

# eSwingo 200+

Electric compact sweeper



[www.aebi-schmidt.com](http://www.aebi-schmidt.com)

 **schmidt**  
a brand of aebi schmidt

# Explore our eSwingo 200+

## A great feel for sweeping – proven technology that is simpler and cleaner than ever before

We are not satisfied until you are. This means we have high expectations, and demand levels of quality, functionality and innovation to match. The Swingo 200+ series has become a byword for safety, reliability, efficiency and durability among customers in 40 countries worldwide. We are proud of this reputation and the success of our product, and we are proud to present with the eSwingo 200+ the first fully electric compact sweeper made by Schmidt. Why not try one for yourself?

## Why choose an eSwingo+



### An investment that convinces

- Save up to 85% of the energy costs and up to 70% of the maintenance costs in comparison to a machine with diesel engine
- Costs of the eSwingo 200+ are over its life cycle on par with those of the diesel version, thanks to lower energy and maintenance costs and a longer amortisation period
- All battery servicing and diagnostics are provided by the Aebi Schmidt, while any used batteries can be returned and recycled free of charge



### “Electrifying” facts and figures for a technical pioneer

- Two battery packs guarantee best performance and efficient handling
- Battery capacity of 75 kWh
- Fully integrated battery management system
- Class-leading performance of up to 10 hours without recharging
- On-board rapid charger quickly recharges the battery in just four hours
- Just one electric motor fitted directly on the rear axle, means more performance coupled with less outlay on maintenance
- High quality battery (at least 5000 charging cycles guaranteed, non-flammable, completely explosion-proof)
- Almost silent driving and working → machine can be deployed at night or in the early hours of the morning
- High suction and driving performance, even on demanding climbs





#### **Ergonomics & comfort**

- Excellent view of sweeping unit and suction nozzle for easy inspection
- Light steering
- Minimal pedal resistance
- Ergonomic driver's seat
- Height and angle-adjustable steering column
- All controls within easy reach
- Auto Drive lever
- Fully integrated air-conditioning and heating system with the option to precondition the cabin
- New generation of telematics solutions available (optional)



#### **Quality**

- Comprehensive corrosion protection
- High-quality parts from leading manufacturers
- High reliability
- Economical to run
- Low wear and tear
- Low depreciation
- Hopper and suction fan made of seawater-resistant aluminium



#### **Brushes**

- Choose between the 2 or 3-brush system (2-brush system: Brush diameter 850 mm (33.5"), (3-brush system: Brush diameter 800 mm (31.5"))
- Choose between plastic, steel or mixed material brushes as well as "whisper-brushes"



#### **Vehicle technology**

- Pressurised water recirculation system can also be combined with the innovative Koanda air circulation system. Means: virtually zero particulate emissions
- High-pressure water system saves resources by recovering used water
- No compromises in work speed – top speed is 50 km/h (31mph), hydrostatic drive
- Water tank with a volume of 400l
- Fully electric drive for automotive driving
- Large 15" wheels
- Ease of manoeuvrability thanks to the all-wheel steering
- Hydraulic dual-circuit brake system with disc brakes on front and rear axles



generation



charge the change

zero emission, zero risk

# charge the change

The time to change is now. Time to reduce CO<sub>2</sub>, to be kind to the environment and to contribute to a better world. Time to get smarter and use our knowledge to create a better and more sustainable world. The time is now for Aebi Schmidt to introduce Generation E. A programme in which we transform our technology to zero emission levels.

So let's charge for a better future.



### **Watch your steps and become part of a new generation**

**Everybody has a carbon footprint. It's the amount of carbon dioxide we produce with any action or activity. As carbon dioxide contributes to 'greenhouse gases', our carbon footprints have a direct impact on the environment. Every day. Everywhere. So watch your steps and start re-charging.**

Carbon dioxide emission is not a mystery. It is simply physics. 1 liter of diesel ends up in 2,64 kilogram CO<sub>2</sub>. If your diesel engine needs 6 liter that means 15 kg/h. For a compact sweeper with 1500 hours per year does that mean: 22.500 kg CO<sub>2</sub> per year or 112.500 kg in 5 years. To compensate the emission of a diesel compact sweeper you would need 1.800 trees a year. In comparison with our eSwingo 200+ CO<sub>2</sub> emissions means: zero\*

\*Assumption that electric power is made from regenerative energy sources

## Charge the change

Ask someone what they think the biggest challenge of electric vehicles future may be. The most common answer will be “charging and range”. But do we really have to worry?

Charging of a Schmidt eSwingo 200+ is possible for quick charger with high voltage (400V) – which is available at least almost everywhere. Battery performance increased over the last years vastly and is still developing like a blink.

As we provide the best battery quality and performance available on the market we guarantee at least 5000 charging cycles and safety of the batteries (non-flammable, completely explosion-proof). Enjoy up to 10 hours of performance without recharging and fill up the battery in 4 hours again (with quick charger).



The background is an aerial view of a city with numerous skyscrapers. Overlaid on this is a large, semi-transparent profile of a person's head facing left. Inside the head, a smaller cityscape is visible, mirroring the background. The word "re-think" is written in large, white, lowercase letters across the middle of the image.


# re-think

Aebi Schmidt has been developing a new approach to the market, which includes the electrical implement carrier Aebi EC as well as the new Schmidt eSwingo200+ compact sweeper. Developing and using new technology means we have to redefine our way of thinking. Switching to smart means switching to sustainable, responsible and cost reducing technology.

# re-charge

The main driver behind a good circular economy is the ability to sustain the inherent value of the product (parts). Therefore Aebi Schmidt is trying to reuse as much as possible to avoid mere recycling/downcycling. Sometimes parts can get a second purpose in a different function. And naturally, for those resources that have no other use, selective waste sorting is at a high level as well within Aebi Schmidt.





### **Our responsibility for a clean future – clean driving means also clean producing**

Aebi Schmidt has already adopted social responsibility into its mission and operations for several decades, because we strongly believe that what is good for our society is also good for business. Themes like efficient production and modular assembly, local supply lines, designing our products for high quality and durability and helping our clients using our machines efficiently, reduce avoidable wastage, lower CO<sub>2</sub> emissions and lead to lower social costs.

Key to our approach is that we make sure that the most important resource of all, human capital and ingenuity are treated in the same spirit. Sustainable employability and circularity go hand in hand. Aebi Schmidt implemented a companywide program (Fit for Tomorrow) to reduce wastage in general. However, special attention was given to avoiding CO<sub>2</sub> emissions and the use of toxic or harmful substances like coatings.

### **Petrol is going the way of horses**

100 years ago, the automotive industry started with petrol – it was a state-of-the-art revolution. In 100 years, petrol will be another chapter in the history books. But times are changing, and we are at the centre of it. Electric mobility is now the key technology for the replacement of fossil energy sources in the long term; creating new markets and new technologies, as the old energy order comes to an end and a new one begins.

The Schmidt eSwingo 200+ and Aebi EC are not just a sound financial investment, it is also an investment into a sustainable future. Correct, electrical vehicles are currently more expensive to buy up-front, but it is important to consider the costs over the whole lifecycle of the machine, once you calculate the total cost of ownership, you will be astonished.

Save up to 85% of the energy costs and up to 70% of the maintenance costs in comparison to a diesel machine. Also over its life cycle, the costs of the eSwingo 200+ are on par with those of the diesel version, thanks to lower energy and maintenance costs and a longer amortisation period. Furthermore, the European Union and federations are offering funding for municipal customers investing in electric technology. Want to know more? Aebi Schmidt would be happy to guide you through the process with our consultative approach.





# re-invest

Sustainability doesn't come by itself. It is a way of thinking, and acting. As a major company it's our responsibility to invest in progress. But in the end this also counts for our clients. Everything we develop and produce is effected through our clients. Every single sustainable machine is an investment in our common goal: a healthy planet.



# Why choose an eSwingo 200+?

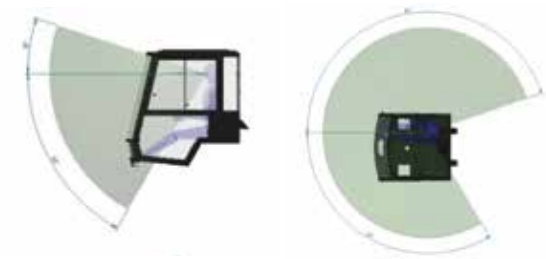
## Great comfort with a fantastic view

The eSwingo 200+ is designed to meet the highest standards of user **comfort and ergonomics**. An excellent field of vision thanks to cabin floor-roof level front windscreen and an observation window in floor of driver's cabin allows a clear view of the suction shaft and plate brushes below. The eSwingo 200+ comes with a large driver's cabin with air conditioning and full-sized passenger seat.

**Excellent ventilation ensures that:** Fresh air is filtered and sucked in at the back of the cabin. The cabin air filter is equipped with a pollen filter. The high-performance air conditioning system (fitted as standard) which runs also with electric power, provides cool, comfortable working conditions even in high outside temperatures.

All controls are ergonomically positioned around the driver. The ergonomic positioning of the accelerator and brake reduces strain on the driver, as do the cruise control function and the steering column, which is fully adjustable for both height and angle. In addition, the eSwingo 200+ is equipped with an automatic, electrically operated parking brake.

**Driving and sweeping at your fingertips** – it doesn't get more comfortable than this! The sweeping unit is operated using joysticks and buttons on the control console in the driver's door. The Auto Drive feature allows all sweeping functions and driving operations to be controlled using the ergonomic multi-function drive lever. The system is unique in its class and puts everything you need for driving and sweeping at your fingertips. Getting in and out is quick and easy thanks to the new Schmidt steering column with its unique ergonomic and fully-adjustable design. A cruise control is also available.



Using just one electric motor fitted directly on the rear axle, means more performance coupled with less outlay on maintenance. The top speed is 50 km/h (31mph) with the noise level being a great deal lower than the noise produced by the diesel vehicle.

Experienced Swingo drivers appreciate the ease of manoeuvrability thanks to the all-wheel steering, which is also fitted in the eSwingo 200+. The weight distribution between the front and rear axles is also very well thought out thanks to the intelligent battery distribution, and this guarantees excellent driving stability.

The hydro-pneumatic chassis suspension is unique in the class and provides the highest levels of driver comfort. The suspension package is tailor-made for the machine and ensures safe and comfortable driving, just like in a car. Alternatively, a mechanical suspension system is also available.

A height-adjustable chassis (optional) makes it easier to negotiate covered car parks and low entrances. The chassis can be lowered around 70 mm (2.75") at the touch of a button. The system levels the chassis automatically.

The eSwingo 200+ is equipped with a hydraulic dual-circuit brake system incorporating front and rear brakes. The 15" wheels, with their high load capacity and wide contact patch, ensure improved safety in any conditions, combined with low contact pressures.

The machine can also be fitted with 17.5" wheels and tyres, which increase the maximum laden weight to 5 metric tonnes (+500 kg [1100 lbs]).

## 100% electric. 0% emission

Highest quality of materials and workmanship guarantee the durability (at least 5000 charging cycles) and safety of the batteries (non-flammable, completely explosion-proof). Thanks to a powerful rechargeable battery we offer a class-leading performance of up to 10 hours without recharging. When a shift comes to an end, an on-board rapid charger quickly recharges the battery in just four hours. And the best: Customers don't need to worry about battery life as all battery servicing and diagnostics are provided by the Aebi Schmidt, while any used batteries can be returned and recycled free of charge.





# The choice is yours:

## 2 or 3-brush systems

The brushes also drives fully electric. Choose one of two independent sweeping systems: the pushed 2-brush system or the pulled 3-brush system: With its individually controllable plate brushes, the **2-brush system guarantees** total flexibility in any sweeping conditions.

Two stable brush arms with built-in impact protection allow sweeping widths of up to 2,900 mm (114.1"). The brush angle tracks the road automatically, meaning that the brush always returns to its starting position even when the road surface changes. A heavy-duty weed clearance specification is also available, including more options for hydraulically adjusting the brush angle.



### 2-brush system suction shafts:

- Standard suction shaft with manual hydraulic dirt flap or
- HS suction shaft, combining the benefits of a built-in dirt flap with excellent airflow. High suction performance even at low revs.

**This allows valuable energy to be saved!**

**The 3-brush system** with its fully moveable front brush arm is highly versatile and offers a sweeping width of up to 2,600 mm (98.4"). The front brush can be aligned left-right, and the machine is also capable of dual-level sweeping and heavy-duty weed clearance work.

### 3-brush suction shaft:

- Airflow-optimised suction shaft, no separate dirt flap. Large objects can be easily sucked into the system from the brushes by simply tilting the shaft.

You benefit also from the same powerful suction even at low revs as with a Swingo 200+ with diesel engine. You will enjoy also a high working speed, fully adjustable fan speed and an energy-efficient design of the suction fan (uses less fuel and is effective even at low fan speeds). The spherical joint of the rear suction shaft (impact-protected thanks to its mounting position) allows it to move in all directions and adjust perfectly to the ground below, leading to guaranteed consistency.

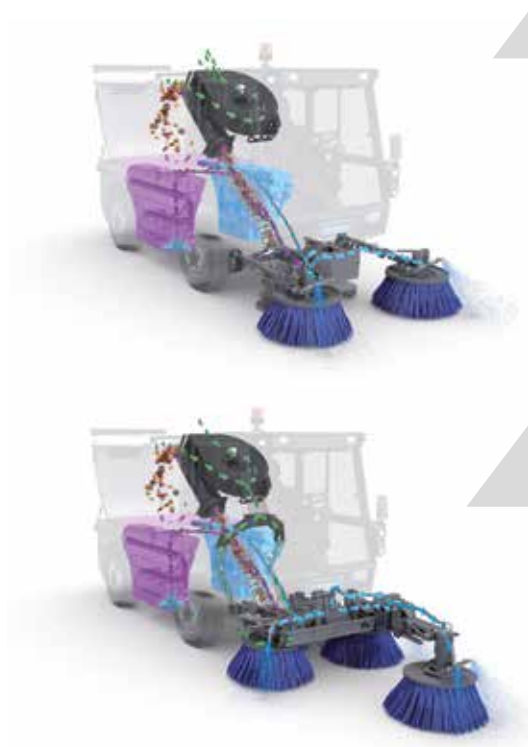


# Clean performance

## Reduce particulate emissions by up to 70%

The unique Koanda air circulation system and the high-pressure water system combine to reduce harmful particulate emissions by up to 70%. The bulk of the polluted air remains in the suction system and is funnelled back to the suction nozzle. The remainder is passed through a fine-pored filter for cleaning. Used water moves back into the water system through the waste water pump and can be reused. This makes the most of the tank capacity as well as saving water. Debris swept into the machine is both humidified and compressed. The electric water pump supplies the spray jets on the plate brushes. The amount of water reaching the brushes can be easily controlled from the cabin.

The leaf screen is fixed along the entire width of the debris container, allowing the container capacity to be used as efficiently as possible. The large screen area prevents clogging and guarantees a constant stream of air even when the container is 100% full. The screen can be easily removed for cleaning.



## High-pressure water system

Large volumes of water in the suction system ensure safe debris entry and minimise wear. Optimum water recovery guarantees:

- Compacted and watertight debris
- Efficient use of resources
- Optimal use of available container capacity

## The unique Koanda air circulation System

- Virtually eliminates particulate emissions
- Reduces noise significantly
- Stands out thanks to its low water consumption
- Allows sweeping even when the outside temperature falls below zero

## Knowledge is power

With our tailor made telematics solution you can track and monitor the battery status in real-time. This knowledge offers you the possibility to optimize the route in order to increase the operation time of the eSwingo 200+.

Both batteries of the eSwingo 200+ are equipped with a battery management system (BMS) which keeps you informed at any time. The BMS monitors and controls the battery as well as charging currents, discharge currents and management of temperature.



## Our options at a glance

- Reversing camera and suction shaft camera
- Weed brushes
- Hand suction pipe
- High-pressure cleaner
- Noise suppression package
- Koanda air circulation system
- Auto Drive (drive lever control)
- Height-adjustable chassis
- High-quality LED lighting for full illumination and maximum safety



	eSwingo 200*, 2 Besen	eSwingo 200*, 3 Besen
<b>Containers</b>		
Approx. system capacity	2 m <sup>3</sup> (6.5 cub. ft.)	2 m <sup>3</sup> (6.5 cub. ft.)
Tipping angle	55°	55°
Tipping height	1,400 mm	1,400 mm
<b>Drive system</b>		
<b>Cell</b>		
Safety	Total battery capacity 75 kWh / 400 V non-flammable, 100% explosion-proof	Total battery capacity 75 kWh / 400 V non-flammable, 100% explosion-proof
Periode of use without re-charging	up to 10h	up to 10h
Full charged (quick charger)	4h	4h
Cycle life capacity	min. 5,000	min. 5,000
Electric motors		
Drive (rear axle)	Torque (rated / max.): 90 / 200 Nm - Power (rated / max.): 38 / 90 kW	Torque (rated / max.): 90 / 200 Nm - Power (rated / max.): 38 / 90 kW
Fan drive	Torque (rated / max.): 27 / 32 Nm - Power (rated / max.): 8,5 / 11,5 kW	Torque (rated / max.): 27 / 32 Nm - Power (rated / max.): 8,5 / 11,5 kW
<b>Sweeping unit</b>		
Brush diameter / rpm approx.	Ø 850 mm (33.5"), max. 120 rpm	Ø 800 mm (31.5"), max. 120 rpm
<b>Brush material</b>		
Sweeping width	Steel, plastic, or mixed material	Steel, plastic, or mixed material
Max. fan rpm	1,400 – 2,900 mm (55.1-114.1")	up to 2,600 mm (102.4")
	3,000 rpm	3,000 rpm
<b>Water system</b>		
Overall water capacity	400 l	400 l
Fresh water tank / used water tank	200 l / 200 l	200 l / 200 l
Water spray system	3 bar / 11 l/min	3 bar / 11 l/min
<b>Speeds</b>		
Max. driving speeds	25 / 40 / 45 / 50 km/h (15/ 25 / 28 / 31 mph)	25 / 40 / 45 / 50 km/h (15/ 25 / 28 / 31 mph)
Max. sweeping speed	12 km/h (7.5 mph)	12 km/h (7.5 mph)
<b>Weights</b>		
Maximum laden weight	4,500 kg (9,921 lbs), upgradable to 5,000 kg (11,023 lbs)	4,500 kg (9,921 lbs), upgradable to 5,000 kg (11,023 lbs)
<b>Dimensions</b>		
Length excl. brushes	4,150 mm	4,140 mm
Length incl. 2 or 3 brushes	4,690 mm	5,140 mm
Width excl. brushes	1,300 mm	1,300 mm
Height excl. EVL	1,990 mm	1,990 mm
Wheelbase	1,900 mm	1,900 mm
Track	1,053 mm	1,053 mm



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Marketing and Communication

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