









### **BBOE** Advanced. The E-Series



1980: S214 with dual cylinder

### What makes up the E-Series

- 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 service life and high value retention

### Your top benefits

- Green Efficiency
  Save fuel reduce operating costs
  Work quietly protect operator and environment
- Top-level performance

  Durable mechanical systems stressed parts optimized

  High speeds high load capacities
- Maximum usability

  Maxcab comfort cab work in comfort

  SENCON work program selection made easy
- Maximum safety
  Safe entry and exit non-slip steps
  State-of-the-art cameras entire work area in view
- Maintenance and service made easy
  SENNEBOGEN control system easy diagnosis
  Simple maintenance clear labeling
- Consultation and support in your area
  3 production sites 2 subsidiaries
  150 sales partners over 350 service stations







## **BBO** The E-Series. At a glance.



### Four ways to save fuel

- Savings of up to 20 %: Work 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 after treatment

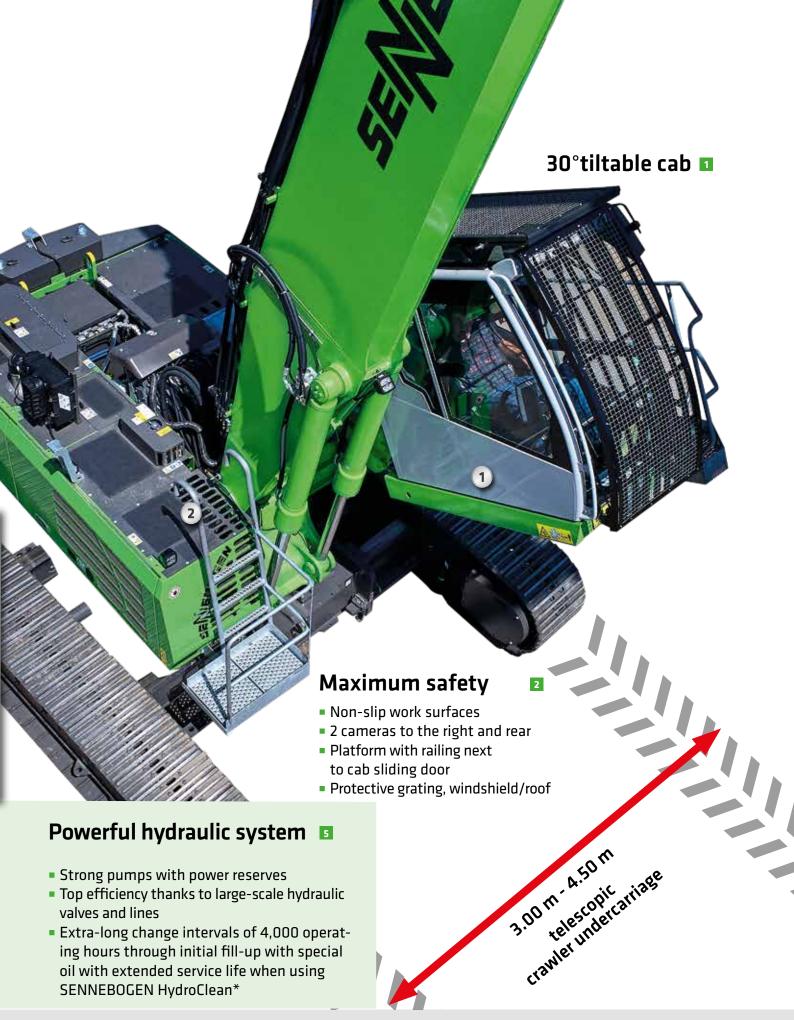


### Quiet operation **1**

- Consistently quiet operation thanks to decoupled engine mounts and sound proofing in the doors
- Sound power level in accordance with 2000/14/EC as much as 2 dB lower than required

### High-capacity cooling <a>I</a>

- Constant, reliable performance thanks to large-scale, robust fans and coolers
- Water and oil coolers with top-notch efficiency thanks to axial-piston pump and engine control and on-demand thermostatic control
- Fan reversal for cleaning in series



# The premium cab.



#### **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**

- Joysticks on resonant, seatmounted consoles
- Comfortable grip thanks to ergonomic design
- Shortcuts for direct and sensitive control of all functions
- Quicker access thanks to optimized design of buttons and switches





## **BBDE** Maintenance and service made easy.



### **Optimized for** maintenance

- Fast and easy diagnosis thanks to the clearly labeled electrical distributor
- Easy access to all the machine's service points
- Automatic central lubrication for equipment and live ring track



### **SENNEBOGEN** HydroClean\*

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



### **Central measuring** points

- Easily accessible
- Quick inspection of the entire hydraulic system

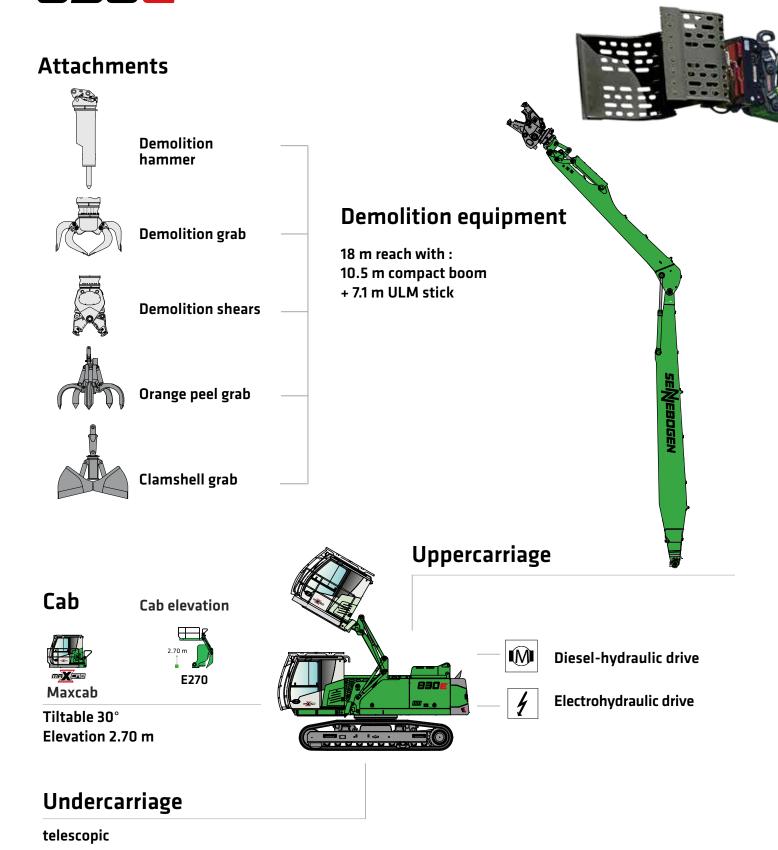


### **Clear labeling**

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

\* Option 7

### **BBO** Modular construction



## **BBOE** Advantages at a glance



## **BBO** Technical data, equipment

### **MACHINE TYPE**

Model (type) 830

<b>ENGINE</b>	
Power	Stage V: Rated power: 168 kW at 2200 min <sup>-1</sup> 186 kW at 2000 min <sup>-1</sup> / 188 kW at 1900 min <sup>-1</sup> Stage Illa: Rated power: 164 kW at 2000 min <sup>-1</sup> 172 kW at 1800 min <sup>-1</sup>
Model	<b>Cummins 6.7</b> direct injection, turbo charged, charge air cooler, reduced emissions, Eco mode, idle automation, stop automation
Cooling	water-cooled
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	450 l
DEF tank	45 l
Electr. system	24 V
Batteries	2 x 150 Ah, main switch
Options	<ul> <li>Engine block preheating for temperatures below -20°C</li> <li>Electric fuel pump</li> <li>Jump start pole</li> </ul>

<b>UPPER</b>	ARRIAGE			
Design	Torsion-resistant box design, precision crafted, steel bushings for boom mounting. Very service-friendly design, engine installed in the longitudinal direction			
Central lubrica- tion	Automatic central lubrication for equipment and slewing gear			
Electrical sys- tem	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> <li>Swing gear brake via foot pedal</li> <li>Uppercarriage railings for additional safety</li> <li>LED lighting package</li> <li>Fire extinguisher</li> <li>Electric heater for hydraulic tank</li> <li>Low temperature packages</li> </ul>			

Options	<ul><li>Hydraulically-driven magnetic generator 15 kW / 20 kW</li></ul>
	<ul> <li>SENtrack DS telematic system</li> </ul>

,			
ULIC SYSTEM			
UDV hydraulic system for hydraulically operats			
Swash plate-type variable-displacement piston pump, load pressure-independent flow distribution for simultaneous, independent control of work functions			
Zero-stroke control, on-demand flow control  – the pumps only pump as much oil as will actually be used, pressure purging, load limit control			
520 l/min			
max. 350 bar			
High-performance filtration with long change interval			
310 I			
Proportional, precision hydraulic actuation of work movements, 2 hydraulic servo joysticks for the work functions, additional functions via switches and foot pedals			
Hydraulic circuits with safety valves, secured emergency lowering of the equipment at engine standstill, pipe fracture safety valves for lift cylinder and stick cylinder			
<ul> <li>Bio-oil – environmentally friendly</li> <li>Tool Control for programming pressure/rate of up to 10 tools</li> <li>Supplementary hydraulic circuit for shear attachment</li> <li>Load torque warning with capacity display</li> <li>Overload safeguard with shutdown</li> <li>3 µm hydraulic micro-filter - SENNEBOGEN HydroClean</li> </ul>			

SLEWING DRIVE				
Gearbox	Compact planetary gear with bent-axis hy- draulic engine, integrated brake valves			
Parking brake	Spring-loaded multi-disk brake			
Slewing ring	Strong slewing ring, sealed			
Slewing speed	0-8 min <sup>1</sup> , variable			



Subject to technical changes.



<b>□</b> CAB					
Cab elevation	E270, hydraulically elevating cab, tiltable 30 °				
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	<ul> <li>Maxcab Industry</li> <li>Armored-glass windshield</li> <li>Armored-glass sunroof</li> <li>Safety side window and rear window</li> <li>Windscreen wiper for front window/skylight</li> <li>Rolling shade for roof window and windshield</li> <li>FOPS protective roof guard</li> <li>Protective front guard</li> <li>Charcoal filter for circulating and outside air</li> <li>Auxiliary heating</li> <li>Climatic seat</li> <li>Radio</li> <li>Electric cool box</li> </ul>				

<b>■</b> UNDERCARRIAGE				
Design	Wide-gauge crawler undercarriage in stable, torsionally rigid box construction			
Drive	Hydraulic travel drive			
Parking brake	Spring-loaded, hydraulically ventilated disk brakes, hydraulic brake valves			
Traveling gear	T41/380 telescopic crawler undercarriage with hydraulic or mechanical track adjustment of 2.3 - 3.8 m			
Speed	<b>0 - 1.6 km/h</b> Stage I, <b>0 - 3 km/h</b> Stage II			

эрсси	o nokinyii stage i, o skinyii stage ii
ELEC	TRIC DRIVE GGREEN
Option	Power: 132 kW / 400 Volt / 50 Hz Total connected load 250 kVA
	<ul> <li>Option: 160 kW / 400 Volt / 50 Hz         Total connected load 270 kVA machine side fuse 315 A (alternatively 355 A with magnet system) for 400 V - via star-delta circuit     </li> </ul>
	<ul> <li>Advantages: Lowest operating costs, low- noise and almost vibration-free work, long service life of the hydraulic components</li> </ul>

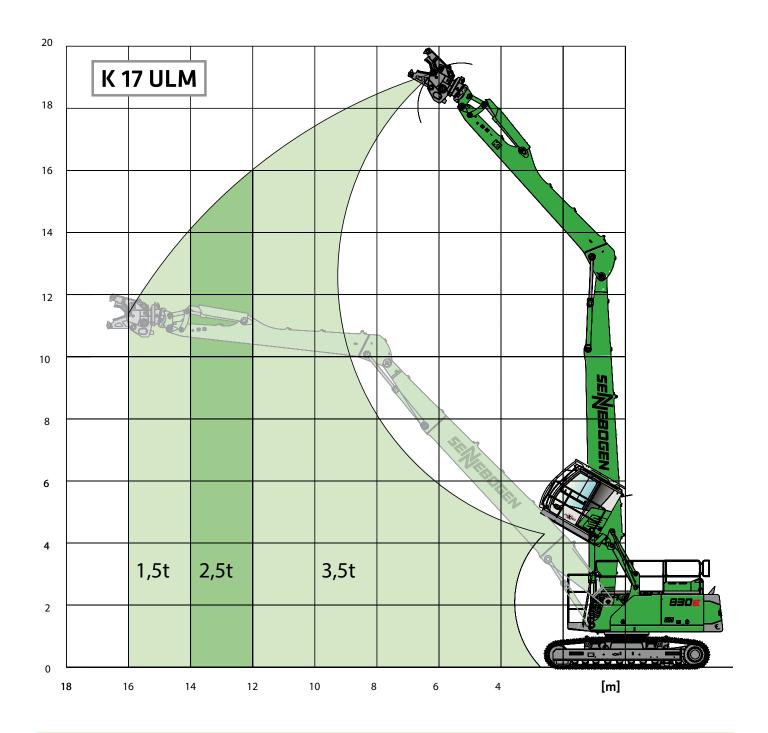
<b>EQUIPMENT</b>				
Design	Decade-long experience, most advanced computer simulation, the greatest degree of stability and longest service life, large-scale mounting points and precision-crafted sealed low-maintenance special bushings, quick change couplings for connecting/removing/turning grabs			
Cylinders	Hydraulic cylinders with high-quality sealing and guide elements, end position damping, sealed mounting points			
Options	<ul> <li>Ball valves in the grab hydraulic lines</li> <li>Hoisting limiter / stick limitation adjustable for stop settings, e.g. in the hall</li> <li>Multi-coupling</li> </ul>			



Subject to technical changes.



## **Demolition**



**Undercarriage:** T41/380 **Compact boom:** 10.5 m **Cab:** E270 Maxcab, hydraulically elevating, tiltable by 30°

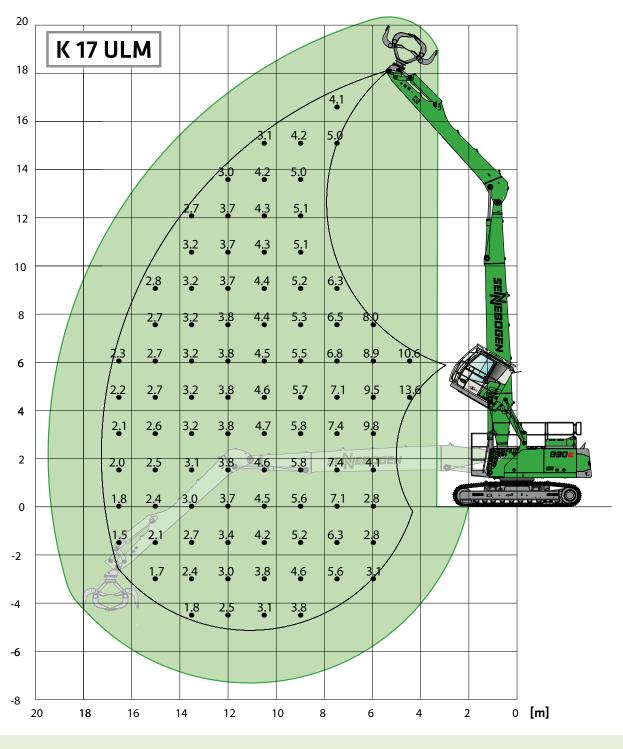
Grab stick: 7.1 m

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. Load ratings apply to max. gauge and they are 360° slewing.





## **Demolition**

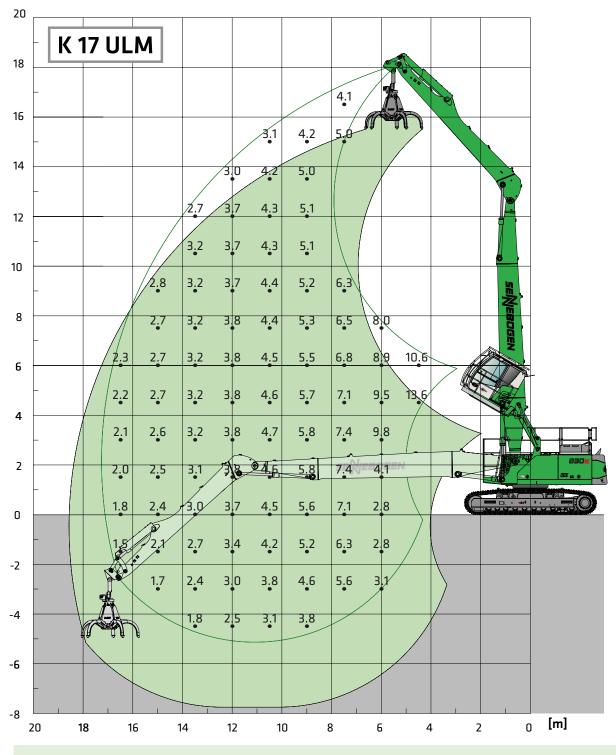


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## **BBO**Load ratings

## **Demolition**



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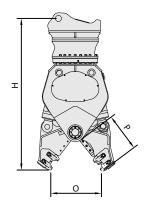
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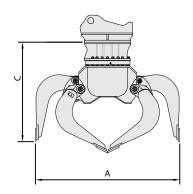


## **Demolition**

#### **Pulveriser**

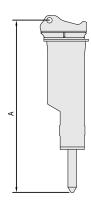
Description	Weight	H	0	P
	(kg)	(mm)	(mm)	(mm)
CD 015 BB-A	1470	2050	710	530





#### **Demolition grab**

Description	Weight (kg)	Length (mm)	A (mm)	B (mm)	C (mm)
S1402	1220	1010	2000	1046	616



#### **Demolition hammer**

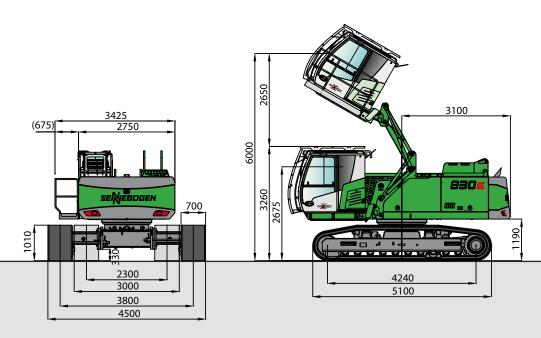
Description	Weight	ø	A
	(kg)	(mm)	(mm)
AB 1853 1800		135	2700

The tools depicted should serve as an example of the potentially suitable sizes. Customers will make their own tool selection.

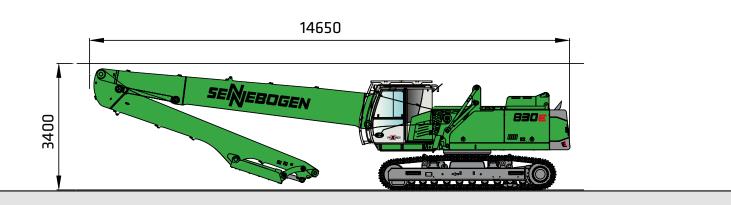
## Stick-mounted hydraulic performance data

- AUF/ZU tool up to 385 lt./min./ 350 bar
- Set quantity and pressure via the tool control
- Tool ROTATION
- Hammer vent / return line (option)
- Operate hydraulic quick change (option)





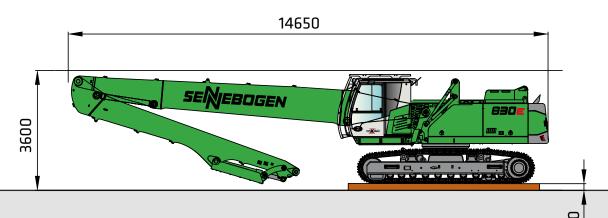
830~R-HDD with T41/380 undercarriage and hydraulically elevating Maxcab, tiltable by  $30^\circ$ 



830 R-HDD with T41/380 undercarriage and 10.8 m compact boom, 7.1 m grab stick, with cylinder protection







830 R-HDD with T41/380 undercarriage and 10.8 m compact boom, 7.1 m grab stick, with cylinder protection







**Optimum protection** for ULM cyclinder

### Cab

series standard 30° tilt, protective guard and underbody protection panel made of riffled sheet metal

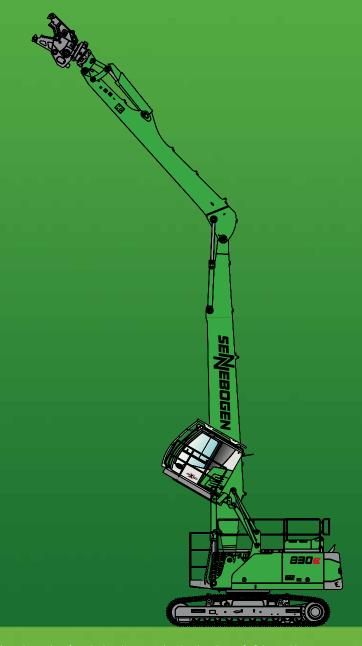


### **Easy to transport** transport width 3.0.m transport length 14.6 m









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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