















Crawler material handling machine





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

Your top benefits



Green Efficiency

Save fuel - reduce operating costs Work quietly - protect operator and environment



Peak performance

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

3

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



5

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





Base 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

Powerful hydraulic system <a>I

- 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*

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





preliminary picture with mobile undercarriage

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







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

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





SENNEBOGEN HydroClean*

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

*Option



- Easily accessible
- Quickly inspect entire hydraulic system

*Option



6

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



Clear labeling

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

B35 Modular structure - versatile solutions



8 * Additional information on our mobile undercarriage is in the separate 835 M E-Series brochure

seNjebogen

* Option

Reliable work through robust and FEMoptimized equipment



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



Model (type)	835
	F
ENGIN	E
Power	Stage V: Rated power: 231 kW at 2100 rpm 237 kW at 2000 rpm / 241 kW at 1850 rpm Stage IIIa: Rated power: 227 kW at 2000 rpm 254 kW at 1800 rpm
Model	Cummins L9 Direct injection, turbo charged, charge air coole reduced emissions, ECO mode, idle automatio 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 an safety element, contamination indicator
Fuel tank	625 l
Adblue tank	75 l
Electr. system	24 V
Batteries	2 x 150 Ah, battery disconnect switch
Options	 Engine block pre-warming at temperature under -20°C Electric fuel pump
🛃 UPPER	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
Electrical system	Central electrical distributor, battery disconne switch
Cooling system	3-circuit cooling system with high cooling output thermostatically regulated fan drive for oil cool 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 low temperature packages Hydraulically-driven magnetic generator 15 kW / 20 kW

N	L	
SEN	= = •	I S S N

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-dowr 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					

B35 Technical data - equipment

🖳 CAB			RCARRIAGE
Cab type Cab equipment	Hydraulically elevating cab E270 Sliding door, sliding window in the operator door,	Design	Wide-gauge crawler undercarriage in stable torsionally rigid box construction
	excellent ergonomics, climate automation, seat heater, air-suspension comfort seat, fresh air filter / circulating air filter, joystick steering, 12 V / 24 V connections, SENCON	Drive	Hydraulic travel drive, integrated in the traveling gear frame for each traveling gear side through an axial piston motor via compact planetary gear.
Options	 Cab E300/260 can be elevated 300 cm, and moved forward 260 cm hydraulically Rigid cab elevation 1.00 m 	Parking brake	Spring-loaded, hydraulically ventilated disk brakes. Hydraulic brake valves protect the drive engines when moving downhill.
 Auxil Cab a air, id Steer steer 	 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 	Traveling gear	Telescopic crawler undercarriage type T41/380 with mechanical track adjustment from 2.3 – 3.8 m and maintenance-free B6 crawler track (55 links, length 5350 mm) wit 700 mm triple-grouser track shoes, canted
	 Armored glass windshield, additional safety Armored glass roof window, additional safety 	Speed	0 - 1.6 km/h stage l 0 - 3 km/h stage ll
	 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 	Options	 Telescopic crawler undercarriage type T41/380 with hydraulic track adjustment of 2.3 - 3.8 m Maintenance-free B6 crawler track (55 links, length 5350 mm) with 700 mm flat track shoes, rounded Maintenance-free B6 crawler track (55 links, length 5350 mm) with 800 mm triple-growser track shoes, canted
		ELECTI	
Design	Decades of experience, state-of-the-art computer simulation, highest level stability, longest service life, large-dimensioned bearing points, sealed special bearing bushes, precision-crafted, quick-release couplings on the grapple connections - open/close/rotate	Option	 Power: 160 kW / 400 volt / 50 Hz 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 v star delta switch. Power: 200 kW / 400 volt / 50 Hz Total connected load 340 kVA, fuse protection in machine's switch box 400A
Cylinders	and guide elements, end position damping, sealed bearing points		at 400 V / in combination with magnet system 425 at 400 V - engine start up vi star delta switch.
Options			 Advantages: Lowest operating costs, low-noise and virtually vibration-free work, long service life of the hydraulic components
	 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 	Mass	approximately 54,500 kg Basic machine 835 R with attachment K18 and 600 l multi-shell grab
	for the stop settings, for example in the nam		

Subject to change.



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°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

12 Technical data and dimension information subject to change





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°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

Technical data and dimension information subject to change





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°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

14 Technical data and dimension information subject to change





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°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

Technical data and dimension information subject to change.

B35 Technical data, equipment



Undercarriage	R44D/380	Compact boom	10,8 m	Cab	maXcab E270,
Pylon	4,5 m	Loading stick	9,4 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. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

16 Technical data and dimension information subject to change





Pylon	4	4,5 M			LO	ading	STICK	9,4	т
All load ratings hook, et cetera			. ,	,					
HOUK, EL LELEIA	are part o	i the spec			_	pecificu	values	aic / J /0	

tachment, on a solid, level substrate. Attachments, such as grapple, magnet, load f 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°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

بامالده معادا

Technical data and dimension information subject to change



maXcab E270, hydraulically elevating



Undercarriage	R44D/380	Compact boom	10,8 m	Cab	maXcab E270,
Pylon	4,5 m	Loading stick	9,4 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. The specified load ratings apply for the machine supported with 4-point claw support and slewable 360°. The specified load ratings in square brackets [] apply with blocked pendulum axle, unsupported, free standing, slewable 360°.

18 Technical data and dimension information subject to change





Orange peel grab SGM (4 shells)



Design / size	Grab capacity	Weight ¹		max. piled density
		Snell	Torm-	
		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	

Orange peel grab SGM (5 shells)



SGZ clamshell grab



Magnetic plates



3000.50 4000.50 3000.50 L 3500.50 L 4000.50 L 4500.50 L 1500.50 HD 2000.50 HD

Design / size

SGM

400.40

600.40

800.40

1000.40

1250.40

1400.40

Design / size

SGZ

1500.50

2000.50 2500.50

Type series / mode WOKO S-RSL 15 S-RSL 17 S-RLB 13,5 S-RLB 15 S-RLB 17

*) On request

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

Grab capacity	Weight ¹		max.					
diab capacity	Shell	form ²	piled density					
	HO G							
I	kg	kg	t / m³					
400	1820	1920						
600	1910	2035						
800	1960	2140	2,0					
1000	2040	2290	2,0					
1250	2180	2415						
1400	2250	2500	1					

Grab capacity	Weight ¹	max. payload
I	kg	t / m³
1500	1950	2,6
2000	2200	2,0
2500	2300	2,0
3000	2490	2,0
4000	2880	1,6
3000	2140	1,0
3500	2260	1,0
4000	2480	0,8
4500	2600	0,0
1500	2240	3,5
2000	2535	2,5

el	Power	Weight	Pull-off strength	Lifting capacity in kg			
	kW	kg	kN	Slab (safety factor 2)			
	12,2	1950	360	18000			
	17,0	2500	460	23000			
	10,0	1700	300	15000			
	11,7	2400	380	19000			
	17,8	3300	640	32000			
	Recommended mag	netic generator: 15	kW / 20 kW				

¹) Weight information without grab suspension, stick bolts, hose system ²) Half-open shells: Shell sheet steel 400 mm wide, from content 1250 | shell sheet steel 500 mm wide





Transport width 3000 mm

835 R with hydraulic telescopic undercarriage T41/380 and hydraulic elevating cab E270



835 R with wide gauge undercarriage R44D/380, 4,5m Pylon and hydraulic elevating cab type E270



Transport dimensions 835 R with undercarriage type T41/380

	Loading boom	Grabstick	Transport length (L)	Transport height (H2)	Transport height (H1)	Transport height (X)
K16	9,1 m	6,9 m	13,5 m	3,20 m	-	-
K18	10,1 m	7,9 m	14,5 m	3,90 m	3,50	0,20 m
B18	10,8 m Banana	7,9 m	15,1 m	3,45 m	-	-
K16 ULM	9,1 m	6,6 m	13,5 m	3,80 m	3,45	0,20 m



835 R with wide gauge undercarriage R44D/380 and hydraulic elevating and forward moving cab E300/260

20



B35 Transport dimensions





Transport dimensions 835 R with undercarriage type R44D/380

	Loading boom	Grabstick	Transport length (L)	Transport height (H)	Transport height (X)
K16	9,1 m	6,9 m	13,4 m	3,45 m	0,25 m
K18	10,1 m	7,9 m	14,4 m	3,45 m	0,50 m
B18	10,8 m Banana	7,9 m	15,1 m	3,45 m	0,25 m
K16 ULM	9,1 m	6,6 m	13,4 m	3,45 m	0,50 m



Crawler, B6 crawler R44D/380 with 700 mm track shoes, weight approx. 6.850 kg - 2 pieces









This catalog describes machine models, the scope of equipment of individual models, and configuration possibilities (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik. Machine illustrations can contain optional equipment and supplemental equipment. Depending on the country in which the machines are delivered, deviations from the equipment are possible, particularly with regard to standard equipment and optional equipment. Depending on the country in which the machines are delivered, deviations from the equipment are possible, particularly with regard to standard equipment and optional equipment. All product designations used can be trademarks of SENNEBOCEN Maschinenfabrik GmbH, or trademarks of other supplying companies, the use of these trademarks by third parties for purposes of the third party can violate the rights of the owners. Please contact your local SENNEBOGEN sales partner for information concerning the equipment variants offered. Desired performance characteristics are only binding if they are expressly agreed when the contract is concluded. Delivery possibilities and technical features are subject to change. All information is provided without guarantee. We reserve the right to make equipment changes and further developments.

© SENNEBOGEN Maschinenfabrik GmbH, Straubing/Germany. Reproduction, even in part, only with written permission of SENNEBOGEN Maschinenfabrik GmbH, Straubing/Germany.



SENNEBOGEN Maschinenfabrik GmbH Sennebogenstraße 10 94315 Straubing, Germany

Tel. +49 9421 540-144/146 Fax +49 9421 43 882 marketing@sennebogen.de