance.



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 rear
- Platform 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
- comfort seat with air suspension
- 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 cool box behind driver's seat, seat air conditioning

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

830E Maintenance and service made easy.



Optimized for maintenance

- Fast and easy diagnosis thanks to the clearly labeled electrical distributor
- Easy accessibility to all service points of the machine
- Automatic central lubrication for equipment and slewing gear raceway



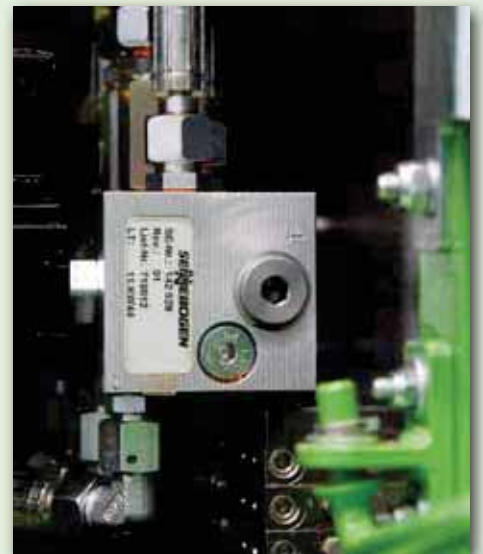
SENNEBOGEN HydroClean*

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



Central measuring points

- Easily accessible
- Inspect the entire hydraulic system quickly

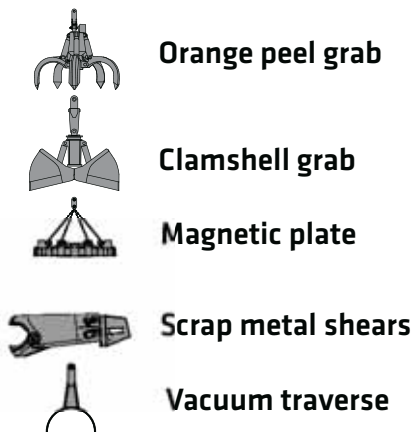


Clear labeling

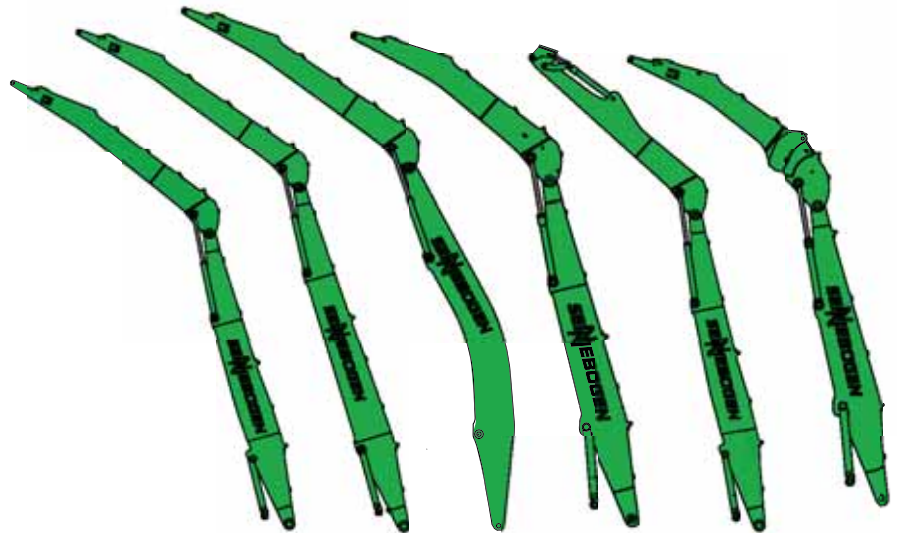
- All parts labeled with a unique part number
- Easy and reliable spare parts ordering

830E Modular design - versatile solutions

Attachments



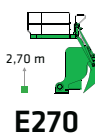
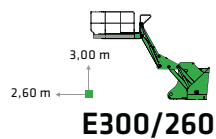
Equipment options (others available upon request)



Cabs

Cab elevation

K15 K17 B16 K14 K14 ULM K13 VT



Uppercarriage



Diesel-hydraulic drive



Electrohydraulic drive

Options

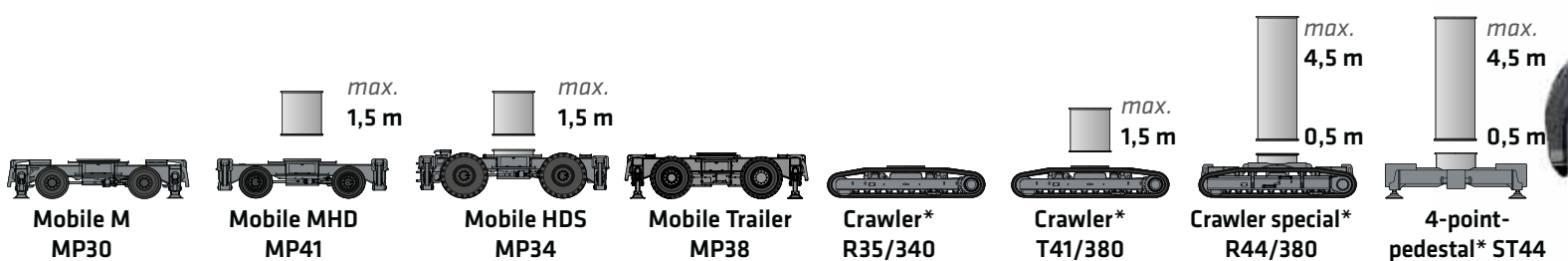


Motorized cable reel

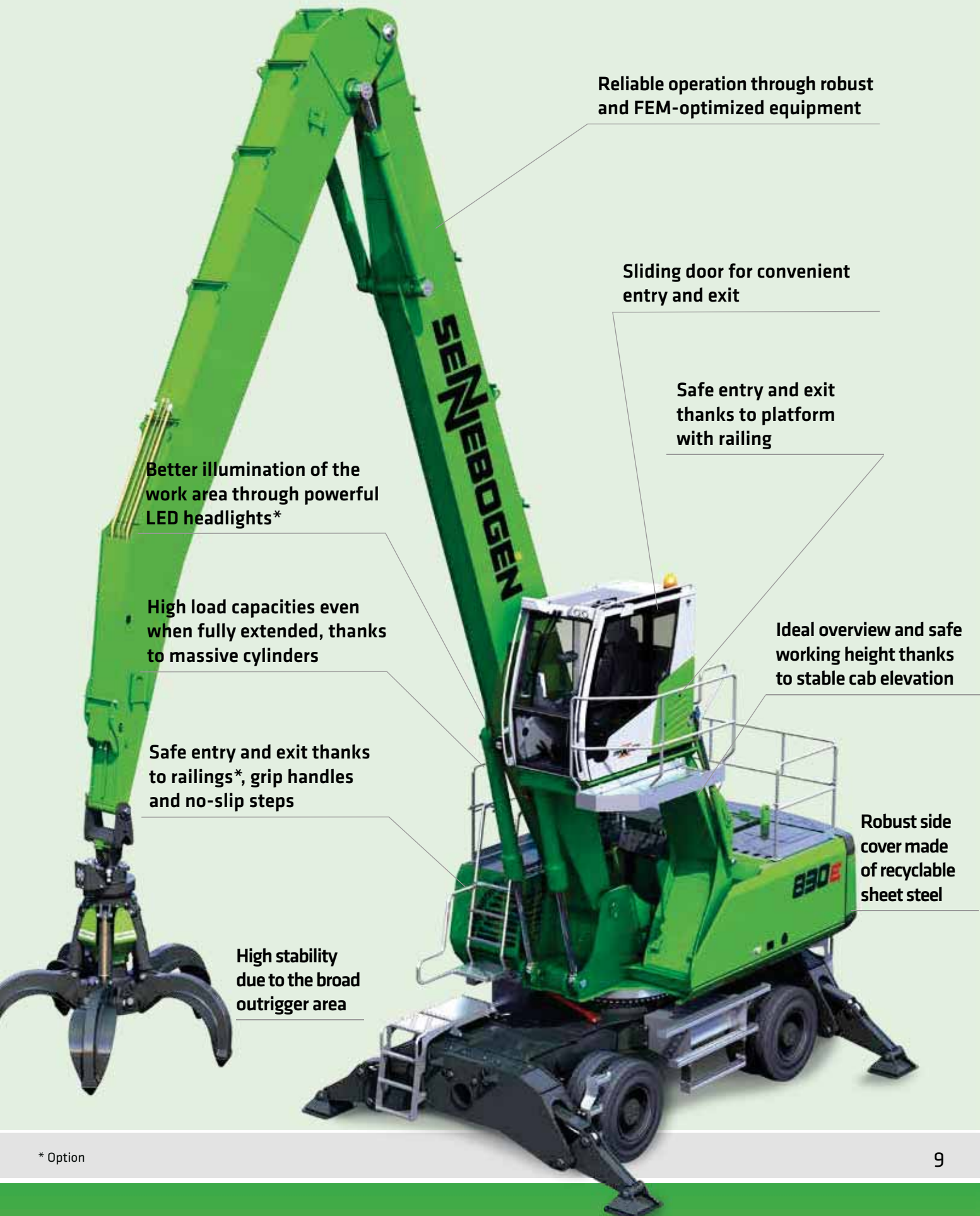


Transformer

Undercarriage variants



830E Advantages at a glance



Reliable operation through robust and FEM-optimized equipment

Sliding door for convenient entry and exit

Safe entry and exit thanks to platform with railing

Better illumination of the work area through powerful LED headlights*

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

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

Ideal overview and safe working height thanks to stable cab elevation

Robust side cover made of recyclable sheet steel

High stability due to the broad outrigger area

* Option

830E Technical data, equipment

MACHINE TYPE

Model (type) **830**

ENGINE

Power	Stage V: Rated Power: 168 kW at 2200 rpm 188 kW at 1900 rpm Stage IIIa: Rated Power: 164 kW at 2000 rpm 172 kW at 1800 rpm
Model	Cummins 6.7 Direct injection, turbo charged, charge air cooler, reduced emissions, Eco Mode, idle automation, stop automation
Cooling	Water-cooled
Diesel filter	with water separator and heating system
Air filter	Dry filter with integrated pre-separator, automatic dust discharge, main element and safety element, contamination indicator
Fuel tank	450 l
DEF tank	45 l
Electr. system	24 V
Batteries	2 x 150 Ah , main switch
Options	■ Engine block heater for temperatures below -20 °C ■ Electric fuel pump ■ Jump-start battery terminals

UPPERCARRIAGE

Design	Torsion-resistant box design, precision crafted, steel bushings for boom bearings. Extremely service-friendly design, longitudinal engine
Central lubrication	Automatic central lubrication for equipment and slewing gear
Electrical system	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	■ Slewing gear brake via foot pedal ■ Hand rail at the upper structure for additional safety ■ LED lighting packages ■ Fire extinguisher ■ Sea climate resistant coating ■ Electric heater for hydraulic tank

Options

- Low-temperature packages
- Hydraulically driven magnetic generator 15 kW/20 kW
- Telematic system SENtrack DS

HYDRAULIC SYSTEM

Load sensing / LUDV hydraulic system for hydraulic, pilot-controlled work 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
Delivery rate	520 l/min
Operating pressure	max. 350 bar
Filtration	High-performance filtration with long change interval
Hydraulic tank	310 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	Hydraulic circuits secured with safety valves, emergency lowering of the equipment at engine standstill, pipe fracture safety valves for lift cylinder and stick cylinder
Options	■ 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 ■ Overload safeguard with overload shutdown ■ 3 µm hydraulic micro-filter - SENNEBOGEN HydroClean

SLEWING DRIVE

Gearbox	Compact planetary gear with bent-axis hydraulic motor, integrated brake valves
Parking brake	Spring-loaded multi-disk brake
Slewing ring	Strong slewing ring, sealed
Slewing speed	0-8 rpm, variable

830E Technical data, equipment



CAB



Cab elevation	E270, hydraulically elevating cab
Cab equipment	Sliding door inc. sliding pane, vibration damped, tinted safety glass, front pane can be openend, roof window, windscreen wiper for front pane, radio preparation, air-suspended comfort seat, joystick steering, SENNEBOGEN SENCON control & diagnosis system
Options	■ Tiltable cab, 30 ° ■ Cab elevation E300/260, can be elevated and moved forward hydraulically ■ Maxcab Industry ■ Armored-glass windshield ■ Armored-glass sunroof ■ Safety side window and rear window ■ Windscreen wiper for front window/skylight ■ Rolling shade for roof window and windshield ■ FOPS protective roof guard ■ Protective front guard ■ Charcoal filter for circulating and outside air ■ Auxiliary heating ■ Climatic seat ■ Radio ■ Electric cool box



EQUIPMENT

Design	Decades of experience, state-of-the-art computer simulation, highest level of stability, longest service life, large-dimensioned and low-maintenance bearing points, sealed special bearing bushes, precision-crafted, quick-release couplings on the connections - open/close/rotate grapple
Cylinders	Hydraulic cylinders with high-quality sealing and guide elements, end position damping, sealed bearing points
Options	■ Ball valves on the hydraulic lines - open and close grab ■ nickel-plated and chrome-plated ■ Float position of the equipment ■ Hoisting limiter / stick limitation adjustable for stop settings, e.g. in the hall ■ Multi-coupling



UNDERCARRIAGE

Design	Strong mobile undercarriage with integrated 4-point outriggers, steering axle as hydraulically locking pendulum 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 cylinders, service brake in 2-circuit system
Parking brake	Spring-loaded multi-disk brake
Tires	M: solid-rubber tires 12.00-20 , 8x MHD: solid-rubber tires 12.00-20 , 8x MHDS: solid-rubber tires 16.00-25 , 4x Trailer: pneumatic tires 650/65-R25 , 4x
Speed	0 - 7 km/h stage I 0 - 20 km/h stage II Trailer 25 km/h
Options	■ MHD: pneumatic tires 12.00-20, 8x ■ MHDS: pneumatic tires 20.50-R25, 4x ■ Additional pushing blade for 4-point outriggers ■ Individual outrigger actuation ■ Protection for travel drive, shunting coupling



ELECTRIC DRIVE

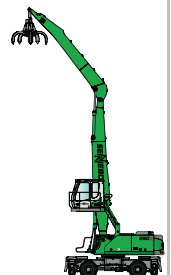


Option	■ Power: 132 kW / 400 V / 50 Hz Total connected load 270 kVA, machine fusing 315 A at 400 V - motor start-up via star-delta circuit Alternative power: 160 kW / 400 V / 50 Hz ■ Advantages: lowest operating costs, quiet and virtually vibration-free work, long service life of hydraulic components
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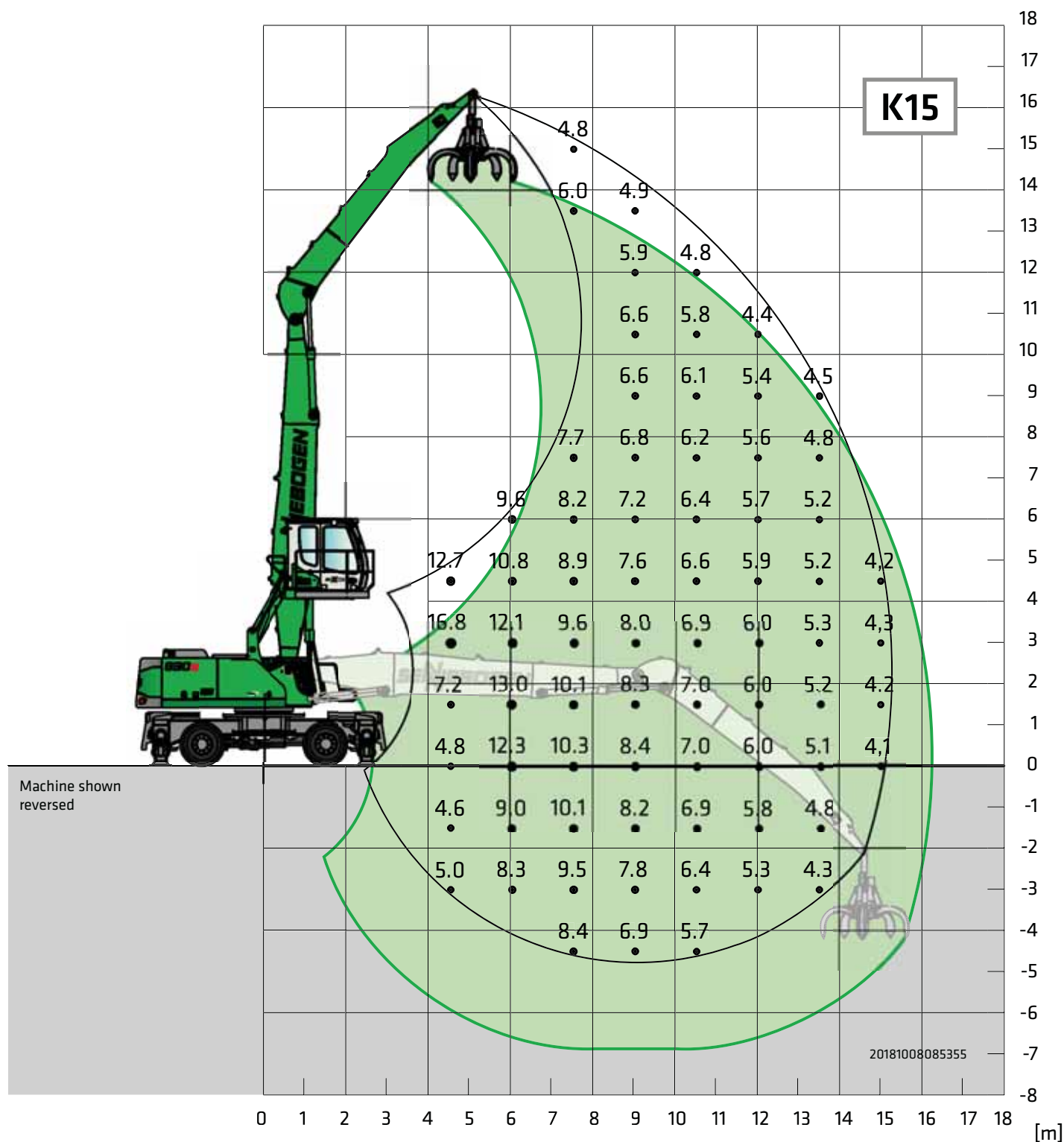


OPERATING WEIGHT

Mass	830 M with MP30E, operating equipment K17 and grab 600 l approx. 38,500 kg 830 MHD with MP41, operating equipment K17 and grab 600 l approx. 40,000 kg
Notice	The operating weight varies depending on the model.



830E Load ratings



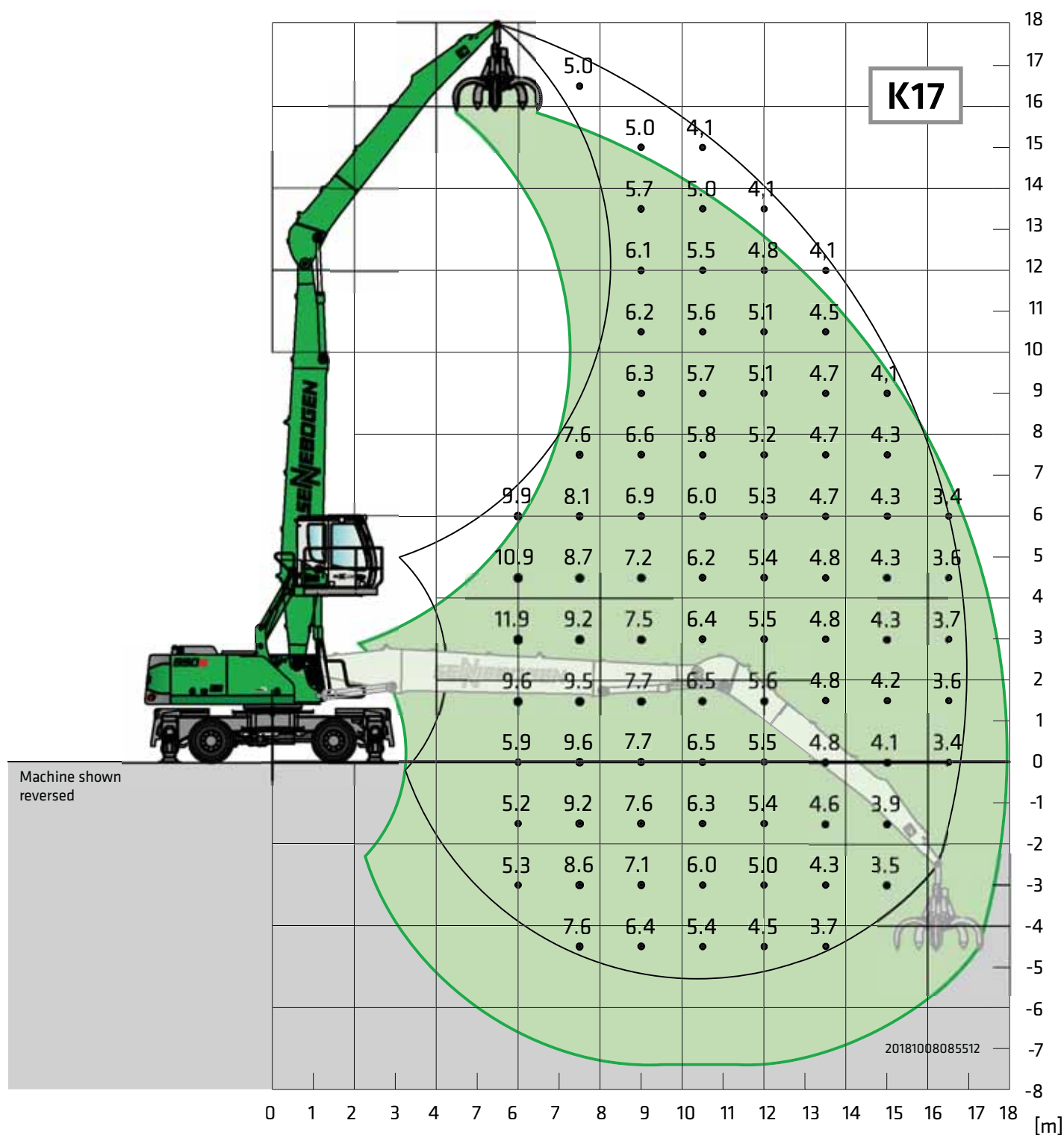
Undercarriage MP30

Compact boom 8.5 m
Grab stick 7.0 m

Cab Maxcab E270,
hydraulically elevating

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grabs, magnets, load hooks, etc. 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 EU standard EN 474 / 5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist and stick cylinders and an overload warning device. Loads rating apply to a machine with deployed 4-point outrigger support and 360° slewing.

830E Load ratings



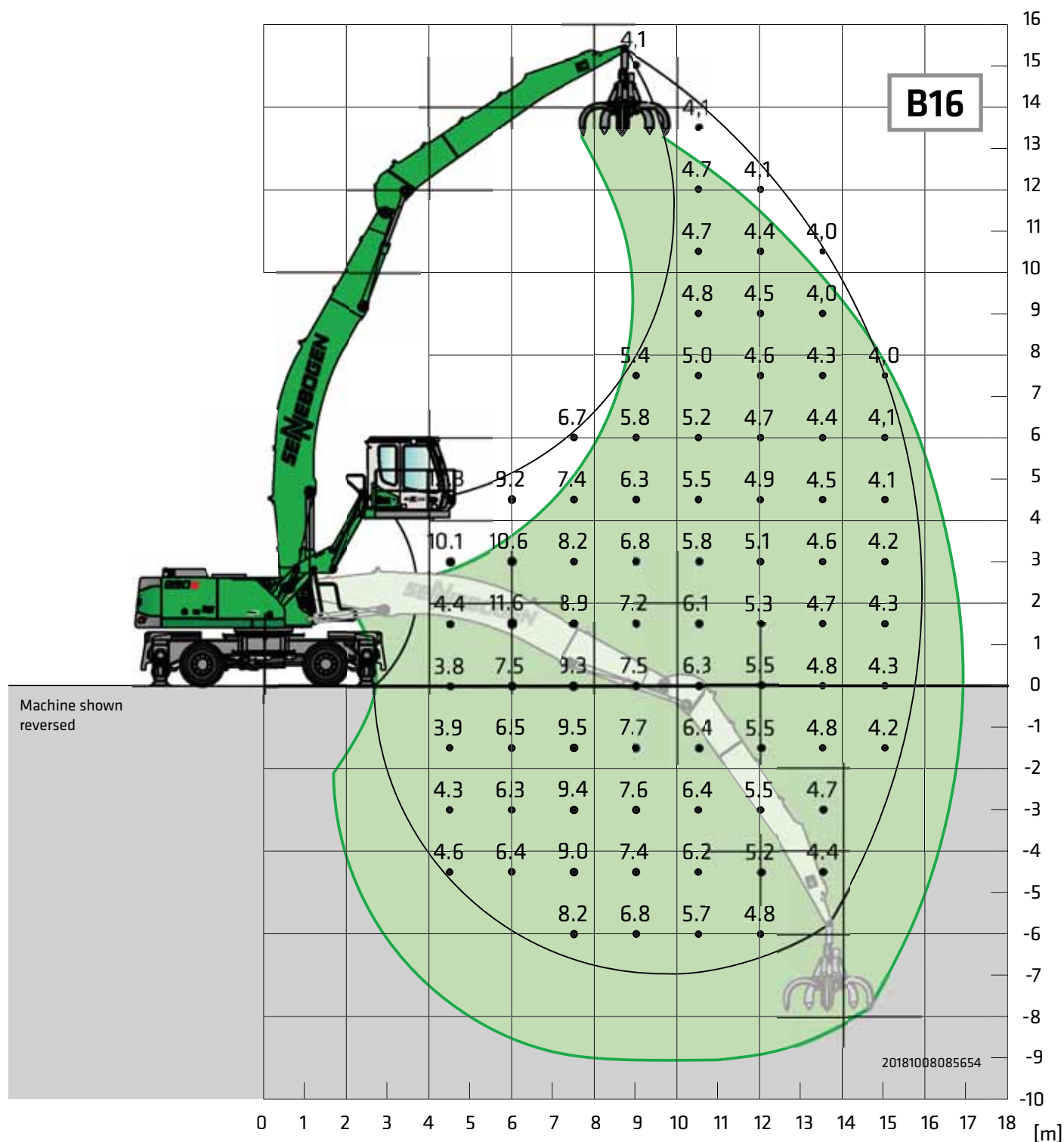
Undercarriage MP30

Compact boom 9.8 m
Grab stick 7.5 m

Cab Maxcab E270,
hydraulically elevating

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830E Load ratings



Undercarriage MP30

Compact boom
Grab stick

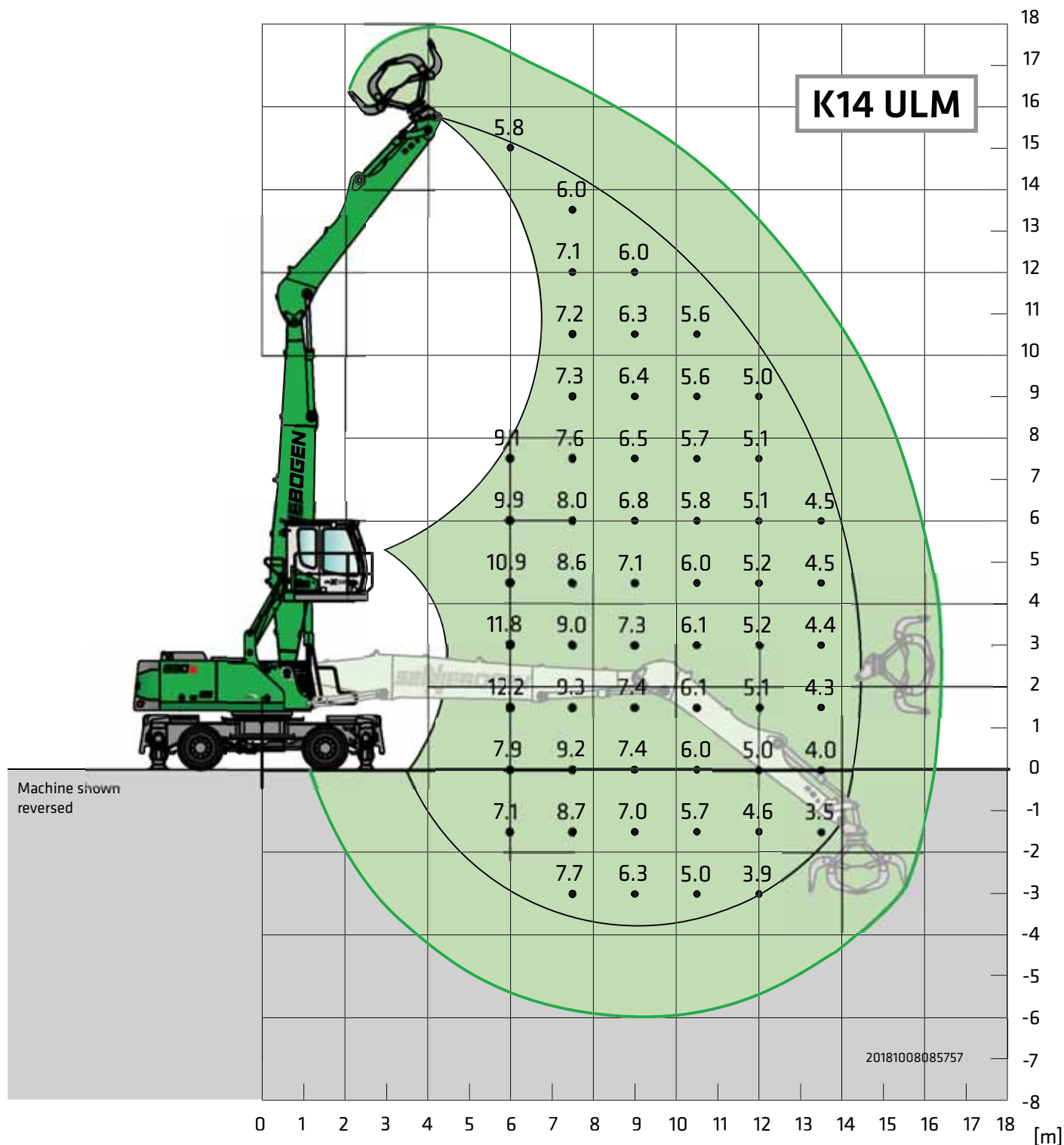
9.4 m Banana
7.0 m

Cab

Maxcab E300/260, can be elevated
and moved forward hydraulically (option)

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grabs, magnets, load hooks, etc. 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 EU standard EN 474 / 5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist and stick cylinders and an overload warning device. Loads rating apply to a machine with deployed 4-point outrigger support and 360° slewing.

830E Load ratings



Undercarriage MP30

**Compact boom
Grab stick**

**8.5 m
6.0 m ULM**

Cab

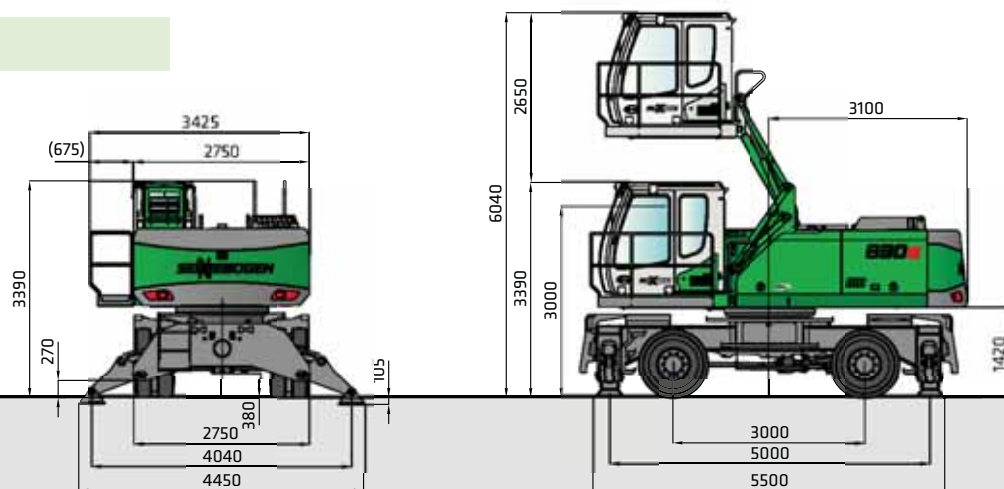
**Maxcab E270,
hydraulically elevating**

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grabs, magnets, load hooks, etc. 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 EU standard EN 474 / 5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist and stick cylinders and an overload warning device. Loads rating apply to a machine with deployed 4-point outrigger support and 360° slewing.

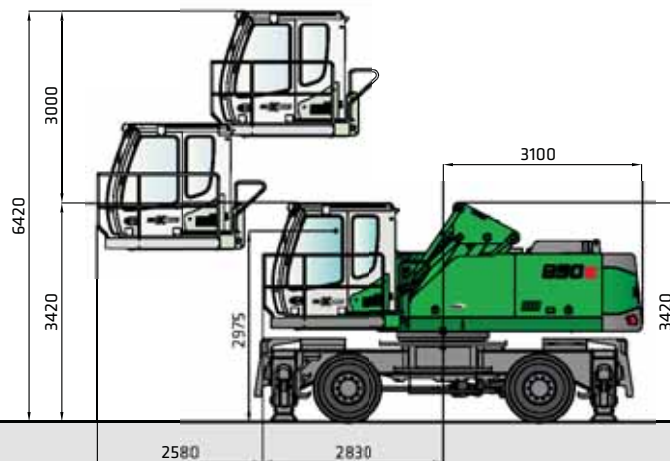
830E Dimensions

Transport width 2.750 mm

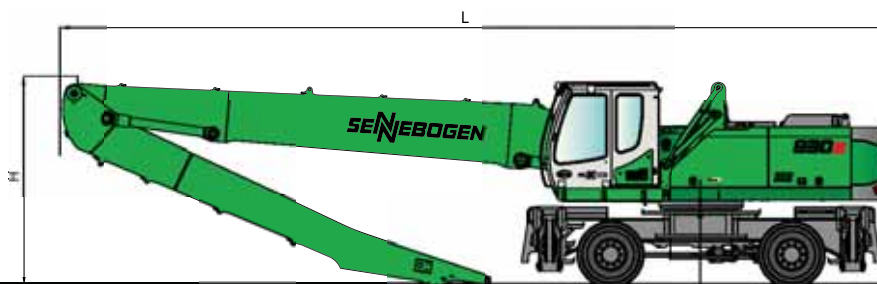
Solid-rubber tires



830 M with undercarriage type MP30 (series) and hydraulically elevating cab type E270



830 M with cab type E300/260 (option), can be elevated and moved forward hydraulically

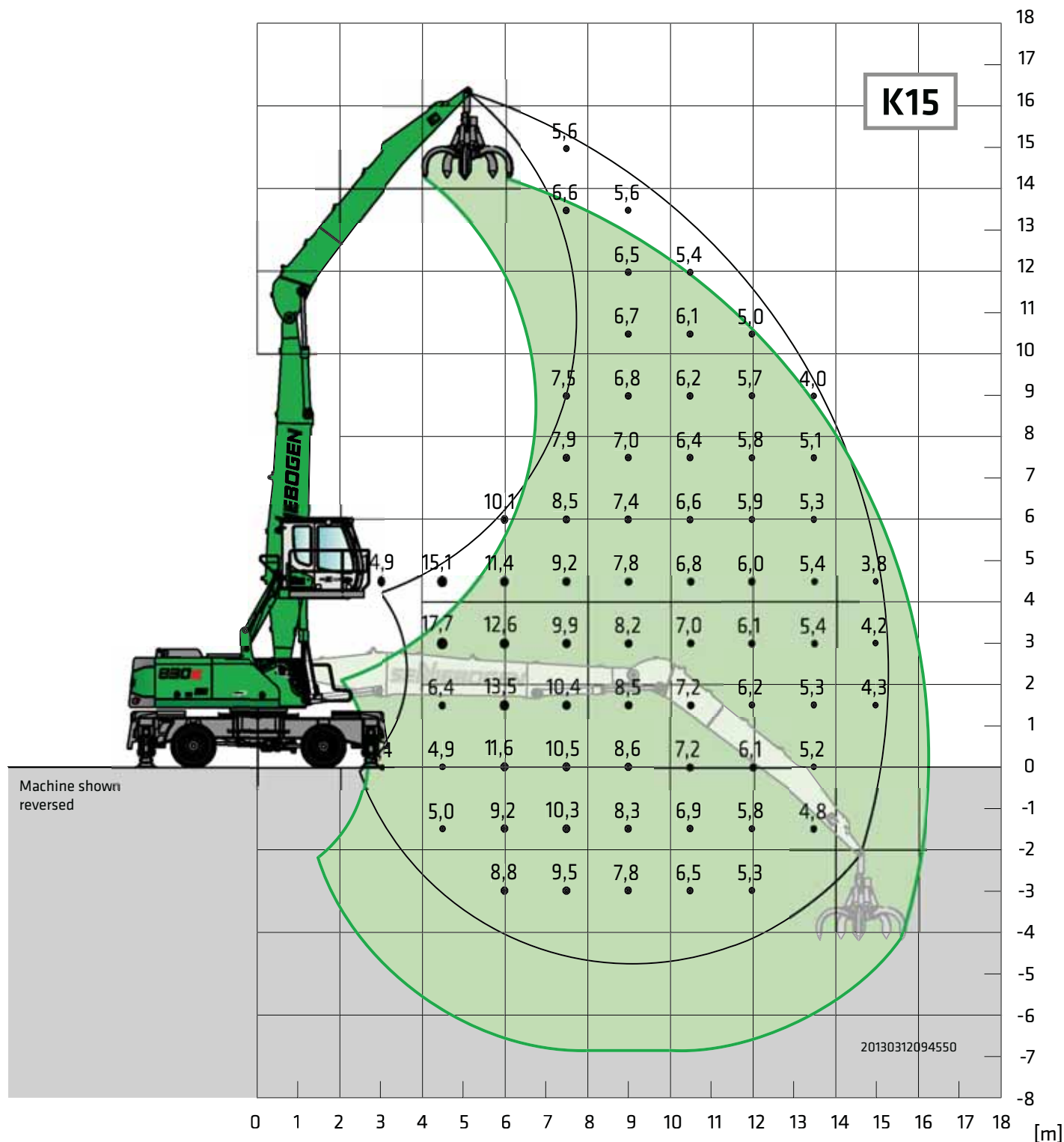


830 M with undercarriage type MP30

	Load boom	Grab stick	Transport length (L)	Transport height (H)
K15	8.5 m	7.0 m	12.45 m	3.40 m
K17	9.8 m	7.5 m	13.75 m	3.45 m
B16	9.4 m Banana	7.0 m	13.40 m	3.50 m
K14 ULM	8.5 m	6.0 m	12.45 m	3.40 m

830E Load ratings

MHD / MHDS



Undercarriage **MP41**

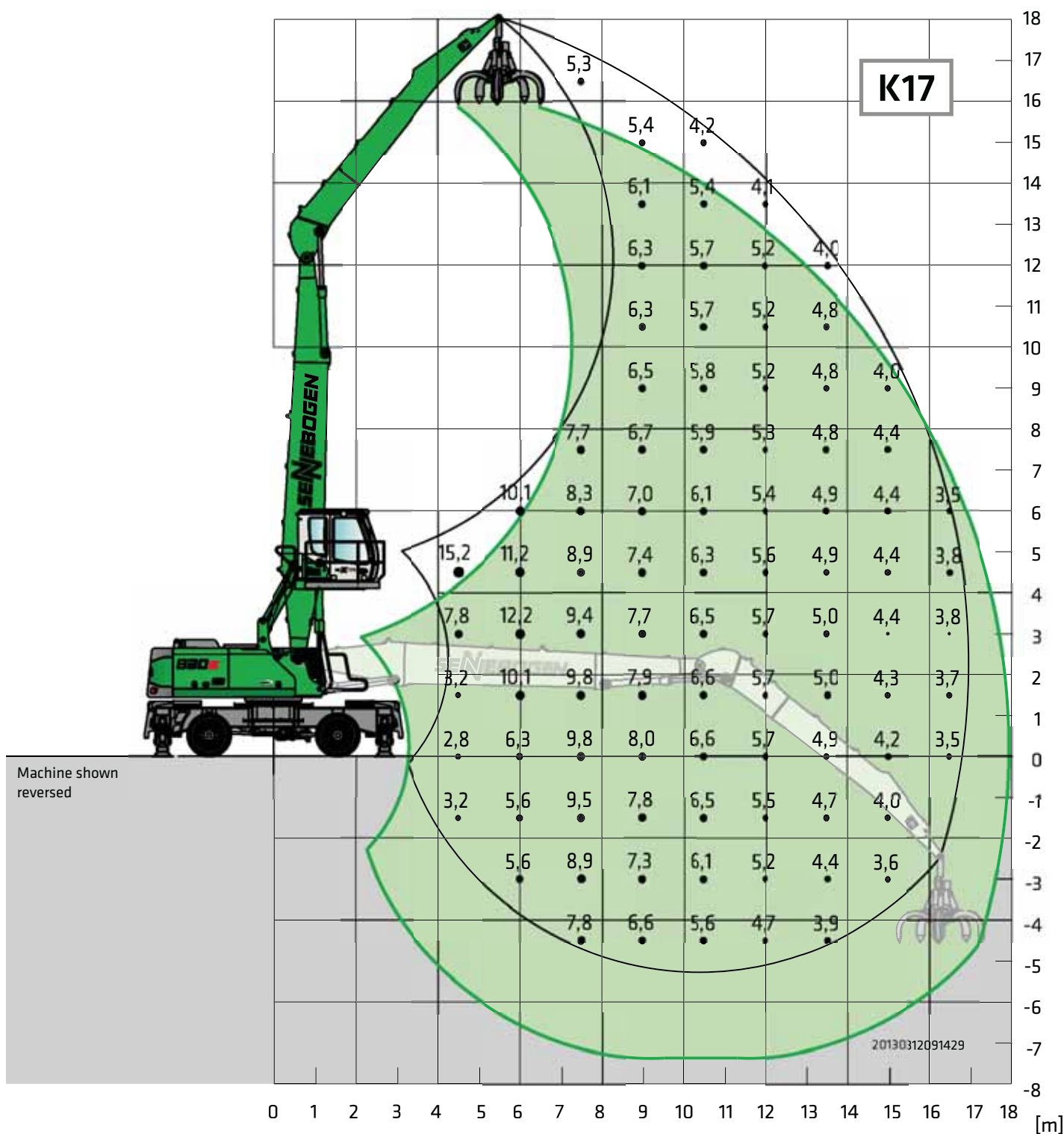
Compact boom **8.5 m**
Grab stick **7.0 m**

Cab **Maxcab E270,**
hydraulically elevating

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grabs, magnets, load hooks, etc. 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 EU standard EN 474 / 5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist and stick cylinders and an overload warning device. Loads rating apply to a machine with deployed 4-point outrigger support and 360° slewing.

830E Load ratings

MHD / MHDS



Undercarriage **MP41**

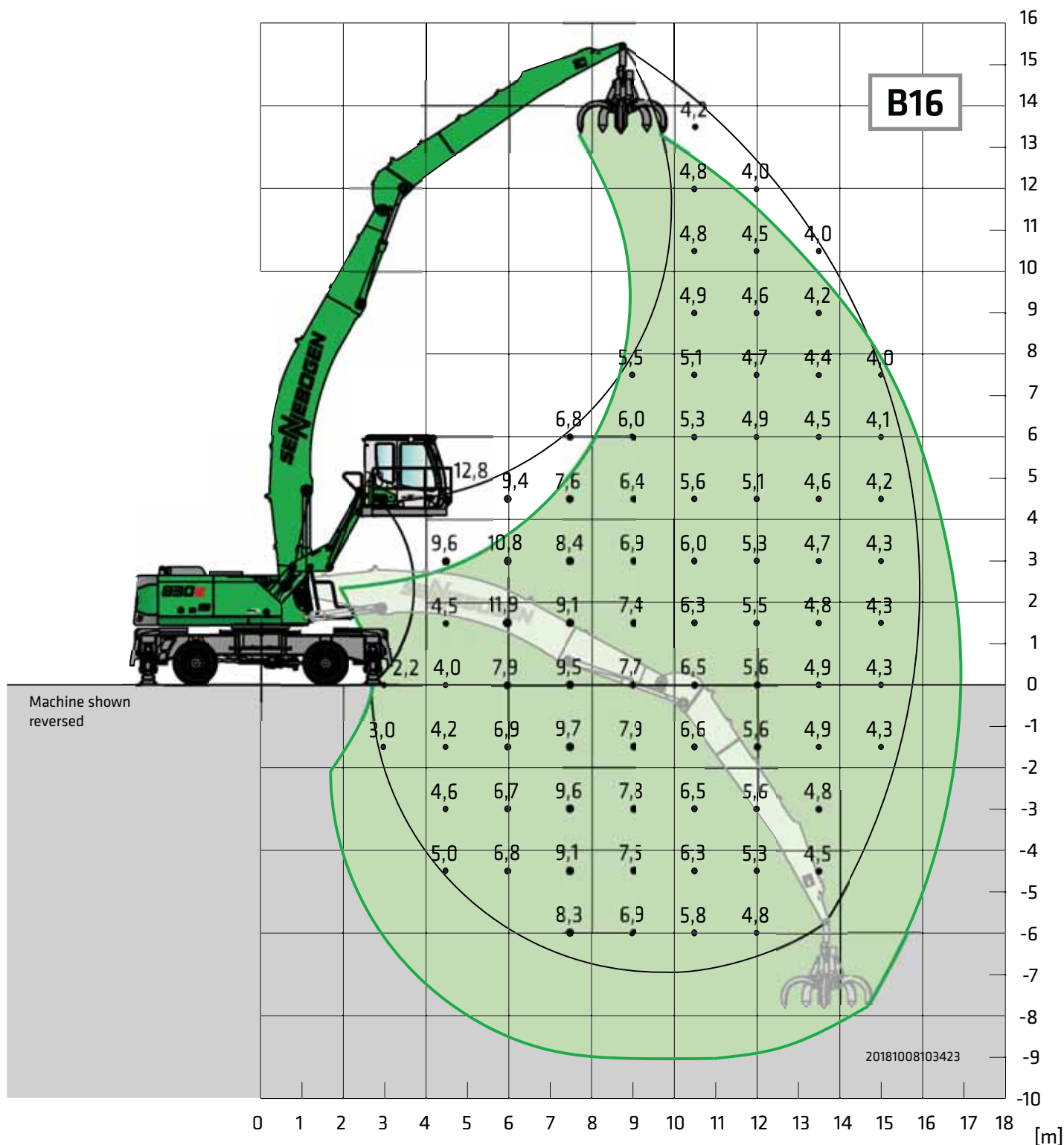
Compact boom **9.8 m**
Grab stick **7.5 m**

Cab **Maxcab E270,
hydraulically elevating**

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B30E Load ratings

MHD / MHDS

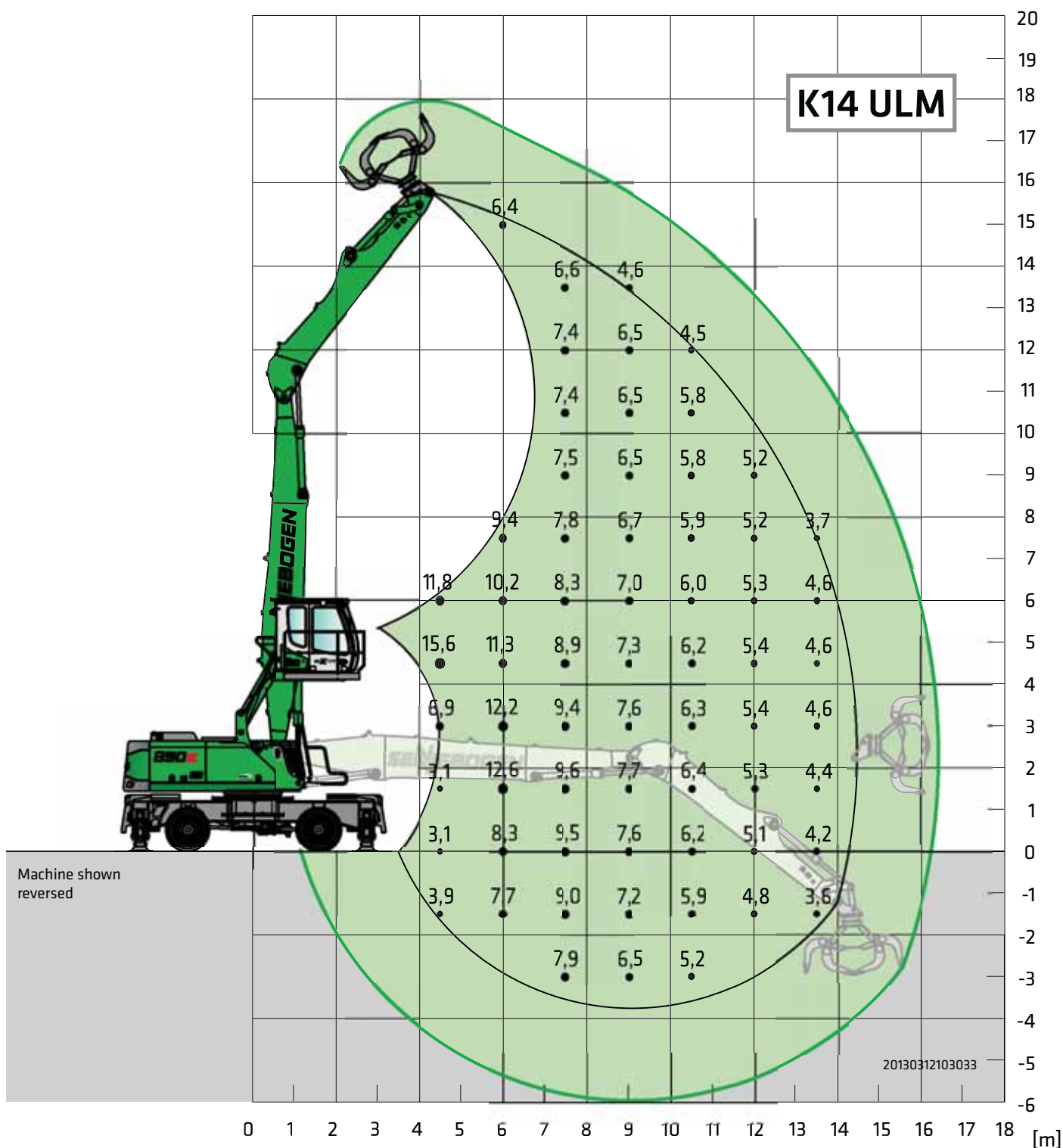


Undercarriage	MP41	Compact boom	9.4 m Banana	Cab	Maxcab E300/260, can be elevated and moved forward hydraulically (option)
		Grab stick	7.0 m		

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grabs, magnets, load hooks, etc. 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 EU standard EN 474 / 5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist and stick cylinders and an overload warning device. Loads rating apply to a machine with deployed 4-point outrigger support and 360° slewing.

830E Load ratings

MHD / MHDS



Undercarriage **MP41**

Compact boom **8.5 m**
Grab stick **6.0 m ULM**

Cab **Maxcab E270,
hydraulically elevating**

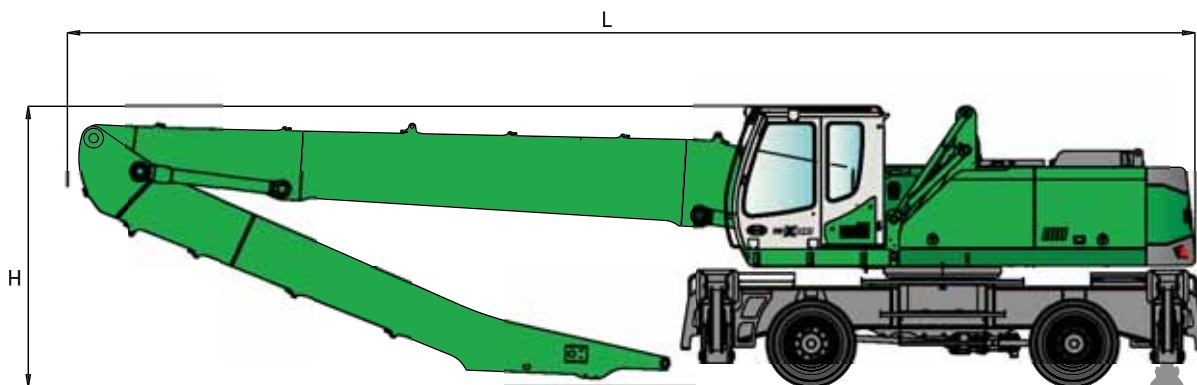
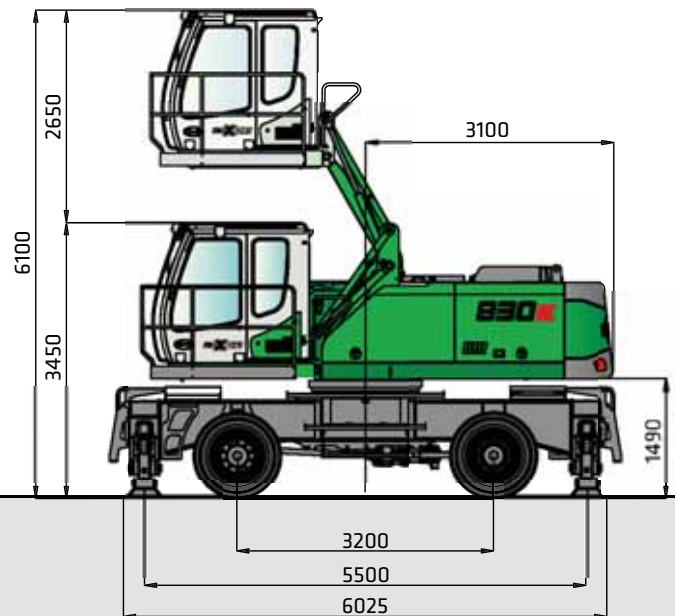
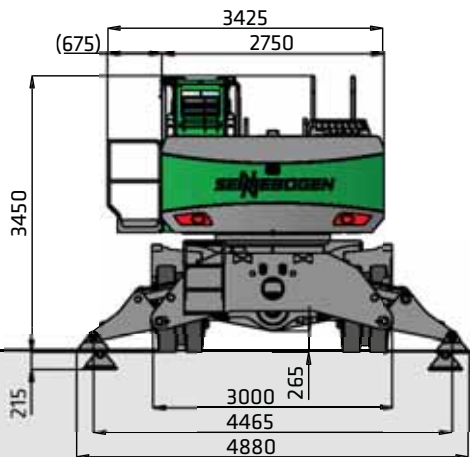
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830E Load ratings

MHD

Transport width 3,000 mm

Solid-rubber tires 12.00-20, 8x



830 MHD with undercarriage type MP41, hydraulically elevating Maxcab type E270, tires 12.00 - 20, 8x, transport width 3,000 mm, working weight with boom K17, 600 l orange peel grab, approx. 40,000 kg

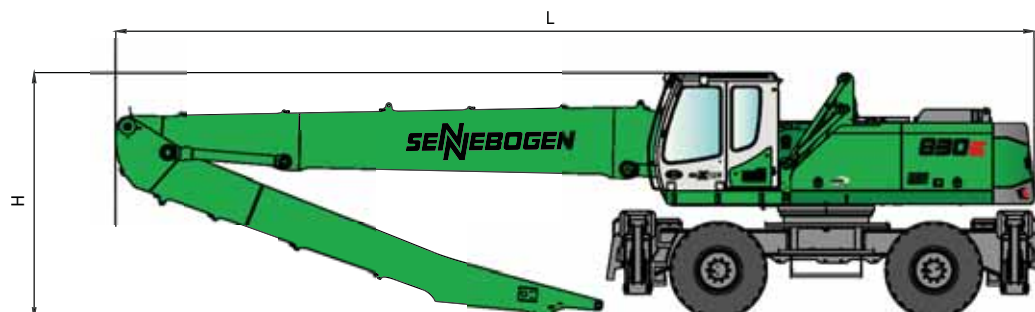
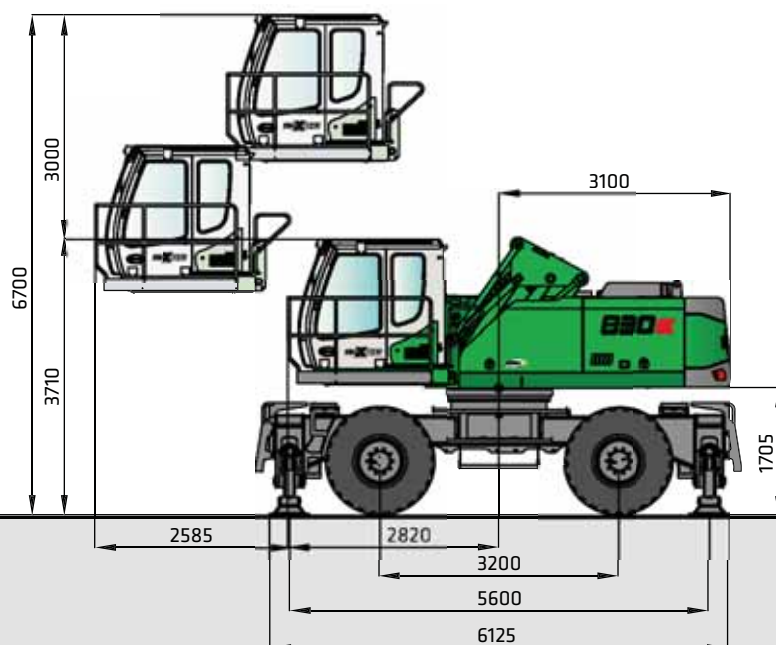
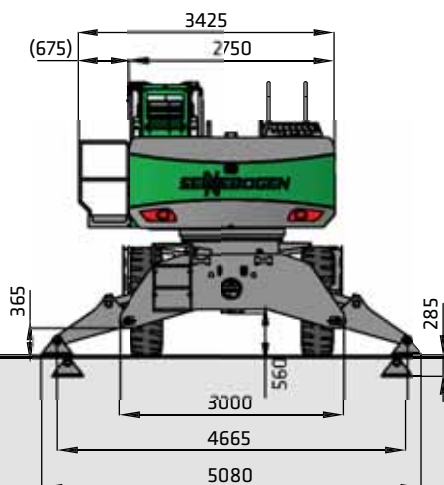
	Load boom	Grab stick	Transport length (L)	Transport height (H)
K15	8.5 m	7.0 m	12.5 m	3.45 m
K17	9.8 m	7.5 m	13.8 m	3.45 m
B16	9.4 m	7.0 m	13.4 m	3.5 m
K14 ULM	8.5 m	6.0 m	12.5 m	3.45 m

830E Load ratings

MHDS

Transport width 3,000 mm

Solid-rubber tires 16.00-25, 8x

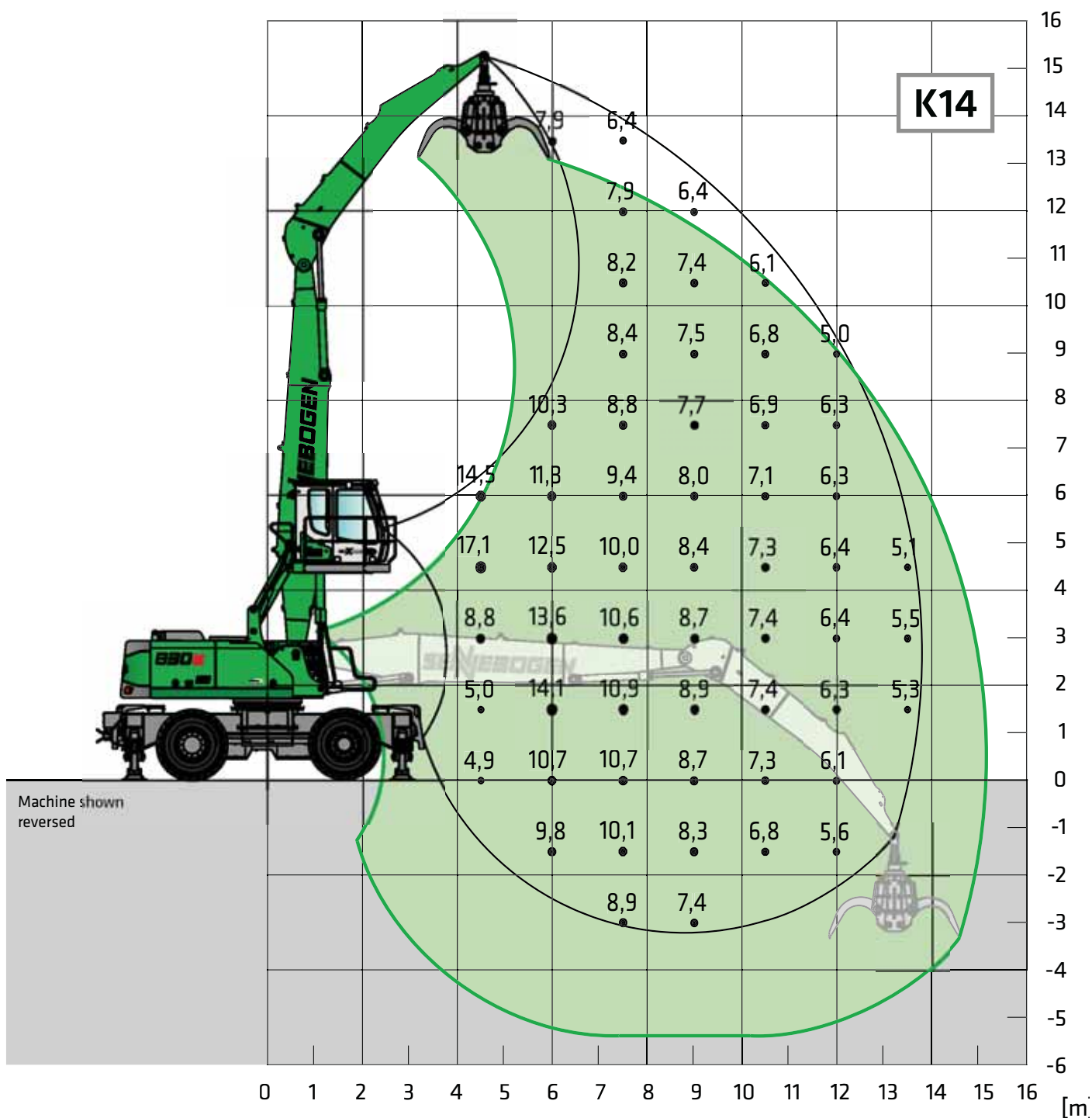


830 MHDS with undercarriage type MP34, Maxcab can be elevated hydraulically, tires 16.00 - 25, 4x, transport width 3000 mm, working weight with boom K17, 600 l orange peel grab, approx. 41,000 kg

	Load boom	Grab stick	Transport length (L)	Transport height (H)
K15	8.5 m	7.0 m	12.5 m	3.7 m
K17	9.8 m	7.5 m	13.8 m	3.7 m
B16	9.4 m	7.0 m	13.4 m	3.8 m
K14 ULM	8.5 m	6.0 m	12.5 m	3.7 m

830E Load ratings

Trailer



Undercarriage MP38

**Compact boom
Grab stick**

**8.2 m
5.8 m**

Cab

**Maxcab E270,
hydraulically elevating**

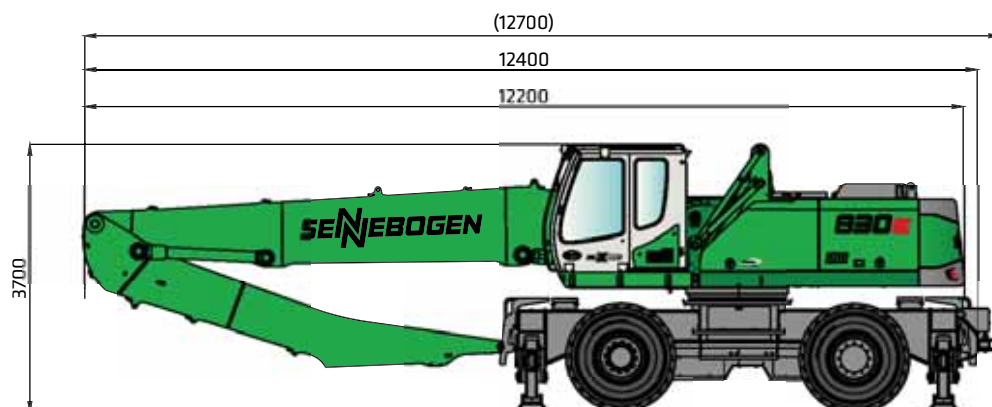
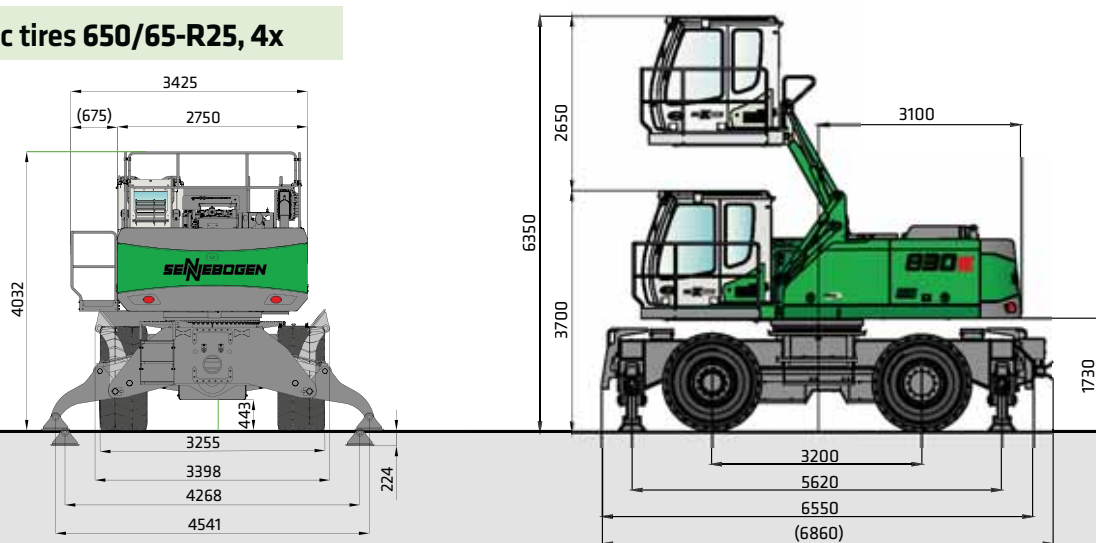
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830E

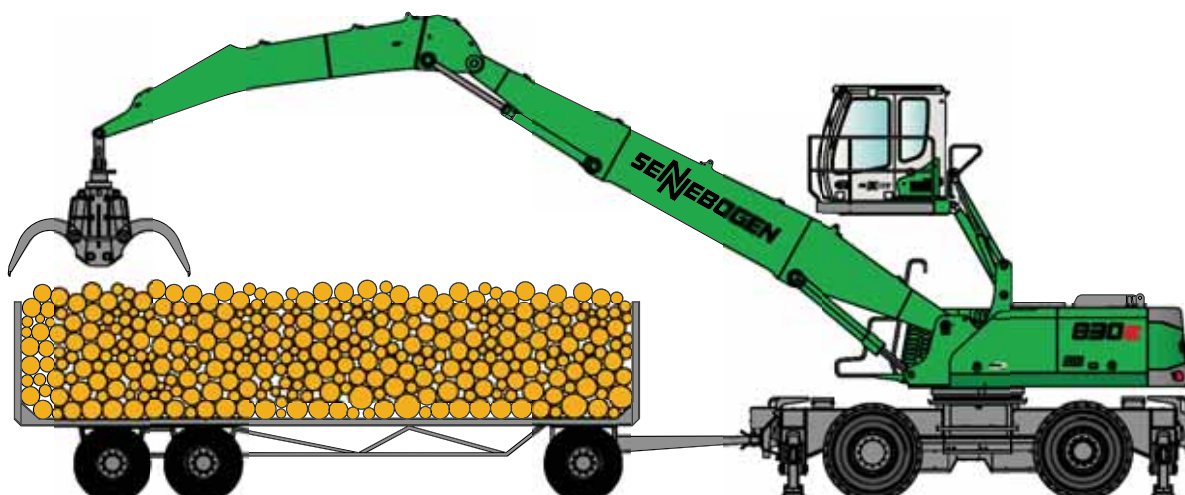
Trailer

Transport width 3,400 mm, extremely high pulling force for pulling heavy trailers

Pneumatic tires 650/65-R25, 4x



830 trailer, operating weight with boom K14, 1.5 sqm log grab, approx. 43,500 kg



830E

VARIOTOOL

From a high-performance handling machine to a multi-functional high-performance tool carrier

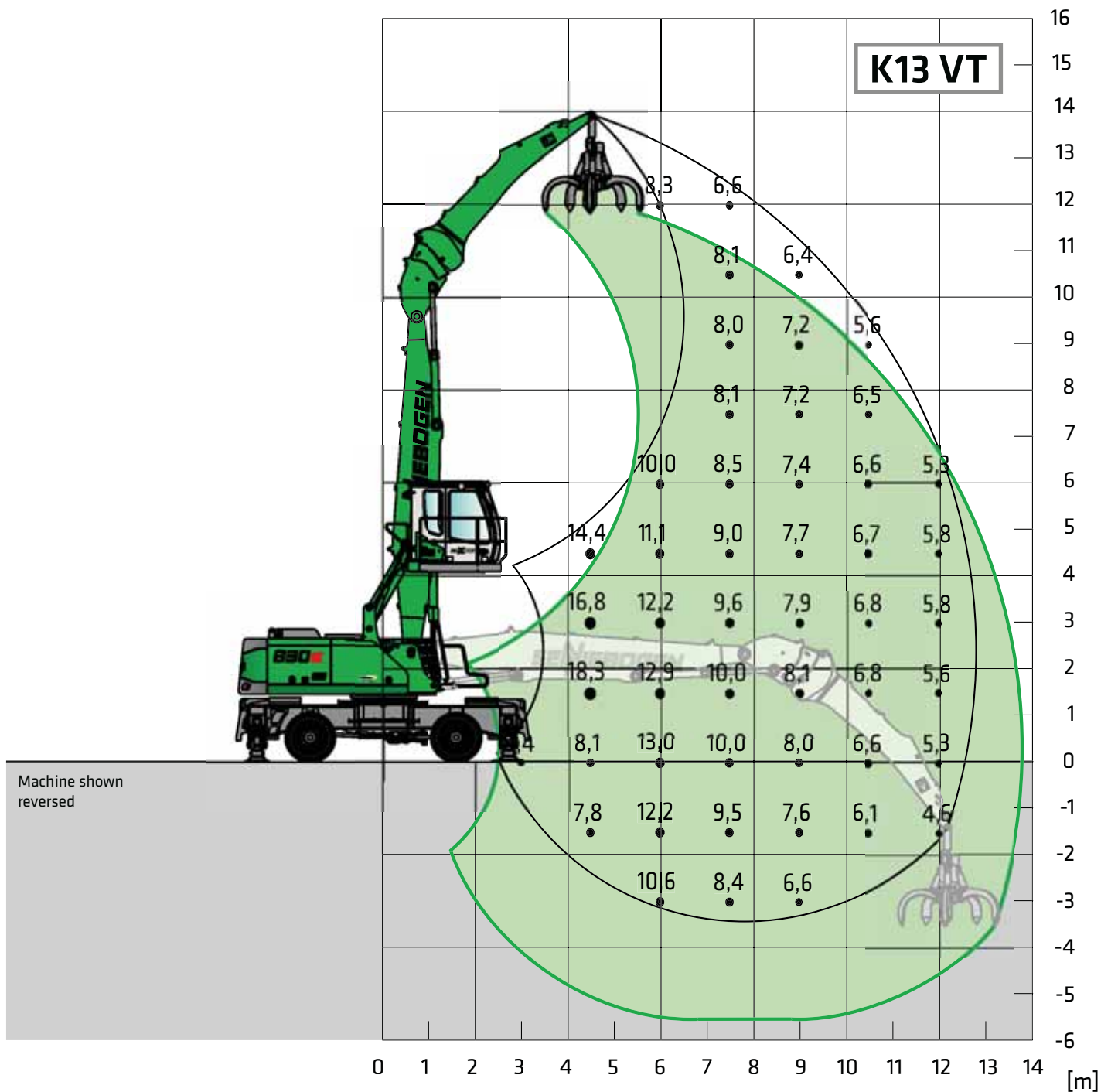


- Stick / shear can be supported without support frame
- Automatic valve protection in coupled and decoupled state
- Effective change of the attachment: simple – fast – reliable
- Full power with:
 - Orange peel grab
 - Shear
 - Magnet
 - Sorting grab
- Fast and reliable changing of the attachment in seconds from the driver seat

- One basic system for different attachments
- Robust and intelligently simple
- Locking and changing the attachments without exiting
- Maximum versatility
- The material handling machine as a tool carrier
- The "VarioTool" quick changing system for material handling changes attachments fast and reliably

830E Load ratings

VARIOTOOL



Undercarriage **MP41**

Compact boom
Grab stick

7.2 m
5.7 m

Cab

Maxcab E270,
hydraulically elevating

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grabs, magnets, load hooks, etc. 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 EU standard EN 474 / 5, hydraulic material handling machines used for hoisting must be equipped with pipe fracture safety devices on the hoist and stick cylinders and an overload warning device. Loads rating apply to a machine with deployed 4-point outrigger support and 360° slewing.

B30E Recommended grapples

Orange peel grab SGM (4 shells)



Design / size	Grapple capacity	Weight ¹		Maximum piled density
		Shell form		
		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	

Orange peel grab SGM (5 shells)



Design / size	Grapple capacity	Weight ¹		Maximum 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	
1400.40	1400	2250	2500	

SGZ clamshell grab



Design / size	Grapple capacity	Weight ¹	Maximum piled density
SGZ	l	kg	t / m ³
1000.40	1000	1270	2.0
1200.40	1200	1360	
1400.40	1400	1420	
1600.40	1600	1530	2.6
1500.50	1500	1950	
2000.50	2000	2200	2.0
2500.50	2500	2300	
3000.50	3000	2490	1.6
4000.50	4000	2880	
3000.50 L	3000	2140	1.0
3500.50 L	3500	2260	
4000.50 L	4000	2480	0.8
4500.50 L	4500	2600	
1500.50 HD	1500	2240	3.5
2000.50 HD	2000	2535	

Magnetic plates



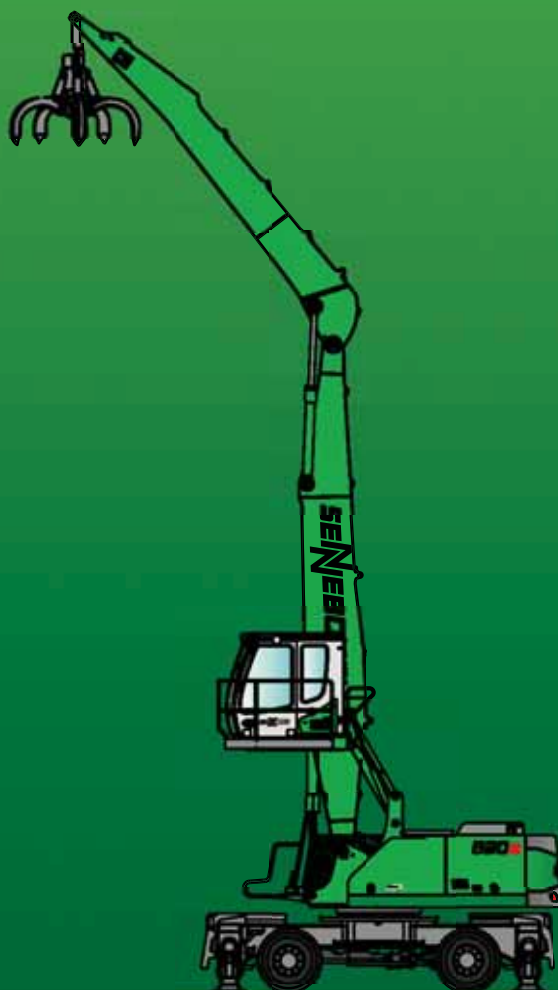
Type series / model	Power	Weight	Breakaway force	Load-bearing capacity in kg
WOKO	kW	kg	kN	Slab (safety factor 2)
S-RSL 13	10.5	1300	260	13000
S-RSL 15	12.2	1950	360	18000
S-RLB 12.5	8.8	1310	280	14000
S-RLB 13.5	10.0	1700	300	15000
S-RLB 15	11.7	2400	380	19000
Recommended magnetic generator: 15 kW/20 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 for 1250 l capacity and higher

830E

M / MHD / MHD S / TRAILER



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 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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