Mobile material handling machine

129 kW (Stage V)
110 kW (Electro)
28.8 t
12 - 14 m
Advanced. The E-Series

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

1962: rope-driven S833 with elevated operator cab

Your top benefits

1. **Green Efficiency**
   Safe fuel - reduce operating costs
   Work quietly - protect operator and environment

2. **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

4. **Maximum safety**
   Safe entry and exit - no-slip steps
   State-of-the-art camera - entire work area in view

5. **Maintenance and service made easy**
   SENNEBOGEN Control System SENCON - easy fault diagnosis
   Easy Maintenance - clear labeling

6. **Consultation and support in your area**
   3 production sites - 2 subsidiaries
   more than 130 sales partners - worldwide and also in your area
Subject to technical changes. Further options available upon request.
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

- Constant, reliable performance thanks to large-dimensioned 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
Maximum safety

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

Powerful hydraulic system

- Strong pumps with power reserves
- Top efficiency thanks to large-dimensional 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*
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
- 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
- 12 V, 24 V, and USB charging sockets hands-free telephone preparation, document box
- various options: electric cooler behind’s, 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
Hydro Clean*
- Optimal protection of hydraulic components thanks to 3 μm micro-filter
- 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

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

* Option
Modular design - versatile solutions

Attachments

- Orange peel grab
- Clamshell grab
- Magnetic plate
- Scrap metal shears
- Vacuum traverse

Equipment options (others available upon request)

Cabs

- Maxcab
- Maxcab Industry

Cab elevation

- K12
- K12 ULM
- K13
- K14

Uppercarriage

- Diesel-hydraulic drive
- Electrohydraulic drive

Options

- Motorized cable reel
- Transformer

Undercarriage variants

- Mobile M MP26: max. 1,0 m
- Crawler * R35/240: max. 0,5 m
- Wide-gauge crawler* R35/340: max. 3,0 m
- 4-point pedestal ST20

* Additional information on our crawler undercarriages can be found in the 825 R E-Series brochure
Advantages at a glance

Reliable operation through robust and FEM-optimized equipment

Sliding door for convenient entry and exit

Ideal overview and safe working height thanks to stable cab elevation

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 no-slip steps

Robust side cover made of recyclable sheet steel

High stability due to the broad outrigger area

* Option
**MACHINE TYPE**

**Model (type)** 825

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**ENGINE**

**Power**
- **Stage V:**
  - Rated Power: 129 kW at 2200 rpm
  - 145 kW at 2000 rpm
- **Stage IIIa:**
  - Rated Power: 129 kW at 2200 rpm
  - 133 kW at 2000 rpm

**Model** Cummins 6.7
- Direct injection, turbo-charged, charge air cooler, reduced emissions, Eco Mode, automatic idle, automatic stop

**Cooling** Water-cooled

**Diesel filter** With water separator and heating system

**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

**Electrical system** 24 V

**Batteries** 2 x 155 Ah, main switch

**Options**
- Engine block heater
- Electric fuel pump
- Jump-start battery terminals

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**UPPERCARRIAGE**

**Design** Torsion-resistant box design, precision crafted, steel bushings for boom bearings. Extremely service-friendly design, longitudinal engine

**Central lubrication** Automatic central lubrication for equipment and slewing ring

**Electrical system** 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
- Peripheral uppercarriage railing for additional safety
- LED lighting packages
- Fire extinguisher
- Maritime climate varnish as corrosion protection

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**HYDRAULIC SYSTEM**

**Load sensing / LUDV hydraulic system** for hydraulic, pilot-controlled work functions

**Pump type** Swashplate-type variable-displacement piston pump, 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** 410 l/min

**Operating pressure** max. 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
- ToolControl for programming the pressure/rate for up to 10 tools
- Additional hydraulic circuit for shear attachment
- Load moment warning with capacity utilization indicator
- Overload safeguard with overload shutdown
- 3 μm hydraulic micro-filter - SENNEBOGEN HydroClean

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**SLEWING DRIVE**

**Gearbox** Compact planetary gear with slant-axis hydraulic motor, integrated brake valves

**Parking brake** Spring-loaded multi-disk brake

**Slewing ring** Strong slewing ring, sealed

**Slewing speed** 0-8 rpm, variable

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Subject to change.
EQUIPMENT

Design
Decades of experience, state-of-the-art computer simulation, highest level of stability, longest service life, large-dimensioned and low-maintenance bearing points, sealed special bearing bushes, precision-crafted, quick-release couplings on the connections - open/close/rotate grapple

Cylinders
Hydraulic cylinders with high-quality sealing and guide elements, end position damping, sealed bearing points

Options
- Ball valves at the hydraulic lines for grabs
- Adjustable hoisting limiter/stick limiter e.g. in the hall
- Multi-coupling

UNDERCARRIAGE

Design
Strong mobile undercarriage with integrated 4-point outriggers, steering axle as hydraulically locking pendulum axle, pendulum axle cylinder with pipe fracture safety valves

Drive
All-wheel drive powered by a variable-displacement hydraulic motor with direct-mounted, automatically actuated brake valve and 2-stage power shift transmission, strong planetary axles with integrated steering cylinders, service brake in 2-circuit system

Parking brake
Spring-loaded multi-disk brake

Tires
M: solid-rubber tires 10.00-20, 8x

Speed
0 - 7 km/h Level I: 0 - 20 km/h Level II

Options
- Pneumatic tires 10.00-20, 8x
- Additional pushing blade for 4-point outrigger (front or rear)
- Individual outrigger actuation
- Protection for travel drive/coupling
- Pylon

ELECTRIC DRIVE

Option
- Power: 110 kW, 400 V, 50 Hz
  Total connected load: 240 kVA, machine side 250 A at 400 V fuse, alternatively 315 A with magnet system - star-delta connection motor start
- Advantages: Lowest operating costs, quiet and almost vibration-free work, long service life of hydraulic components

OPERATING WEIGHT

Mass
825 M with 4-point outrigger and compact loading attachment Approx. 28,800 kg

Notice
Operating weight varies by model and equipment.

Subject to change.
All ratings are in tons (t) and constitute 75% of the static tipping load or 87% of the hydraulic lifting power in accordance with ISO 10567. They apply on firm and level ground and 360° slewing. The values in brackets [ ] apply 360° freestanding. Safe working loads include attachments such as multi-shell grapples, magnets, etc. According to harmonized EU standard EN 474-5, hydraulic excavators used for lifting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device.
Load ratings

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Technical features and dimensions subject to change.

Undercarriage | MP26
---|---
Compact boom | 6.8 m
Grab stick | 5.5 m ULM
Cab | Maxcab E270, hydraulically elevating

K12 ULM
### Load ratings

#### Technical features and dimensions subject to change.

<table>
<thead>
<tr>
<th>Undercarriage</th>
<th>MP26</th>
<th>Compact boom</th>
<th>7.5 m</th>
<th>Grab stick</th>
<th>5.8 m</th>
<th>Cab</th>
<th>maxcab E270, hydraulically elevating</th>
</tr>
</thead>
</table>

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Technical features and dimensions subject to change.
Transport dimensions

Transport width 2,570 mm
Solid-rubber tires 10.00-20,8x

825 M with undercarriage type MP26 (series) and hydraulically elevating cab type E270

<table>
<thead>
<tr>
<th>Compact boom</th>
<th>Grab stick</th>
<th>Transport length (L)</th>
<th>Transport height (H)</th>
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<tbody>
<tr>
<td>K12</td>
<td>6.8 m</td>
<td>10.40 m</td>
<td>3.25 m</td>
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<tr>
<td>K12 ULM</td>
<td>6.8 m</td>
<td>10.40 m</td>
<td>3.40 m</td>
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<tr>
<td>K13</td>
<td>7.5 m</td>
<td>11.10 m</td>
<td>3.30 m</td>
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<td>K14</td>
<td>8.5 m</td>
<td>12.05 m</td>
<td>3.25 m</td>
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</tbody>
</table>

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.

Dimensions in [mm]
Recommended grabs

Orange peel grab (4 shells)

<table>
<thead>
<tr>
<th>Design / size</th>
<th>Grab capacity</th>
<th>Weight</th>
<th>Maximum piled density</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGZ 400.30-4</td>
<td>400</td>
<td>1240</td>
<td>1350</td>
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<tr>
<td>SGZ 600.30-4</td>
<td>600</td>
<td>1280</td>
<td>1410</td>
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<tr>
<td>SGZ 800.30-4</td>
<td>800</td>
<td>1320</td>
<td>1510</td>
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<tr>
<td>SGZ 400.40-4</td>
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<td>1600</td>
<td>1790</td>
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<td>SGZ 800.40-4</td>
<td>800</td>
<td>1685</td>
<td>1930</td>
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<tr>
<td>SGZ 1000.40-4</td>
<td>1000</td>
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<td>2085</td>
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<tr>
<td>SGZ 1250.40-4</td>
<td>1250</td>
<td>1850</td>
<td>2200</td>
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</table>

Orange peel grab (5 shells)

<table>
<thead>
<tr>
<th>Design / size</th>
<th>Grab capacity</th>
<th>Weight</th>
<th>Maximum piled density</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2140</td>
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<tr>
<td>SGZ 1000.40</td>
<td>1000</td>
<td>2040</td>
<td>2290</td>
</tr>
<tr>
<td>SGZ 1250.40</td>
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<td>2180</td>
<td>2415</td>
</tr>
<tr>
<td>SGZ 1400.40</td>
<td>1400</td>
<td>2250</td>
<td>2500</td>
</tr>
</tbody>
</table>

Clamshell grab SGZ

<table>
<thead>
<tr>
<th>Design / size</th>
<th>Grab capacity</th>
<th>Weight</th>
<th>Maximum piled density</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGZ 1000.40</td>
<td>1000</td>
<td>1270</td>
<td>1300</td>
</tr>
<tr>
<td>SGZ 1200.40</td>
<td>1200</td>
<td>1360</td>
<td>1360</td>
</tr>
<tr>
<td>SGZ 1400.40</td>
<td>1400</td>
<td>1420</td>
<td>1420</td>
</tr>
<tr>
<td>SGZ 1600.40</td>
<td>1600</td>
<td>1530</td>
<td>1530</td>
</tr>
</tbody>
</table>

Magnetic plates

Recommended magnetic generator: 15 kW/20 kW

Detailed information on grapples, as well as log grapples, quick-release systems, and other attachments can be found in the “Attachments” brochure.
825 M - Scrap handling with orange peel grab; Germany

825 M - New scrap handling with magnetic plate; Germany
825 M Electro - Indoor scrap handling with overhead power supply; Germany

825 M - Mobile scrap handling with original SENNEBOGEN orange peel grab; Germany
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