

 **825 M**

SENEBOGEN



129 kW



28,8 t



12 - 14 m



MAX CAB

825E

Mobile material handling machine

Tier IVf emission
standards

825E 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 measuring points
Easy maintenance – clear labeling
- 6 Consultation and support**
3 production sites – 2 subsidiaries
120 sales partners – over 300 service stations





825E 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* 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
- Side-by-side coolers, easily accessible and clean cooling technology
- Fuel savings through optimized fan operation

Powerful hydraulic system

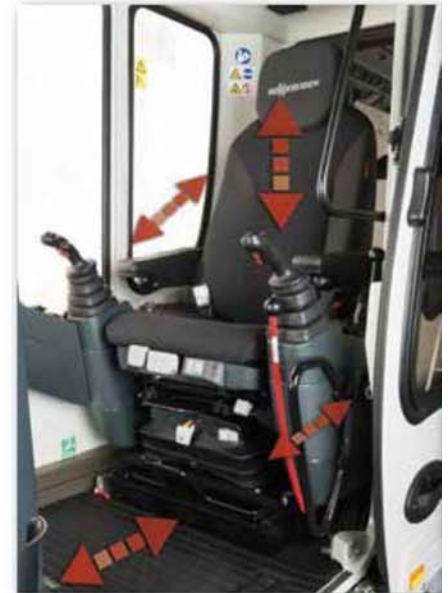
- Strong pumps with power reserves
- Top efficiency thanks to large-dimensioned hydraulic valves and lines
- Extra-long change intervals of 4,000 operating hours through initial fill-up with special oil with extended service life when using SENNEBOGEN HydroClean* 5

* Optional

825E 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



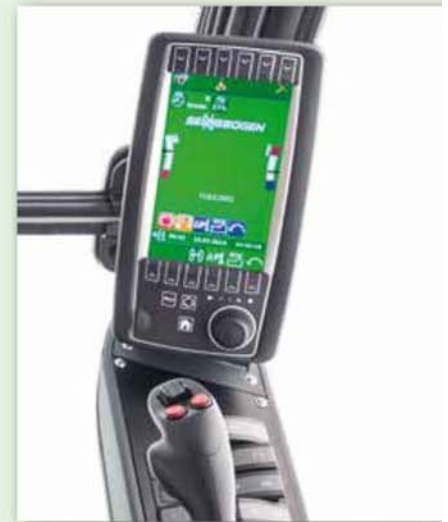
Platform with railing*

- 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

825E 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

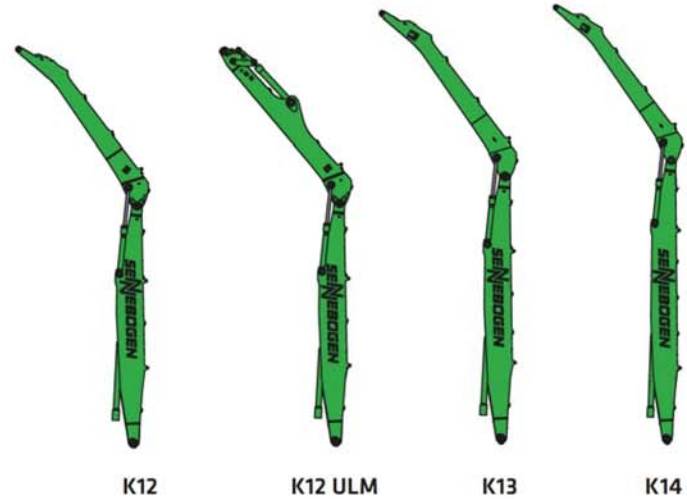
* Optional

825E Modular design – versatile solutions

Attachments

-  Multi-shell grab
-  Double shell grab
-  Magnetic plate
-  Scrap metal shears
-  Vacuum traverse

Equipment options (others available upon request)

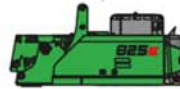



Cabs


Cab elevation




Uppercarriage



 Diesel-hydraulic drive

 Electrohydraulic drive

Options

 Engine line drum

 Transformer

Undercarriage variants



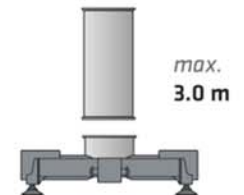
Mobile M
MP26




R35/240
crawler



Wide-gauge crawler
R35/340



4-point underframe
ST 20



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*

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 no-slip steps

**Robust side
cover**
Made of
recyclable
sheet steel

**High
Stability**
due to the broad
outrigger area

* Option

825E Technical data, equipment

MACHINE TYPE

Model (type) **825**

ENGINE

Power	129 kW / 173 PS at 2200 rpm
Model	Cummins QSB 6.7 (IIIa / IV) Direct injection, turbo-charged, charge air cooler, reduced emissions, Eco Mode, automatic idle, automatic stop
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	480 l
DEF tank	30 l
Electrical system	24 V
Batteries	2 x 155 Ah , main switch
Options	<ul style="list-style-type: none"> ■ Engine block heater ■ 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	<ul style="list-style-type: none"> ■ Slewing gear brake via foot pedal ■ Peripheral uppercarriage railing for additional safety ■ LED lighting package ■ Fire extinguisher ■ Maritime climate varnish as corrosion protection ■ Electric heater for hydraulic tank ■ Low temperature package ■ Hydraulically driven magnetic generator 15 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
Delivery rate	410 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 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 – environmentally friendly ■ ToolControl for programming the 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

825E Technical data, equipment

CAB <small>MAX</small> <small>CRAB</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, 12 V/24 V connections, SENCON, joystick control
Options	<ul style="list-style-type: none"> ■ Active seat climatization ■ Rigid cab height elevation 1 m ■ Auxiliary heating system with timer ■ Cabs with active carbon filter ■ Steering wheel with adjustable steering column ■ Sliding window in operator door ■ Armored-glass windshield ■ Armored-glass sunroof ■ Safety side window ■ Floor window for a better view ■ Rolling shade for roof window and windshield ■ Platform next to cab ■ Protective roof grating ■ FOPS protective roof grating ■ Protective front grating ■ Radio 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	<ul style="list-style-type: none"> ■ Ball valves at the grip arm hydraulics wire ■ Adjustable hoisting limiter/stick limiter e.g. in the hall ■ Multi-coupling

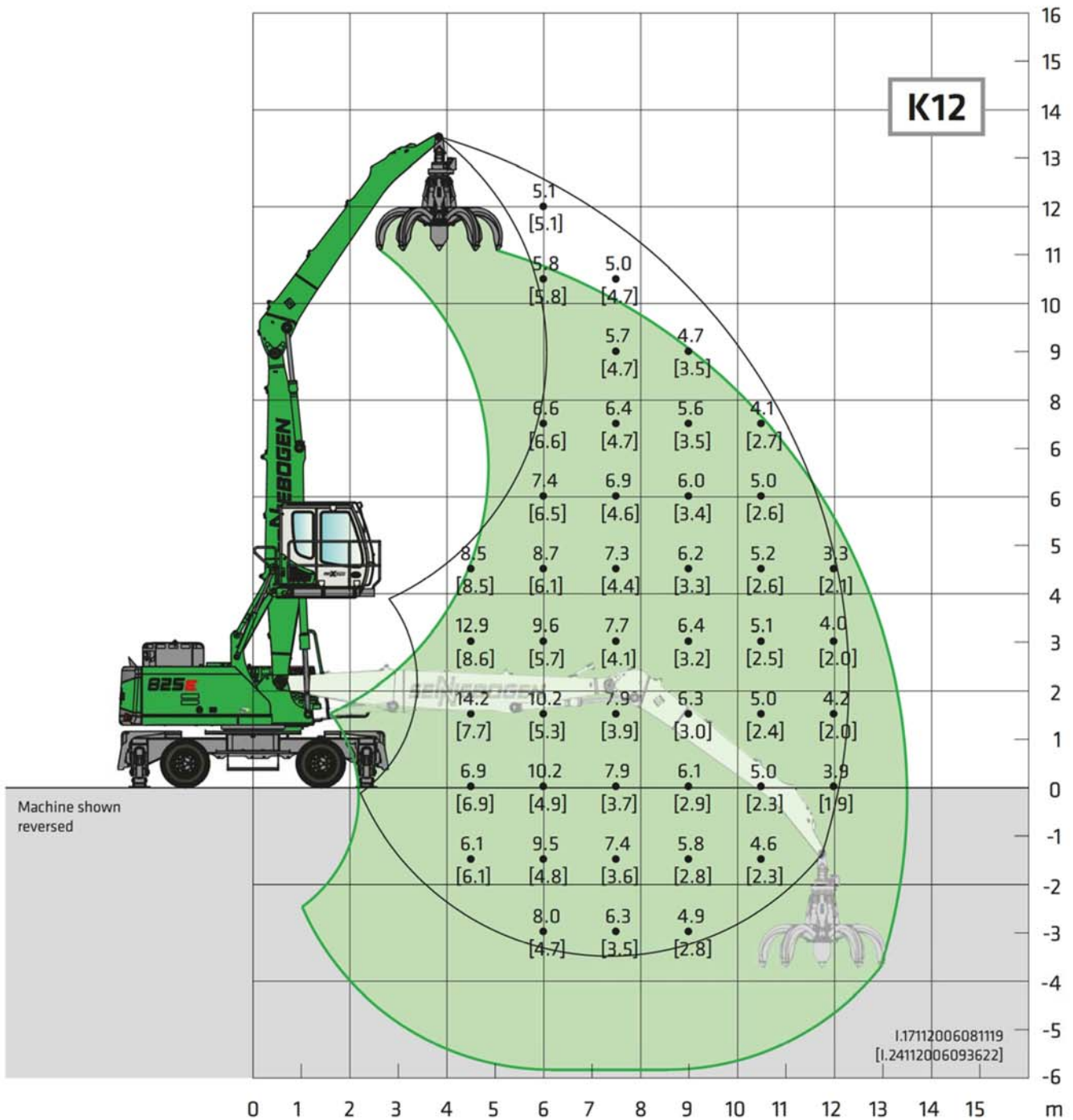
UNDERCARRIAGE	
Design	Strong mobile undercarriage with integrated 4-point claw support, steering axle as hydraulically locking pendulum axle, pendulum axle cylinder with pipe fracture safety valves
Drive	All-wheel drive powered by a variable-displacement hydraulic motor with direct-mounted, automatically 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 10.00-20, 8
Speed	0 - 7 km/h Level I: 0 - 20 km/h Level II
Options	<ul style="list-style-type: none"> ■ Pneumatic tires 10.00-20, 8 ■ Additional pushing blade for 4-point outrigger (front or rear) ■ Individual outrigger actuation ■ Protection for travel drive/towing pintle ■ Pylons with 0.5 m or 1.0 m

ELECTRIC DRIVE <small>eGREEN</small>	
Option	<ul style="list-style-type: none"> ■ Power: 110 kW, 400 V, 50 Hz Total connected load: 240 kVA, machine side 250 A at 400 V fuse, alternatively 315 A with magnet system - star-delta connection motor start ■ Advantages: Lowest operating costs, quiet and almost vibration-free work, long service life of hydraulic components

OPERATING WEIGHT	
Mass	825 M with 4-point outrigger and compact loading attachment Approx. 28,800 kg
Notice	Operating weight varies by model and equipment.



825E Load ratings



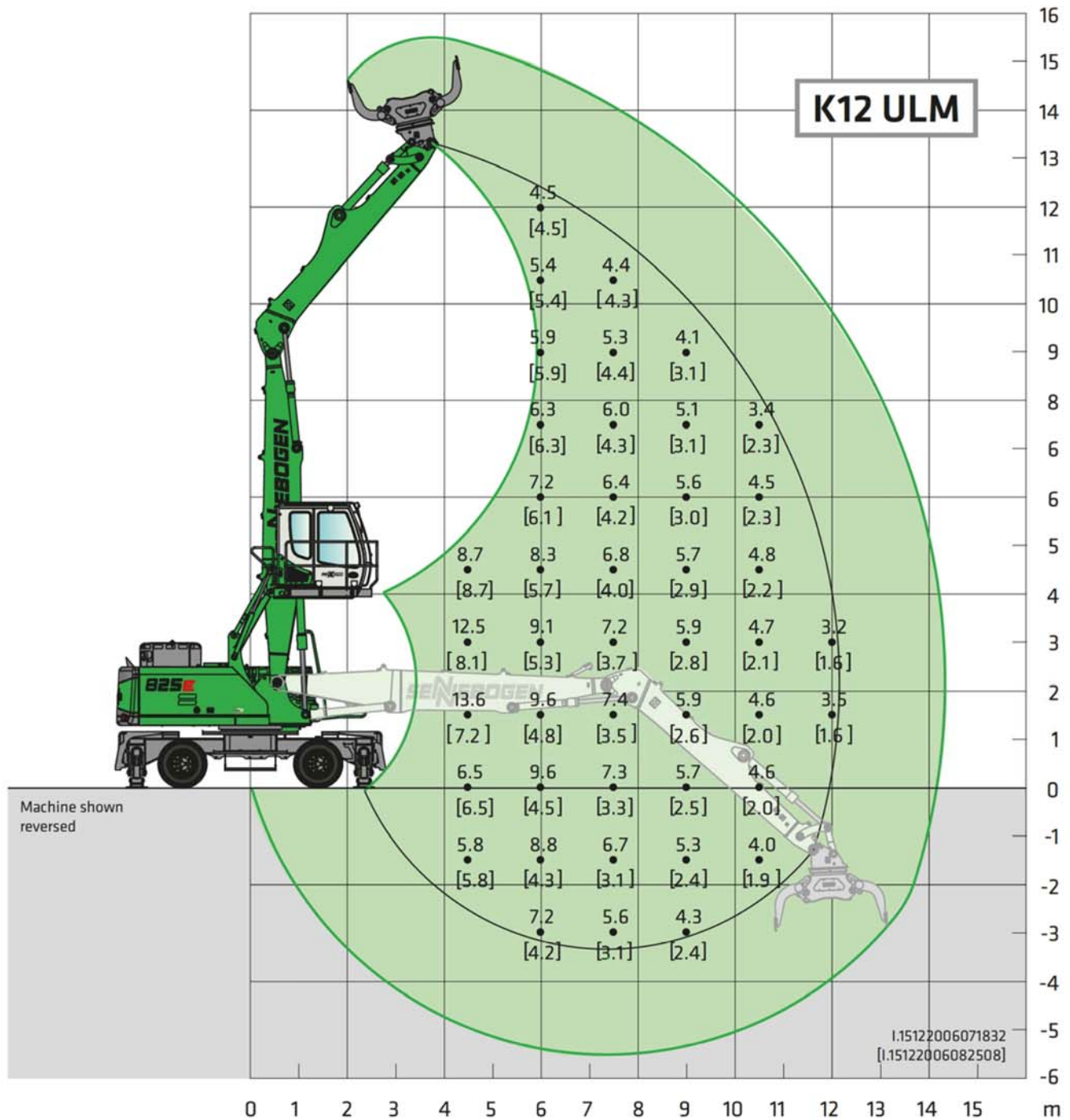
Undercarriage **MP26E**

Compact boom **6.8 m**
Dipper stick **5.6 m**

Cab **Maxcab E270,**
hydraulically elevating

All ratings are in tons (t) and constitute 75% of the static tipping load or 87% of the hydraulic lifting power in accordance with ISO 10567. They apply on firm and level ground and 360° slewing. The values in brackets [] apply 360° freestanding. Safe working loads include attachments such as multi-shell grapples, magnets, etc. According to harmonized EU standard EN 474-5, hydraulic excavators used for lifting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.

825E Load ratings



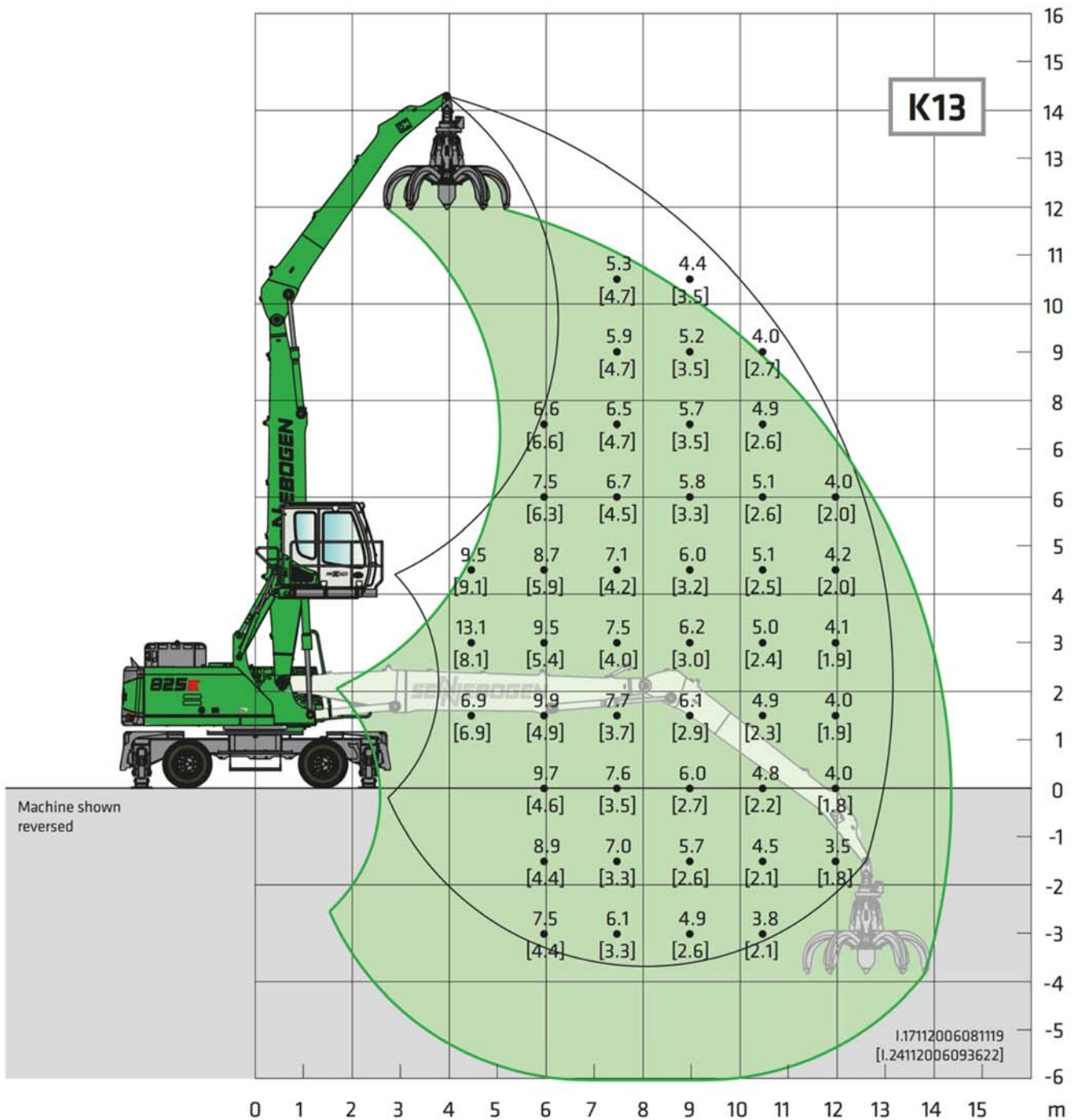
Undercarriage **MP26**

Compact boom **6.8 m**
Dipper stick **5.5 m**

Cab **Maxcab E270,**
hydraulically elevating

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825E Load ratings



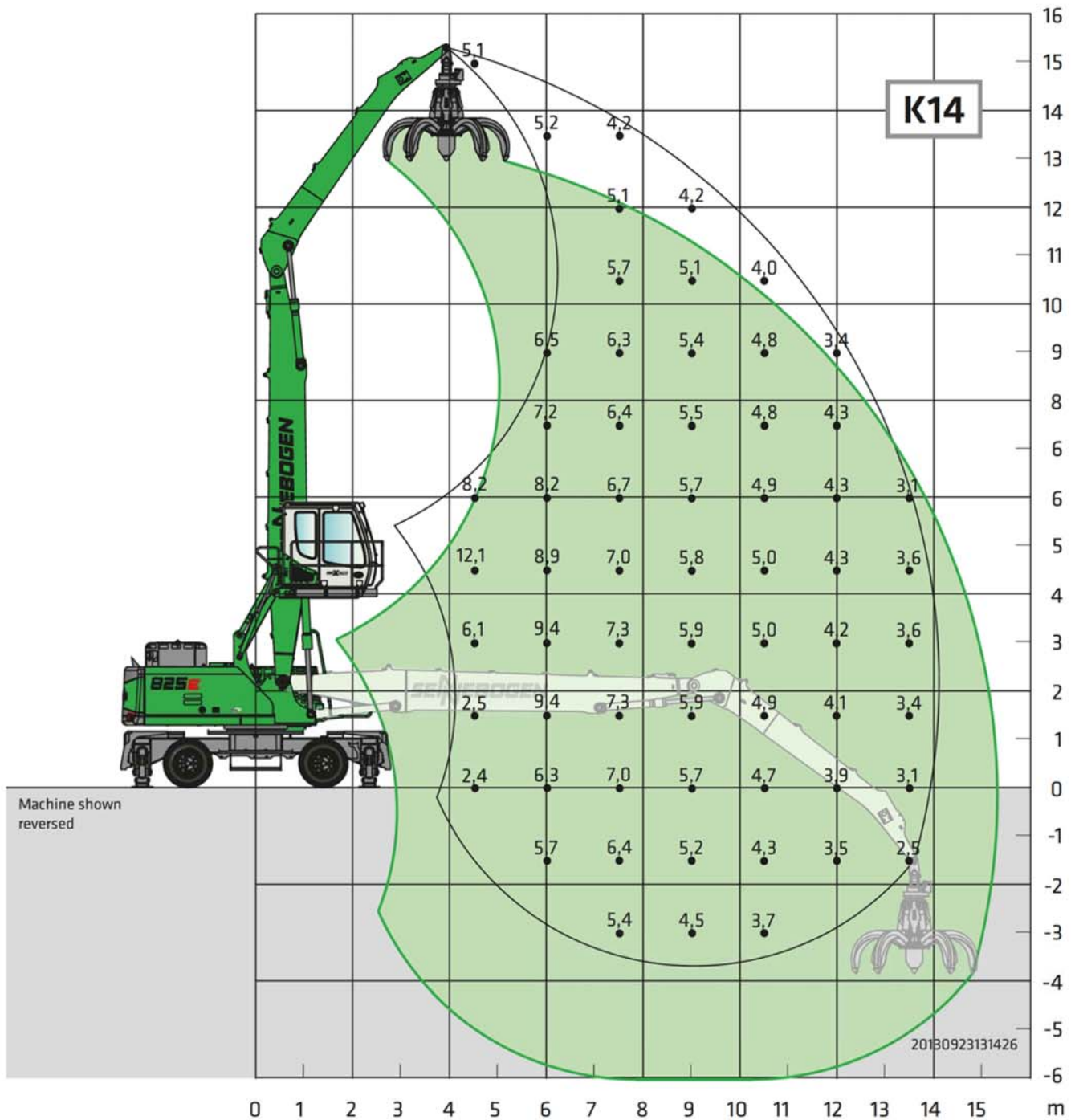
Undercarriage **MP26**

Compact boom **7.5 m**
Dipper stick **5.8 m**

Cab **maxcab E270,**
hydraulically elevating

All ratings are in tons (t) and constitute 75% of the static tipping load or 87% of the hydraulic lifting power in accordance with ISO 10567. They apply on firm and level ground and 360° slewing. The values in brackets [] apply 360° freestanding. Safe working loads include attachments such as multi-shell grapples, magnets, etc. According to harmonized EU standard EN 474-5, hydraulic excavators used for lifting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.

825E Load ratings



Undercarriage **MP26**

Compact boom **8.5 m**
Dipper stick **5.8 m**

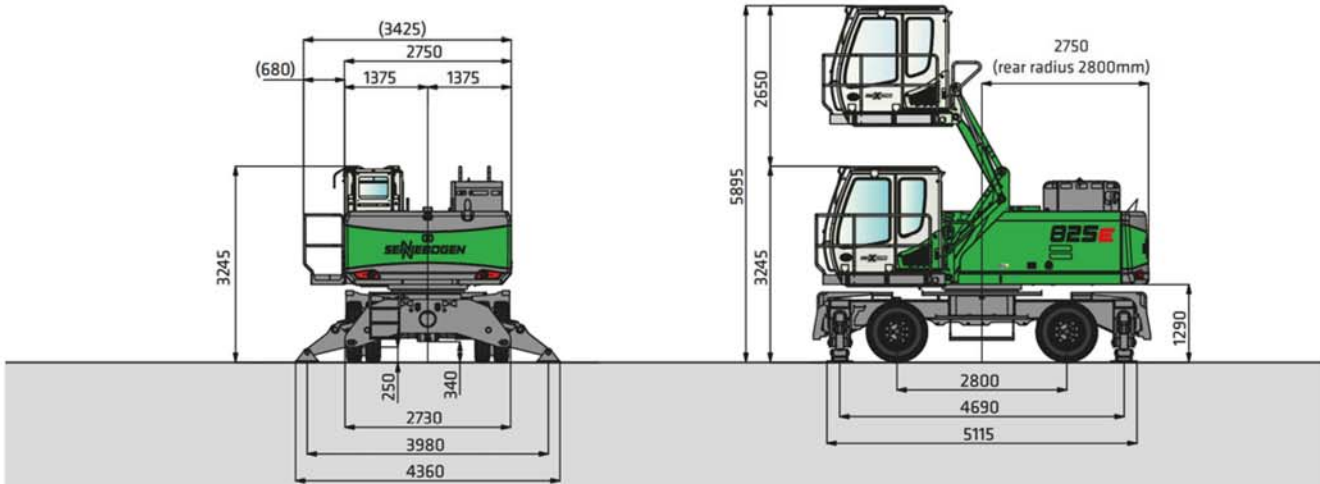
Cab **Maxcab E270, hydraulically elevating**

All ratings are in tons (t) and constitute 75% of the static tipping load or 87% of the hydraulic lifting power in accordance with ISO 10567. They apply on firm and level ground and 360° slewing. The values in brackets [] apply 360° freestanding. Safe working loads include attachments such as multi-shell grapples, magnets, etc. According to harmonized EU standard EN 474-5, hydraulic excavators used for lifting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.

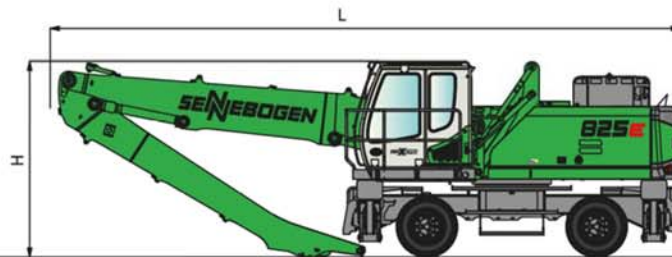
825E Transport dimensions

Transport width 2,750 mm

Solid-rubber tires 10.00-20, 8



825 M with undercarriage type MP26 (series) and hydraulically elevating cab type E270



825 M with undercarriage type MP26

	Compact boom	Dipper stick	Transport length (L)	Transport height (H)
K12	6.8 m	5.6 m	10.40 m	3.25 m
K12 ULM	6.8 m	5.5 m	10.40 m	3.40 m
K13	7.5 m	5.8 m	11.10 m	3.30 m
K14	8.5 m	5.8 m	12.05 m	3.25 m

825E Recommended grabs

SGM multi-shell grab (4 shells)



Design / size	Grapple capacity	Weight ¹		Maximum load capacity
		Shell shape		
		HO	G	
		kg	kg	t
SGM	I			8.0
400.30-4	400	1240	1350	
600.30-4	600	1280	1410	
800.30-4	800	1320	1510	
400.40-4	400	1570	1720	
600.40-4	600	1600	1790	
800.40-4	800	1685	1930	
1000.40-4	1000	1755	2085	
1250.40-4	1250	1850	2200	

SGM multi-shell grab (5 shells)



Design / size	Grapple capacity	Weight ¹		Maximum load capacity
		Shell shape ²		
		HO	G	
		kg	kg	t
SGM	I			8.0
400.30	400	1400	1475	
600.30	600	1430	1550	
800.30	800	1460	1600	
400.40	400	1820	1920	
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	

Double-shell grab SGZ



Design / size	Grapple capacity	Weight ¹	Maximum load capacity
		kg	t
SGZ	I		4.0
1000.40	1000	1270	
1200.40	1200	1360	
1400.40	1400	1420	
1600.40	1600	1530	

Magnetic plates



Type series / model	Power	Deadweight	Breakaway force	Load-bearing capacity in kg
	kW	kg	kN	Slab (safety factor 2)
WOKO				
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
Recommended magnetic generator: 15 kW/20 kW				

¹) Available upon request

²) Weight information without grapple suspension, stick bolts, hose system

³) Half-open shells: shell sheet steel width 400 mm, 500 mm wide for 1250 l capacity and higher

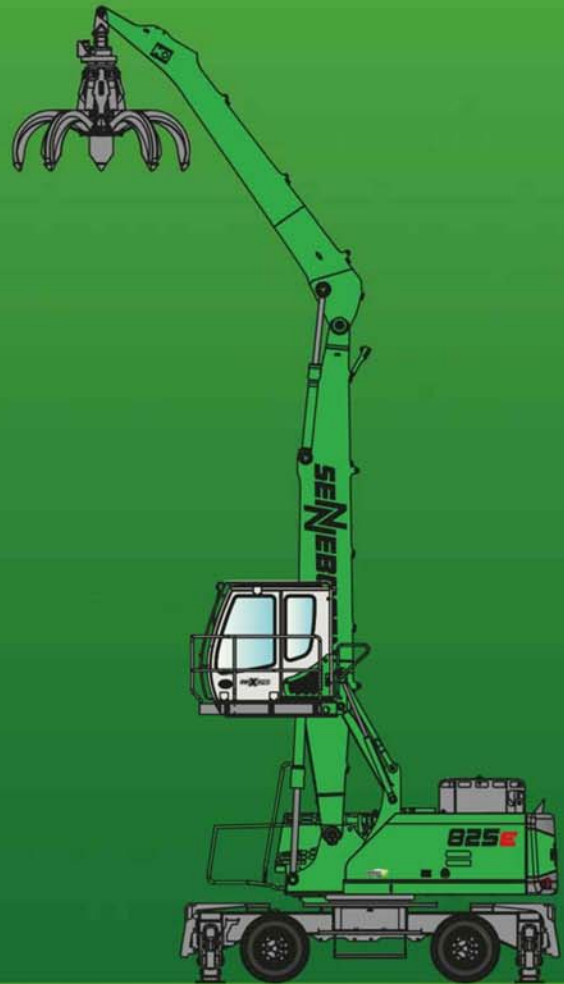
825E



825E



825E



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SENNEBOGEN

SENNEBOGEN
Maschinenfabrik GmbH
Sennebogenstraße 10
94315 Straubing, Germany

Tel. +49 9421 540-144/146
Fax +49 9421 43 882
marketing@sennebogen.de

Order no. / Item no. 299080
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