

45,5t

19 m





Mobile material handling machine

Stagev





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



Work quietly - protect operator and environment



Peak performance

Save fuel - reduce operating costs

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







BBSE 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 **2**

- 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 🗉

- 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.



Maximum safety

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

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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*

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Features

- optimum cab climate with automatic air conditioning system, partial tinted glass
- pleasant and equal temperature dispersion by means of 9 nozzles
- panoramic view
- climatic comfort seat with air suspension and air conditioning*
- 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 the driver seat, protective covers, seat air conditioning

Our 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

* Option



EBOGEN

BBSE 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 raceway



SENNEBOGEN Hydro Clean*

- 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

* Option

BBSE Modular structure - versatile solutions



8 * Additional information on our crawler undercarriage can be found in the separate 835 R E-Series brochure.

senjebogen

Reliable work through robust and FEMoptimized equipment



Robust slewing gear (2x) for fast work cycles and highperformance material handling

Sliding door for convenient entry and exit

Better illumination of the work area through powerful LED headlights*

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

> High stability due to the broad outrigger area

Safe entry and exit thanks to railings*, grip handles and non-slip steps **Safe entry and exit** via the step grid with railing

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

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

> > 835

BBSE Technical data, equipment

MACHINE TYPE

Model (Type) 835

ENGIN	E			
Power	Stage V: Rated power: 231 kW at 2100 rpm 237 kW at 2000 rpm / 242 kW at 1800 rpm Stage Illa: Rated power: 227 kW at 2000 rpm 254 kW at 1800 rpm			
Model	Cummins L9 Direct injection, turbo charged, charge air cooler, 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 			
	CARRIAGE			
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	Automatic central lubrication for equipment and slewing ring raceway			

ubrication and slewing ring raceway Central electrical distributor, battery disconnect Electrical system 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 for additional safety LED lighting packages Fire extinguisher Sea climate resistant coating Electric heater for hydraulic tank lowtemperature packages Hydraulically driven magnetic generator 15 kW / 20 kW

Telematic system SENtrack DS

🛃 HYDRAULIC SYSTEM

	Load sensing / LUDV hydraulic system, hydraulic, pilot-controlled 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						
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	 Bio-oil filling - ecologically worthwhile Tool Control for programming up to 10 tools in pressure / rate Supplemental hydraulic circuit for shear attachment Load moment warning with capacity utilization indicator Overload safeguard with overload shut-down 60 µm pressure filter for attachments 3 µm hydraulic micro-filter - SENNEBOGEN HydroClean 						
SLEWI	NG DRIVE						
Gearbox	Compact planetary gear with bent-axis hydraulic motor, integrated brake valves						
Parking brake	Spring-loaded disk brake						
Slewing ring	External gear slewing ring with 360° protection and pinion tooth lubrication						

Slewing speed 0-8 RPM, stepless

10 Subject to change.



BBSE Technical data, equipment

🖾 CAB	
Cab type	Hydraulically elevating cab E270
Cab equipment	Sliding door, sliding window in the operator door excellent ergonomics, climate automation, seat heater, air-suspension comfort seat, fresh air filter / circulating air filter, joystick steering, 12 V / 24 V connections, SENCON
Options	 Cab E300/260 can be elevated 300 cm, and moved forward 260 mm hydraulically Rigid cab elevation 1.00 m Auxiliary heating system with timer Cab active-charcoal filter inside air/outside air, ideal for waste recycling applications Steering wheel steering with adjustable steering column Armored glass windshield, additional safety Safety side window Camera system for view under cabin Sunblind for roof window Protective roof grating FOPS protective roof grating, protection against falling objects Front protective grating Radio with speakers Enlarged industrial cab with undivided armored glass windshield
	IENT

Design	Decades of experience, state-of-the-art computer simulation, highest level stability, longest service life, large-dimensioned be- aring points, sealed special bearing bushes, precision-crafted, quick-release couplings on the grapple connections - open/close/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, close, rotate Kinematic position II for greater working depth Sea climate resistant coating Sea climate resistant coating of all cylinders, nickel-plated and chrome-plated Float position for equipment via hoist cylinder Lift limitation / stick limitation adjustable for the stop settings, for example in the hall

Design	Mobile undercarriage with integrated 4-point outriggers, steering axle as hydraulically locking pendulum axle, pendulum axle cylinder with pipe fracture safety valves, type MP41 E
Drive	All-wheel drive powered by a variable- displacement hydraulic motor with direct- mounted, automatically actuated brake valve and 2-stage power shift transmission Planetary axles with integrated steering cylinders, service brake in 2-circuit system
Parking brake	Spring-loaded disk brake
Tires	12.00-20 , 8x, option: 12.00-24 , 8x
Speed	0-5.4 km/h stage I, 0-20 km/h stage II
Options	 Individual activation of the outriggers for firm stance on uneven substrate Protection for travel drive Maneuvering hitch

ELECTRIC DRIVE [EGREEN]

- Option Power: **160 kW / 400 volt / 50 Hz** Total connected load 270 kVA, fuse protection in machine's switch box at 400 V / in combination with ma
 - Total connected load 270 kVA, fuse protection in machine's switch box 315A at 400 V / in combination with magnet system 355A at 400 V - engine start up via star delta switch.
 - Power: 200 kW / 400 volt / 50 Hz Total connected load 340 kVA, fuse protection in machine's switch box 400A at 400 V / in combination with magnet system 425 at 400 V - engine start up via star delta switch.
 - Advantages: Lowest operating costs, low-noise and virtually vibration-free work, long service life of the hydraulic components

OPERATING WEIGHT

Mass

approximately 45,500 kg Basic machine 835 M with attachment K18 and 600 I orange peel grab

The operating weight varies depending on the model.

Note

B35 Lift capacities



Undercarriage	MP41E	Compact boom Grab stick	9,1 m 6,9 m	Cab	Maxcab E270, hydraulically elevating
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All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera 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 the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.

12 Technical data and dimension information subject to change.







Grab stick 6,6 m ULM hydraulically elevating	Undercarriage	MP41E	Compact boom Grab stick	9,1 m 6,6 m ULM	Cab	Maxcab E270, hydraulically elevating	
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B35 Lift capacities



Undercarriage	MP41E	Compact boom Grab stick	10,1 m 7,9 m	Cab	Maxcab E270, hydraulically elevating	

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera 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 the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°.

14 Technical data and dimension information subject to change.







Undercarriage	MP42E	Compact boom	10,1 m	Cab	Maxcab E270,
Pylon	2,5 m	Grab stick	7,9 m		hydraulically elevating

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera 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 the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.

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16 Technical data and dimension information subject to change.







UndercarriageMP42ECompact boom10,8 m BananaCabMaxcab E270, hydraulischPylon2,5 mGrab stick7,9 mhochfahrbar (Option)

All load ratings are specified in tons (t) and apply at the end of the stick, without attachment, on a solid, level substrate. Attachments, such as grapple, magnet, load hook, et cetera 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 the EU standard, EN 474-5, material handling machines in hoist operation must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.



Orange peel grab SGM (4 shells)



Orange peel grab SGM (5 shells)



SGZ clamshell grab



Magnetic plates



Design / size	Grab capacity	Weight ¹		Maximum
Design / Size	Grab capacity	Shell	form	piled density
		НО	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		Weight ¹		Maximum
Design / size	Grab capacity	Shell s	shape²	piled density
		НО	G	
SGM	I	kg	kg	t/m³
400.40	400	1820	1920	
600.40	600	1910	2035	
800.40	800	1960	2140	2.0
1000.40	1000	2040	2290	2.0
1250.40	1250	2180	2415	
1400.40	1400	2250	2500	

Design / size	Grab capacity	Weight ¹	Maximum 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		
4000.50	4000	2880	1.6	
3000.50 L	3000	2140	- 1.0	
3500.50 L	3500	2260		
4000.50 L	4000	2480	0.8	
4500.50 L	4500	2600		
1500.50 HD	1500	2240	3.5	
2000.50 HD	2000	2535		

Type series / model	Power	Weight	Pull-off strength	Lifting capacity in kg		
WOKO	kW	kg	kN	Slab (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: 15 kW/20 kW						

*) Available upon request 1) Weight information without grapple suspension, stick bolts, hose system

²⁾ Half-open shells: shell sheet steel width 400 mm, 500 mm for 1250 I capacity and higher

Detailed information on grabs, as well as log grabs, quick-release systems, and other attachments can be found in the "Attachments" brochure Dimensions in [mm]



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 3000
 3200
 Transport width

 4465
 5500
 3000 mm

835 M with undercarriage MP41 and hydraulically elevating cab type E270



835 M with undercarriage MP41 and hydraulically elevating and forward moving cab type E300/260





Transport dimensions 835 M with undercarriage type MP41E

	Loading boom	Grab stick	Transport length (L)	Transport heigth (H)
K16	9.1 m	6.9 m	13.5 m	3.45 m
K18	10.1 m	7.9 m	14.5 m	3.45 m
B18	10.8 m Banana	7.9 m	15.0 m	3.45 m
K16 ULM	9.1 m	6.6 m	13.5 m	3.45 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. 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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