



164 kW (Stage IIIa) 168 kW (Stage V) 132 kW (Electo)

40 - 56 t







Material handling crawler machine

BBDE Advanced. The E-Series



1976: S 517 with crawler chassis and plastic cab moving earth

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

3

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







BBDE 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 **I**

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

High-capacity cooling <a>I

- 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





Powerful hydraulic system **I**

1

- Strong pumps with power reserves
- Top efficiency thanks to large-scale 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*

Maximum safety

- Non-slip work surfaces
- Hand rails* 1
- 2 cameras to the right and rear
- Platform with railing next to cab sliding door

2





Equipment features

- optimal indoor climate with automatic climate control, partly tinted windows
- pleasant and equal temperature dispersion by means of 9 nozzles
- panoramic view
- air-suspension comfort seat
- quiet due to optimized soundproofing
- safety & comfort thanks to the sliding door, large access opening
- operating elements arranged ergonomically
- = 12 V, 24 V, and USB charging sockets, cellphone holder, document storage
- various options: electric cooling box behind operator seat, slip covers, seat climate control

SENNEBOGEN-Joysticks

- Consoles and joysticks that move with the seat
- Comfortable grip thanks to ergonomic design
- Precise control of all movements through direct and sensitive function activation
- Quicker access thanks to optimized design of buttons and switches

ebogen



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 slewing ring



SENNEBOGEN Hydro Clean*

- 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

BBDE Modular design – versatile solutions



8 * Additional information on our mobile undercarriages can be found in the 830 M E-Series brochure



Reliable working thanks to robust and FEM optimized equipment

Better illumination of the work area through powerful LED headlights*

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

Safe entry and exit thanks to railings, grip handles and non-slip steps Sliding door for comfortable entry and exit

> Safe entry and exit thanks to platform with railing

> > = = | I

Ideal overview and safe working height thanks to stable cab elevation

> Robust side cover made from recyclable sheet steel

* Option

BBDE Technical data, equipment

MACHINE TYPE

Model (type) 830

	i
Power	<u>Stage V:</u> Rated power: 168 kW at 2200 min ⁻¹ 188 kW at 1900 min ⁻¹ <u>Stage Illa:</u> Rated power: 164 kW at 2000 min ⁻¹ 172 kW at 1800 min ⁻¹
Model	Cummins 6.7 direct injection, turbo charged, charge air cooler, reduced emissions, Eco mode, idle automation
Cooling	water-cooled
Diesel filter	with water separator and heating system
Air filter	Dry filter with 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, battery disconnect switch
Options	 Engine block heater Electric fuel pump Jump start pole
	CARRIAGE

Design	Torsion-resistant box design, precision crafted, steel bushings for boom mountings. Ser- vice-friendly design, engine installed in the longitudinal direction
Central lubrication	Automatic central lubrication system for equipment and slewing ring
Electrical system	central electrical distributor, battery disconnect switch
Cooling system	Compact 3-circuit cooler unit with high cooling output, thermostatically controlled fan drive to reduce energy consumption and noise emissions
Safety	Camera package (right/rear)
Options	 Swing gear brake via foot pedal Hand rails at the uppercarriage LED lighting packages Fire extinguisher Special paint finish/sea climate resistant coating Electric heater for hydraulic tank Low temperature packages

Options

 Hydraulically-driven magnetic generator 15 kW / 20 kW

SENtrack DS telematic system

🛃 HYDRAULIC SYSTEM

Load-sensing / LUDV hydraulic system for hydraulically operat- ed work functions					
Pump type	Swash plate-type variable-displacement piston pump, load pressure-independent flow distri- bution 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 control				
Flow rate	max. 520 l/min.				
Operating pressure	up to 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	 Bio-oil - environmentally friendly Tool Control for programming pressure/rate of up to 10 tools Supplementary hydraulic circuit for shear attachment Load torque warning with capacity display Overload safeguard with shutdown 3 μm hydraulic micro-filter - SENNEBOGEN HydroClean 				

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 min¹, variable



BBDE Technical data, equipment

🕒 САВ	
Cab elevation	E270, hydraulically elevating
Cab equipment	Sliding door incl. sliding window, vibration damper, tinted safety glass, opening windshield, skylight, windshield wipers, radio, air-suspen- sion comfort seat, driving control via footpedal, SENNEBOGEN control and diagnostic system SENCON
Options	 Tiltable cab, 30° E300/260 cab can be elevated and moved forward hydraulically Maxcab Industry Bullet proof windshield Bullet proof skylight Polycarbonate safety glass Wipers for windshield/skylight Sunblind for skylight and windshield Protective roof guard, FOPS where appropriate Protective front guard carbon filter for circulating/external air Auxiliary heating system Air-conditioned seat Radio Cooling box

🔜 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	Crawler wide-gauge undercarriage type R35/340 with B60 travelling gear and triple grouser shoes, canted
Speed	0 - 1.6 km/h Stage I, 0 - 3 km/h Stage II
Options	 T41/380 telescopic crawler undercarriage with hydraulic or mechanical track adjust- ment of 2.3 - 3.8 m Wide-gauge undercarriage type R44/380 700 mm flat track shoes 800 mm triple grouser shoes Pylon extension

ELECTRIC DRIVE EGREEN

Option

- Power: 132 kW / 400 V / 50 Hz Total connected load 270 kVA, machine side fuse 315 A for 400 V - motor start-up via star-delta circuit
- Alternative: 160 kW / 400 V / 50 Hz
 Advantages: Lowest operating costs, lownoise and virtually vibration-free work, long service life of the hydraulic components

OPERATING WEIGHT

Mass

830 R with R35/340 wide-gauge undercarriage and K17 equipment and 600 I orange peel grab approx. 39,700 kg

830 R with T41/380 hydraulic telescopic crawler undercarriage and K17 equipment and orange peel grab

approx. 43,900 kg

830 R with R44/380 wide-gauge undercarriage and K17 equipment, 2 m pylon and 600 I orange peel grab approx. 56,100 kg

Note

Operating weight varies with equipment.

EQUIPMENTDesign The greatest degree of stability and longest

	service life, large-scale bearing points and precision-crafted sealed low-maintenance special bushings, quick change couplings on the grab's connections open/close/rotate
Cylinders	Hydraulic cylinders with high-quality sealing and guide elements, end position damping, sealed bearing points
Options	 Ball valves in the grab hydraulic lines Sea climate resistant coating Sea climate resistant coating of all cylinders, nickel-plated and chrome-plated Hoisting limiter / stick limitation adjustable for stop settings, e.g. in the hall Multi-coupling





All load ratings are given in tons (t) brought to bear at the end of the stick, without tools on firm level ground. Working tools such as grab, magnet, load hook etc. are included in the specified load ratings. The stated values are 75 % of the static tipping load and 87 % of the hydraulic lifting force according to ISO10567. According to EU standard EN 474/5, hydraulic material handlers used for hoisting must be equipped with a pipe rupture safety device on lifting and stick cylinders and an overload warning device. The specified load ratings apply to maximum track width and 360° slewing.

12 Technical features and dimensions subject to change.





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6.0 m ULM

hydraulically elevating

Grab stick

16 Technical features and dimensions subject to change.







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BBD Recommended grabs

SGM orange peel grab (4 shells)



SGM orange peel grab (5 shells)



SGZ clamshell grab



Magnet plates



	Crah anna itu		man ultra damater	
Design/size	Grab capacity	Shell profile ²		max. piled density
		HO G		
SGM	I	kg kg		t / m³
400.40-4	400	1570	1720	
600.40-4	600	1600	1790	
800.40-4	800	1685	1930	2.0
1000.40-4	1000	1755 2085		
1250.40-4	1250	1850	2200	

Design (size		ab capacity Shell profile ²		may all address the		
Design/size	Grad capacity			max. piled density		
		HO G				
SGM	I	kg kg		t / m³		
400.40	400	1800	1910			
600.40	600	1900	2020			
800.40	800	1950	2120	2.0		
1000.40	1000	2030	2280	2.0		
1250.40	1250	2180	2420			
1400.40	1400	2190 2460				

Design/size	Grab capacity	Weight ¹	max. piled density	
SGZ	I	kg	t / m³	
1000.40	1000	1440		
1200.40	1200	1575	2.0	
1400.40	1400	1650	2.0	
1600.40	1600	1775		
1500.50	1500	2100	2.6	
2000.50	2000	2310	2.6	
2500.50	2500	2530	2.0	
3000.50	3000	2830	2.0	
4000.50	4000	3050	1.6	
3000.50 L	3000	2502	1.0	
3500.50 L	3500	2650	1.0	
4000.50 L	4000	2672	0.8	
4500.50 L	4500	2936	0.8	
1500.50 HD	1500	2240	3.5	
2000.50 HD	2000	2535	5.5	

Type series / model	Power	Weight ¹	Breakaway force	Load-bearing capacity in kg		
WOKO	kW	kg	kN	Slab (safety factor 2)		
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 grab suspen 2) Half-open shells: shell sheet steel width 400 mm, 500 mm for 1,250 I capacity and higher

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

Dimensions in [mm]





hydraulically elevating cab type E270



830 R with T41/380 hydraulic telescopic crawler undercarriage and hydraulically elevating cab type E270



830 R with T41/380 undercarriage and E300/260 cab elevation which can be elevated and moved forward hydraulically









Transport dimensions of 830 R with T41/380 and R35/340 undercarriage

	Compact boom	Grab stick	Transport length (L)	Transport height (H1)	Transport height (H2)	Transport wood (X)
K15	8.5 m	7.0 m	12.50 m		3.20 m	
K17	9.8 m	7.5 m	13.80 m	3.26 m	3.55 m	0.2 m
B16	9.4 m Banana	7.0 m	13.40 m		3.50 m	
K14 ULM	8.5 m	6.0 m	12.50 m	3.50 m	3.65 m	0.2 m

This catalog describes machine models, scope of equipment of individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik GmbH. Machine illustrations may contain optional and supplementary 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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