



57 - 67 t







Crawler material handler





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: Highquality components without over-engineering
- Long product service life and high value retention

Your top benefits



Green Efficiency



Save fuel - reduce operating costs



Peak performance

Durable mechanical systems - stressed parts optimized High speeds - high load capacities



Maximum usability



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



Maximum safety

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

Maintenance and service made easy

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



Consultation and support in your area

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







Subject to technical changes. Further options available upon request.

BHDE 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

- 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 <a>I

- Constant, reliable performance thanks to largedimensioned 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

4 Subject to technical changes. Further options available upon request.





Powerful hydraulic system **B**

- 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*





Features

- optimum cab climate with automatic air conditioning system, partial tinted glass
- pleasant and equal temperature dispersion by means of 9 nozzles
- panoramic view
- comfortseat 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
- I2 V. 24 V. and USB charging sockets hands-free telephone preparation, document box
- various options: electric cooler behind operator`s seat, protective covers, 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

6

EBOGEN

BHDE Maintenance and service made easy.



Optimized for maintenance

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



SENNEBOGEN HydroClean*

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



Central measuring points

- Easily accessible
- Quickly inspect entire hydraulic system



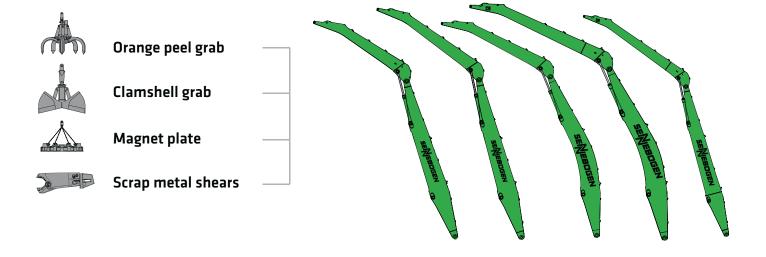
Clear labeling

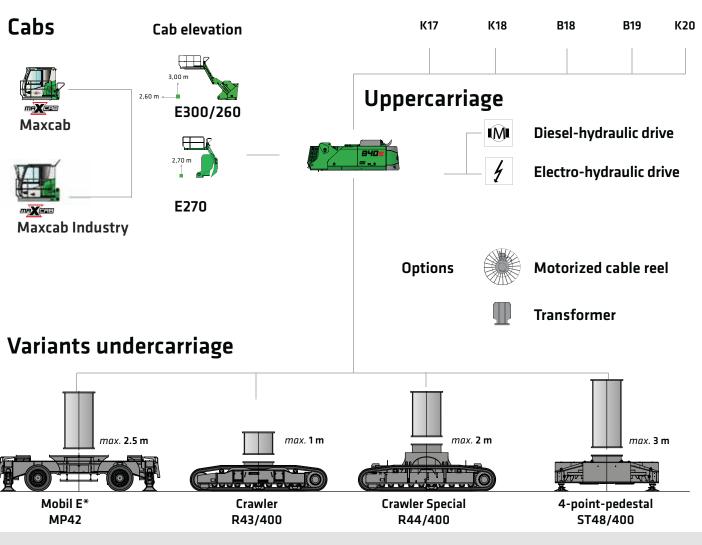
- All parts labeled with a unique part number
- Easy and reliable spare parts ordering

BYDE Modular structure - versatile solutions

Attachments

Equipment (additional equipment on request)





8 * Additional information on our mobile undercarriages can be found in the separate 840 M E-Series brochure



BHDE Advantages at a glance

Reliable work through robust and FEMoptimized equipment

SENIEBOGEN

Better illumination of the work area through powerful LED headlights*

High working loads even at maximum extension, due to massive cylinders

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

ATE OFF OF

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

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

640s

Robust side cover of recyclable steel sheet

> Robust slewing gear (2x) for fast fast work cycles and high-performance material handling

BHDE Technical data - equipment

MACHINE TYPE

Model (type) 840

🔲 мотор	2			
Power	<u>Stage V:</u> Rated Power: 231 kW at 2100 rpm 237 kW at 2000 rpm / 242 kW at 1800 rpm <u>Stage Illa:</u> Rated Power: 227 kW at 2000 rpm 254 kW at 1800 rpm			
Model	Cummins L9 Direct injection, turbo charged, charge air cooling, reduced emissions, ECO mode, idle automation, stop automation, fuel pre-warming			
Cooling	water-cooled, direction of rotation changeover of the cooler fan			
Diesel filter	with water separator and heater			
Air filter	Dry filter with integrated pre-separator, automatic dust discharge, main element and safety element, contamination indicator			
Fuel tank	625 l			
DEF tank	75 l			
Electr. system	24 V			
Batteries	2 x 150 Ah, battery disconnect switch			
Options	 Engine block pre-warming at temperatures under -20°C Electric fuel pump 			

Design	Torsion-resistant box design, precision crafted steel bushings for boom bearing arrangement		
	Extremely service-friendly concept, engine installed in the longitudinal direction		
Central lubrication	Autom. central lubrication for equipment and slewing gear		
Electrical	Central electrical distributor, battery disconnect switch		
Cooling system	3-circuit cooling system with high cooling output, thermostatically regulated fan drive for oil cooler and water cooler, fan reversal for cleaning		
Options	 Slewing gear brake via foot pedal Hand rail at the upper structure LED light packages Fire extinguisher Sea climate resistant coating Electrical hydraulic tank pre-warming at temperatures under -20° 		

Options

Slewing ring

Slewing speed

- Hydraulically-driven magnetic generator 20 kW
- Telematic system SENtrack DS

HYDRAULIC SYSTEM

Load sensing / LUDV hydraulic system, hydraulic, pilotcontrolled work functions, load limit sensing control

Pump type	Variable-displacement piston pump in swashplate design, load pressure-independent flow distribution for simultaneous, independent control of work functions
Pump control	Zero-stroke control, on-demand flow-control - the pumps only pump as much oil as will actually be used, pressure purging, load limit sensing control
Delivery rate	maximum 740 l/min
Operating pressure	to 350 bar
Filtration	High-performance filtration with long-term change interval SENNEBOGEN HydroClean micro-filter system water separator option
Hydraulic tank	500 l
Control system	Proportional, precision hydraulic activation of work movements, 2 hydraulic servo joysticks for work functions, supplemental functions via switches and foot pedals
Safety	Hydraulic circuits with safety valves, secured emergency lowering of the equipment at engine standstill, pipe fracture safety valves for lift cylinder and stick cylinder
Options	 Electric fuel pump for fueling without moving the machine Bio-oil filling - ecologically worthwhile Tool Control for easy attachment change Supplemental hydraulic circuit for shear attachment Load moment warning with capacity utilization indicator, e.g. for tasks in halls Overload safeguard with overload shutdown e.g. for tasks in halls
SLEWII	NG DRIVE
Gearbox	Compact planetary gear with slant axis hydraulic motor, integrated brake valves
Parking brake	Spring-loaded disk brake

Strong ball race slewing ring, sealed

0-8 RPM, stepless



Low temperature packages

BHDE Technical data - equipment

🕒 САВ	
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
	IENT
Design	Decades of experience, state-of-the-art com- puter simulation, highest level stability, longest service life, large-dimensioned bearing points, sealed special bearing bushes, precision-crafted, quick-release couplings on the grapple connec- tions - open/closed/rotate
Cylinders	Hydraulic cylinders with high-quality sealing and guide elements, end position damping, sealed bearing points
Options	 Ball valves on the hydraulic lines grab open, closed, rotate Kinematic position II for greater working depth Sea climate resistant coating Maritime coating of all cylinders, nickel-plated and chrome-plated Float position for equipment Lift limitation / stick limitation adjustable for the stop settings, for example in the hall

🔜 UNDERCARRIAGE

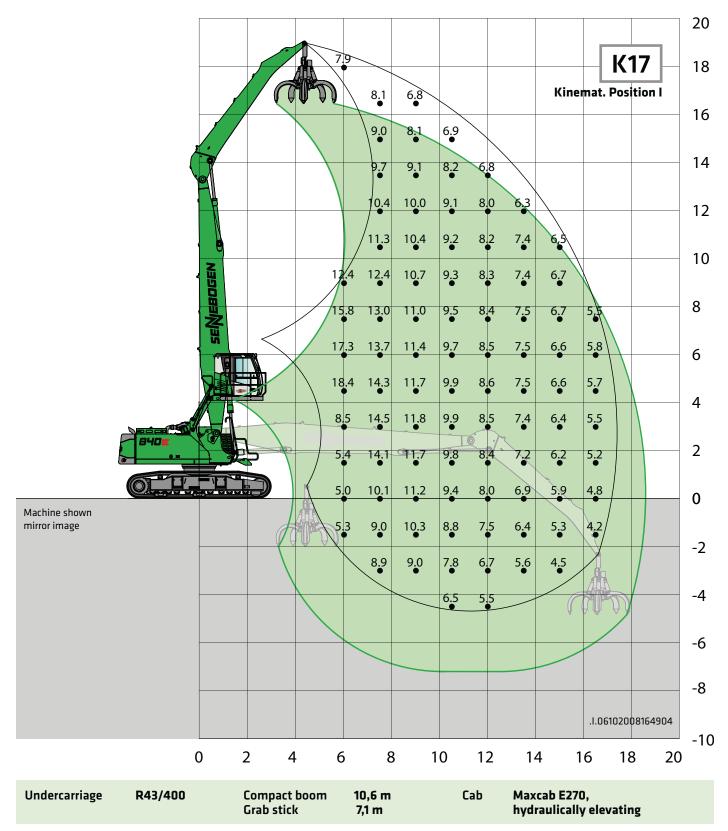
Design	Wide-gauge crawler undercarriage, type R43/400 with 4 m track width and B7 traveling gear in stable, torsionally rigid box construction
Drive	Hydraulic travel drive, integrated in the traveling gear frame for each traveling gear side through an axial piston motor via compact planetary gear.
Parking brake	Spring-loaded, hydraulically ventilated disk brakes. Hydraulic brake valves protect the drive engines when moving downhill.
Traveling gear	B7 crawler track (58 links) with 700 mm triple-growser track shoes, canted
Speed	0 - 2.3 km/h
Options	 R44-400 crawler undercarriage Maintenance-free B7 crawler track with 700 mm triple grouser track shoes Maintenance-free B7 crawler track with 800 mm flat track shoes

ELE	CTRIC DRIVE egreen
Option	Power: 200 kW, 400 V, 50 Hz

Total connected load 340 kVA, machineprovided 400 A fuse (alternatively 425 A with magnet system) for 400 V – via stardelta circuit

 Advantages: Lowest operating costs, quiet and virtually vibration-free work, long service life of hydraulic components

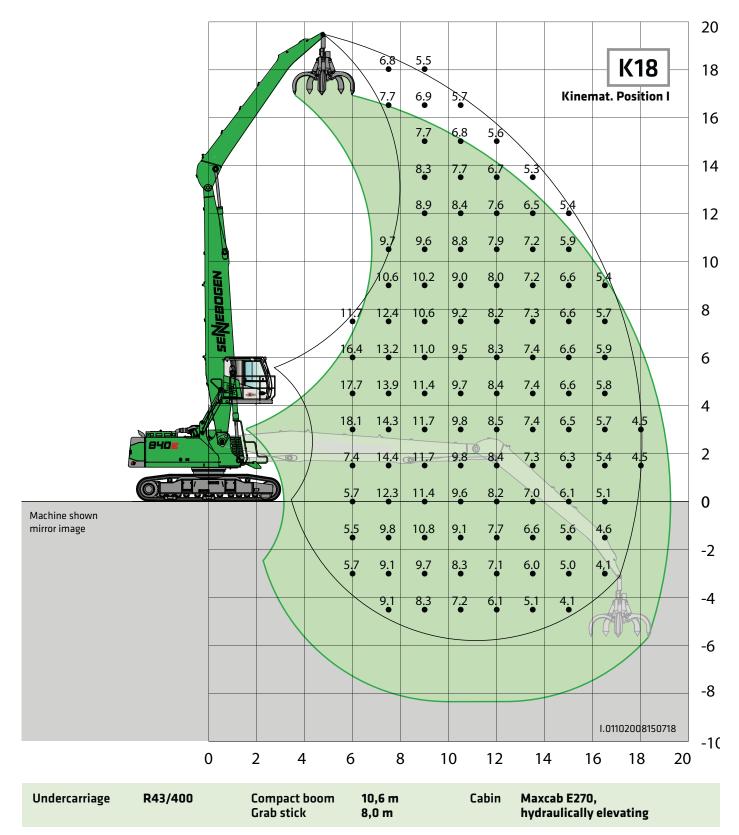
OPERATING WEIGHT Mass approx. 59,000 kg Basic machine 840 R with equipment K18 and 600 I orange peel grab and 700 mm 3-grouser track shoes Note The operating weight varies depending on the model.



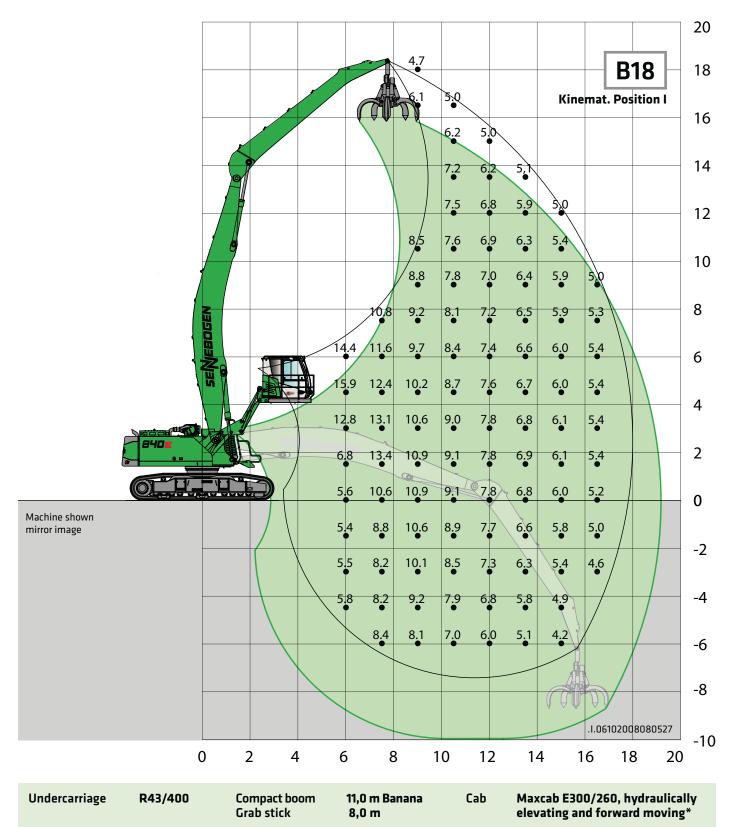
All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on solid, level ground. Attachments such as grabs, magnets, load hooks, etc. are part of the specified load ratings. The specified values are 75% of the static tipping load or 87% of the hydraulic lifting 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. Load ratings apply to max. gauge and they are 360° slewing.

12 Technical data and dimension information subject to change.





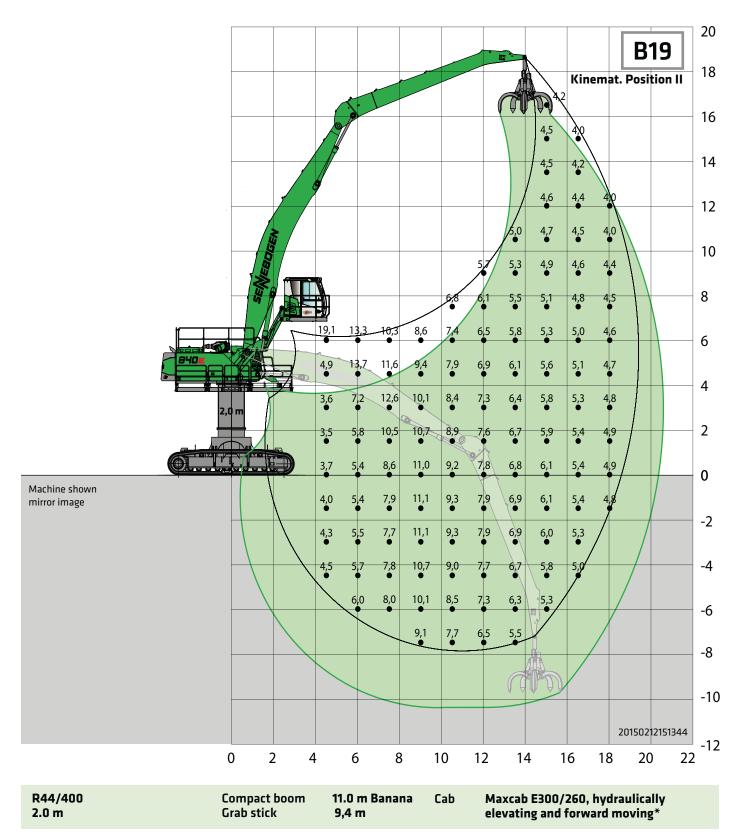
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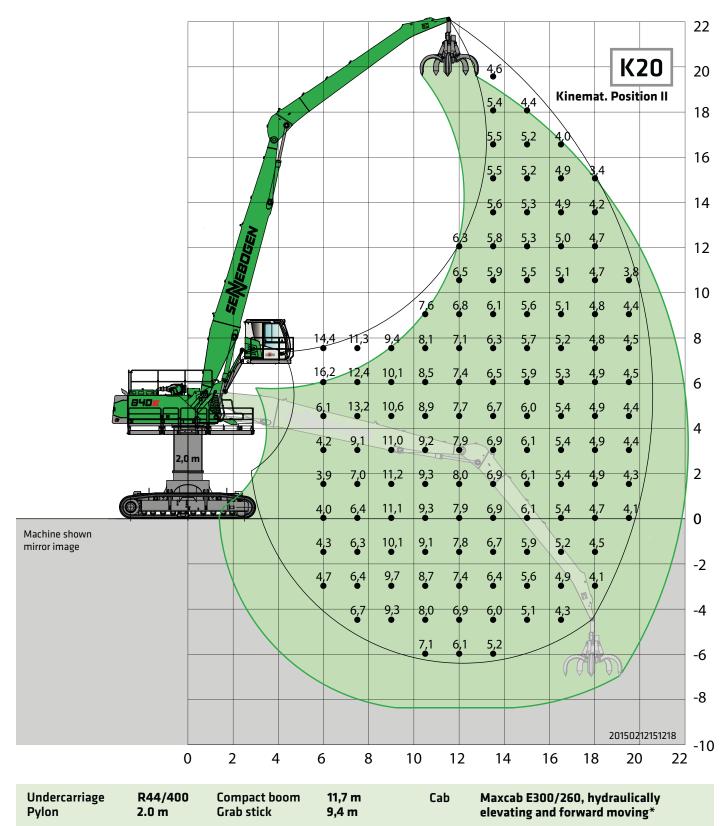
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16 Technical data and dimension information subject to change.



BHDE Grab recommendation

Orange peel grab SGM (4 shells)



Orange peel grab SGM (5 shells)



Clamshell grab SGZ



Magnetic plates



Grab content		Weight ¹	max.	
	Shell shape		piled density	
	HO G			
I	kg	kg	t/m³	
400	1570	1720		
600	1600	1790		
800	1685	1930		
1000	1755	2085		
1250	1850	2200	2.0	
800	2245	2490		
1000	2345	2585		
1500	2475	2830		
2000	2660	3075		
	600 800 1000 1250 800 1000 1500	HO I kg 400 1570 600 1600 800 1685 1000 1755 1250 1850 800 2245 1000 2345 1500 2475	HO C I kg kg 400 1570 1720 600 1600 1790 800 1685 1930 1000 1755 2085 1250 1850 2200 800 2245 2490 1000 2345 2585 1500 2475 2830	

Design (size	Grab content We		ght ¹	max. piled density
Design / size	Grad content	Shell shape ²		
		НО	G	
SGM	I	kg	kg	t/m³
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	
800.50	800	2420	2610	2.0
1000.50	1000	2480	2655	2.0
1500.50	1500	2645	2930	
2000.50	2000	2800	3160	1
2500.50	2500	3130	3615	
3000.50	3000	3250	3875	
3500.50	3500	3420	4140	

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

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

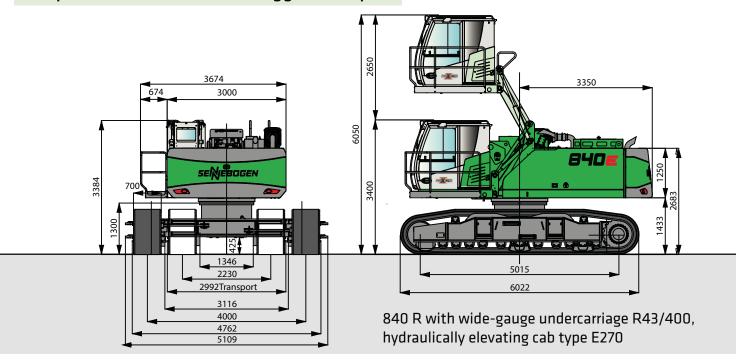
*) On request 1) \

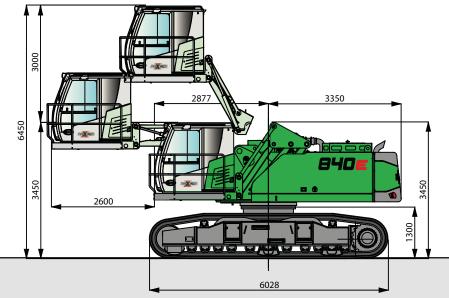
 Weight information without grab suspension, stick bolts, hose system ²) Half-open shells: Shell sheet steel 400 mm wide, from content 1250 I shell sheet steel 500 mm wide

Detailed information concerning the grabs, as well as log grabs, quick-release systems, and other attachments is provided in the "Attachments" brochure



Transport width 3000 mm with traveling gear telescoped

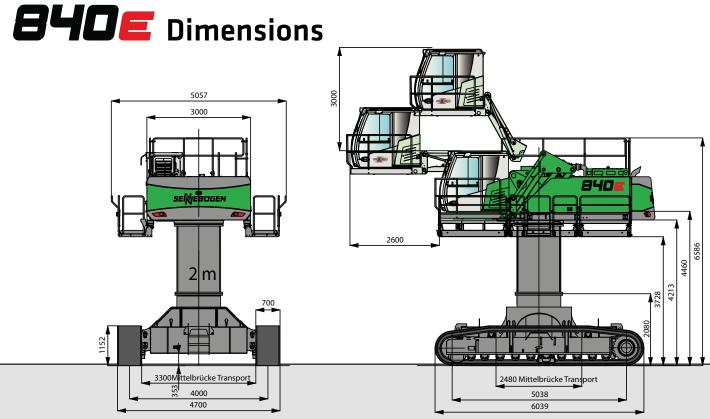




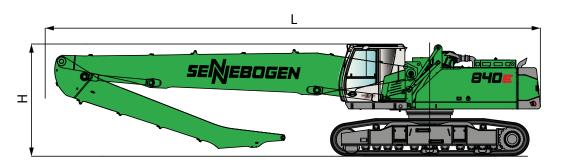
840 R with wide-gauge undercarriage R43/400, cab type E300/260, can be elevated and moved forward hydraulically

18 Technical data and dimension information subject to change.





840 R with wide-gauge undercarriage R44/400, cab type E300/260, can be elevated and moved forward hydraulically



Transport dimensions 840 R with undercarriage type R43/400

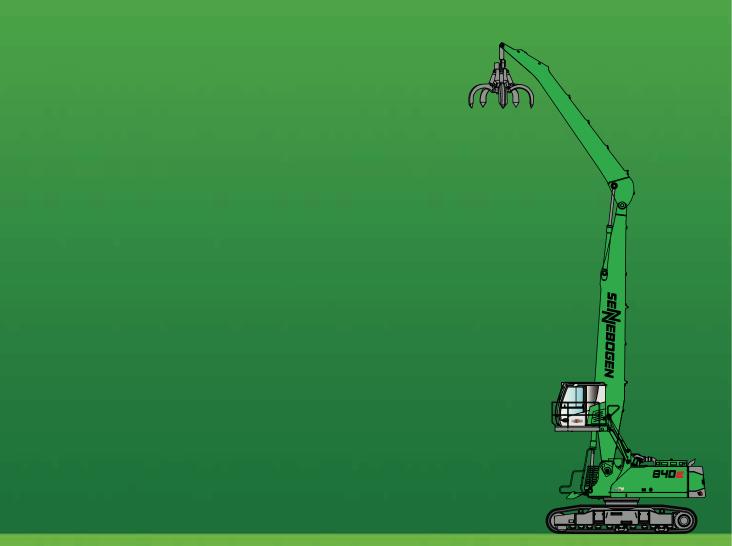
	Boom	Grab stick	Transport length (L)	Transport height (H)
K17	10,6 m	7,1 m	15,0 m	3,40 m
K18	10,6 m	8,0 m	15,0 m	3,65 m
B18	11,0 m Banana	8,0 m	15,35 m	3,70 m
B19	11,0 m Banana	9,4 m	15,3 m	3,65 m*
K20	11,7 m	9,4 m	16,2 m	3,40 m*

* Stick is dismounted

Note:

This catalog describes machine models, scopes of equipment of individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik. Machine illustrations can contain optional equipment and supplemental equipment. Actual equipment may vary in a tolerance range depending on the country to which the machines are delivered, especially in regard to standard and optional equipment





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