

## What **benefits** does Icebear Ve offer on the environment side?

100% emission free of CO2 and NOx, and auxiliary engine noise, Icebear Ve 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 is reusable.

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.

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

### Bucher Municipal



For local contact and support, please scan the QR code or visit [buchermunicipal.com](http://buchermunicipal.com)

At Bucher Municipal, we innovate and engineer better cleaning and clearing solutions, helping our customers grow and maintain efficient and profitable businesses. Leveraging the over 200-year-old heritage of Bucher, we are committed to helping you achieve more using less. Taking pride in being seen as a reliable partner, we work locally with you in realising the possibilities for a smarter, cleaner and more efficient tomorrow. Today.



● Bucher Municipal locations  
● Distribution Partners

**Driven by better**



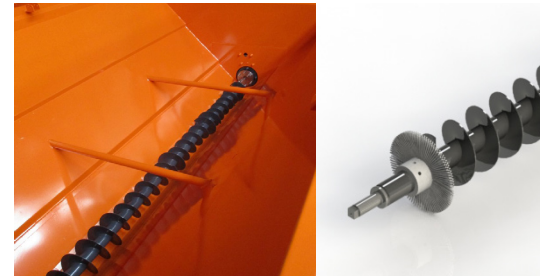
Bucher Icebear Vp, Rev00, 10/2023  
Technical data is subject to change without prior notice.  
The illustrations may deviate from standard equipment.

# **Icebear Ve**

## The 100% electric auger spreader







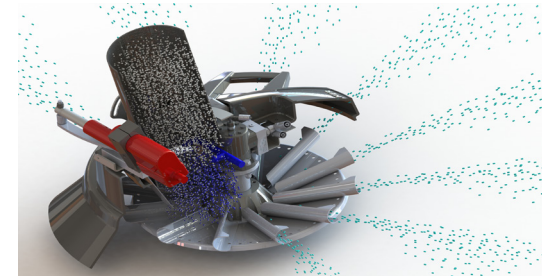
**Auger extraction system**

Material conveyor auger characterised by coils of different diameters and variable pitch between the different coils. At the front end of the auger, there is a bristle brush that allows a constant and continuous inflow of material. This system is designed for the homogenous transport of all types of material and is characterised by high efficiency.



**Humidification system and side tanks**

Humidifier device with polyethylene side tanks and volumetric pump with maintenance-free nitrile impeller. Innovative system that ensures perfect homogeneity in salt humidification. This system improves spreading and increases the effectiveness of the material spread to the benefit of cost savings.



**New Premium spreading unit**

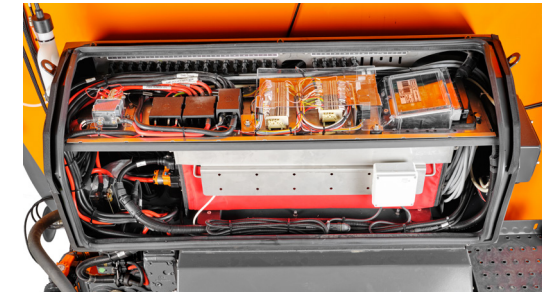
All metal parts are made of stainless steel and the conveyor of polyethylene. The spreading disc is 660 mm in diameter, made of stainless steel, and allows a spreading width of up to 12 meters. The asymmetry is electrically adjustable in 0.5-meter steps. The New Premium spreading unit uses EcoWet technology for salt humidification. Variable pulverization technology prevents the formation of lumps in the material. The jet coming from the pulverizer automatically adapts in width to the amount of salt, thus achieving optimal salt humidification.



**Painting**

Bucher Municipal offers a new process of painting for winter road maintenance products. The big innovation is the application of a catalyzed liquid epoxy primer with a high zinc content. Compared to classic painting methods, the liquid primer provides greater protection to the finished product due to its elastic properties and ability to reach even the most difficult to treat spots.

	VP350e	VP360e	
Hopper capacity	5	6	m <sup>3</sup>
Solution tanks capacity	2640	2640	l
Spreading width min/max	2 + 12	2 + 12	m
Salt dosing capacity	5 + 40	5 + 40	g/m <sup>2</sup>
Sand dosing capacity	10 + 350	10 + 350	g/m <sup>2</sup>
Loading length	3645	3645	mm
Auger diameter	200	200	mm



**Electrical system**

The electrical system, thanks to the new layout, facilitates any repair work. Through remote control, it is possible to know which devices need maintenance, turning unplanned shutdowns into shorter maintenance times and thus increasing service availability.



**Electric motor**

The electric motor with built-in inverter enables precise tuning, remarkable power and high efficiency. Compact design prevents leakage or interference making it suitable for use in any field. IP67 ingress protection rating certified by motor assembly and inverter.



**Battery**

Maintenance-free state-of-the-art lithium battery, allowing partial and fast charging cycle without damage and designed for more than 8000 hours of work. Battery management system with intelligent technology enabling real-time remote diagnosis, automatic temperature protection, automatic cell voltage balancing. Low voltage 48v electrical system enables easy and safe service.



**Ecosat 20**

7-inch touch screen control panel, 12V or 24V power supply, RFID sensor for user identification, significantly improved performance and speed compared to Ecosat 10. There are also physical buttons on the device that work together with the touch screen as well as 3 encoders for manual spreading adjustment. It provides online access to navigation and is easily integrated with the Bucher Assist system.



**Bucher ASSIST**

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**

Winter maintenance operators are helped by an automated system, able to adjust autonomously each spreading parameter; this means that the equipment always applies the exact dosage with the right pattern. The on-board unit includes an accurate GPS navigation system able to guide the operator with visual and vocal messages. Automated spreading combined with satellite navigation, results in economic use of de-icing materials, the best winter maintenance operations with any level of driver skills while reducing their workload.

**Cloud connection**

The cloud connection makes possible real-time data sending and collecting both for on-board unit and the web portal; this enables features like live tracking, mission modification or data analysis from remote. Moreover it helps the user, or directly the Bucher Municipal service, to determinate the condition of in-service equipments in order to predict when maintenance should be performed, avoiding unplanned stops.