SENNEBOGEN

164 kW

38 - 43.5 t

14 - 17 m

maXCAB

830 E

Material handling machine

Tier IV f emission standards

830E 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 Performance at the highest level
Durable mechanical systems – stressed parts optimized
High speeds – high load capacities

3 Maximum ease of use
Maxcab comfort cab – work in comfort
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 error diagnostics – central measuring points
Simple maintenance – clear labelling

6 Consultation and support
3 production locations – 2 subsidiaries
120 sales partners – more than 300 service stations


830E

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 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 (3)
- 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

High-capacity cooling

- Constant, reliable performance thanks to large-dimensioned and robust fans and coolers (4)
- Water and oil coolers with top-notch efficiency thanks to axial-piston pump and motor control and on-demand thermostatic control
- Charge-air cooler with mechanical drive

Maximum safety

- No-slip work surfaces
- Peripheral railing (option) (1)
- 2 cameras to the right and rear
- Platform with railing next to cab sliding door (2)

Smart cooler technology

- Comes standard: 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 (6)
- Fuel savings through optimized fan operation

Powerful hydraulic system

- Strong pumps with power reserves
- Top efficiency thanks to large-dimensioned hydraulic valves and lines
- Extra-long change intervals of 4000 operating hours through initial fill-up with special oil with extended service life when using SENNEBOGEN HydroClean* (7)

* Optional, see page 7

830E 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

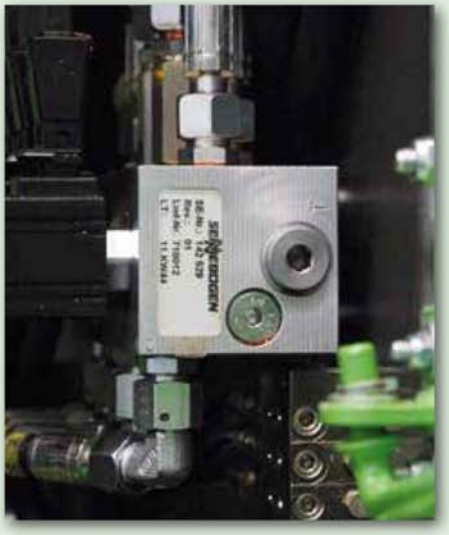
SENCON

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

830E 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 oil service life

Central reading points

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

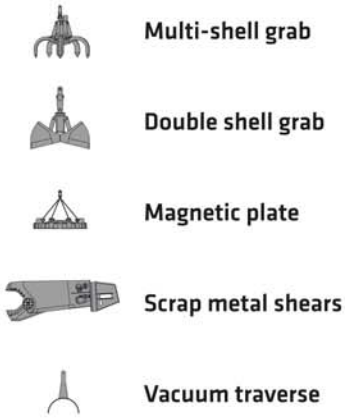
Clear labeling

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

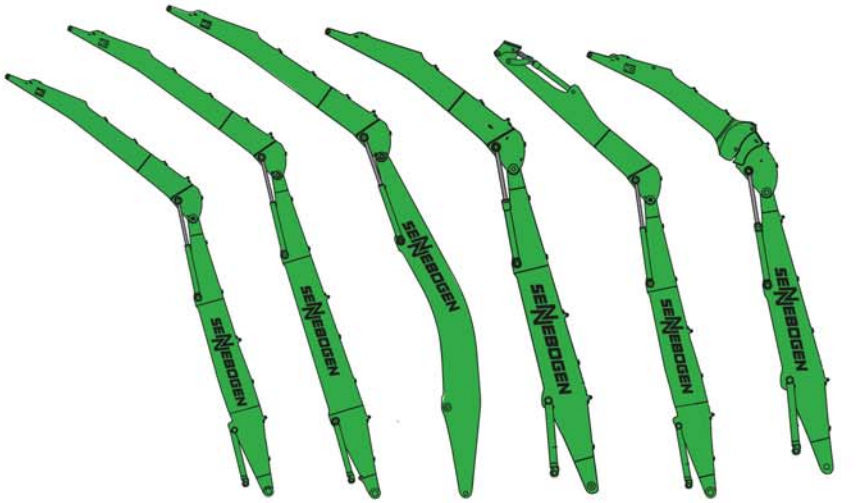
* Optional

830E Modular design – versatile solutions

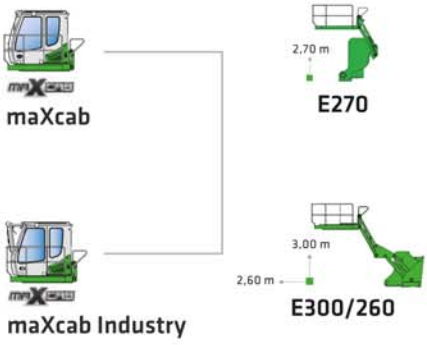
Attachments



Equipment options (others available upon request)



Cab elevation



Uppercarriage

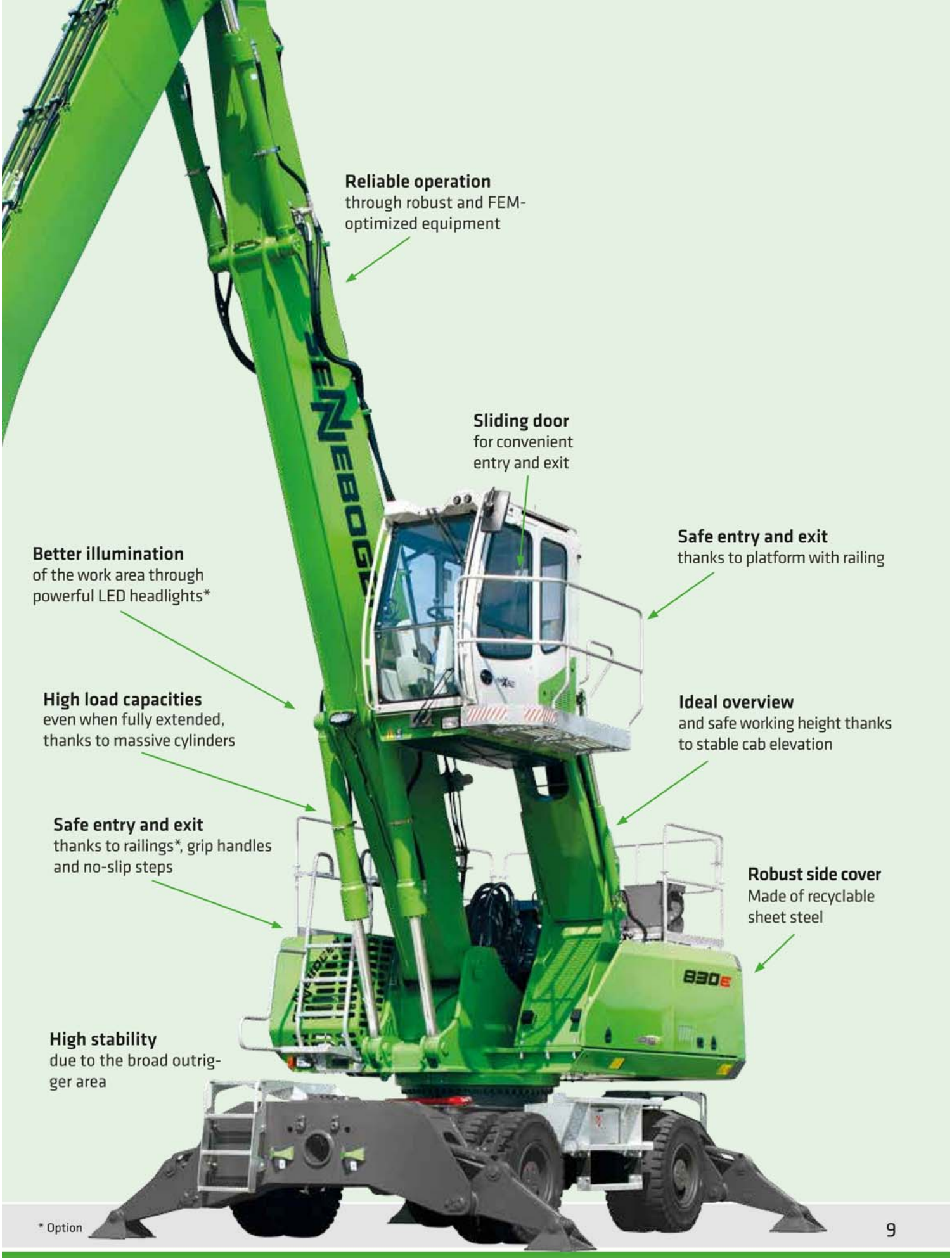
- Diesel-hydraulic drive
- Electrohydraulic drive

Options

- Engine line drum
- Transformer

Undercarriage variants

* Additional information on our crawler undercarriages can be found in the 830 R E-Series brochure


Reliable operation
through robust and FEM-optimized equipment
Sliding door
for convenient entry and exit
Better illumination
of the work area through powerful LED headlights*
Safe entry and exit
thanks to platform with railing
High load capacities
even when fully extended, thanks to massive cylinders
Ideal overview
and safe working height thanks to stable cab elevation
Safe entry and exit
thanks to railings*, grip handles and no-slip steps
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	**164 kW/223 hp at 2000 rpm**
Model	**Cummins QSB 6.7 – C220 TIER III or IVf** 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	**500 l**
DEF tank	**30 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 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 raceway
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 ■ Peripheral uppercarriage railing for additional safety ■ LED lighting package ■ Fire extinguisher ■ Maritime climate varnish for corrosion protection ■ Electric heater for hydraulic tank for temperatures below -20 °C ■ Low-temperature package for use at temperatures below -20 °C ■ Hydraulically driven magnetic generator 15 kW/20 kW

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
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 slant-axis hydraulic motor, integrated brake valves
Parking brake	Spring-loaded multi-disk brake
Slewing ring	Strong ball race slewing ring, sealed
Slewing speed	0-8 rpm, variable

830E Technical data, equipment

CAB maXCAB

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	■ Cab E300/260 can be elevated 300 cm and moved forward 260 mm hydraulically ■ Rigid cab height elevation 1 m (MHD, MHDS, trailer 1.50 m) ■ Joystick steering ■ 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, additional safety ■ Armored glass roof window, additional safety ■ Safety side window ■ Floor window for a better view ■ Rolling shade for roof window and windshield ■ Protective roof grating ■ FOPS protective roof grating ■ Protective front grating ■ Radio and CD player with speakers ■ Enlarged industrial cab with undivided armored glass windshield

ATTACHMENTS

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 grapple ■ Kinematics position II for greater working depth ■ Maritime climate varnishing ■ Maritime climate coating of all cylinders, 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 claw support, 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**, 8 **MHD:** solid-rubber tires **12.00-20**, 8 **MHDS:** solid-rubber tires **16.00-25**, 8 **Trailer:** pneumatic tires **650/65-R25**, 4
Speed	0 - 7 km/h stage I 0 - 20 km/h stage II Trailer 25 km/h
Options	■ **MHD:** pneumatic tires **12.00-20**, 8 ■ **MHDS:** pneumatic tires **20.50-R25**, 4 ■ Additional pushing blade for 4-point support (front or rear) ■ Individual outrigger actuation ■ Protection for travel drive/towing pintle

ELECTRIC DRIVE eGREEN

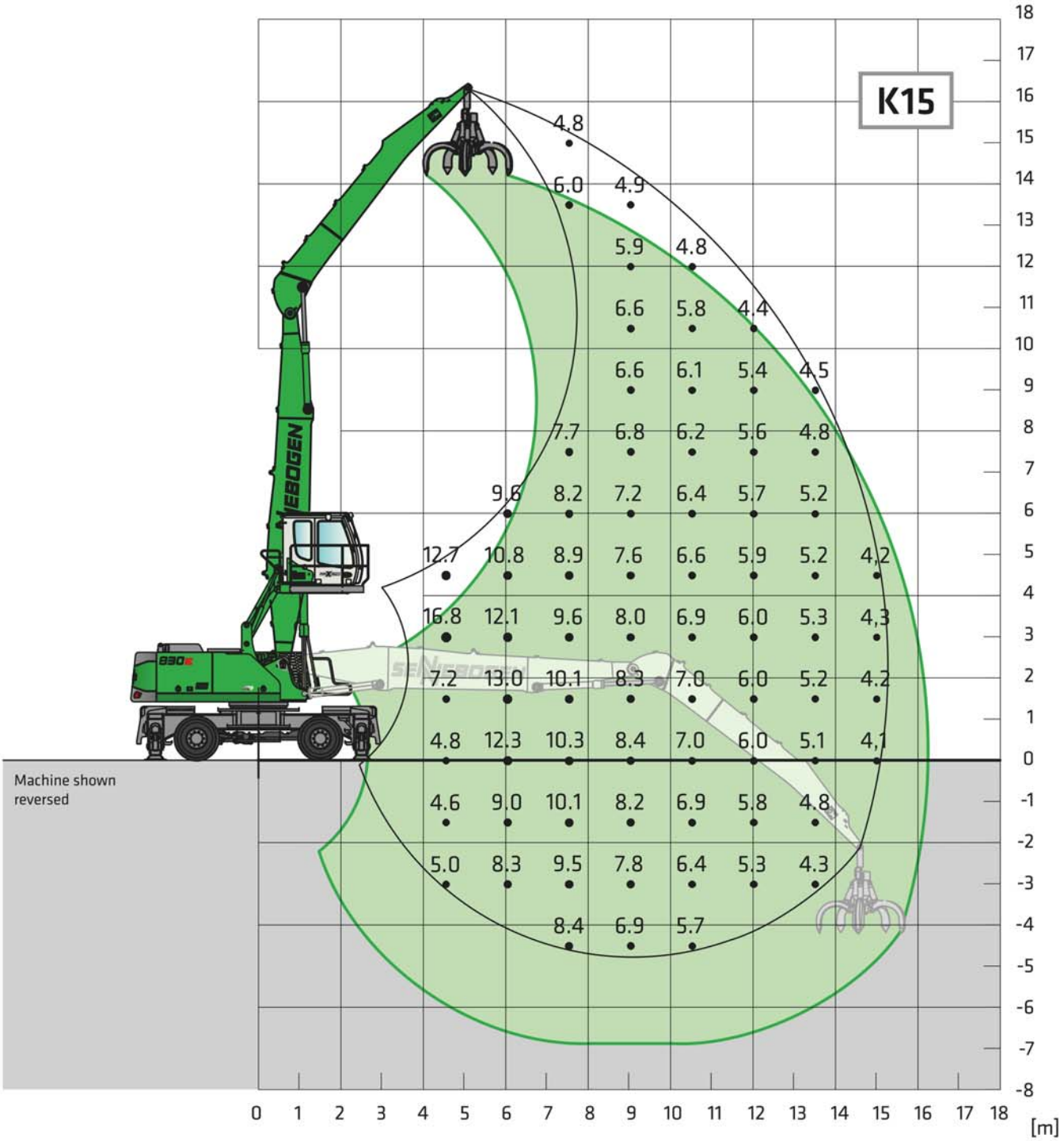
Option	■ Power: **132 kW / 400 V / 50 Hz** Total connected load 270 kVA, customer-provided fusing 400 A at 400 V - motor start-up via star-delta circuit ■ Advantages: lowest operating costs, quiet and virtually vibration-free work, long service life of hydraulic components

OPERATING WEIGHT

Mass	**830 M** with MP30E, operating equipment K17 and grapple 600 l **approx. 38,500 kg** **830 MHD** with MP31E, operating equipment K17 and grapple 600 l **approx. 40,000 kg**
Notice	The operating weight varies depending on the model.

Subject to change.

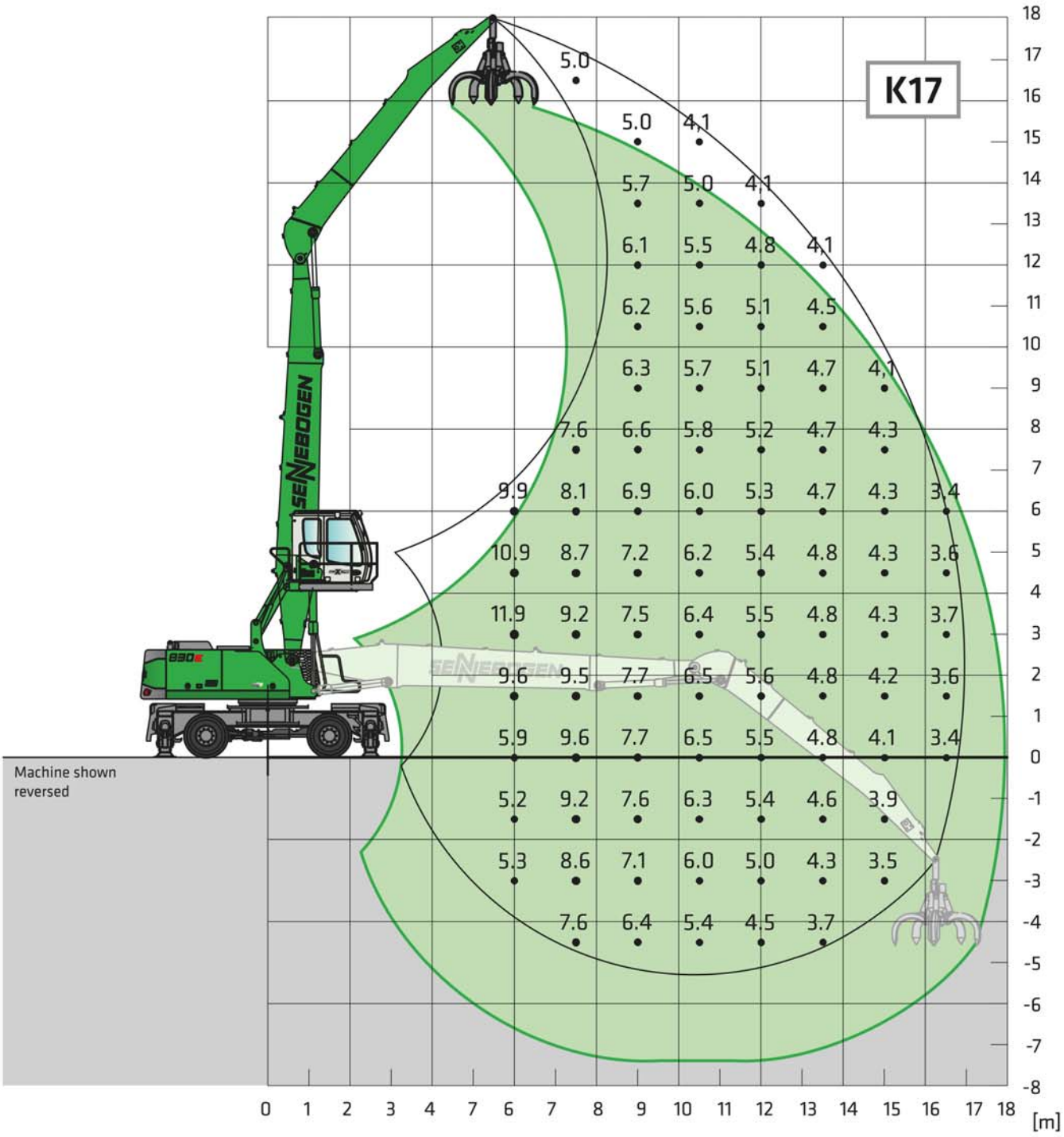
830E Load ratings



Undercarriage	**MP30**	**Compact boom** **Dipper stick**	**8.5 m** **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 a solid, level substrate. Attachments, such as grapple, magnet, load hook, 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 the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

830E Load ratings



Undercarriage	**MP30**	**Compact boom** **Dipper stick**	**9.8 m** **7.5 m**	**Cab**	**Maxcab E270, can be elevated and moved forward hydraulically**

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, 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 the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
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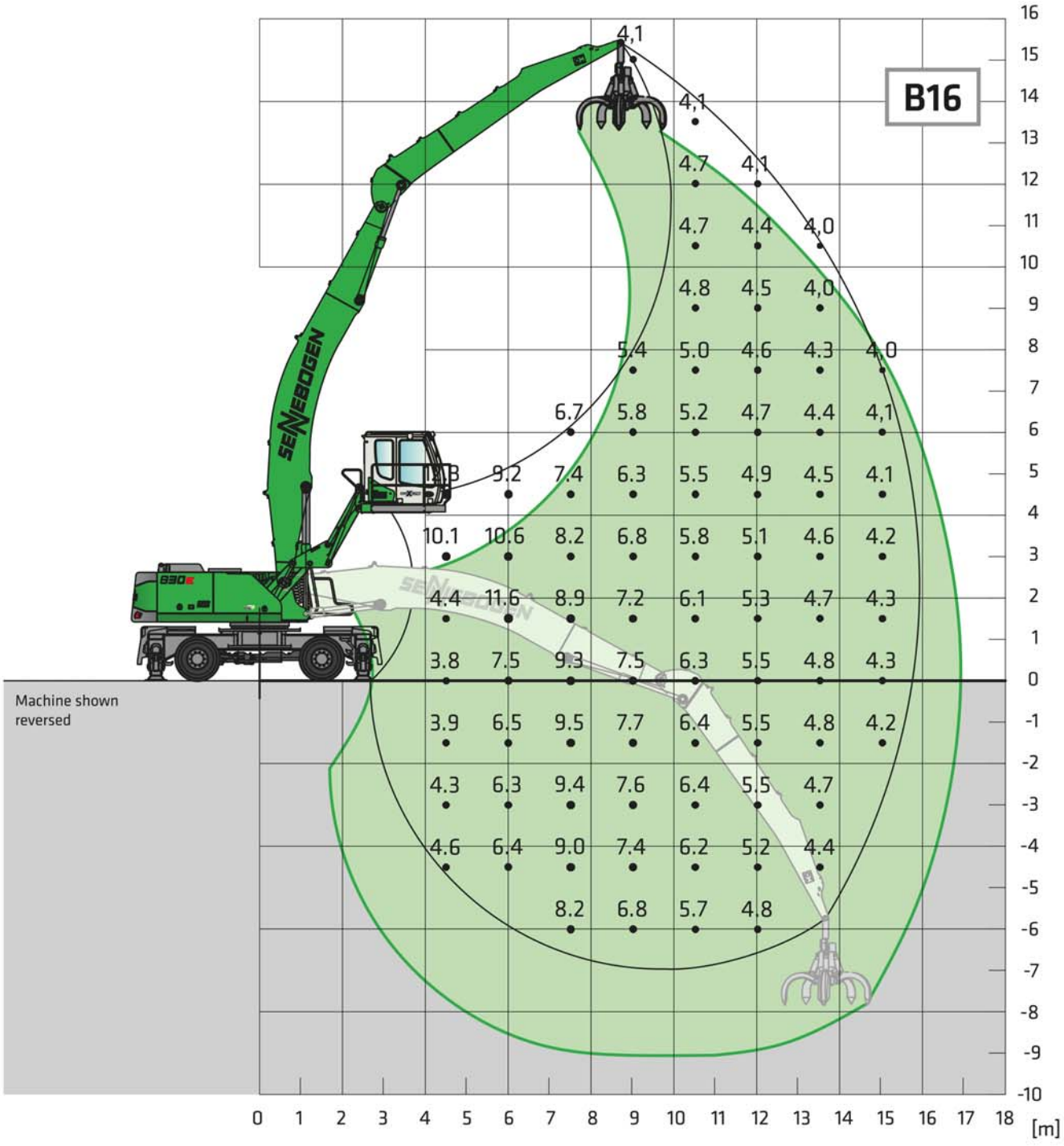
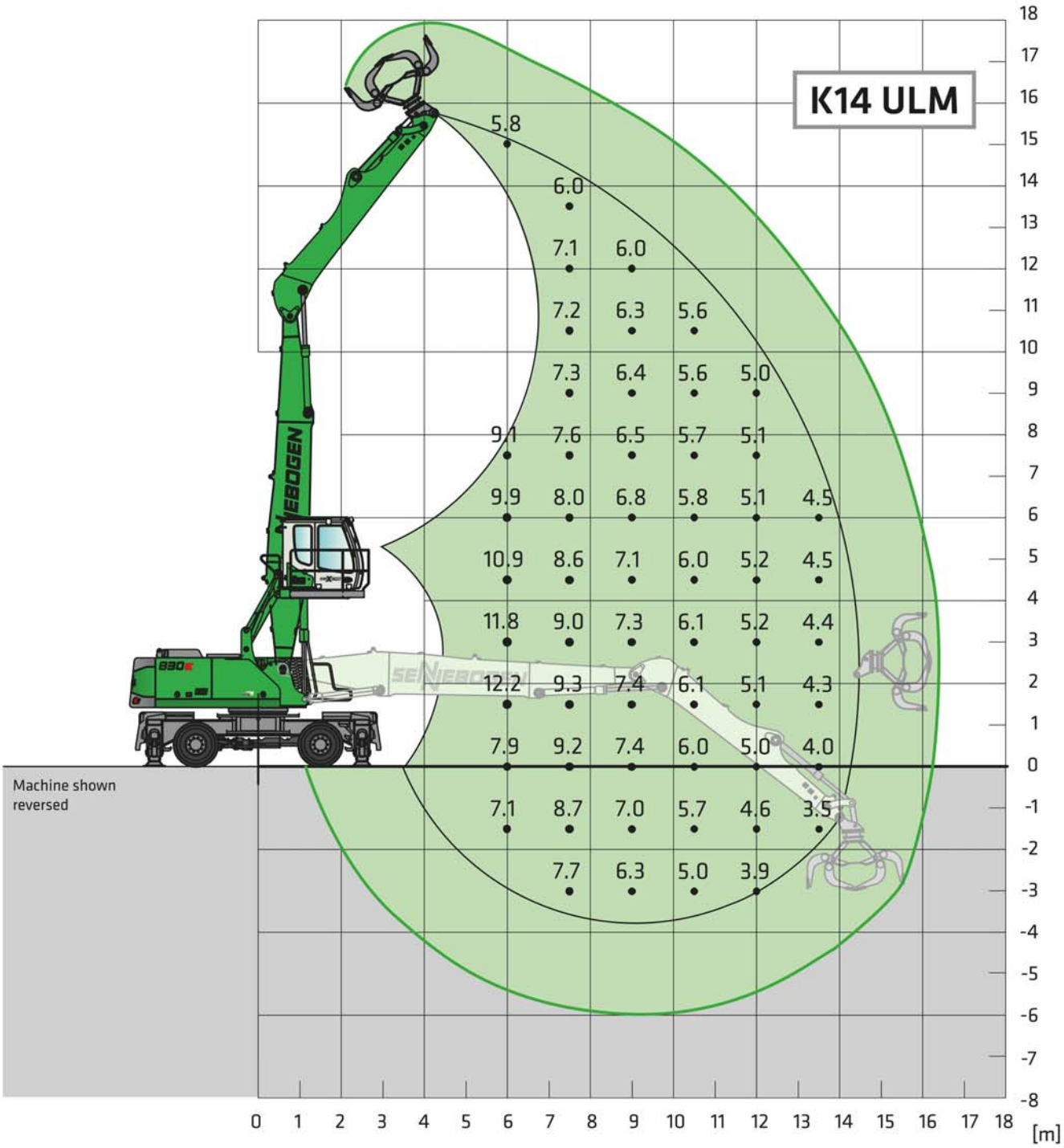
830E Load ratings



Undercarriage	**MP30**	**Compact boom**	**9.4 m Banana**	**Cab**	**Maxcab E300/260, can be elevated and moved forward hydraulically (option)**
		Dipper stick	**7.0 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, 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 the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

830E Load ratings

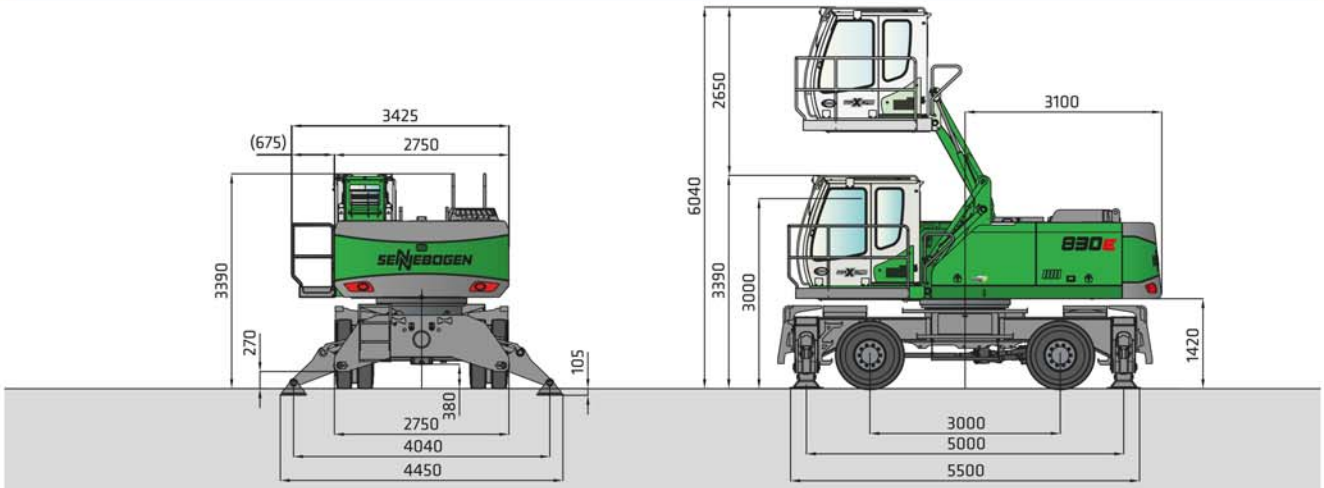


Undercarriage	**MP30**	**Compact boom** **Dipperstick**	**8.5 m** **6.0 m ULM**	**Cab**	**Maxcab E270, hydraulically elevating**

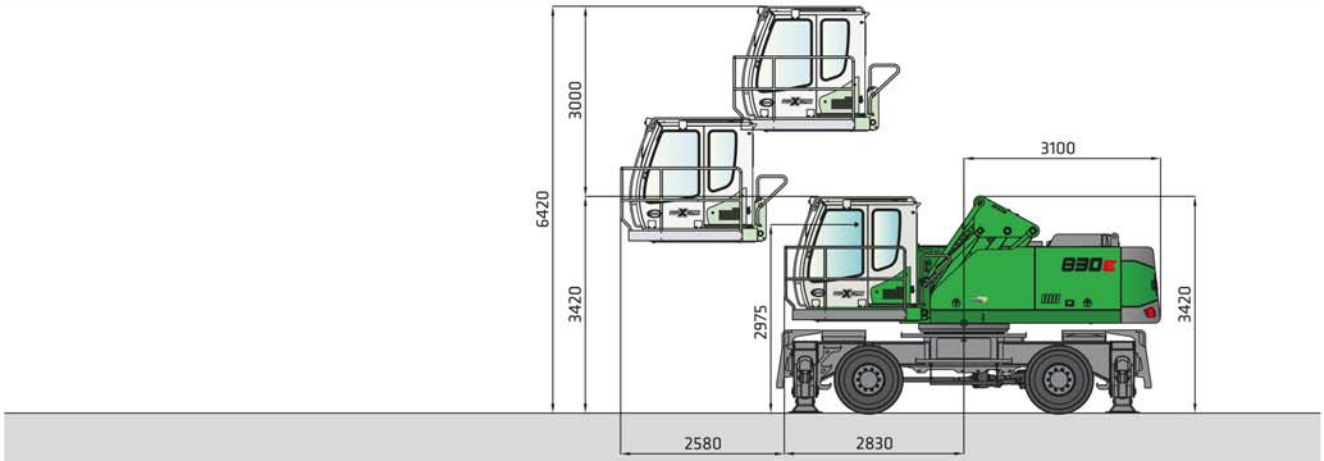
All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, etc. are part of the specified load ratings. The specified values are 75 % of the static tipping load or 87 % of the hydraulic lifting force in accordance with ISO 10567. In accordance with the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

830E Dimensions

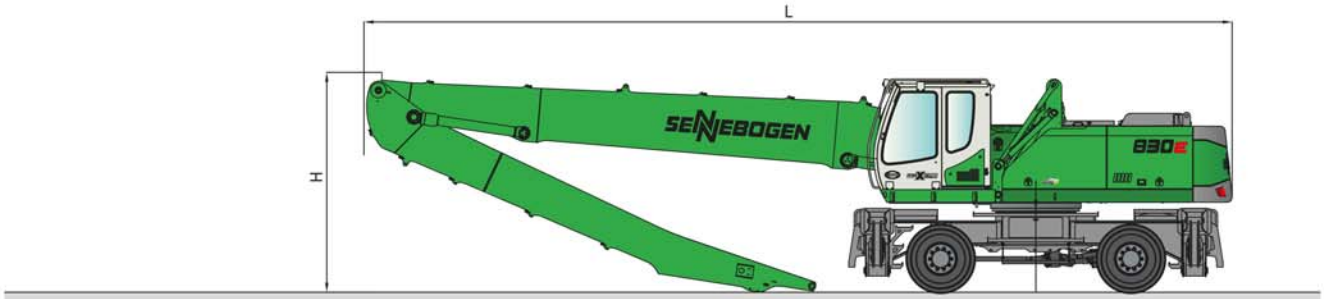
Transport width 2750 mm **Solid-rubber tires 12.00-20, 8**



830 M with undercarriage type MP30E (series) and hydraulically elevating cab type E270



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

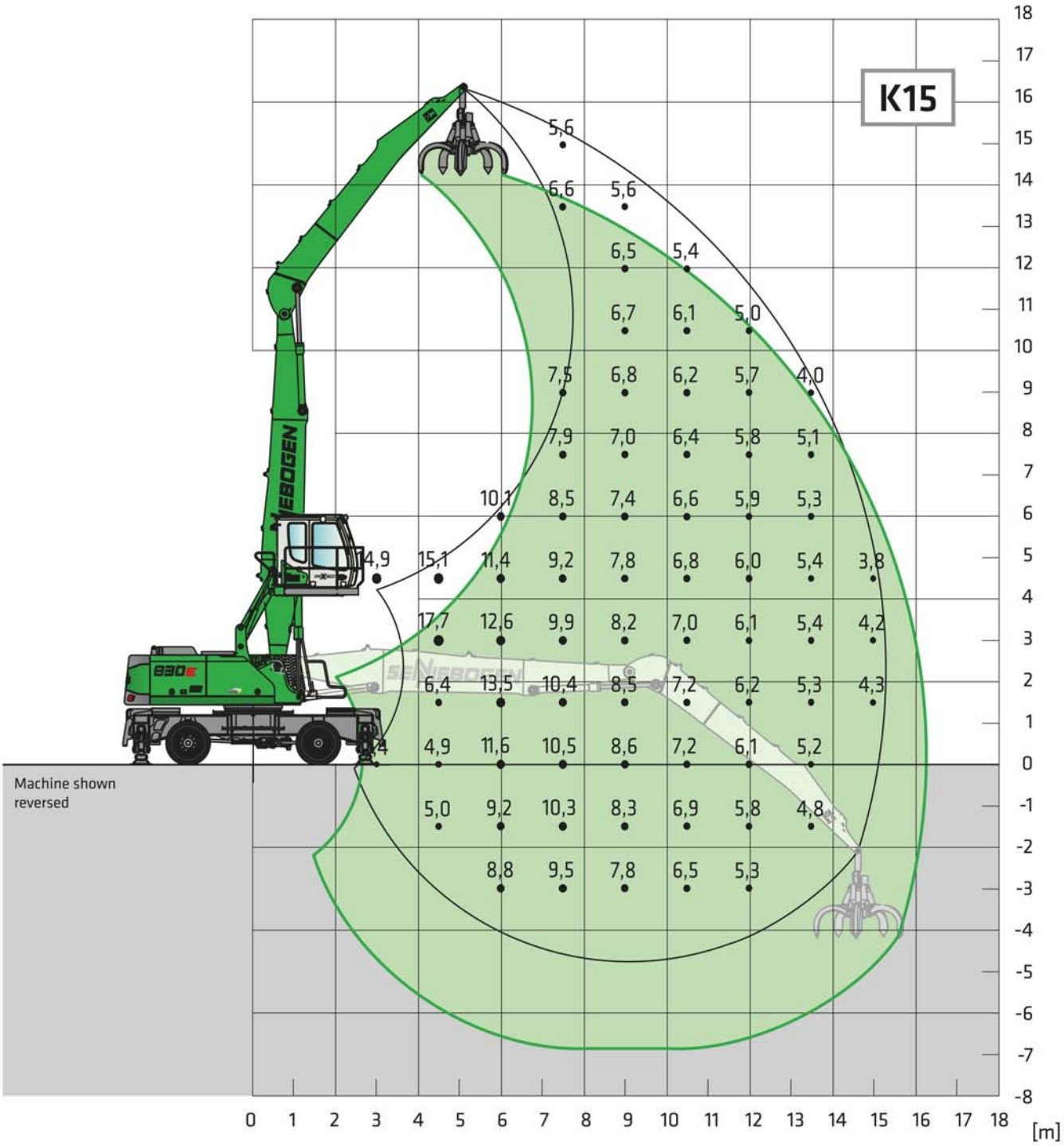


830 M with undercarriage type MP30E

	Load boom	Grapple 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

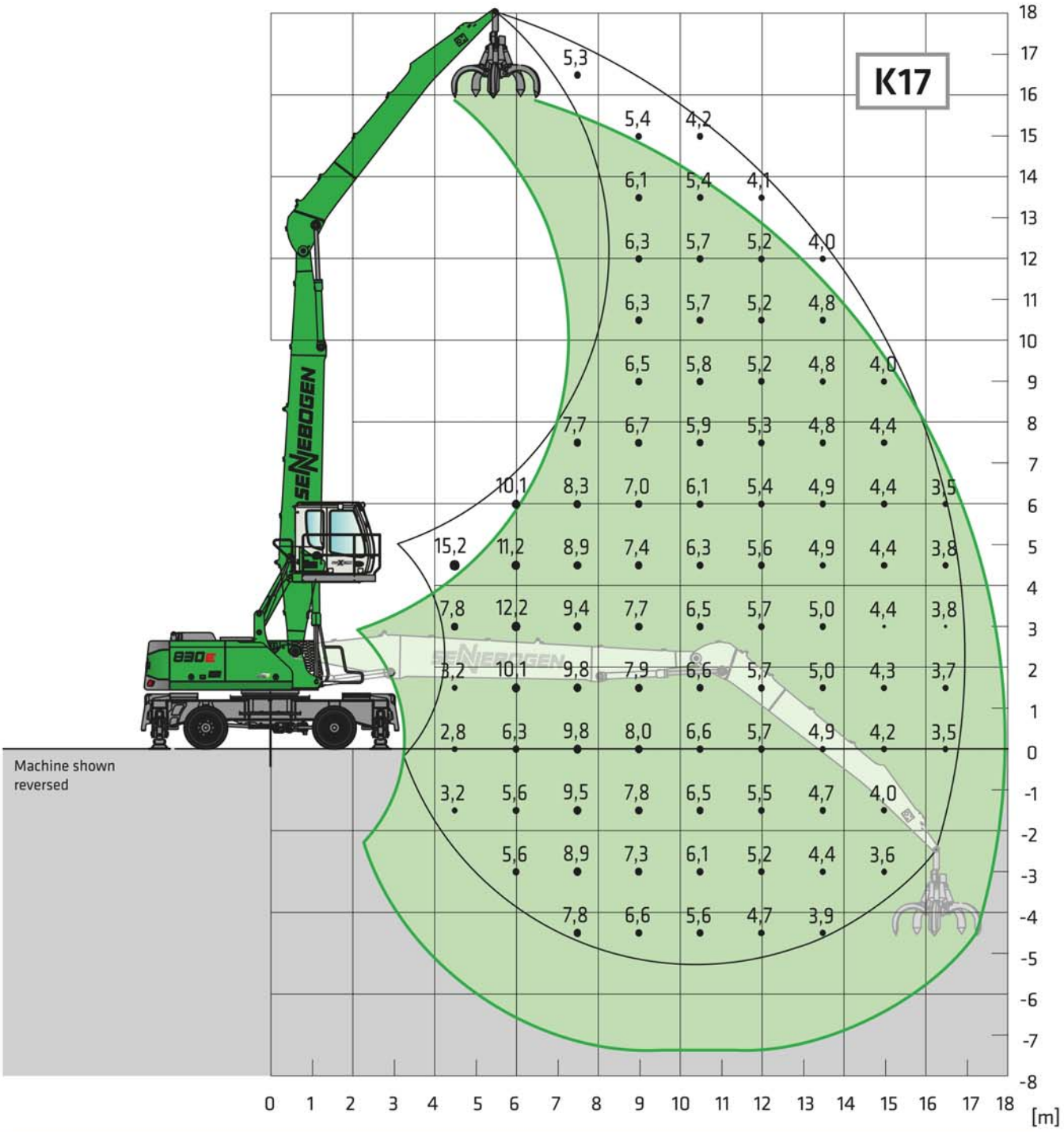


Undercarriage	**MP31**	**Compact boom**	**8.5 m**	**Cab**	**Maxcab E270, hydraulically elevating**
		Dipper stick	**7.0 m**		

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, 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 the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

830E Load ratings

MHD / MHDS

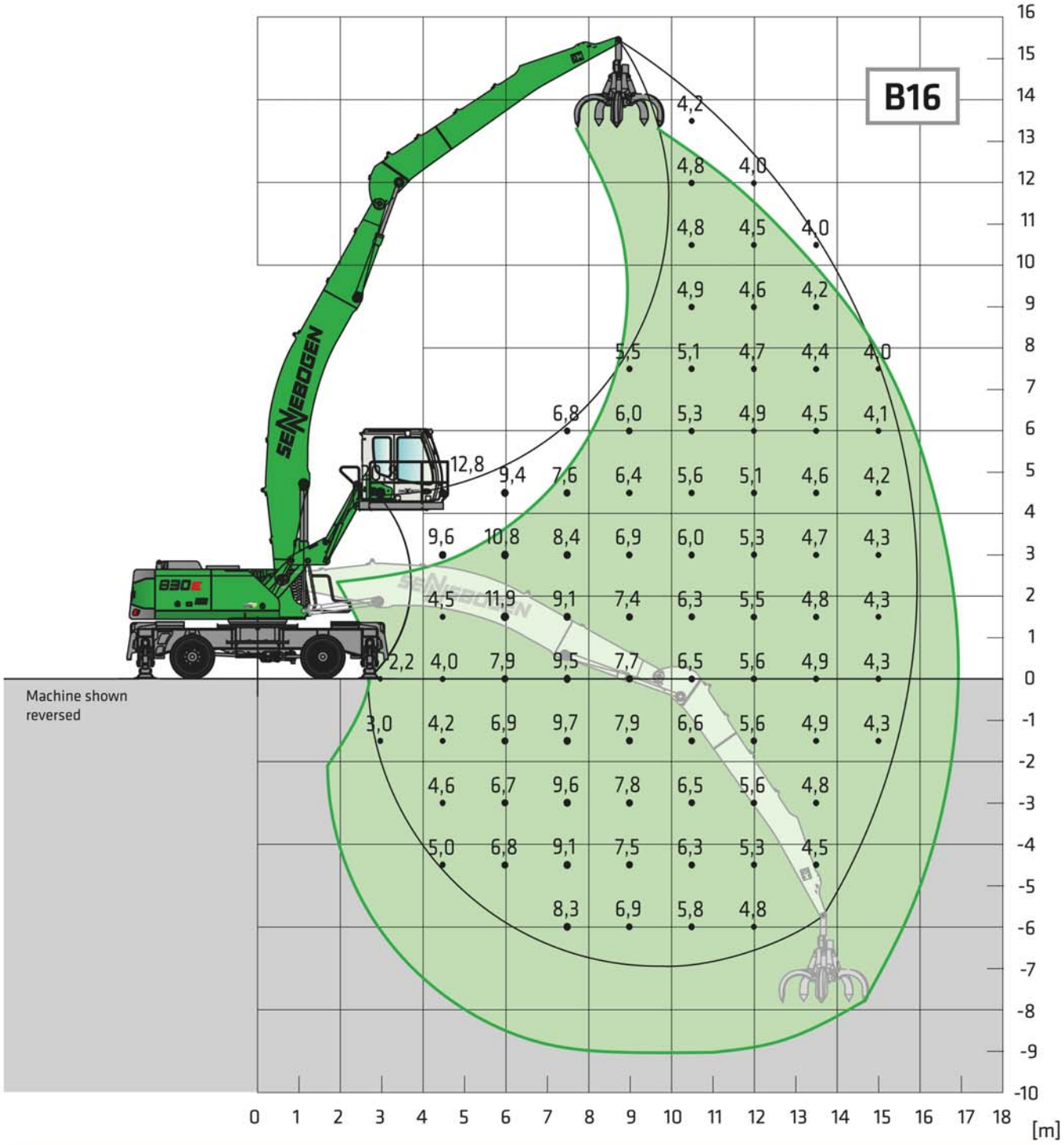


Undercarriage	**MP31**	**Compact boom**	**9.8 m**	**Cab**	**Maxcab E270, hydraulically elevating**
		Dipper stick	**7.5 m**		

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, 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 the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

830E Load ratings

MHD / MHDS

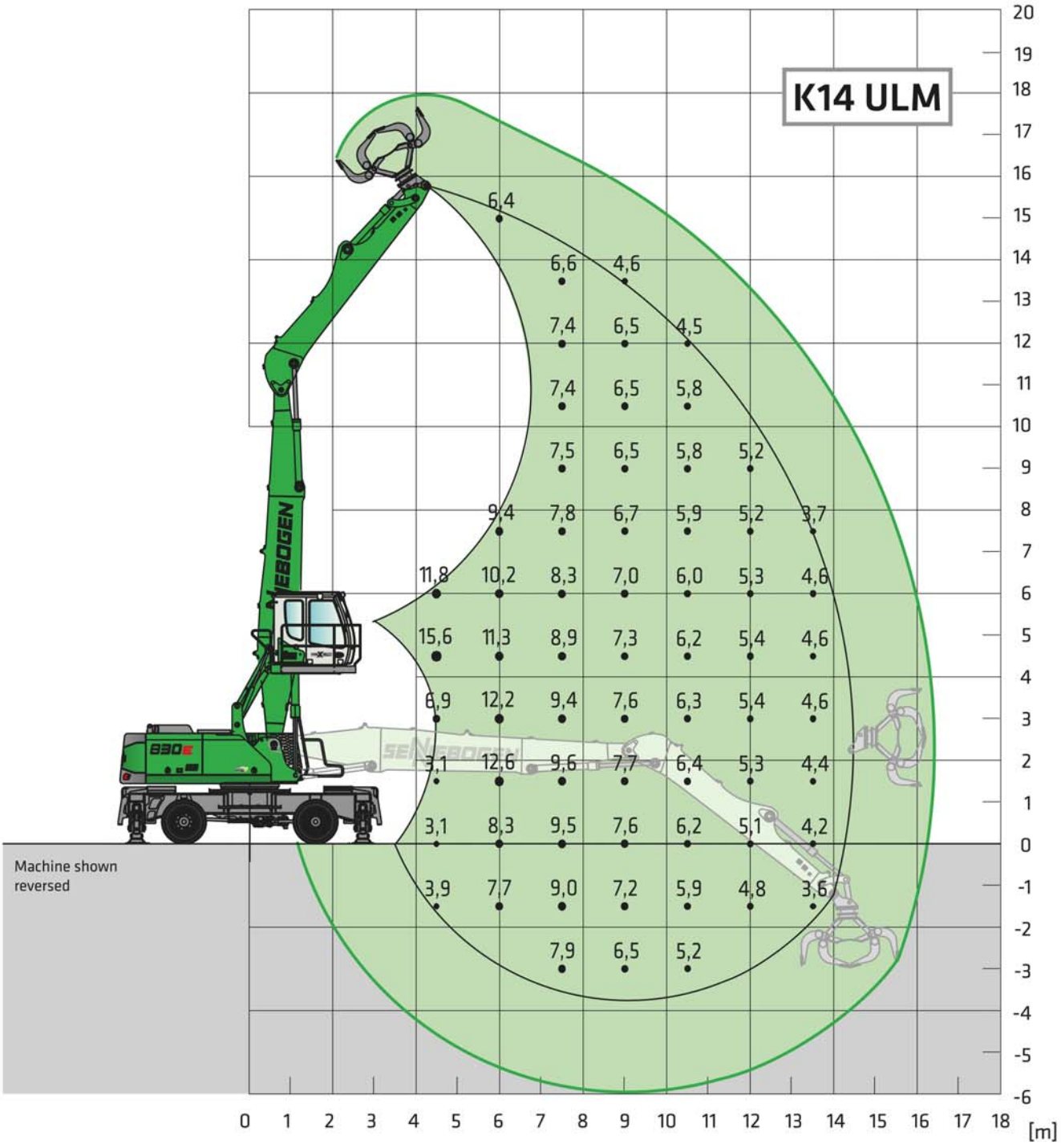


Undercarriage	**MP31**	**Compact boom** **Dipper stick**	**9.4 m Banana** **7.0 m**	**Cab**	**Maxcab E300/260, can be elevated and moved forward hydraulically (option)**

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, 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 the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

830E Load ratings

MHD / MHDS



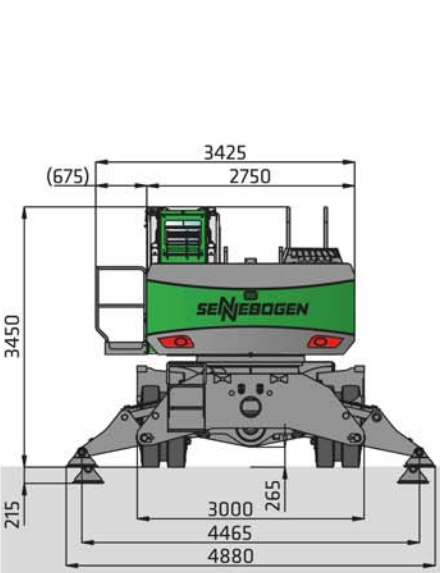
Undercarriage	**MP31**	**Compact boom** **Dipper stick**	**8.5 m** **6.0 m ULM**	**Cab**	**Maxcab E270, hydraulically elevating**

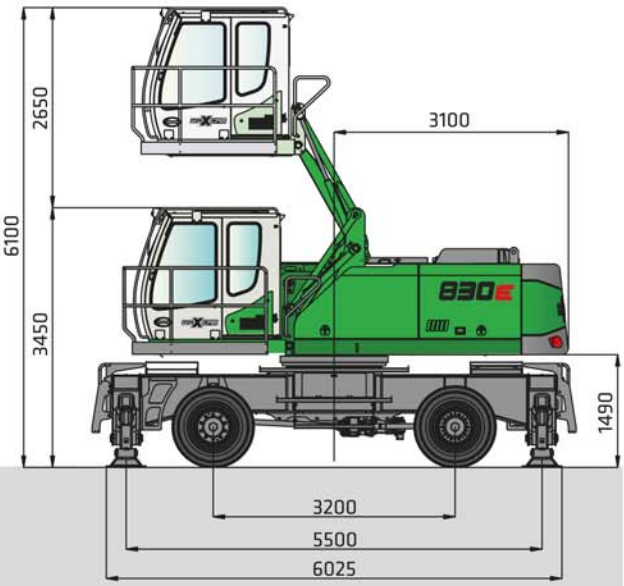
All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, etc. are part of the specified load ratings. The specified values are 75 % of the static tipping load or 87 % of the hydraulic lifting force in accordance with ISO 10567. In accordance with the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

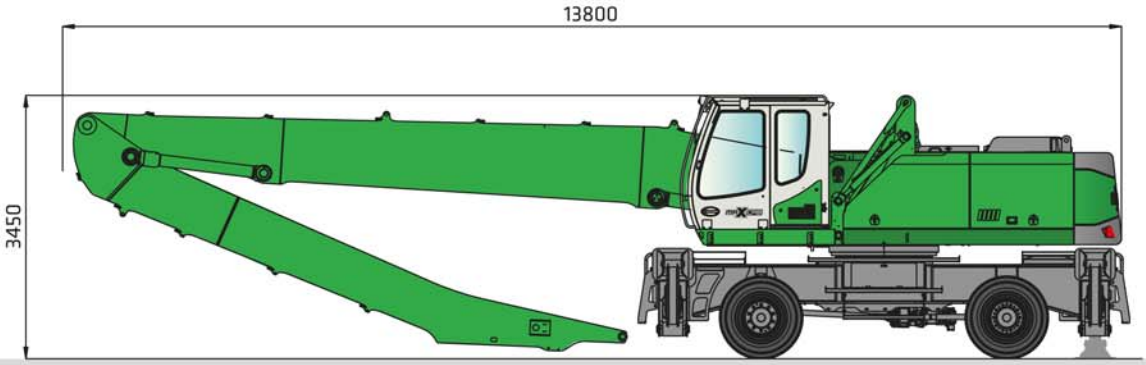
830E Load ratings

MHD

Transport width 3000 mm **Solid-rubber tires 12.00-20, 8**







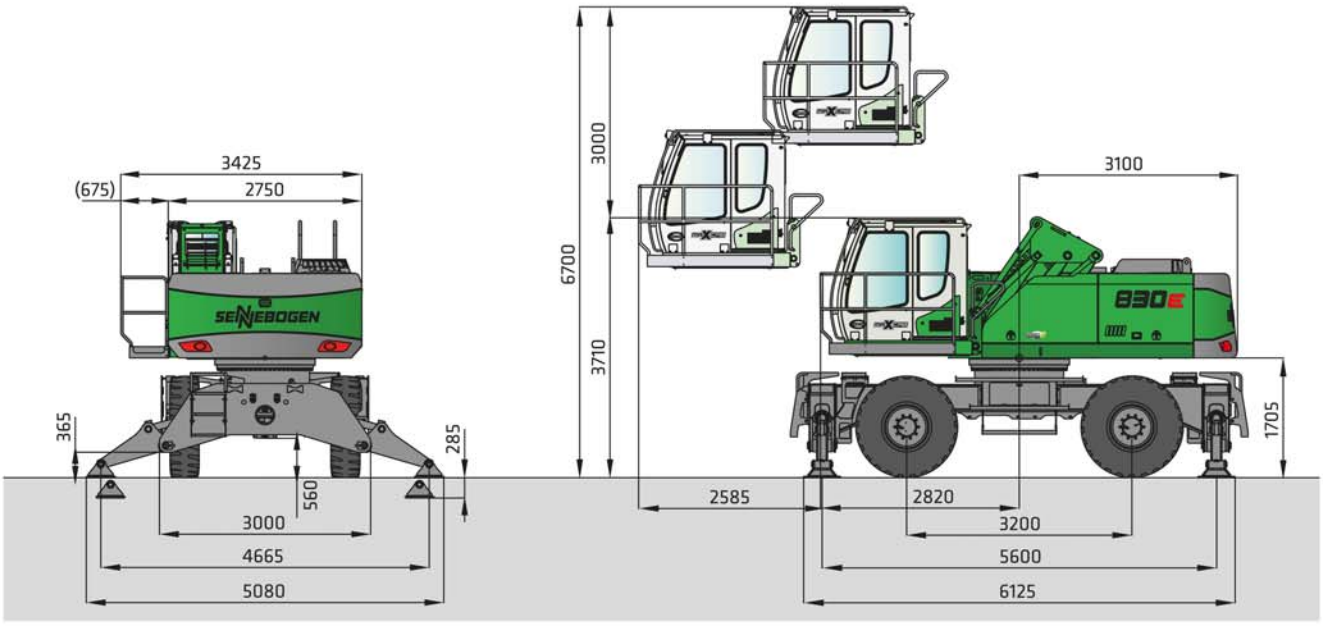
830 MHD with undercarriage type MP31E, hydraulically elevating Maxcab type E270, tires 12.00 - 20, 8, transport width 3000 mm, working weight with boom K17, 600 l multi-shell grab, approx. 40,000 kg

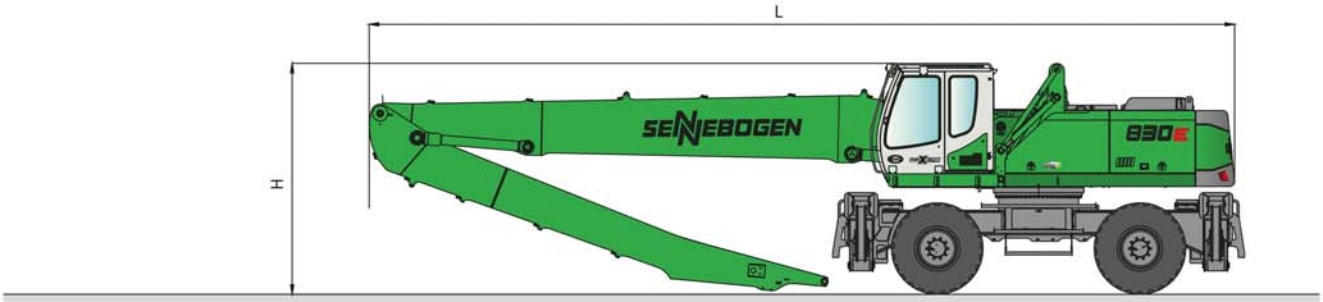
	Load boom	Grapple stick	Transport length (L)	Transport height (H)
K15	8.5 m	7.0 m	12.5 m	3.4 m
K17	9.8 m	7.5 m	13.8 m	3.4 m
B16	9.4 m	7.0 m	13.4 m	3.5 m
K14 ULM	8.5 m	6.0 m	12.5 m	3.4 m

830E Load ratings

MHDS

Transport width 3000 mm **Solid-rubber tires 16.00-25, 8**



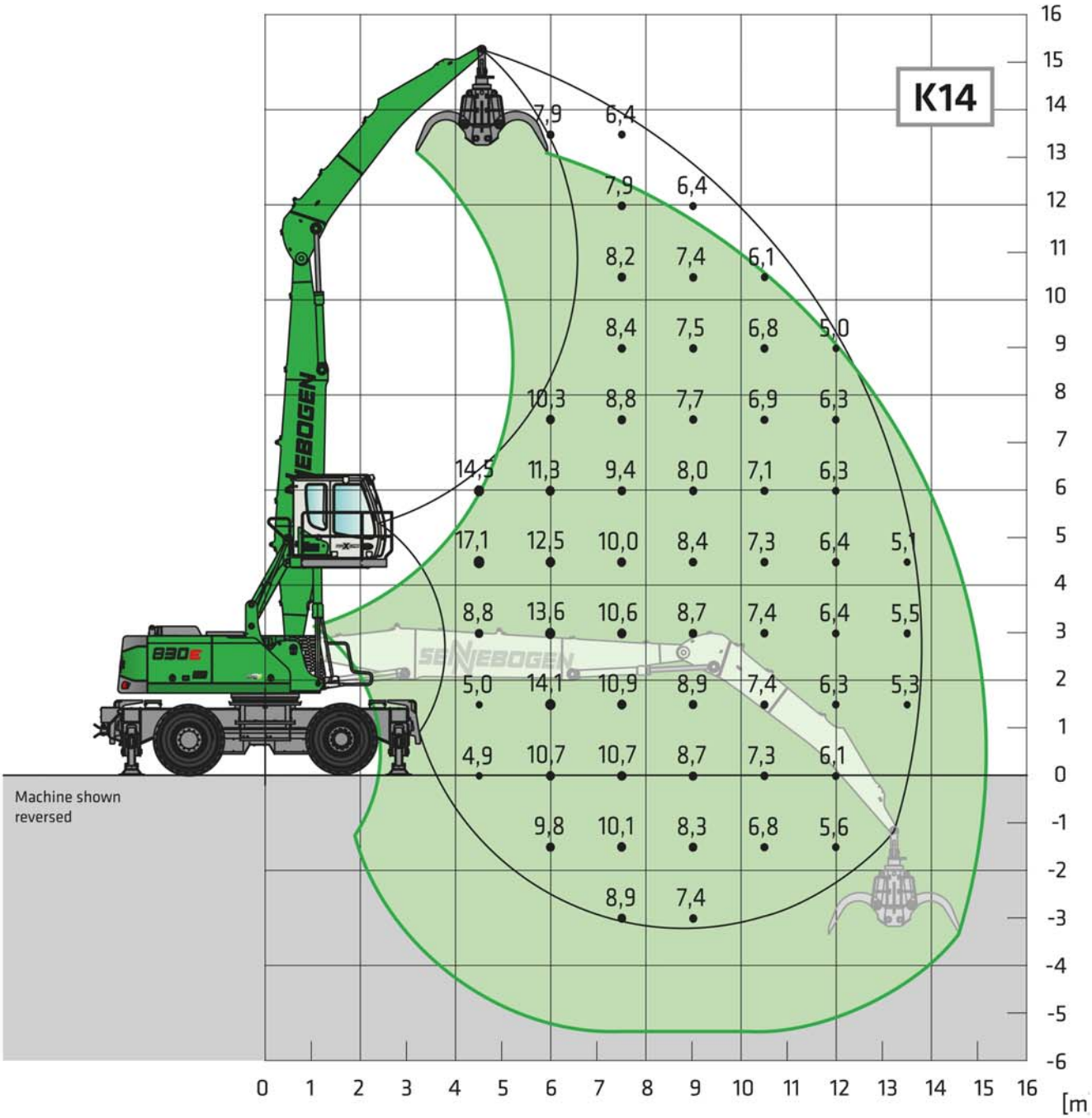


830 MHD with undercarriage type MP34, Maxcab can be elevated and moved forward hydraulically, tires 16.00 - 25, 4, transport width 3000 mm, working weight with boom K17, 600 l multi-shell grab, approx. 41,000 kg

	Load boom	Grapple 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



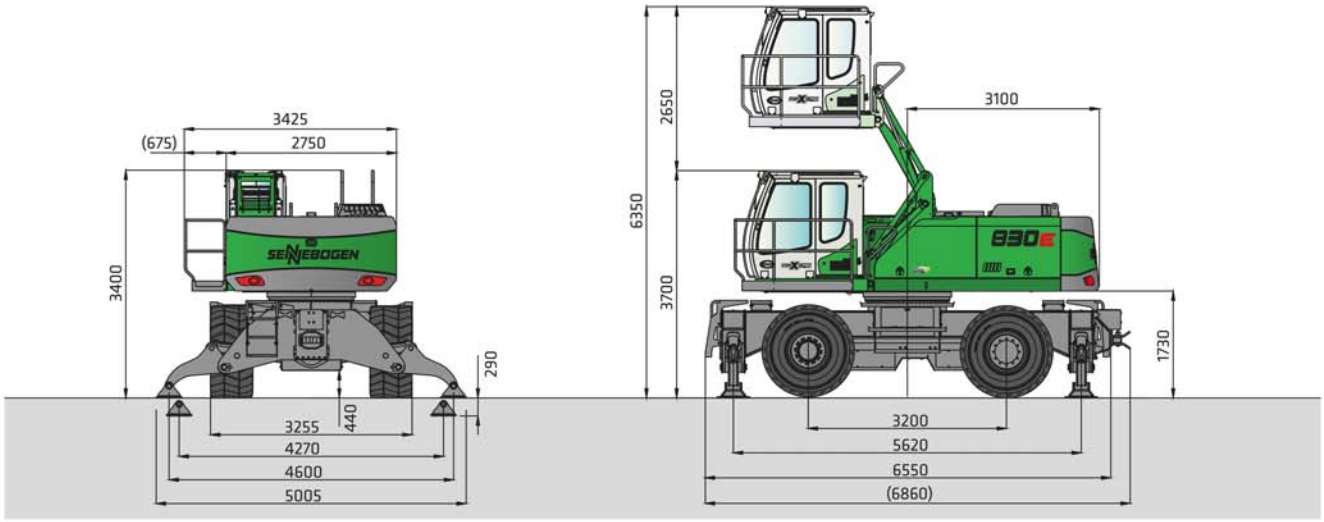
Undercarriage	**MP38**	**Compact boom** **Dipper stick**	**8.2 m** **5.8 m**	**Cab**	**Maxcab E270, hydraulically elevating**

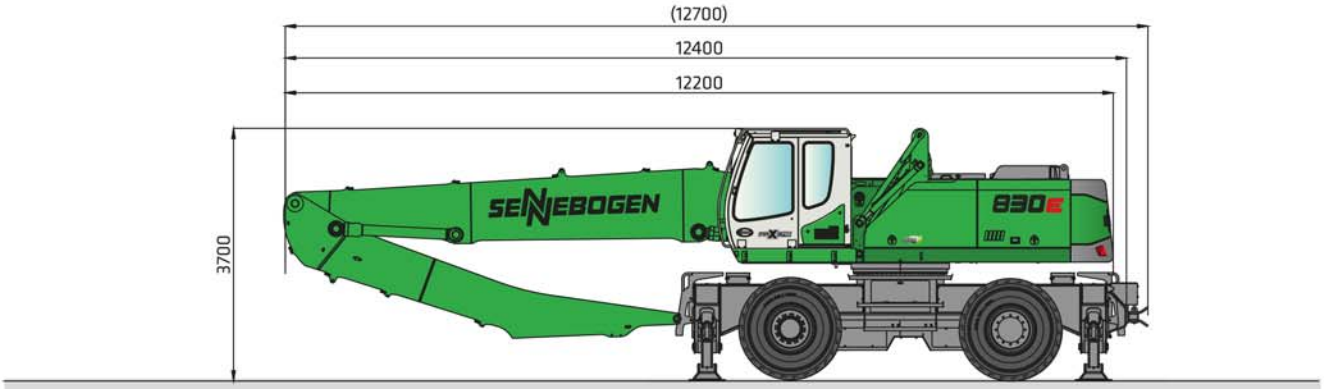
All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, etc. are part of the specified load ratings. The specified values are 75 % of the static tipping load or 87 % of the hydraulic lifting force in accordance with ISO 10567. In accordance with the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

Trailer

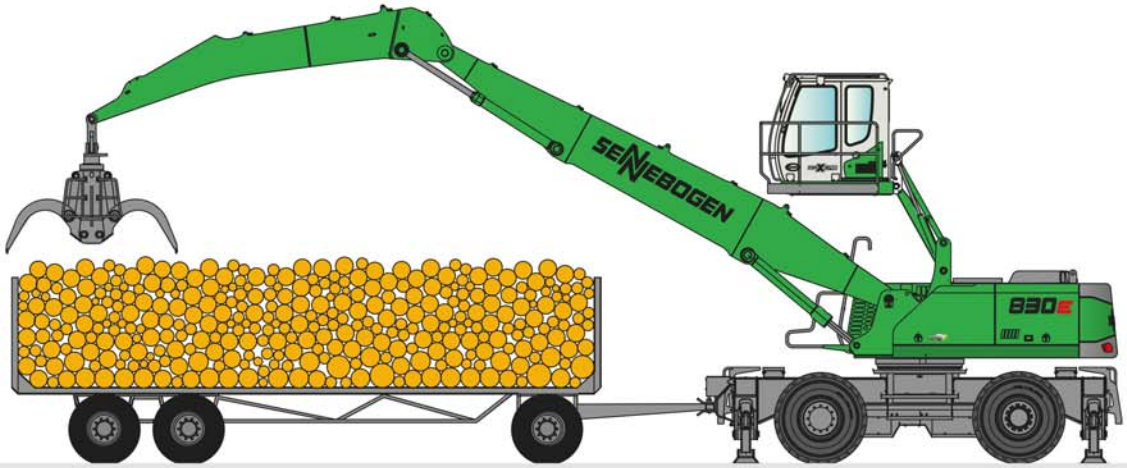
Transport width 3255 mm **Solid-rubber tires 650/65-R25, 4**

Extremely high pulling force for pulling heavy trailers





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



VARIOTOOL

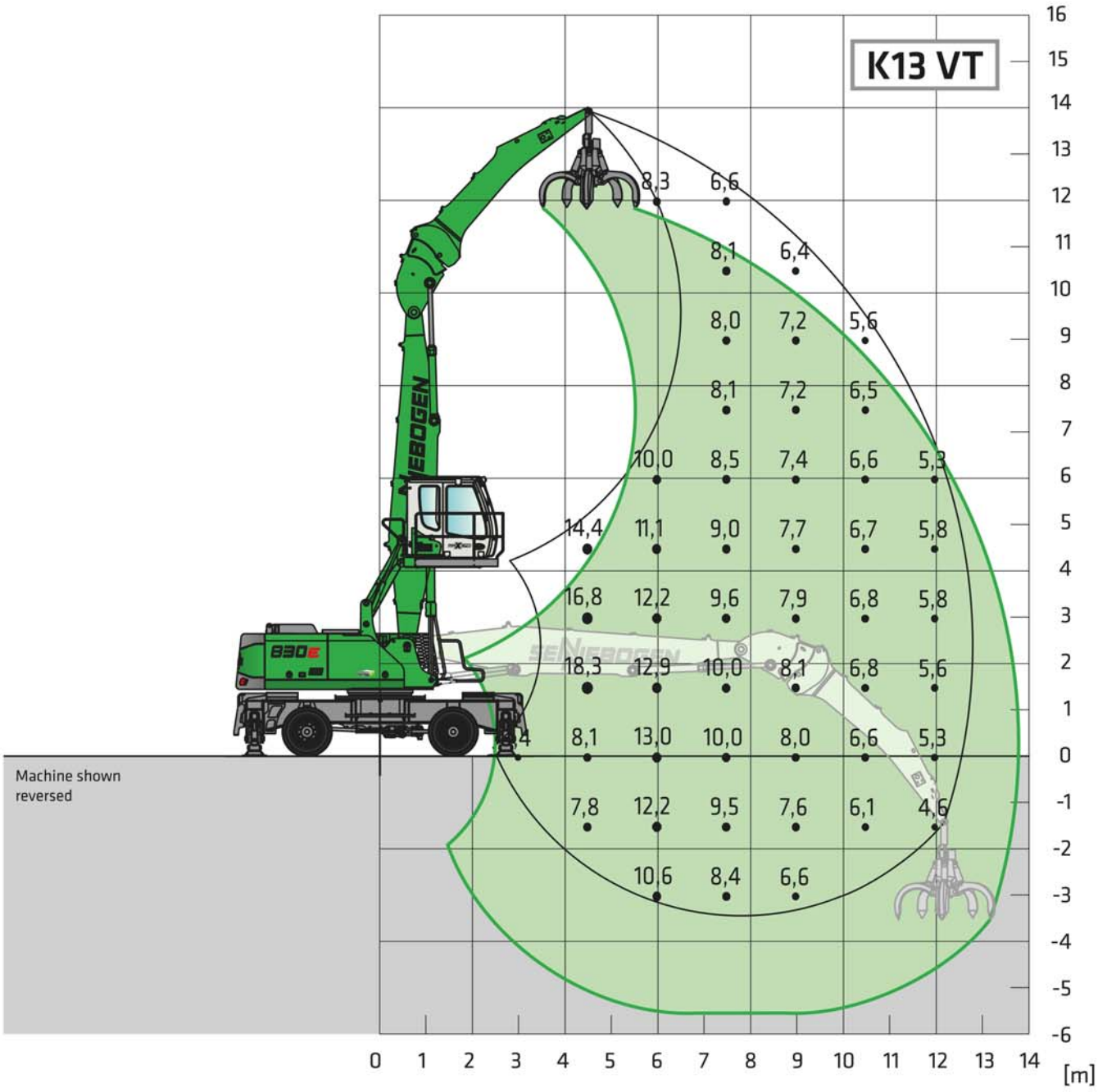
From a high-performance handling machine to a multi-functional high-performance tool carrier




- 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:
  - Multi-shell 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	**MP31**	**Compact boom** **Dipper 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 a solid, level substrate. Attachments, such as grapple, magnet, load hook, 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 the EU standard EN 474-5, material loaders in hoist operation must be equipped with pipe fracture safety devices on hoist cylinders and an overload warning device.
The specified load ratings apply 360° on the crawler undercarriage; telescopic undercarriages must be completely extended.

830E Recommended grapples

Multi-shell grab SGM (4 shells)

Design / size	Grapple capacity	Weight[1] Shell form		Maximum load capacity
		HO	G	
SGM	l	kg	kg	t
400.40-4	400	1570	1720	8.0
600.40-4	600	1600	1790	
800.40-4	800	1685	1930	
1000.40-4	1000	1755	2085	
1250.40-4	1250	1850	2200	

Multi-shell grab SGM (5 shells)

Design / size	Grapple capacity	Weight[1] Shell shape[2]		Maximum load capacity
		HO	G	
SGM	l	kg	kg	t
400.40	400	1820	1920	8.0
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 double shell grab

Design / size	Grapple capacity	Weight[1]	Maximum load capacity
SGZ	l	kg	t
1000.40	1000	1270	4.0
1200.40	1200	1360	
1400.40	1400	1420	
1600.40	1600	1530	
1500.50	1500	1950	8.0
2000.50	2000	2200	
2500.50	2500	2300	
3000.50	3000	2490	
4000.50	4000	2880	
3000.50 L	3000	2140	8.0
3500.50 L	3500	2260	
4000.50 L	4000	2480	
4500.50 L	4500	2600	
1500.50 HD	1500	2240	8.0
2000.50 HD	2000	2535	

Magnetic plates

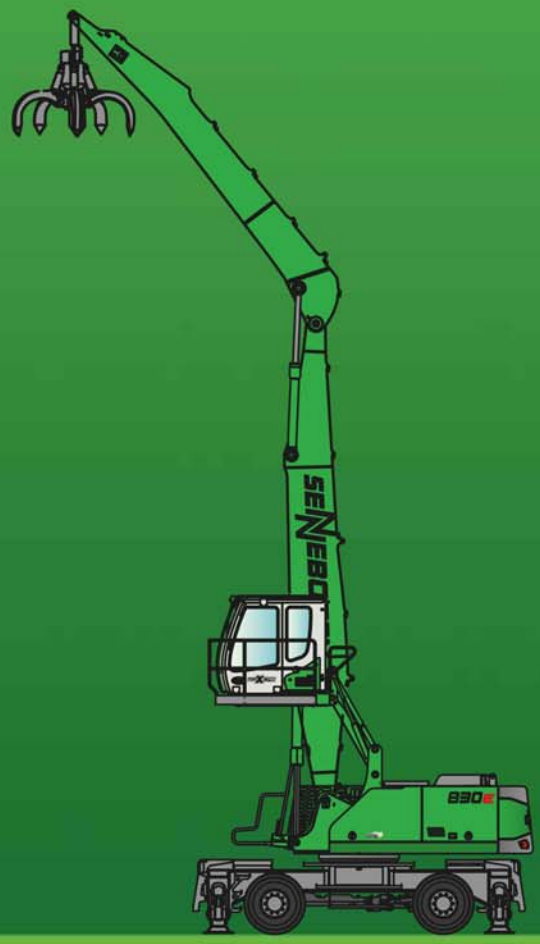
Type series / model	Power	Deadweight	Breakaway force	Load-bearing capacity in kg
WOKO	kW	kg	kN	Slab (safety factor 2)
S-RSL 13	10.5	1300	260	1300
S-RSL 15	12.2	1950	360	1800
S-RLB 12.5	8.8	1310	280	14000
S-RLB 13.5	10.0	1700	300	15000
S-RLB 15	11.7	2400	380	19000
Recommended magnetic generator: 15 kW/20 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

Detailed information on grapples, as well as log grapples, quick-release systems, and other attachments can be found in the "Attachments" brochure

830E

M | MHD | MHDS | TRAILER



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