

MADE IN FRANCE

VANTAGE



BERTHOUD

VANTAGE

INNOVATION FOR CROP CARE



In a context of population growth and climate change, the challenges of future agricultural production rely on optimising yields on existing land while ensuring food security. This inevitably requires effective and sustainable plant protection products to preserve the health of crops, the environment, and consumers.



At **Berthoud**, we build on our 130 years of expertise in crop protection to supply high-performance solutions, tailored to your specific needs, and designed to support you towards a safer and more sustainable future.





VANTAGE

The VANTAGE trailed sprayer is part of the DARK by BERTHOUD range.

It meets all the requirements of a farm wishing to use high-end equipment fitted with the latest options. The VANTAGE tank capacity ranges from 3,500 liters to 6,500 liters. We offer you a wide choice of steel or aluminum booms from 24 meters to 44 meters wide.

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Be one step ahead .

Actiflex 2 Suspension: The quality of spraying depends in particular on the stability of your sprayer. With this in mind, BERTHOUD developed ACTIFLEX 2, a fully mechanical suspension with variable stiffness independent of the load. Based on an optimised lever arm principle, ACTIFLEX 2 stands out for its simple design, low maintenance requirements, and the significant gains in comfort and work quality it brings to the user.

The **Spraytronic:** Pulse width modulation for optimal spray application quality

In spraying, one of the main challenges of current systems lies in the narrow range of working speeds that allow for satisfactory spray application quality.

Beyond this range, droplets become either too fine, causing drift, or too large, causing runoff. SPRAYTRONIC expands your working ranges thanks to an innovative concept. Designed for use with intra-parcel dose modulation, the system not only allows you to exceed working speed limits but also to broaden the range of doses that can be applied within a single plot.

Unique and functional design
for **user comfort**



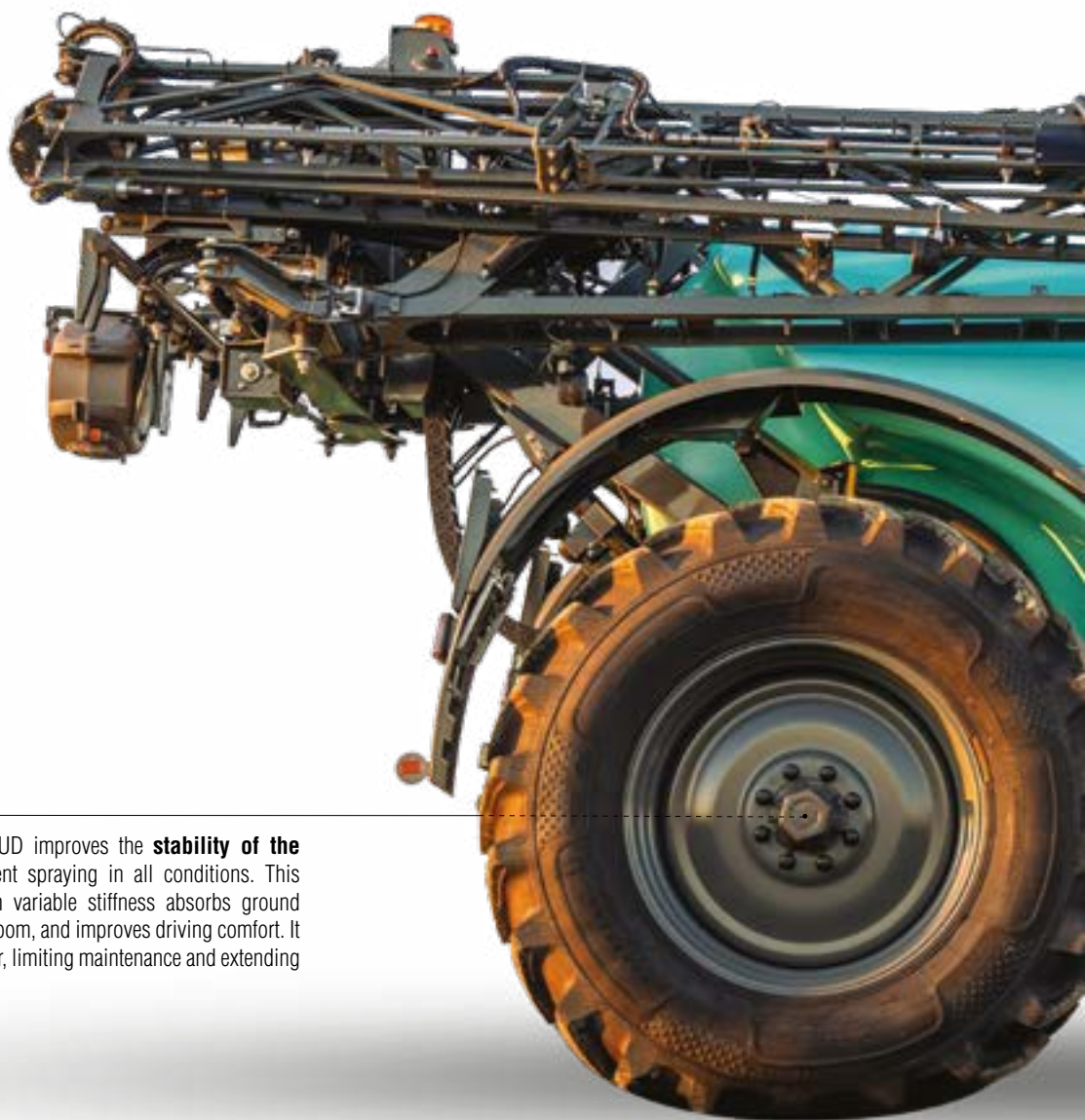
VANTAGE

THE REVOLUTION IN MOTION

The VANTAGE is a **high-end trailed sprayer** with exclusive DARK design, combining the brand's heritage with advanced technology. Equipped with ACTIFLEX 2 suspension and DUALMATIC/DUALELEC implementation, it offers a tailor-made and connected solution thanks to its ISOBUS interface (VT Tronic screen or tractor terminal).

ACTIFLEX 2

With ACTIFLEX 2, BERTHOUD improves the **stability of the sprayer** to ensure consistent spraying in all conditions. This mechanical suspension with variable stiffness absorbs ground irregularities, stabilizes the boom, and improves driving comfort. It also reduces mechanical wear, limiting maintenance and extending the machine's lifespan.



BOOMS

The **Axiale** boom combines durability, precise spray application, and stability in the field. Available with **2- or 3-arm folding** ranging from **24 to 33 meters**, it easily adapts to the demands of any farm. Its central suspension ensures excellent ground-following capability. The **Ektar B3** boom, made of aluminum and available in widths from **36 to 44 meters**, guarantees high spray application rates, great stability, and excellent corrosion resistance.

OMEGA Pump

The OMEGA pump, developed by BERTHOUD, ensures reliable and efficient spraying. With **550 l/min at 3 bar**, it guarantees a steady supply to the boom as well as a high filling speed. Capable of delivering high flow rates for spraying, it adapts to all your working conditions for greater efficiency and peace of mind every day.

STORAGE COMPARTMENT

Large-capacity box, designed to safely transport your containers. Easily accessible, it makes daily loading and unloading operations easier. Its design effectively protects the contents from splashes and dirt, ensuring cleanliness, safety, and practicality during operations.

VANTAGE

SUSPENSION

COMFORT AND OPTIMAL WORK QUALITY



"THE AXLE SUSPENSION CHANGES EVERYTHING: LESS SHOCKS AND MORE PRECISION FOR QUALITY WORK"



ACTIFLEX 2

The quality of spraying depends on the stability of the machine, both in the field and on the road. With ACTIFLEX 2, BERTHOUD offers a fully **mechanical axle suspension with variable stiffness, independent of the load**, ensuring optimal work consistency in all conditions.

Based on a smart lever-arm adjustment mechanism, the suspension effectively absorbs uneven terrain. The boom remains stable, the spray height is controlled, and the spray distribution is more uniform, ensuring **precise application** and accurate dosage.

ACTIFLEX 2 also improves driving comfort by reducing shocks and vibrations, both in the field and on the road. The result: less operator fatigue, safer travel, and a longer service life for the sprayer thanks to reduced wear and maintenance. Simple, robust, and low-maintenance, ACTIFLEX 2 combines **performance, comfort, and durability**.

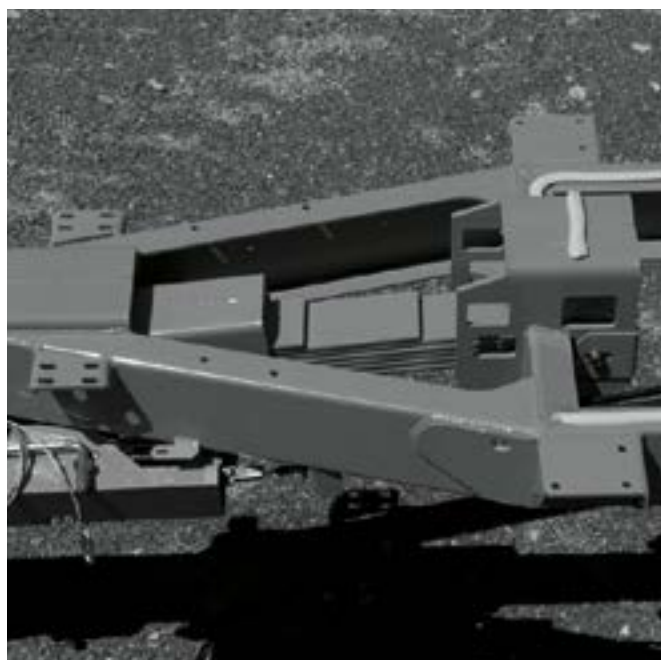
FEATURES

THAT MAKE A DIFFERENCE

A DESIGN FOCUSED ON PERFORMANCE

The tanks are designed to improve your efficiency by optimising emptying and cleaning thanks to their diamond-shaped design, which limits residues and product wastage. Their low-profile design enhances machine stability, while siphon-free suction maximises the usable volume.

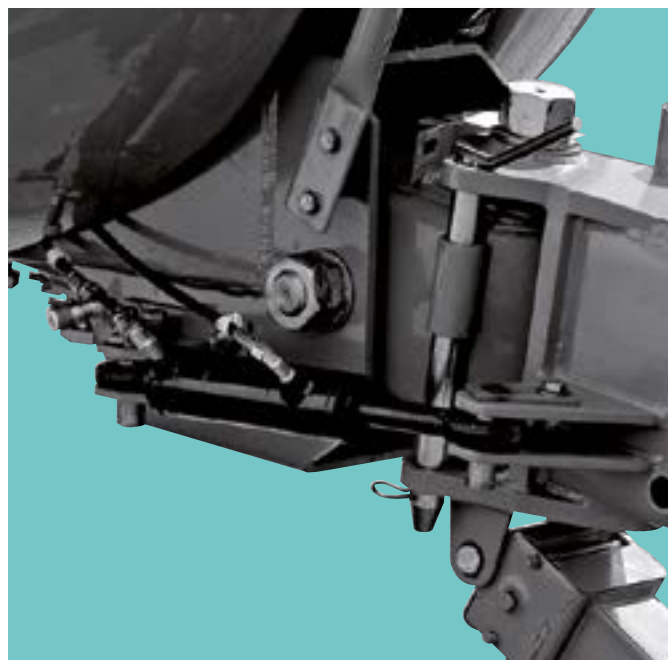
The optimised positioning of the rinse tank, available in 380, 580, or 700 liters depending on the model, promotes better overall balance, while the design limits internal shocks and contributes to its durability.



FLEXIA DRAWBAR SUSPENSION

Perfectly complementary to ACTIFLEX 2 for total comfort

The FLEXIA drawbar suspension works seamlessly with the ACTIFLEX 2 axle suspension to enhance operating comfort and extend the sprayer's service life.



ANGLING DRAWBAR

The angling drawbar allows manual correction of the sprayer's position on slopes and limits crop damage by perfectly following the tractor's tracks.

VANTAGE

PRECISION AND MANOEUVRABILITY

EFFICIENCY AND CROP CARE





TRACKING AXLE

PRECISION, COMFORT, AND CROP CARE

The tracking axle allows **the sprayer to stay in the track of the tractor in headlands**. This solution helps to protect crops, maintains yield, and generates immediate economic benefits with every pass. Designed to simplify daily work, **the system can operate with the boom folded**, making manoeuvres in the farmyard and narrow field entrances easier.

The intelligent angle control automatically adapts to the angle between the tractor and the sprayer. At any time, the operator can also take control, either from the in-cab terminal or directly via the E-Pilot handle, to avoid an obstacle or correct the machine's drift on slopes.

In headlands, **the ACS (Simplified Driving Assistance)** allows you to link the activation of the tracking axle, the spraying shut-off, and the boom height adjustment **with a single press of a button**.

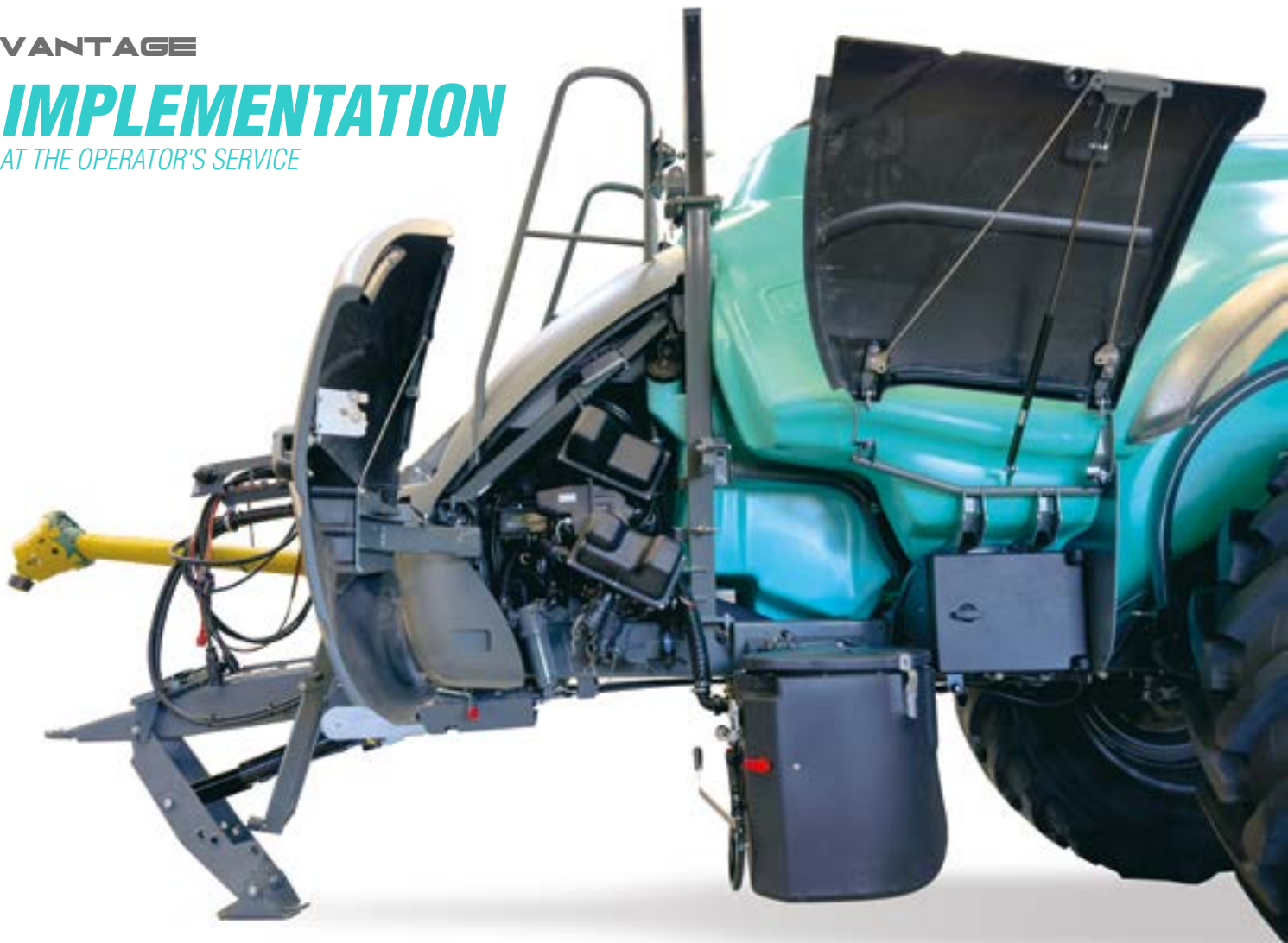
THE BENEFITS OF THE STEERING AXLE:

- > **Cost savings** : *no crop destruction in headlands*
- > **Enhanced comfort**: *improved maneuverability and automated system (optional ACS) for easier operation*
- > **Compensation on slopes** *with control via the wireless E-Pilot joystick*

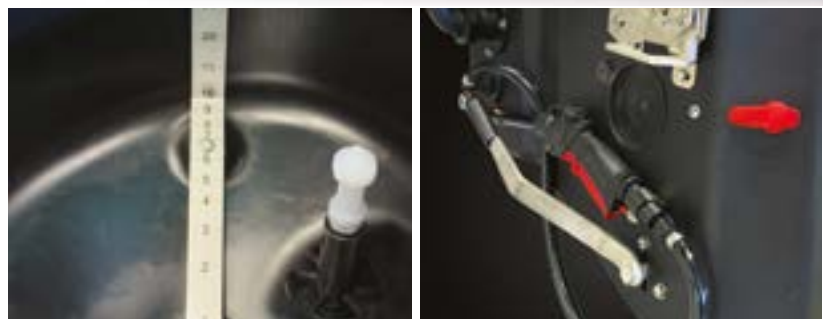
VANTAGE

IMPLEMENTATION

AT THE OPERATOR'S SERVICE



*"TOTAL COMFORT AND EASE OF USE IN
EVERYDAY LIFE, ENSURING YOU CAN GET
TO WORK RIGHT AWAY"*



CHEMICAL FUNNEL

Incorporation is a key step that requires both peace of mind, precision, and safety. Thanks to its **35-liter** chemical funnel directly integrated under the main tank, you benefit from optimised organisation and smoother handling every day. Positioned right next to the PPE locker, it improves practicality and user comfort by limiting movement and making each intervention easier.

The high-performance rinsing system, combined with perfectly smooth walls, ensures fast and thorough cleaning of the chemical funnel, avoiding any risk of phytotoxicity and securing your spray applications. The rotary nozzle provides effective rinsing of containers, even large ones, for safer, cleaner, and more comfortable work for the operator.

DUALELEC / DUALMATIC

OPERATE WITH EASE, WORK IN COMFORT

DUALELEC

With **DUALELEC 5**, benefit from a sprayer designed for your comfort, peace of mind, and increased precision. This **fully electric solution** allows you to control all sprayer functions directly from the cab or the operation station, without handling any valves. You **save time, reduce human error, and improve your operational safety**.



The rinsing of the tank, boom, and circuits is controlled simply from the cab. The agitation intensity can be adjusted automatically according to the tank volume for increased peace of mind. It can also be managed manually depending on the product and your preferences. Intelligent filling management with **automatic shut-off prevents overflows and optimises preparation**. And for total peace of mind, the system remains usable in manual mode in case of unforeseen events, ensuring the continuity of your activity in all circumstances.



DUALMATIC

The **Dualmatic** version offers a simple, reliable, and effective solution, ideal for users seeking intuitive handling while maintaining an excellent level of user comfort. Thanks to its two ergonomic levers, you can easily control three valves from the operation station, for smooth work without unnecessary complexity.

The volume reading remains accessible at any time, either directly at the operation station or from the cab via the sprayer screen, allowing you to stay in control without unnecessary movement. Combined with the Nivomatic gauge, the Dualmatic solution also secures your filling operations thanks to automatic shut-off at the programmed volume, preventing overflows and optimising your preparation time. **A reliable, practical, and reassuring solution** for working peacefully every day.

AXIALE BOOM

WORK WITH COMPLETE CONFIDENCE

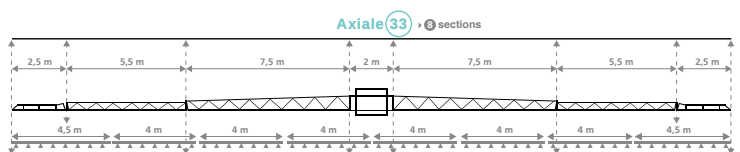
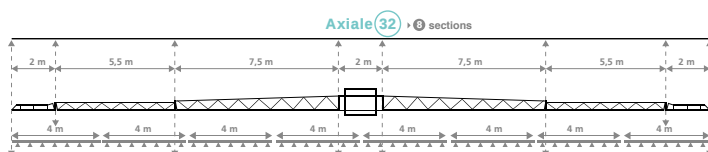
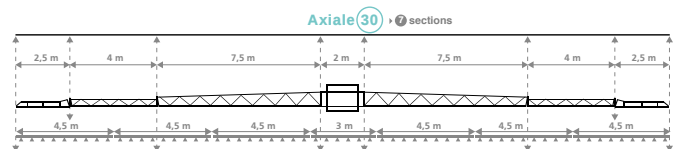
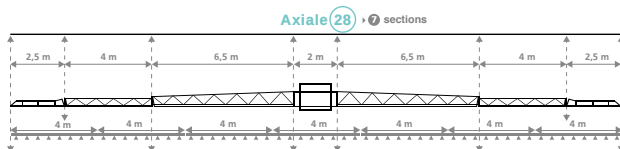
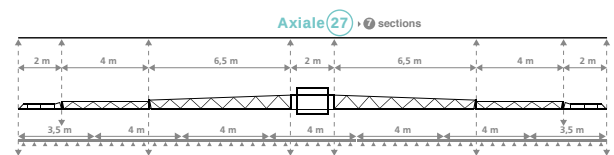
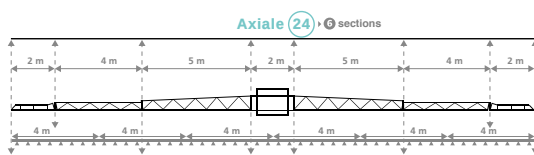
The Axiale boom combines robustness, precise spray application, and benchmark stability in the field. Available in **2-arm version (Axiale II) or 3-arm version (Axiale B3), from 24 to 33 meters**, it easily adapts to the organisation and requirements of your operation. Its design with central pivot suspension ensures optimal levelling: the boom remains perfectly parallel to the chassis, even in turns or on slopes, to guarantee consistent spray application quality. Its double anti-yaw system, present on the mobile frame and independently on each arm, limits unwanted movements and ensures uniform spraying across the entire width, contributing to treatment effectiveness while preserving the structure's lifespan.

The Axiale B3 version stands out for its remarkable compactness during transport. It reduces the overall size of the machine, improves manoeuvrability on the road and in narrow accesses, while offering excellent stability thanks to a low center of gravity. An ideal solution for combining field performance and ease of movement on a daily basis.

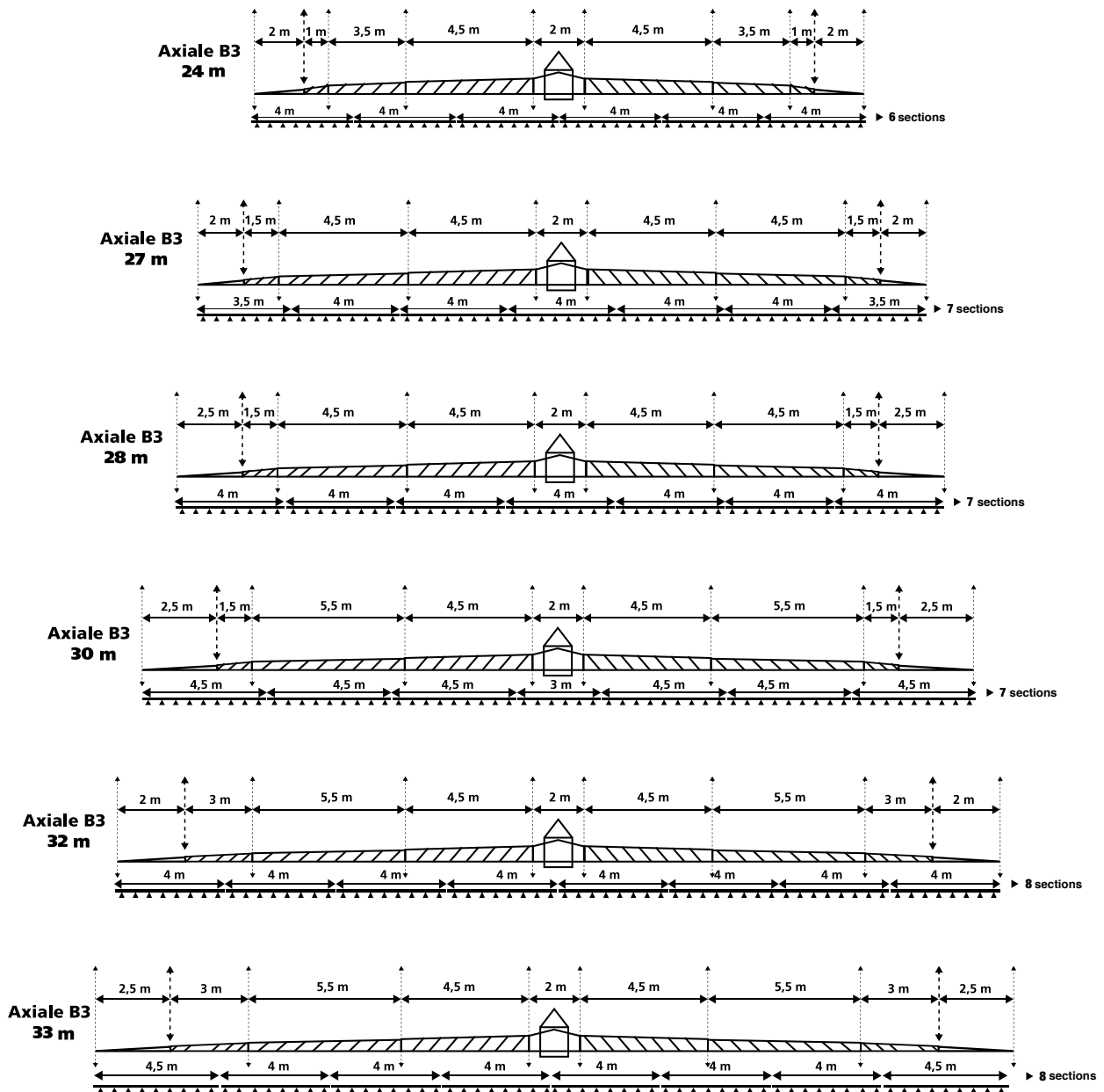
In summary:

- Uniform spraying and optimal efficiency
- Performance and precision in all situations
- Durability and reduced maintenance costs
- Manoeuvrability and increased transport safety with the Axiale B3 version

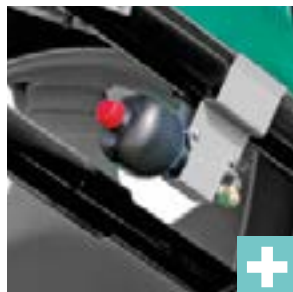
AXIALE II



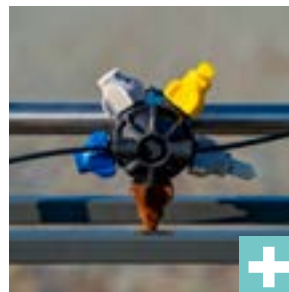
AXIALE B3



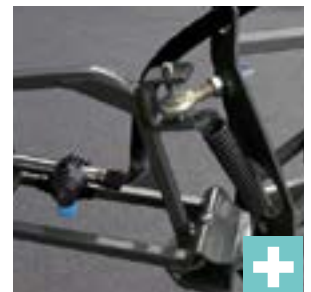
Robust joints and sturdy cylinders that operate with the rod retracted when the boom is extended, ensuring the machine's long service life.



Vertical suspension for greater comfort and better spray application quality.



Pentix nozzle holders fully integrated into the boom structure, offering great durability and allowing a wide choice of nozzles.



End arms with breakaway in all three dimensions in case of impact to avoid major damage to the boom.

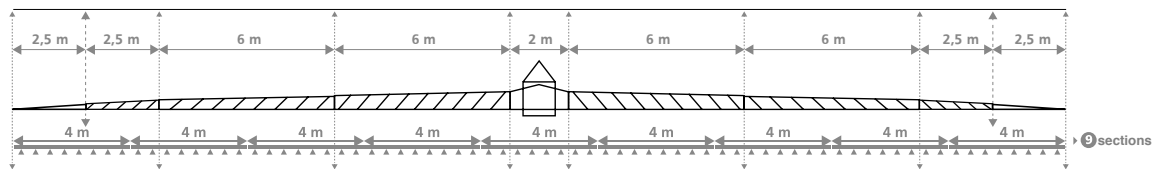
EKTAR B3 BOOM

FOR INCREASED PRODUCTIVITY

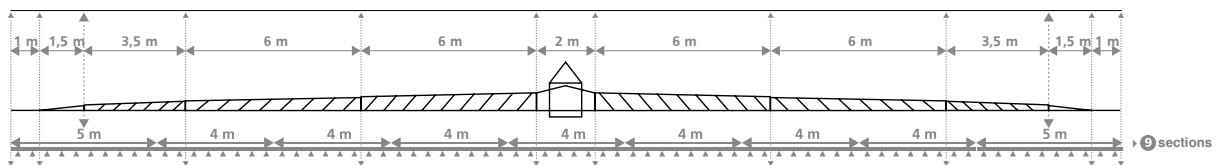
The **EKTAR B3 boom**, available from **36 to 44 meters**, combines the robustness of **POMMIER** arm design with the performance of **BERTHOUD axial pendulum suspension**, to offer a particularly high level of stability and versatility. It allows you to work in both **Axiale mode** and **pendulum mode**, with switching from one mode to the other directly from the cab, to instantly adapt to field conditions and ensure consistent spray application quality.

Its double anti-yaw system, present on the unfolding cylinders of the main arms and on the mobile frame, effectively limits unwanted movements to secure wide-width spraying. Slope control, variable geometries, and automatic neutral position ensure precise boom positioning at all times, for uniform spraying, greater agronomic efficiency, and optimal working comfort.

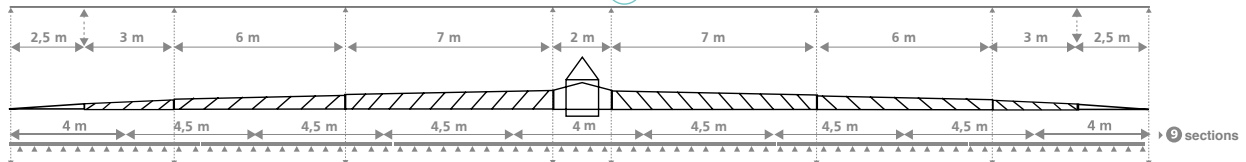
Ektar B3 (36)



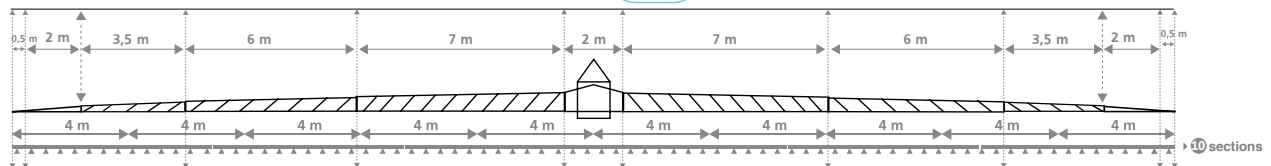
Ektar B3 (38 / 36)



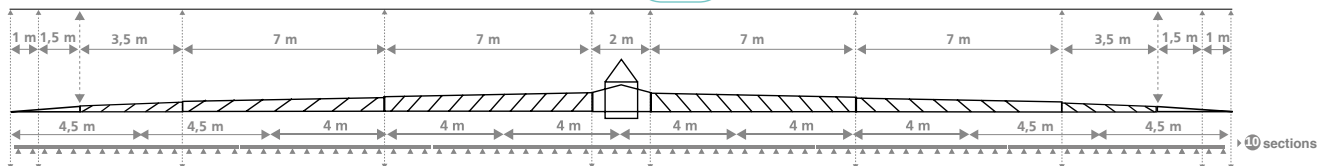
Ektar B3 (39)



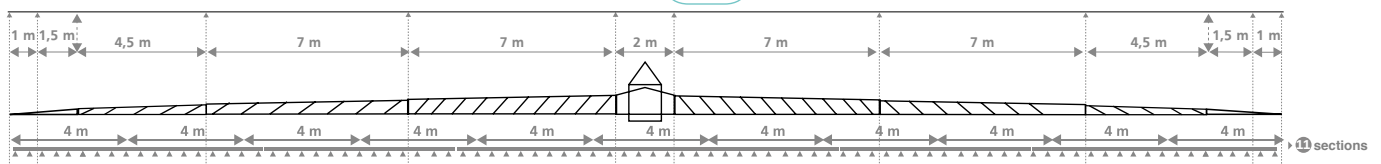
Ektar B3 (40 / 39)



Ektar B3 (42 / 40)



Ektar B3 (44 / 42)





VANTAGE

OPTIMAL STABILITY



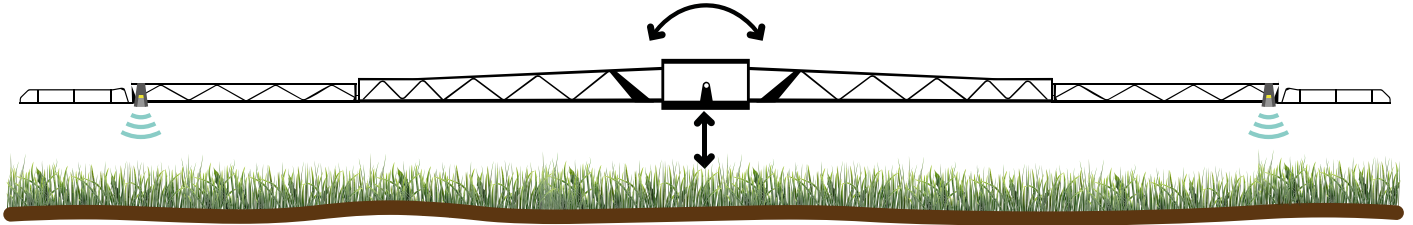
BOOM LEVELLING

The Berthoud boom levelling system improves spraying and user comfort. By maintaining a constant height, it ensures optimal coverage and a precise dose for each plant.

- High working speed
- Fast and smooth movements
- Headland automation with pre-recording of working height and headland
- Be able to spray day or night
- Reduced stress and fatigue for the operator

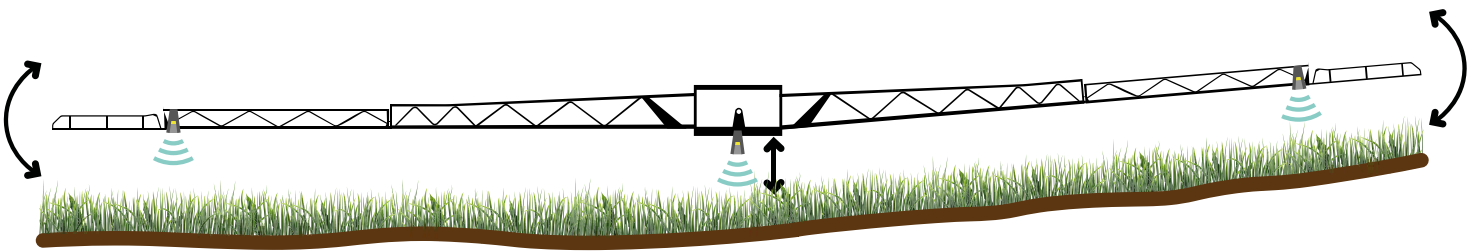
ACTIVE SLANT

This system automatically controls the **height** and the **angle** of the boom according to the terrain, ensuring optimal adaptation. The sprayer is equipped with two ultrasonic sensors placed at the ends of the boom, allowing precise tracking. Particularly suitable for flat or slightly undulating terrain, it keeps the boom at a consistent height, thus ensuring optimal coverage. This solution is perfectly suited for booms without variable geometries.



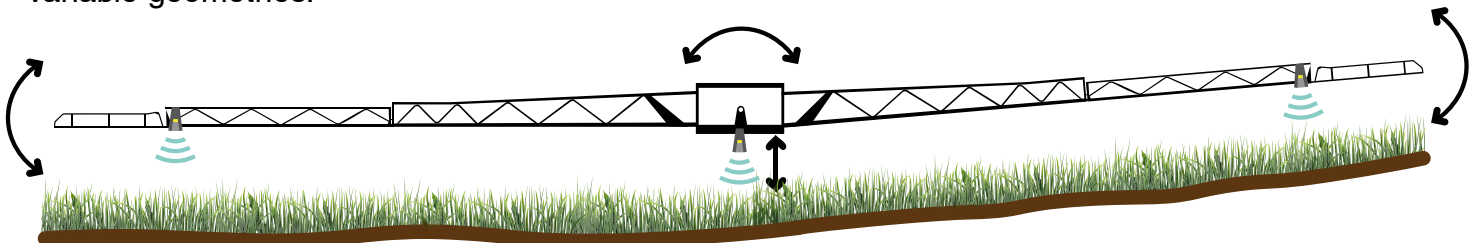
TOTAL CONTROL

This system automatically controls the **height** and the **variable geometries** of the boom according to the terrain, ensuring precise and efficient adaptation. The sprayer is equipped with three ultrasonic sensors, strategically positioned at the ends and in the central part of the boom. Particularly suitable for hilly or even steep terrain, it keeps the boom at a constant height, ensuring optimal coverage. This solution is ideal for booms with a large working width equipped with variable geometries.



ACTIVE ROLL

This device automatically adjusts the **height**, the **angle**, and the **variable geometries** of the boom according to the terrain, ensuring precise and efficient adaptation. The sprayer integrates three ultrasonic sensors, cleverly placed at the ends as well as in the center of the boom. Designed for rough terrain, the system ensures the boom is kept at a constant height, allowing for even and optimal coverage. This solution is particularly suitable for booms with a large working width with variable geometries.



USE

- Different operating modes to adapt to working conditions: crop mode when the foliage is uniform, soil mode on bare plots, and hybrid mode in heterogeneous crops.
- Display on an additional box in EC Tronic version or on a universal terminal if VT Tronic or Iso tronic option is selected.

DISCONTINUOUS CIRCULATION: the basics

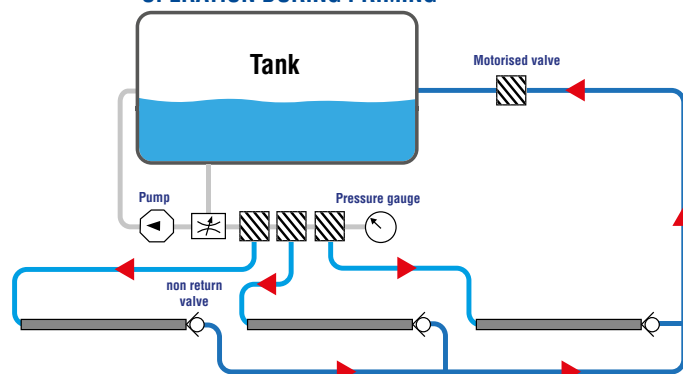
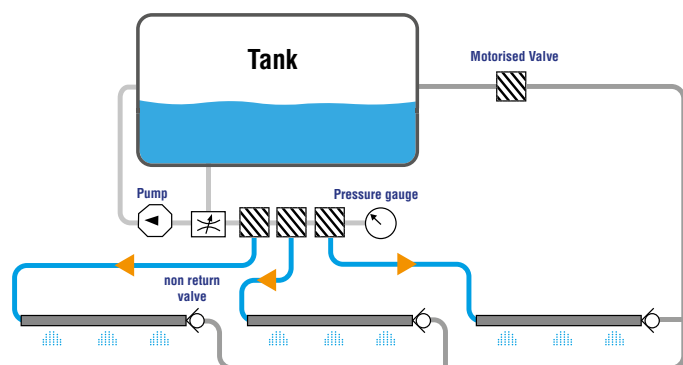
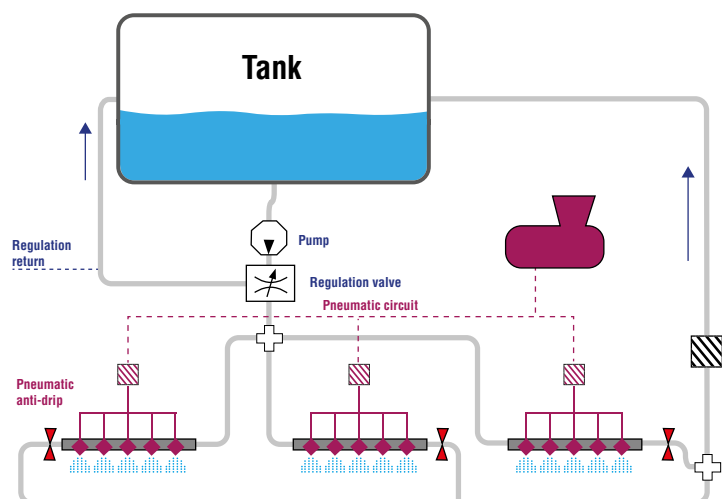
The Vantage range comes with standard discontinuous circulation. The mixture only circulates in the sections during spraying. This solution is cost-effective.

RTS CONTINUOUS PRIMING CIRCULATION

Allows priming of the booms after filling ... The boom is thus filled with mixture and under pressure, which allows spraying the correct dose as soon as spraying starts. During this function, the flow circulates in the same direction as during the spraying phase, so there is no flow reversal that could bring deposits back into the pipes. The circulation pressure, lower than the opening pressure of the pentix nozzle holders, is controlled by the regulation.

The Benefits of RTS

- > Time saving during priming (no need to spray)
- > Good spray mixture concentration at the boom after rinsing
- > Limitation of deposits at the end of the boom

OPERATION DURING PRIMING**OPERATION DURING SPRAYING****CONTINUOUS CIRCULATION**

Continuous circulation ensures spray mixture circulation during and outside of spraying. Based on a Pneumatic Anti-Drip (AGP) system, it offers several advantages:

- > Minimizes dirt and deposits
- > Permanent mixing, rinse water can be used several times by recirculating it = less contaminated water to dispose of
- > Fast priming
- > Instant pneumatic shut-off
- > Returns channeled into a single pipe
- > Motorized valves to open the circulation from the cab



VANTAGE

SPRAYTRONIC V2

CLEVER SPRAYING



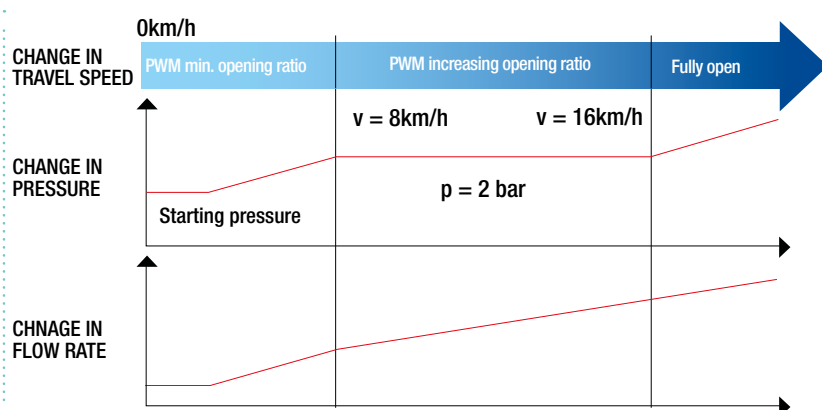
Spraytronic, pulse-width modulation for optimal spray application quality

When spraying, the main issue with current systems is the limitation of the working speed range to ensure good spraying quality. Beyond this, the droplets are too fine (drift) or too large (runoff). For use with intra-parcel dose modulation, in addition to limiting the working speed range, it also limits the possible dose range within the plot.

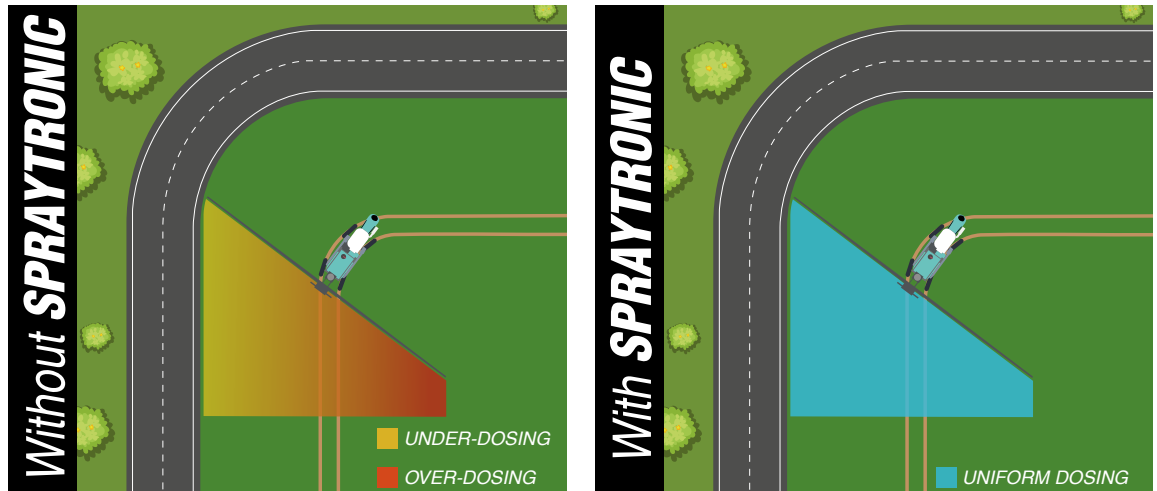
Increase your working ranges with spraytronic V2: the concept

Depending on your forward speed, a solenoid valve fitted to each nozzle holder will chop the spraying. The ratio between opening and closing times changes according to speed variation, at a fixed frequency. Thus, Spraytronic allows the flow rate of a nozzle to vary by 50% and, in the same way, the working speed, without changing the operating pressure!

Example yellow nozzle 50l/ha



Thanks to **Spraytronic V2** technology, each nozzle operates independently, avoiding overlaps and misses. In turns, the system adjusts the nozzle flow for uniform spray application, ensuring optimal crop protection.



Precision agriculture is within reach thanks to **Spraytronic V2**. The system allows the dose applied to each nozzle to be modulated using a pre-established modulation map. Crop protection inputs are therefore more precise and each plant receives the right dose for optimal development.



Spraytronic V2: your benefits at a glance

- A single nozzle is required to meet the vast majority of requirements:
reduce operating costs
- No pressure fluctuations after changing nozzles: optimal quality
- Use of a standard nozzle holder:
increase your range of action without having to change nozzles
- Can function by entering a required operating pressure:
optimal spray quality according to operation conditions
- Nozzle/nozzle shut-off: saving inputs
- Compensation in turns: optimal spray application across the entire plot
- Nozzle rate modulation

VANTAGE

PRECISE SPRAY APPLICATION



EC TRONIC

EC Tronic regulation is based on a pressure sensor, which offers several benefits. The pressure sensor, located as close as possible to the boom and nozzles, allows for more precise and reliable application. It is insensitive to clogging phenomena and therefore maintains correct regulation whatever the conditions. The pressure sensor requires minimal maintenance and offers long service life since there are no moving parts.

The EC Tronic monitor provides continuous display of the main spraying parameters (Volume/ha, speed, measured pressure). The unit controls up to 15 sections, paired with the wireless E-Pilot handle for greater comfort and safety. It allows you to control all hydraulic functions of the boom as well as manage the sequential opening and closing of sections. The handle can be used within a 20-meter radius around the machine.

E-TECH PACK

Berthoud offers various options for accessing precision agriculture, with solutions tailored to all levels of need. Among them, the E-TECH pack stands out as a turnkey solution designed to simplify access to cutting-edge technologies. At the heart of this package is the **EC Tronic** control unit, a high-performance and intuitive control tool, **paired with the Trimble GFX-1060 display**. Featuring a 10-inch touchscreen, this display offers excellent visual comfort and smooth navigation.

This system notably allows you to benefit from GPS section control, with management of up to 255 sections, to optimise inputs and limit overlaps. It also includes an efficient manual guidance mode.



GFX 1060



VANTAGE

SIMPLE AND EFFICIENT SOLUTIONS

VT TRONIC

The new **VT Tronic** display is a high-end **ISOBUS** terminal that comes standard with guidance, section control, rate control, and documentation features. A license for intra-field modulation is available as an option. The touchscreen features a display concept where information is shown in windows that can be moved "with the touch of a finger" for greater comfort and visibility. The user interface is ergonomic and easy to use. The VT Tronic touchscreen offers high resolution and a 10-inch display. The VT Tronic monitor can be used with other ISOBUS implements.

ISOBUS ISOTRONIC

In the **ISOTRONIC** version, you do not have an in-cab control box. Connected to an Isobus tractor, the VANTAGE range will be recognized by the tractor's Universal Terminal (UT), which will display the spraying parameters and control the sprayer functions.

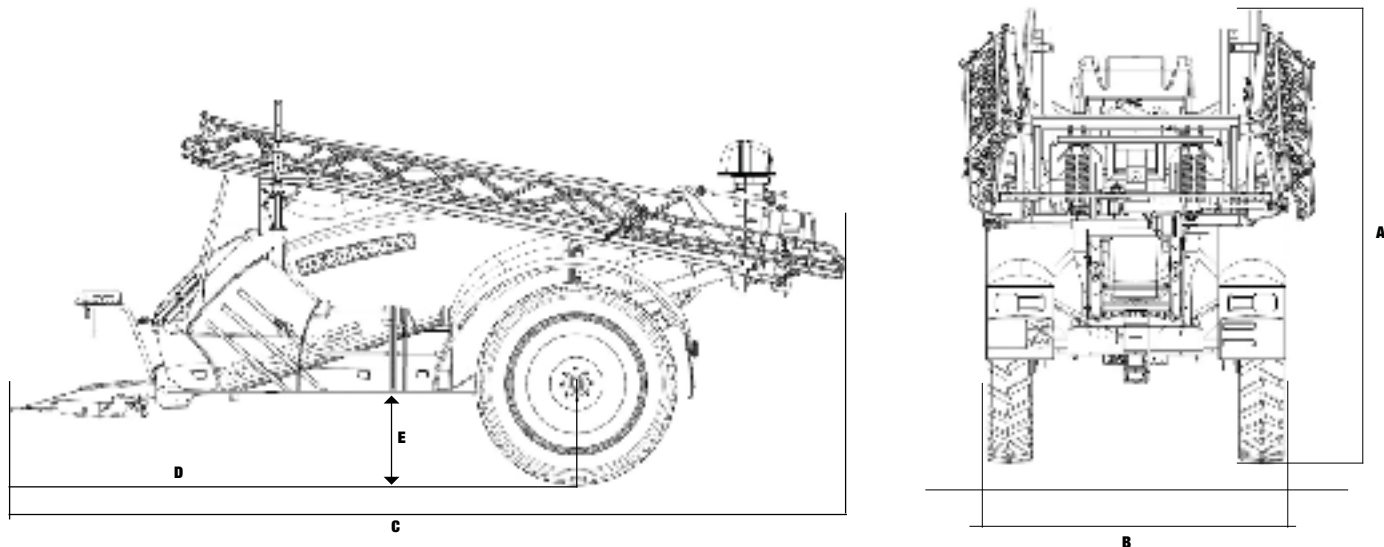
The same applies to advanced Precision Agriculture applications grouped under the TASK CONTROLLER concept: section control (TC-SC), rate modulation (TC-GEO), task documentation (TC-BAS), which will also be managed from the tractor terminal if the latter allows it. Finally, AUX-N certification allows you to use your tractor's iso joystick (if available) to control certain sprayer functions. Berthoud is a member of AEF, whose aim is to promote **ISOBUS** for all machines, terminals, and tractors through the ISO 11783 communication protocol. The goal is perfect compatibility between suppliers and total freedom of choice of control box for users.

AEF Certified





DIMENSIONS



Maximum dimensions (in m)		AX II 24-28 / 30-32		AX II B3 24-28 / 30-32		AX HD 36-38	EK B3 36-38 / 39-44	
		AX II 24-28 (transport)	AX II 30-32 (transport)	AX II B3 24-28 (transport)	AX II B3 30-32 (transport)	AX HD 36-38 (transport)	EK B3 36-38 (transport)	EK B3 39-44 (transport)
Vantage 35-37	A (transport)	4.00	4.00	3.40	3.50			
	B (transport)	2.55	2.55	2.55	2.55			
	C (transport)	6.96	8.56	7.01	7.01			
	D	4.52		4.52				
	E	0.69		0.69				
Vantage 43-46	A (transport)	4.00	4.00	3.40	3.50	4.00	3.90	
	B (transport)	2.55	2.55	2.55	2.55	2.55	2.55	
	C (transport)	7.47	9.09	7.57	7.57	9.45	7.80	
	D	5.02		5.02		5.02	5.02	
	E	0.80		0.80		0.80	0.80	
Vantage 55-60	A (transport)	3.78	3.78	3.50	3.60	4.00	3.90	3.90
	B (transport)	2.55	2.55	2.55	2.55	2.55	2.55	2.95
	C (transport)	7.89	7.89	8.44	8.44	9.45	8.40	8.40
	D	5.89		5.89		5.89	5.89	
	E	0.76		0.76		0.76	0.76	
Vantage 67-71	A (transport)	3.78	3.78	3.50	3.60	4.00	3.90	4.00
	B (transport)	2.55	2.55	2.55	2.55	2.55	2.95	2.95
	C (transport)	7.98	7.98	8.44	8.44	9.45	8.29	8.29
	D	6.21		6.21		6.21	6.21	
	E	7.30		7.30		7.30	7.30	

Maximum weight (in kg)		AX II 24-28 / 32	AX II B3 24-28 / 30-32	AX HD 36-38	EK B3 36-38 / 39-44	
Vantage 35-37	empty weight	4100	4630			
	GVWR	8300	8300			
Vantage 43-46	empty weight	4480	4640	5110	5000	
	GVWR	9400	9540	10000	9900	
Vantage 55-60	empty weight	4670	5050	5580	6020	
	GVWR	11200	11200	12100	12100	
Vantage 67-71	empty weight	5050	5255	5670	5970	
	GVWR	12550	12550	13000	13000	



