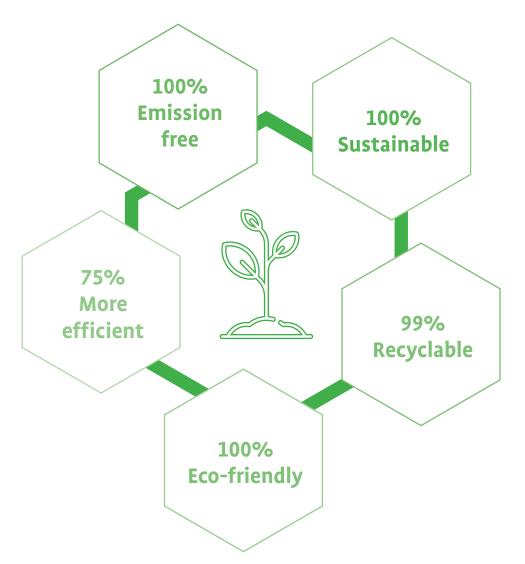
## What benefits do Phoenix Electra offer on the environment side?



100% Emission free of CO2 and NOx, and auxiliary engine noise, Electra is the first professional spreader able to meet the Kyoto protocol values and respect our cities and rural areas.

**100% Sustainable**, the first completely sustainable professional salt spreader on the market today; we have endeavoured to create equipment that respects the environment, avoids the waste of natural resources and reduces emissions without compromises on the performance side.

99% recyclable; zero environmental impact through recycling and reusing materials. Less than 1% is not recyclable but

100% Eco friendly through the complete elimination of hydraulic filters, pipes or oil disposal; there are no pollutants to be disposed over the entire life cycle of the unit.

**75% more efficient** energy consumption, compared to the traditional hydraulic systems.

Electra is a sustainable solution ready today, representing our commitment to build a better future for our children.







### Spreader

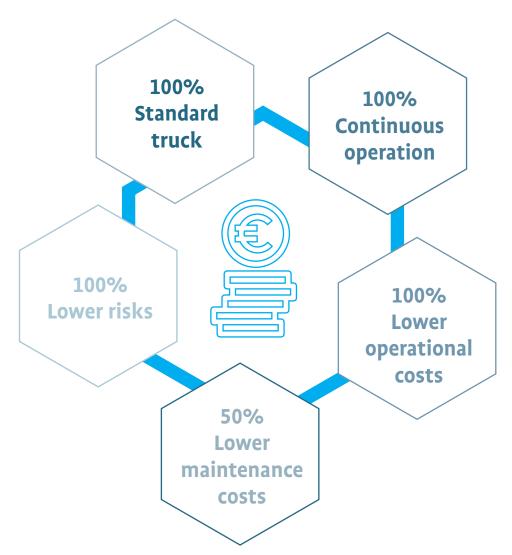
**Giletta SpA**Via A. De Gasperi, 1
I - 12036 Revello (CN) tel. +39 0175 258 800 fax. +39 0175 258 825 giletta@buchermunicipal.com

# Phoenix ELECTRA

www.buchermunicipal.com/winter

The first professional spreader 100% electric.

# What benefits do Phoenix Electra offer on the economic side?



100% reduction of truck installation costs; it is possible to rent a standard truck with any special requirement, having the adequate pay-load and just for the necessary time, avoiding the costs related to a dedicated vehicle for winter maintenance service.

100% Continuous operation thanks to the fast and partial charge during the salt refilling stops allowing endless autonomy; no additional waste of time is required, guaranteeing the necessary working period, even in the most serious snow falls. By completely using a dwell time to recharge the salt, it is possible to recharge up to 35% of total battery capacity.

50% Lower maintenance costs removing hydraulic components such as filters, pipes, valves and oil; hydraulic elements are replaced with maintenance free electrical components, without early disposal.

100% Lower operational costs, complete reduction in fuel consumption in comparison with auxiliary engine or truck power take-off; moreover, electricity is the most common and low-cost source of energy compared to fossil fuels. The infrastructure to install our charge station does not need special requirements and is easy to manage.

100% Lower risks of oil leaking spills on the road; the asphalt contamination due to oil spills has a huge environmental impact and the decontamination process takes a long time and interrupts the regular traffic for many hours, with all the related problems for road users or service companies.



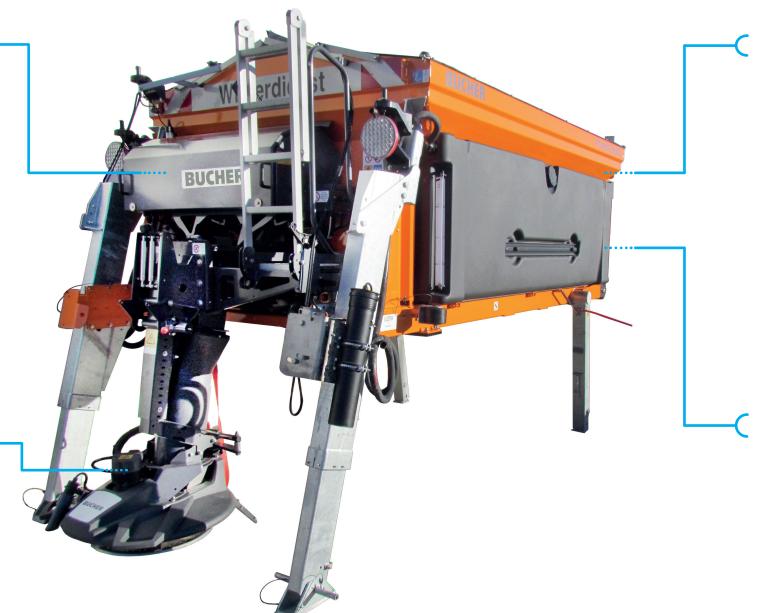
### **Electric system**

The electric system is designed to perform fast repair interventions, thanks to the service friendly layout. Through the remote control is possible to know which equipment needs maintenance, transforming unplanned stops to shorter and fewer planned service time, thus increasing service availability.



### **Motor assembly**

Electric motor with integrated inverter allows fine tuning, noticeable power and high efficiency. The compact design avoids dispersion or interference making it suitable to be used in every field. Motor and inverter assembly certified IP67 ingress protection rating.





Latest technology maintenance free lithium battery, allowing partial and fast charging cycle without damages and designed for up to 9000 working hours.

Battery management system with smart technology enabling real time remote diagnosis, automatic temperature protection, automatic cell voltage balance. 48v low voltage electric system enable safe and easy



### **Control panel**

EcoSat10 belong to the latest generation of microprocessor based control systems, with maximum flexibility in programming and displaying the different parameters. Integrates a satellite navigation module, which guide the driver with vocal and visual messages.

Unique design with 3 lateral knobs and 7" colour display.



### **ASSIST ready**

ASSIST enables cost-effective, flexible and efficient winter services thanks to its innovative tools for the service responsible as well as for the driver. ASSIST reduce the operator workload while allowing him to comply with operational procedures, due to the man-machine collaboration, improving the winter road maintenance quality.



### Online management

Accessible from everywhere, using a simple internet connection; all the tools used for winter services management are available through a single web portal. Real-time weather analysis, telemetric and road morphology studies offer to the service responsible all necessary data to create precise winter maintenance mission, anytime and anywhere with the guarantee to carry out the exact planned procedure.



### **Spreading automation**

combined with satellite navigation, results in economic use of de-icing should be performed, avoiding unplanned stops. materials, the best winter maintenance operations with any level of driver skills while reducing their workload.





### **Cloud connection**

Winter maintenance operators are helped by an automated system, able The cloud connection makes possible real-time data sending and collecting to adjust autonomously each spreading parameter; this means that the both for on-board unit and the web portal; this enables features like live equipment always applies the exact dosage with the right pattern. The tracking, mission modification or data analysis from remote. Moreover it on-board unit includes an accurate GPS navigation system able to guide helps the user, or directly the Bucher Municipal service, to determinate the the operator with visual and vocal messages. Automated spreading condition of in-service equipments in order to predict when maintenance