

# SENEBOGEN



EFFICIENT AND ECOLOGICAL

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ELECTRIC DRIVES

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# SENNEBOGEN – WORLD LEADER IN ELECTRIC MATERIAL HANDLERS

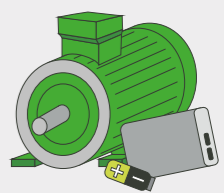
The electrification of construction machinery is a megatrend that is being driven ever further by environmental aspects, strict emission standards and the constant development of storage technologies. For more than 35 years, we have realised by far the most electrical applications. The result: emission-free and powerful machines with minimal energy and service costs.



## WE FIND THE RIGHT SOLUTION

From cable-supplied to battery-powered machines to electric travel drives or Powerpack solutions for short-distance mobility: There are many options on the market for the electrification of construction machines and material handlers. There is not only one ideal solution - for each individual application, a different drive variant is optimal.

	Handheld devices	Small construction machines and material handlers	Medium construction machines and material handlers	Large construction machines and material handlers
<b>Electric motor power</b>	up to 20 kW	up to 110 kW	up to 250 kW	up to 500 kW
<b>Battery</b>	✓	✓	✓ possibly from 2030	
<b>Mains and cable-supplied</b>		✓	✓	✓
<b>Powerpack</b>		✓	✓	✓
<b>Electric travel drive</b>		✓	✓	



No matter the operating conditions, individual needs or operating processes: our solutions are specially tailored to our customers.

✓ A complete solution direct from the manufacturer – detailed route analyses and individual power supply project planning, tailored specifically to your application

✓ A variety of solutions for power supplies, voltage types and emergency operating units ex works

## REDUCE COSTS BY 50 %: ELECTRO-HYDRAULIC DRIVES

**ELECTRO**

SENNEBOGEN has been implementing material handling machines with electric drives for over 35 years and this experience underlines its status as a leader in innovation.

**5 benefits of electro-hydraulic drive solutions help reduce operating costs by up to 50 % in comparison to Diesel engines and ensure that the machine pays for itself in no time:**

- /// High value retention through longer service life of the hydraulic components
- /// Extremely low operating costs thanks to low energy costs
- /// Significantly longer maintenance intervals compared with diesel engines
- /// Reduced maintenance costs: No need for fuel and oil filters/oil changes
- /// Always ready for use – no fuelling and no fuel storage required



Future-oriented electro-hydraulic drives:  
Economical, environmentally-friendly, long-living

## ZERO EMISSIONS - CLEAN TECHNOLOGY

**ELECTRO**

**BATTERY**

The low Total Cost of Ownership of our machines have enthused our customers for many years. Our machines are not only extremely clean, quiet and long living, but also particularly environmentally friendly.

With an assumed 2,000 operating hours per year and energy generation from renewable energy sources, a battery-powered material handler saves up to 50 tonnes of CO<sub>2</sub> per year.

### Your benefits

- /// Extremely environmentally-friendly - completely emission-free - no exhaust fumes
- /// Increased comfort during operation with vibration-free drives and extremely low operating noise
- /// Clean motor compartment, also after many working hours



**PROVEN:**  
Application example of a  
SENNEBOGEN electric machine  
with > 100.000 working hours.

# ELECTRO INSTALLATION: EASY ACCESS

## Safe and convenient

The electro installation at the rear of the upper carriage ensures an easy and safe access to the electric components - in working height and with anti-slip tread.



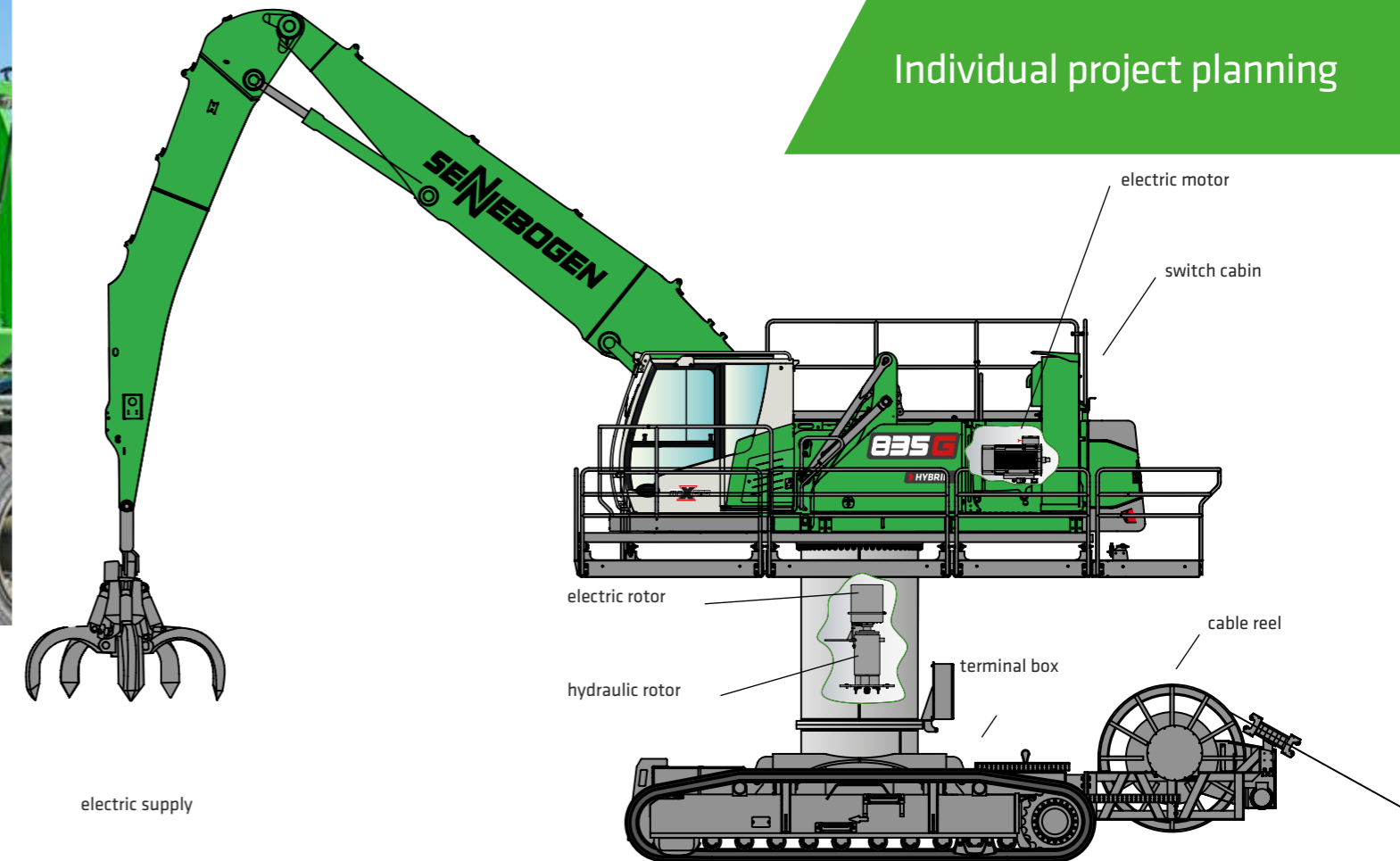
Example 8130 EQ



Clearly arranged electro components; standard components with high degree of availability.

# MOBILITY - FOR EVERY APPLICATION

## Individual project planning

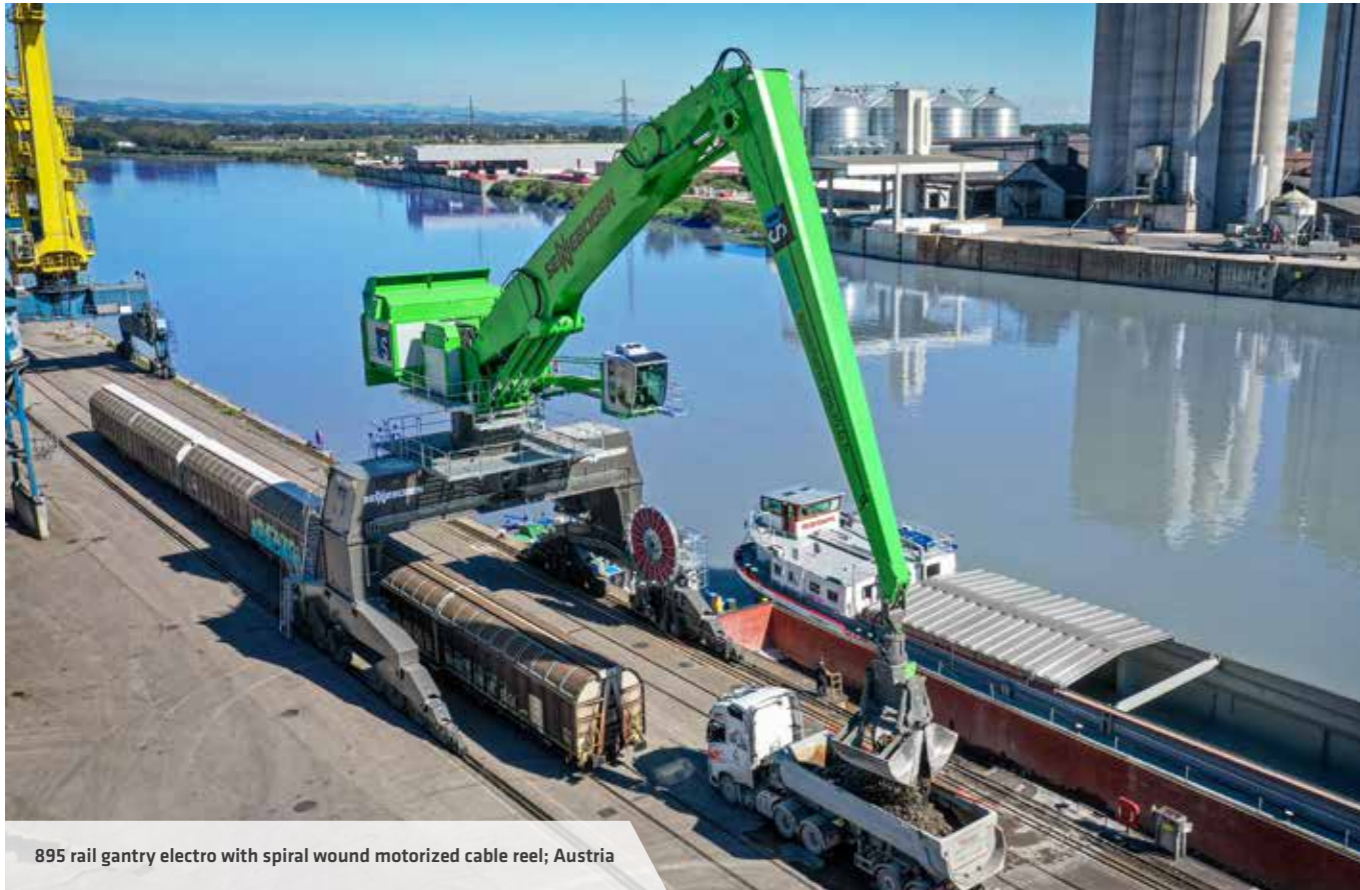


### Your optimal solution depends on the following parameters:

- /// Connected load and engine size
- /// Planned operating time
- /// Location (indoor/outdoor)
- /// Travel path characteristics and length
- /// Grid infrastructure

### Different drive types

- /// Battery
- /// Spiral wound motorized cable reel
- /// Cylindrical motorized cable reel
- /// Conductor bars
- /// Powerpack
- /// Trailing cable



895 rail gantry electro with spiral wound motorized cable reel; Austria



825 mobile electro with ceiling power supply via overhead bridge crane; Germany



8240 EQ crawler electro - timber handling; Brazil



830 crawler electro with cylindrical motorized cable reel; Switzerland



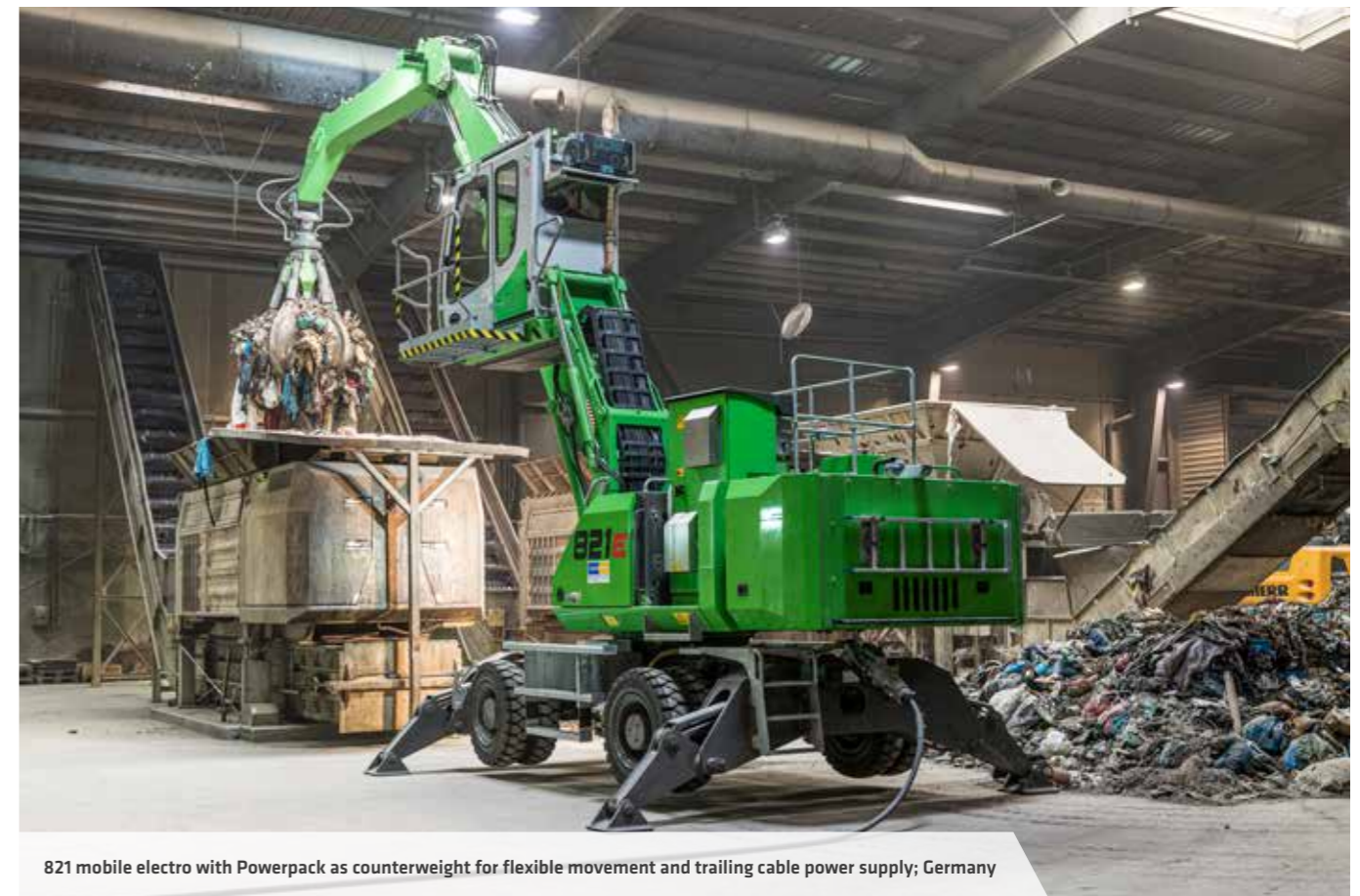
835 stationary, indoor electric solution with elastic bearing; Russia



840 rail gantry electro - timber loading; Germany



840 crawler gantry electro with spiral wound motorized cable reel; Czech Republic



821 mobile electro with Powerpack as counterweight for flexible movement and trailing cable power supply; Germany



# SERVICE - EFFICIENT AND COST-SAVING



### Easy and uncomplicated maintenance

- Regular refuelling stops and oil level checks are completely eliminated
- No fuel and oil filter changes required

### Low maintenance and operating costs

- Cost savings of up to 50 % compared to diesel engines due to high service friendliness and efficiency

### Significantly longer service intervals

- Diesel: approx. 500 h (engine oil and filter change)
- Electro: approx. 10,000-20,000 h (grease change of the rolling bearings)

### Comparison of maintenance and operating costs for diesel and electric machines

- Cost of energy, diesel/electricity
- Service costs
- Daily maintenance
- DEF
- Refueling downtime
- Service downtime



# EFFICIENT AND SAFE OPERATION OF YOUR ELECTRIC MACHINE

## Training offers

### Electric drive concepts

- Function of electric/electronic components and working with electric diagrams
- Targeted checks, troubleshooting and fault rectification on the machines

### High-voltage 1S/2S - Focus Electric Travel Drive/Electro Battery

- Maintenance, service and safe working with high-voltage machines



### Best possible machine availability

by minimised downtimes and reduced damage due to operating errors

### Longer service life

better maintenance, optimal detection and prevention of service situations

### Efficiency increase

independent identification of technical problems ensures smooth workflows

### More safety in operation

all relevant accident prevention regulations as well as legal and trade association regulations



This catalog describes machine models, the 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. All product designations used may be trademarks of SENNEBOGEN Maschinenfabrik GmbH or other supplying companies, and any use by third parties for their own purposes may violate the rights of the owners. Please contact your local SENNEBOGEN sales partner for information concerning the equipment variants offered. Requested performance characteristics are only binding if they are expressly stipulated upon conclusion of the contract. Delivery options and technical features are subject to change. All information is supplied without liability. Equipment is subject to change, and rights of advancement are reserved. © SENNEBOGEN Maschinenfabrik GmbH, Straubing, Germany. Reproduction in whole or in part only with written consent of SENNEBOGEN Maschinenfabrik GmbH, Straubing, Germany.

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