



**97 kW**



**25 t**



**9 m**



**MAX CAB**

# 818 E

Crawler material handling machine

Tier IVf emission standards

# 818E Advanced. The E-Series.



1976: S 517 with crawler chassis and plastic cab in earthworks

## 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

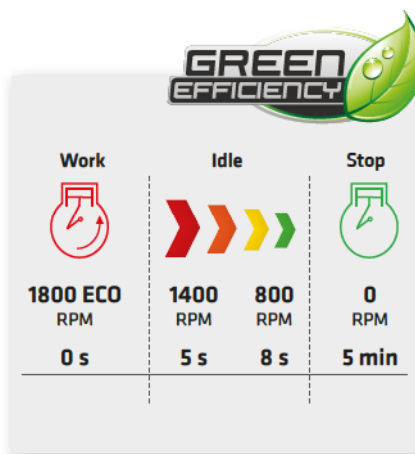
**5 Maintenance and service made easy**  
Easy fault diagnosis – central measuring points  
Easy maintenance – clear labeling

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





# B18E The E-Series. At a glance.



## Four ways to save fuel

- Up to 20% savings: working in EcoMode 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**
- Charge air, water and oil coolers with top-notch efficiency thanks to axial-piston pump and motor control and on-demand thermostatic control



### Maximum safety

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



### Smart cooler technology

- Standard features: automatic, fast and strong fan reversal for blowing out coolers and continuous cooling capacity **5**
- Side-by-side coolers, easily accessible and clean cooling technology **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 4,000 operating hours through initial fill-up with special oil with extended service life when using SENNEBOGEN HydroClean **7**

\* Optional

# 818E The E-Series. Pure comfort.

## Maxcab comfort cab

- Air-suspension comfort seat with heater
- Comfortable 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



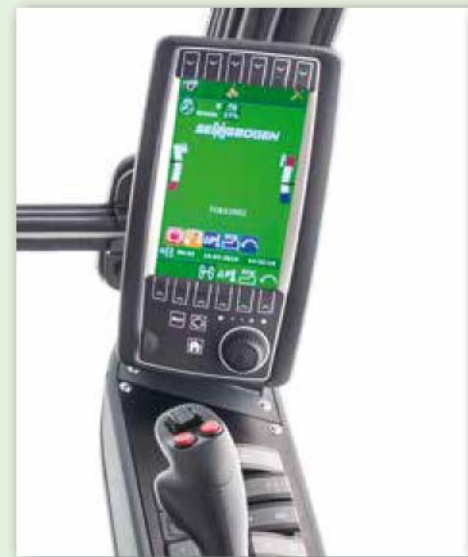
## Platform with railing\*

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



## Automatic climate control

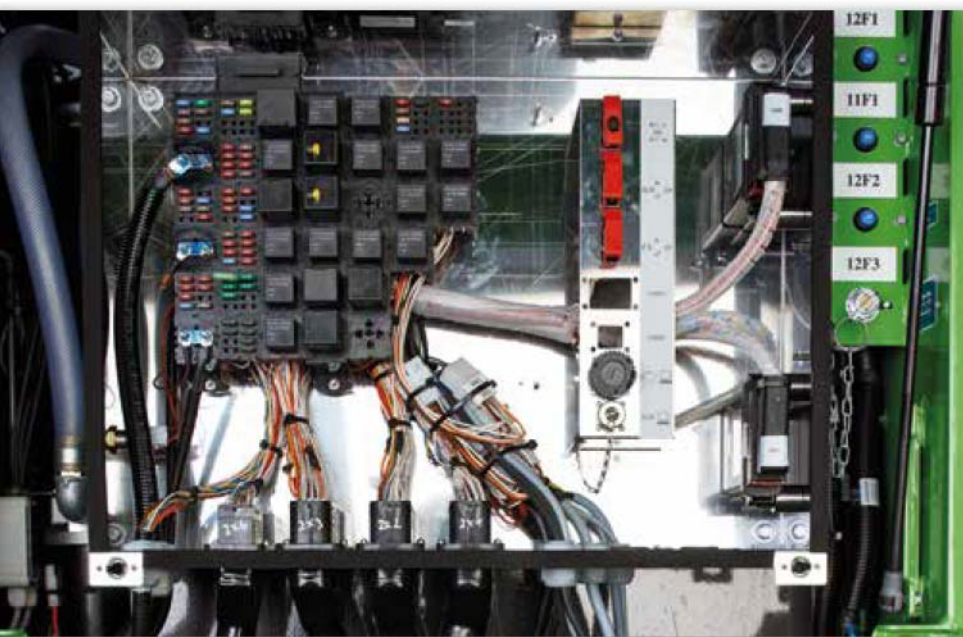
- Consistently pleasant cab climate thanks to 10 evenly distributed air vents
- Central controls make operation easy



## SENCAN

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

# B18E Maintenance and service made easy



## Optimized for maintenance

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



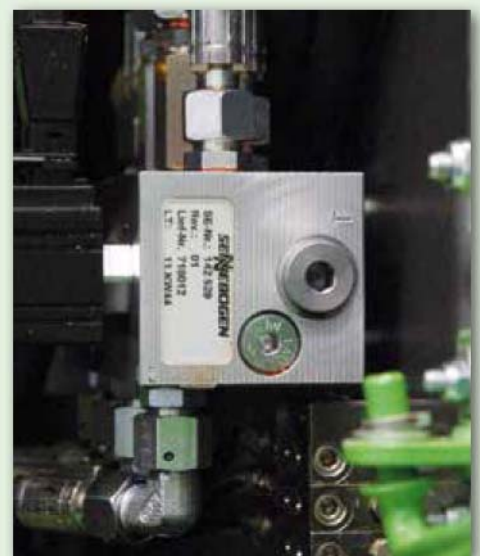
## HydroClean\*

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



## Central reading points

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








## Clear labeling

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

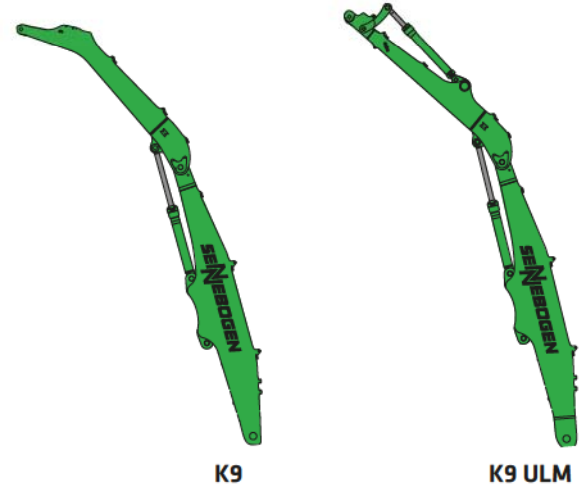
\* Optional

# 818E Modular design – versatile solutions

## Attachments

-  Multi-shell grab
-  Double shell grab
-  Magnetic plate
-  Scrap metal shears
-  Sorting grab

## Equipment options (others available upon request)



K9

K9 ULM

## Cabs

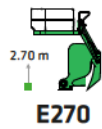


Maxcab



Maxcab Industry

## Cab elevation



E270

## Uppercarriage



Diesel-hydraulic drive



Electrohydraulic drive

## Options

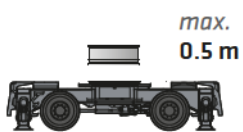


Engine line drum



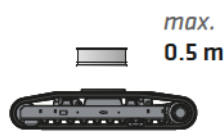
Transformer

## Undercarriage variants



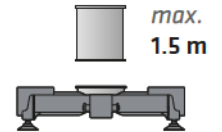
max.  
0.5 m

Mobile M\*  
MP21



max.  
0.5 m

Crawler R25/240



max.  
1.5 m

4-point underframe  
ST20





**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 power-  
ful LED headlights\*

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

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

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

**Safe entry and exit**  
using railings on the uppercarri-  
age\*, grip handles and anti-slip  
steps

\* Option

# 818E Technical data, equipment

## MACHINE TYPE

Model (type) **818**

## ENGINE

Power **818 R: 97 kW / 130 PS at 2200 min<sup>-1</sup>**

Model **Cummins QSB 4.5 – level IIIa/IV**  
Direct injection, turbo charged, charge air cooling, fewer emissions, ECO mode, no-load automatic function

Cooling Water-cooled

Air filter Dry air filter with cyclonic pre-filter, safety element, contamination indicator

Fuel tank **330 l**

DEF tank **30 l**

Electr. system **24 V**

Batteries 2 x cold-start high-performance batteries

Options

- Engine block heater for temperatures below -20 °C
- Electric fuel pump
- Jump-start terminals

## UPPERCARRIAGE

Design Torsion-resistant upper frame with continuous bearing plates from the boom link to the counterweight for optimal force transmission, precision treated, steel bushing for boom storage, lockable storage compartment, very low noise emission values

Central lubrication Automatic central lubrication for equipment and slewing gear raceway

Electrical system central electrical distributor, battery disconnect switch

Options

- Slewing gear brake via foot pedal
- Circumferential uppercarriage railing for additional safety
- LED lighting package
- Fire extinguisher
- Special paint finish
- Hydraulic tank pre-heating, electrical, with power socket on the upper carriage
- Low-temperature package (oils, battery heater, hydraulic oil preheater, cab pre-heater, engine preheater)
- Platform with railing next to cab
- Hydraulically driven magnetic generator 9 kW

## HYDRAULIC SYSTEM

Load-sensing/LUDV hydraulic system for work and travel functions

Pump type Swashplate-type variable-displacement piston pump, load pressure-independent flow distribution for simultaneous, independent control of work functions

Pump control Zero-stroke control, on-demand flow control – the pumps only pump as much oil as will actually be used, pressure purging, load limit sensing control

Delivery rate **max. 310 l/min**

Operating pressure **max. 350 bar**

Filtration High-performance filtration with long change interval

Hydraulic tank **260 l**

Control system Proportional, precision hydraulic actuation of work movements, 2 hydraulic servo joysticks for the work functions, additional functions via switches and foot pedals

Safety All hydraulic circuits are secured with safety valves, Hydraulic cylinder for emergency release of the equipment and the cab when the engine is at a standstill  
Pipe protection valve for stick cylinders and hoist cylinders

Options

- Organic oil filling
- ToolControl for programming the pressure/rate for up to 10 tools
- Additional hydraulic circuit for shear attachment
- Load moment warning with capacity utilization indicator with/without shutdown
- Electronic overload safeguard with overload shutdown
- SENNEBOGEN HydroClean 3 µm hydraulic microfilter system

## SLEWING DRIVE

Gearbox Planetary gearbox with axial piston motor and integrated brake valves

Parking brake Spring-loaded, hydraulically vented safety multi-disk brake

Slewing ring Oversized slewing ring

Slewing speed 0-8 rpm, variable. Hydraulic brake valves integrated in motor ensure wear-free braking.

# B18E Technical data, equipment

## CAB **MAX CAB**

Cab type	Hydraulically elevating cab E270
Cab equipment	Sliding door, excellent ergonomics, climate control, heated seats, air-sprung seat, fresh air / circulations filter, drive control using pedals, 12 V / 24 V connections, SENCON
Options	<ul style="list-style-type: none"> <li>■ Auxiliary heating system with timer</li> <li>■ Cabs active carbon filters indoor / outdoor air</li> <li>■ Joystick steering</li> <li>■ Sliding window in operator door</li> <li>■ Armored-glass windshield</li> <li>■ Armored-glass sunroof</li> <li>■ Polycarbonate safety side and rear panels</li> <li>■ Windshield wipers with wipe / wash function for lower front window / glass roof panel</li> <li>■ Rolling shade for roof window and windshield</li> <li>■ Protective roof grating</li> <li>■ FOPS protective roof grating</li> <li>■ Protective front grating</li> <li>■ Maxcab industrial cab with single-piece armored windshield</li> <li>■ Radio preparation /radio with speakers</li> <li>■ active seat air conditioning</li> </ul>

## ATTACHMENTS

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

## UNDERCARRIAGE

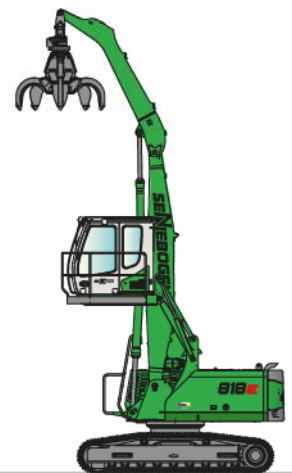
Design	Crawler undercarriage in stable, torsion-resistant box structure
Drive	Hydraulic travel drive
Parking brake	Spring-loaded multi-disc brakes with hydraulic brake valves
Traveling gear	Undercarriage with traveling gear B4HD with 600 mm and 3-bar base plates Crawler undercarriage type R25/240
Speed	<b>0-1.8 kph</b> Tier I, <b>0-2.4 kph</b> Tier II
Options	<ul style="list-style-type: none"> <li>■ Crawler track B4HD with 700 mm 3-bar base plate, chamfered</li> </ul>

## ELECTRIC DRIVE **eGREEN**

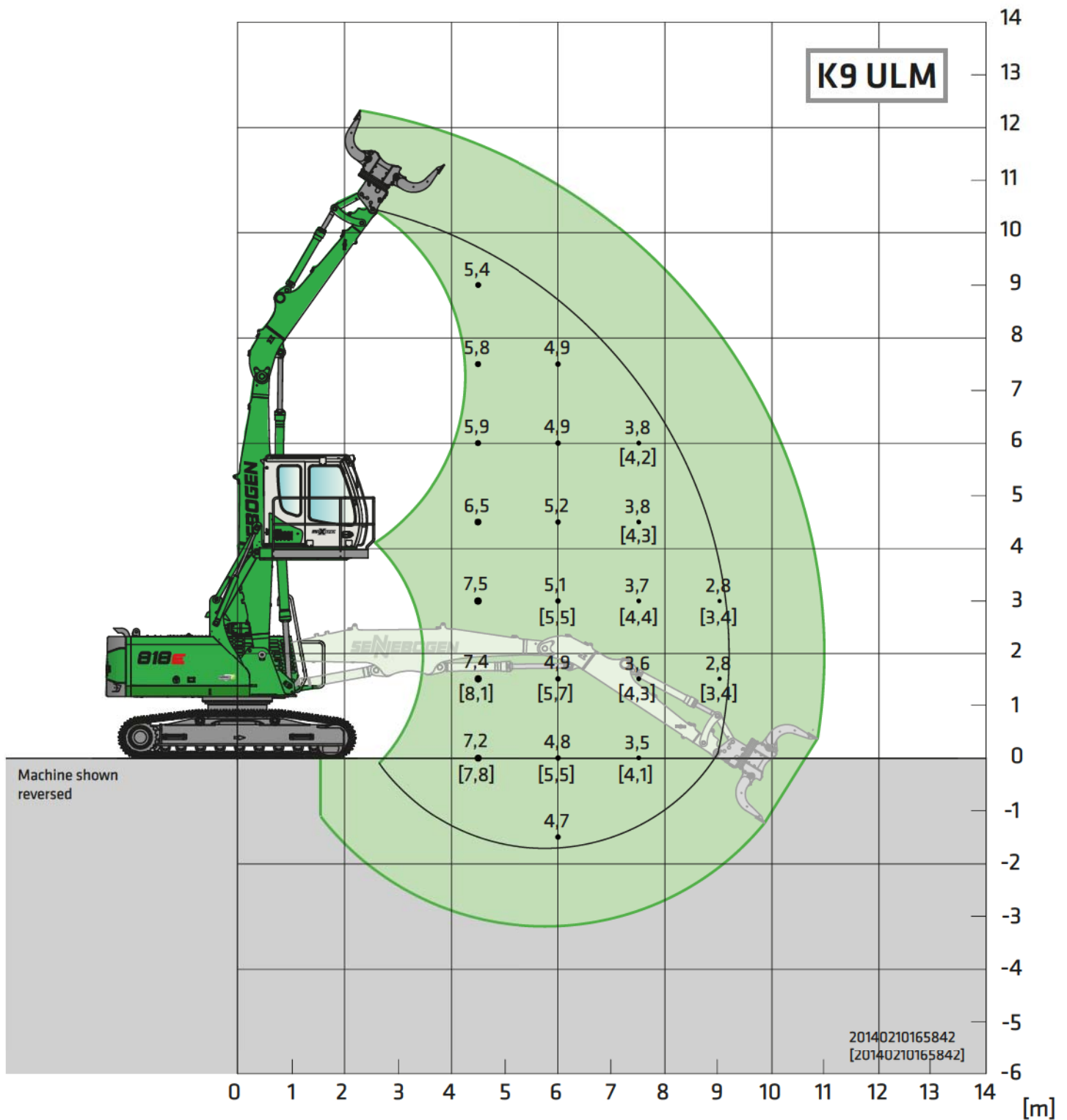
Option	<ul style="list-style-type: none"> <li>■ Output: <b>90 kW / 400 Volt / 50 Hz</b> Total power input 200 kVA, safeguard on the machine, 200 A (alternatively 250 A with magnet system) at 400 V - motor start-up via star-delta switching operation</li> <li>■ Advantages: Lowest operating costs, quiet and virtually vibration-free work, long service life of hydraulic components</li> </ul>
--------	--

## OPERATING WEIGHT

Mass	818 R with undercarriage type R25/240 and compact loading equipment K9 and multi-shell grab 600 I <span style="float: right;">approx. 25,000 kg</span>
Note	The working weight varies depending on the design and features.



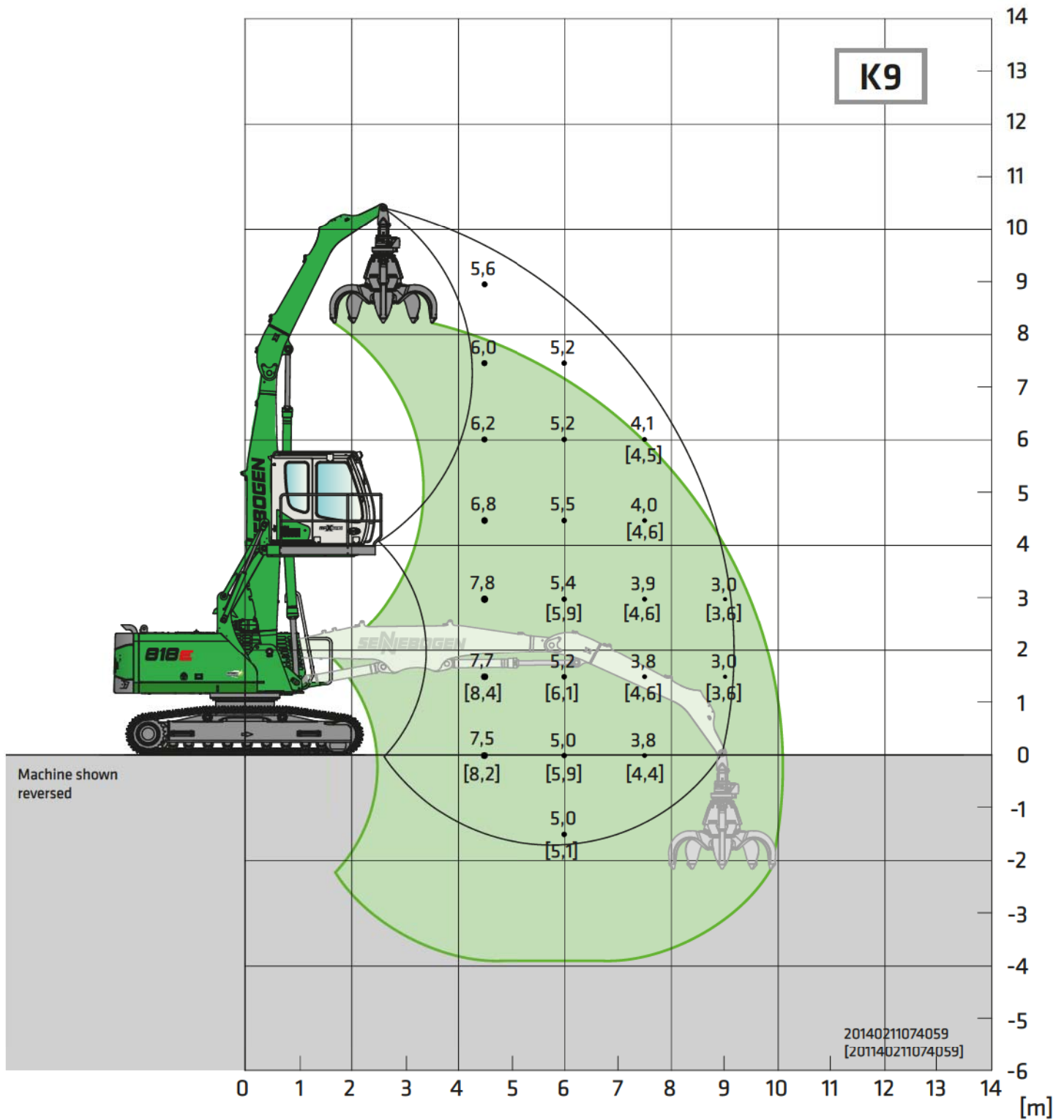
# 818E Load ratings



<b>Undercarriage</b>	<b>R25/240</b>	<b>Compact boom</b>	<b>5.3 m</b>	<b>Cab</b>	<b>Maxcab E270,</b>
		<b>Dipper stick</b>	<b>3.8 m ULM</b>		<b>hydraulically elevating</b>

All load ratings are in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grapple, magnet, load hook, etc. are part of the specified load ratings. The given 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, material handlers used for hoisting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. Load ratings apply for a machine with deployed 4-point outrigger support and for 360° slewing. Load ratings in square brackets [ ] apply for blocked pendulum axle, undeployed outriggers, free-standing, and 360° slewing.

# 818E Load ratings

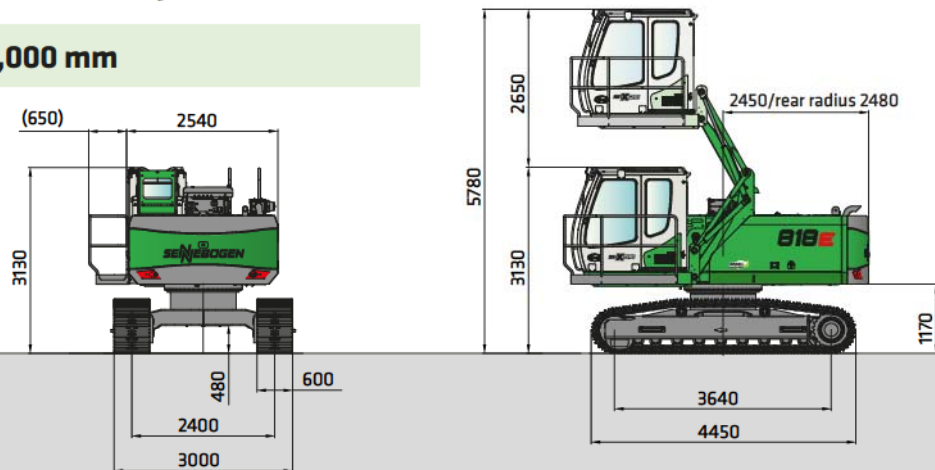


Undercarriage **R25/240**      Compact boom **5.3 m**      Cab **Maxcab E270,**  
 Dipper stick **3.8 m**      hydraulically elevating

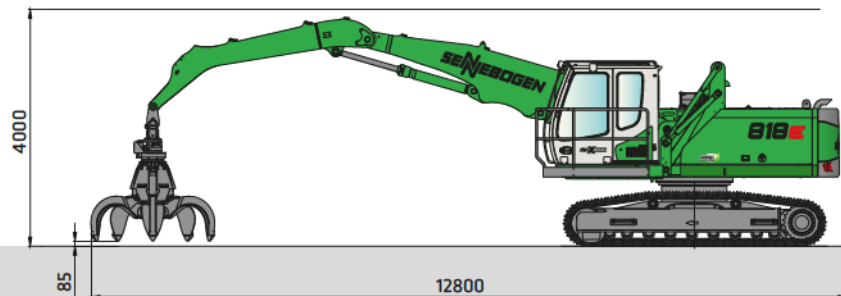
All load ratings are in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grapple, magnet, load hook, etc. are part of the specified load ratings. The given values are 75% of the static tipping load or 87% of the hydraulic lifting force in accordance with ISO 10567. In accordance with EU standard EN 474/5, material handlers used for hoisting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. Load ratings apply for a machine with deployed 4-point outrigger support and for 360° slewing. Load ratings in square brackets [ ] apply for blocked pendulum axle, undeployed outriggers, free-standing, and 360° slewing.

# 818E Transport dimensions

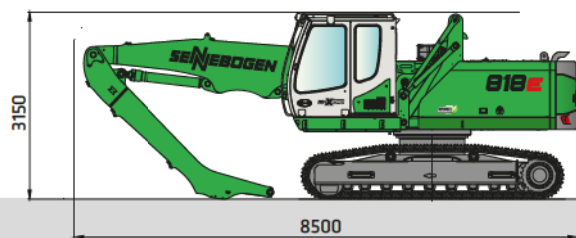
Transport width 3,000 mm



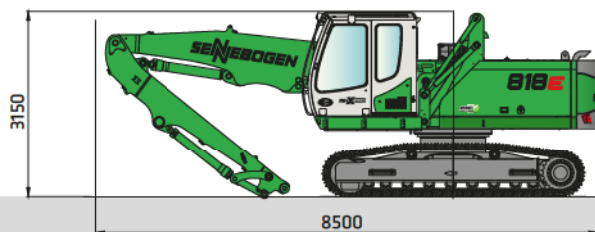
818 R with undercarriage R25/240 and hydraulically adjustable cab type E270



818 R with undercarriage R25/240, 5.3 m compact boom and 3.8 m dipperstick



818 R with undercarriage R25/240, 5.3 m compact boom and 3.8 m dipperstick



818 R with undercarriage R25/240, 5.3 m compact boom and 3.8 m dipperstick ULM

	Compact boom	Dipper stick	Transport length (L)	Transport height (H)
K9 ULM	5.3 m	3.8 m ULM	8.5 m	3.15 m
K9	5.3 m	3.8 m	8.5 m	3.15 m

# B18E Recommended grabs

## SGM multi-shell grab (4 shells)



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

## SGM multi-shell grab (5 shells)



Design / size	Grapple capacity	Weight <sup>1</sup>		Max. load capacity
		Shell shape <sup>2</sup>		
		HO	G	
SGM	l	kg	kg	t
400.30-5	400	1465	1528	4.0
600.30-5	600	1490	1580	
800.30-5	800	1540	1650	

## Double-shell grab SGZ



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

## Sorting grab SGR



Type series / model	Grapple capacity	Weight <sup>1</sup>	Max. load capacity
SGR	l	kg	t
800.30 L	400	1135	4.0
1000.30 L	500	1230	
1200.30 L	600	1320	

## Magnetic plates



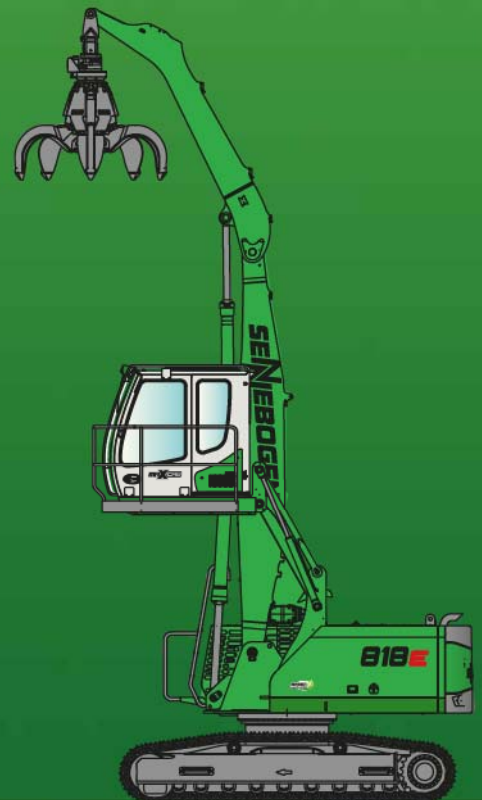
Type series / model	Power	Deadweight	Breakaway force	Load-bearing capacity in kg
WOKO	kW	kg	kN	Slab (safety factor 2)
S-RLB 10	4.8	730	190	9500
S-RLB 11.5	5.5	1060	240	12000
S-RLB 12.5	8.8	1310	280	14000
Recommended magnetic generator: 9 kW/15 kW				

\*) Available upon request

<sup>1</sup>) Weight information without grapple suspension, stick bolts, hose system

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

# 818E



This catalog describes machine models, what equipment comes with individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik. Machine illustrations may contain optional and additional equipment. Actual equipment may vary depending on the country to which the machines are delivered, especially in regard to standard and optional equipment.

All product designations used may be trademarks of SENNEBOGEN Maschinenfabrik GmbH or other supplying companies, and any use by third parties for their own purposes may violate the rights of the owners.

Please contact your local SENNEBOGEN sales partner for information on available equipment variants. Desired performance characteristics are only binding if they are expressly stipulated upon conclusion of the contract. Delivery options and technical features subject to change. Errors and omissions excepted. Equipment subject to change and rights of advancement reserved.

© SENNEBOGEN Maschinenfabrik GmbH, Straubing, Germany. Reproduction in whole or in part only with written consent of SENNEBOGEN Maschinenfabrik GmbH, Straubing, Germany.

## SENNEBOGEN

**SENNEBOGEN**  
**Maschinenfabrik GmbH**  
Sennebogenstraße 10  
94315 Straubing, Germany

Tel. +49 9421 540-144/146  
Fax +49 9421 43 882  
[marketing@sennebogen.de](mailto:marketing@sennebogen.de)

Order no. / Item no. 187563  
818E-E-041715

GO FOR GREEN

 [www.sennebogen.com](http://www.sennebogen.com)