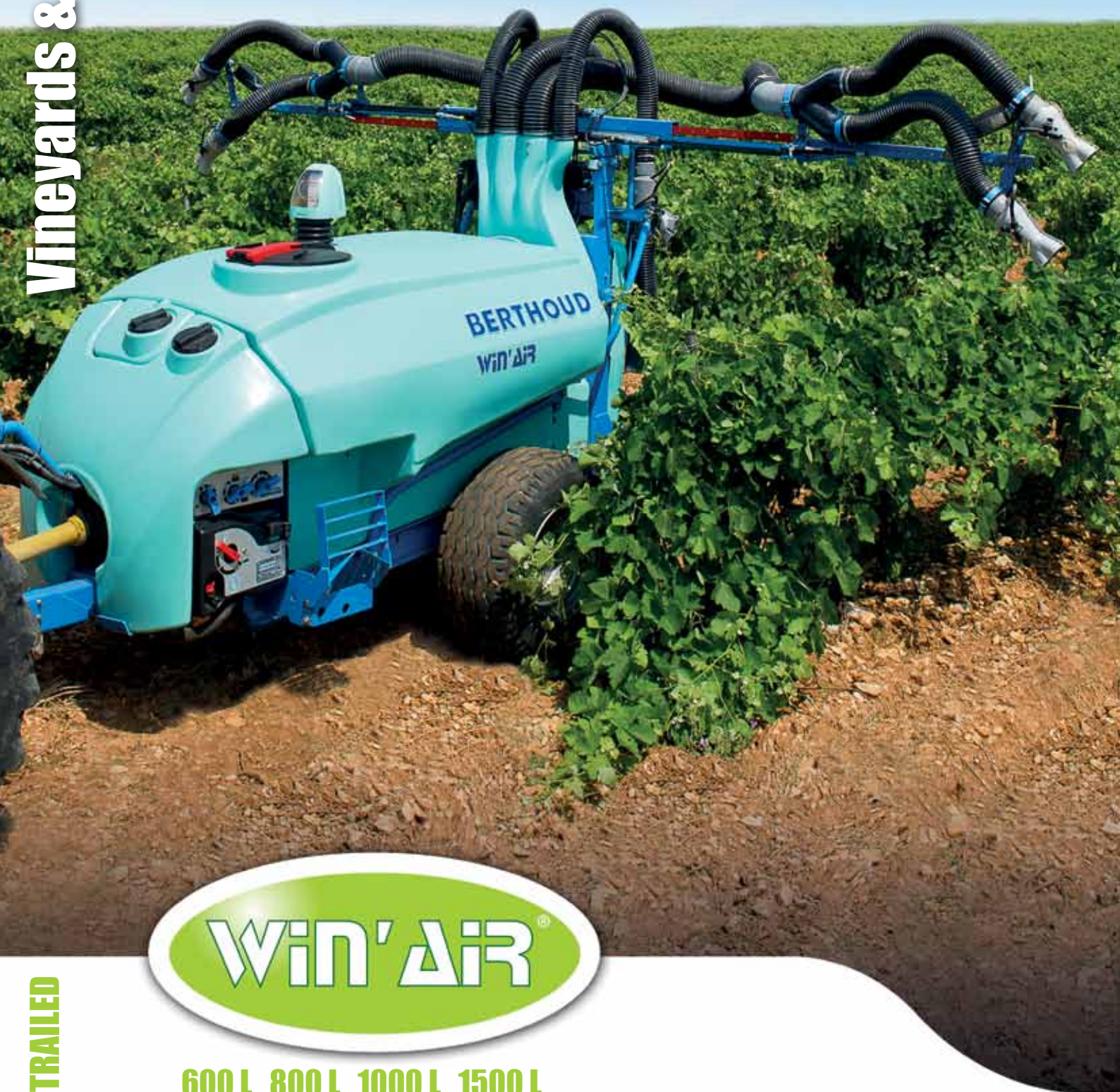


Vineyards & Orchards



600 L 800 L 1000 L 1500 L

TRAILED

BERTHOUD®
Forward together

Win'Air the champion

Berthoud's spraying quality

Win'air capitalises all of Berthoud's expertise in spraying (Speedair and Supair fans, Airmist diffusers, Easyflo calibration, etc.) combined with a number of significant developments: new fan unit, new generation AB Most sprayers and booms, pneumatic and air-assisted spraying, new electronics, etc.



Workability and productivity



Reinforced chassis, compact equipment, assisted driving, reduced transport width: Win'air is designed to guarantee workability, sturdiness and reliability for intensive and long-lasting use.

Simplified operation

Tube gauge, ribbon gauge or electronic gauge, Berlogic control panel, rinsing circuit without return to tank, reinforced agitation, assisted adjustment, new spray controls, etc. Operating Win'air is both simple and convenient, with maximum working comfort.



of spraying

Regulations and best practices

The Win'air range meets all the regulatory requirements applicable to sprayers in terms of safety, environment and road traffic. It also offers simple and convenient solutions for an easy implementation of good crop spraying practices.



A complete range of solutions

Capacities of 600, 800, 1000 and 1500 L, Speedair or Supair fans, manual or hydraulic boom arches, manual or telescopic AB Most booms, pneumatic or air-assisted spraying... Win'air is a complete range that offers a wide choice of solutions tailored to meet each of your needs.



Win'air, a functional and

Workability



> Tandem axle

Tandem axle improves the stability of the machine in rugged terrain. This option is strongly recommended on machines equipped with a AB Most boom.



> Articulated hitch

The optional articulated hitch allows turning within a shorter distance and ensures that the sprayer's wheels follow the tractor tracks.



> Ultra-compact tank and chassis

- Integrated tanks,
- Reduced clearance,
- Chassis raised at the rear.

The Win'air tank and chassis is designed for maximum compactness and workability in vineyards.

> Chassis tilted forwards

The clearance at the rear of the machine makes it easier to cross ditches or embankments.



Simplified operation



> Berlogic panel

With valves centralised on the left front of the machine and identification of the different functions with numbers, operation is much easier.

> Precise and easy-to-read gauge

Float gauge as standard. Ribbon or electronic gauges optional.

> Reinforced agitation

APS 96 pump (96 l/min) and high pressure agitation circuit.

> Powder incorporator

In the filter basket (optional). High pressure supply that incorporates 20 kg of powder in less than 2 minutes.

ultra-compact tank and chassis

Comfort & Safety

> Main tank with 5% anti-overflow

Overflow capacity equal to the nominal capacity plus 5% (e.g. 1050 L for Win'air 1000 L).

> 16 L hand wash tank

> Foldaway step

Directly below the inspection lid. Provides an ergonomic position for the operator.



Precision of application

> DPM regulation

Manual DPM as standard. Electric DPM (DP Elec) and flow controller (EC Control) optional.

> Electric gate valves (VEC)

2 VECs as standard. 2 additional VECs optional for closing outer half-rows.

> Triple filtration

During filling (filter basket), suction and delivery.



Best practices in action

> Minimum residual volume

- > Chassis tilted forwards. Allows the complete drainage of the tank in sloped terrain,
- > Tank with diamond-shaped base,
- > Sump with suction via a lateral pipe.

> Rinse tank with a capacity greater than or equal to 10% of the volume of the main tank

E.g. 100 L in Win'air 800 L and 1000 L. Facilitates rinsing in the field.



> Built-in boom rinse and tank rinse

Boom rinsing without return to tank and tank rinsing as standard.

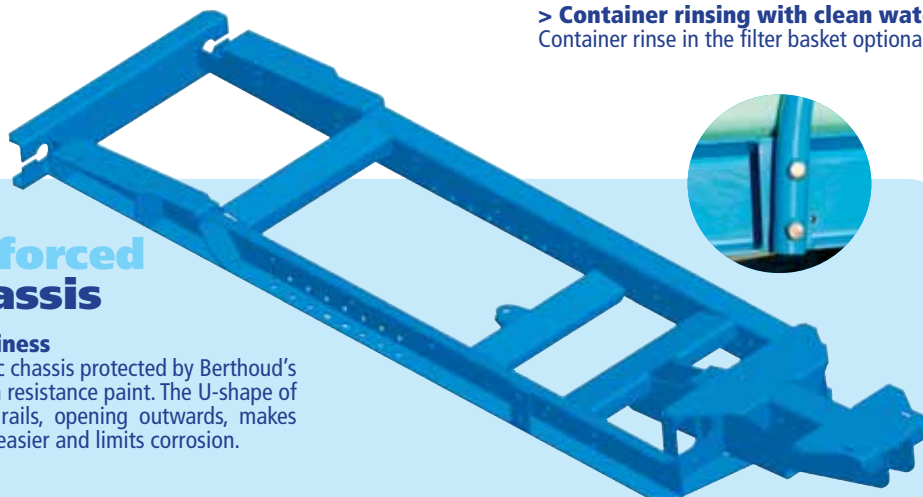
> Container rinsing with clean water

Container rinse in the filter basket optional.

Reinforced chassis

> Sturdiness

Monobloc chassis protected by Berthoud's ultra high resistance paint. The U-shape of the side rails, opening outwards, makes cleaning easier and limits corrosion.



Win'air, all of Berthoud's

**BERTHOUD
PATENT**

Speedair and Supair fans



Corrosion-proof profiled cage

The polyethylene cage of Speedair and Supair fans is corrosion-proof. Tangential outlets in the upper section limit load losses.



High performance impeller

With their impeller with closed centre, Speedair and Supair fans combine power, efficiency and low sound level. Impeller diameter 560 mm (Speedair) or 630 mm (Supair).

Intake on the front

It prevents the re-intake of spray mixture which undermines the quality of application, increases corrosion risks and leads to the formation of deposits of phytosanitary products inside the air ducts.

Reinforced transmission

The new transmission by polyV belt drive in Speedair and Supair fans combines flexibility of use and reliability over time.

Simplified disengagement

This new indexed jaw clutch is both very convenient and reliable over time.



Twinmist cannon

**BERTHOUD
PATENT**



Easyflo individual calibration

Precision of application

Double spreader

Optimal grain size
Expanded spraying spectrum

Optimised profile

Greater coverage height
Uniform air speeds
Limited air consumption

Mounting on ball joint

Easy adjustment

Airmist Duo and Trio diffusers

Airmist Trio



Easyflo calibration

> Ultra-precise calibration of the flow rate and limited clogging risk.
> Equips each outlet (diffuser or cannon).



Anti-drip diaphragm with built-in Monostop
> Opening/closing of liquid intake at each outlet.

Swirl nozzle

> Precise calibration of low flow rates and limited clogging risks.

Nozzle holder nut 1/4 turn
> Easy disassembly.

Higher level Airmist Duo diffusers may be replaced if necessary with Airmist Trio diffusers to increase the coverage height on side rows.

spraying quality

New generation **AB Most** drop legs

Graduated indicator for guiding the sprayer

Adjustable diffusers with position markers
> Simplified adjustments.

Sprayer body made by RIM

> Lightweight sprayer ultra-resistant to shocks.



Airmist diffuser with double spreader
> Great coverage height.
> Limited absorbed power.

Flexible sleeve
> 360° retractable.



Calibration for each diffuser with individual shut-off of liquid intake

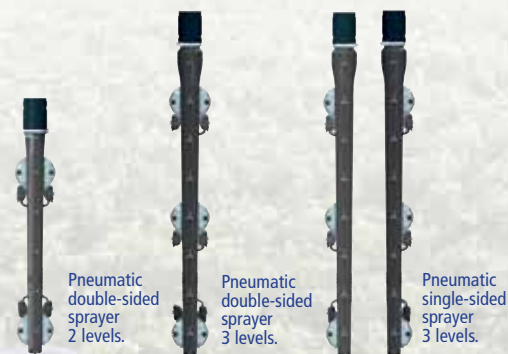
> Uniform distribution of liquid flow among outlets.
> Localised applications.

Right/left independent liquid supply

> Shut-off possible by half-rows or complete rows.

Diffusers built into the sprayer body
> Reduced dimensions.

A complete range



Different versions of sprayers are available to bring you **a solution tailored for each vineyard**, regardless of the foliage height and plantation width.

Efficient air assistance

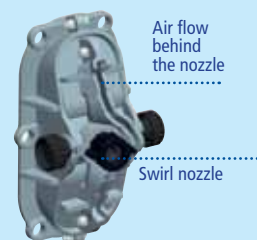
NG AB Most sprayers are designed to optimise the air flow both in terms of intensity and distribution. A design that guarantees effective penetration inside the foliage and clusters.

Air Drive

New generation AB Most sprayers are also available in air-assisted version (single or double side and with 3 or 4 diffuser levels).

The **Air Drive** diffuser includes a swirl nozzle whose angle with respect to the air flow is designed to optimise the spraying spectrum in terms of coverage height and distribution.

The air flow is placed behind the nozzle in order to trap all the droplets and thereby **limit dispersion**.



Air Drive diffuser

Win'air, the champion

Minimum residual volume

Win'air is designed to minimise the volume of spray mixture remaining in the tank when the pump loses its priming, even on slopes:

- > main tank with **diamond-shaped base**,
- > sump with **lateral suction pipe**,
- > agitation **shut-off valve**,
- > **chassis tilted** forwards.

This design facilitates the management of residues and meets regulatory requirements.



Rinse tank with a capacity greater than or equal to 10% of the volume of the main tank

The different rinsing operations in the field (rinsing of the circuit, rinsing of the tank, external rinsing) require a sufficient reserve of clean water.

With a rinse tank having a capacity greater than or equal to 10% of the volume of the main tank (100 L for example on Win'air 1000 L), Win'air meets the highest requirements of the environmental regulations.



Precise and easy-to-read gauges

A gauge must be precise, easy to read (from the filling station and from the cab), prevent any risk of accidental leakage and retain its readability over time. These practical requirements are also regulatory obligations.

Win'air is equipped with a **float gauge as standard** and can receive a **ribbon gauge** or an **electronic ribbon gauge** (Nivelec gauge).

Placed in the middle of the tank, they are easy to read and remain precise even in rugged terrain. Their upper part does not come into contact with the spray mixture, and thus they retain their readability over time.



of best practices

Berlogic panel

The Berlogic panel is both convenient and easy to use:

- > all the valves centralised on the front left of the machine,
- > identification of different functions using numbers,
- > blue colour code for rinsing functions.



Built-in boom rinse and tank rinse

Now mandatory, these rinsing systems are included as standard in Win'air.

Boom rinse without return to tank

This device allows the boom to be rinsed without diluting the spray mixture remaining in the tank. If an application is interrupted, it prevents **clogging** when spraying is resumed.

Tank rinse

It rinses the walls of the tank with clean water at the end of the application. Paddle system **without risk of clogging by powders**.



Container rinse (optional)

Container rinse built into the filter basket. Facilitates the rinsing of containers with clean water.



Powder incorporator (optional)

With its high pressure supply, it can incorporate **20 kg of powder in less than 2 minutes**.

Vitiflex and Vitiset boom arches,

Vitiflex arch

Arch with hydraulic unfolding and spacing

Vines up to 3 m (Speedair) or 3.50 m (Supair).

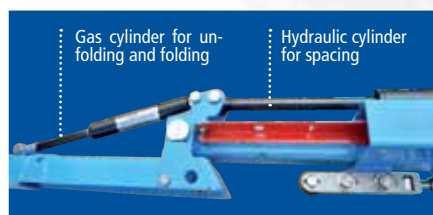
Vitiflex arch provides great flexibility of use. It is particularly suitable in case of multiple plantation widths and in very wide vines.

Flexibility of use

Independent unfolding and spacing

Each of the two arms can be unfolded and spaced out with a single action.

After opening, the spacing can be adjusted to the desired width. Right/left movements are independent.



Telescoping range of 500 mm

Graduated indicators

They make it easier to position the boom arch at the desired width.

Orientation of external cannons

Manual or electric (Sitelec optional).

Simplified control

Only two double-acting hydraulic spools are required to unfold and space out the arms independently and uncouple right/left movements.

Hydraulic lift requires a third double-acting distributor or SEH option (Electro-Hydraulic Selector).



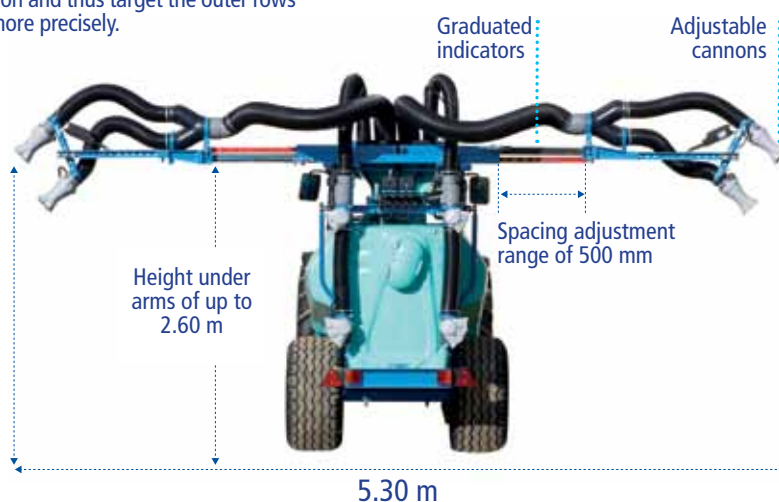
Spraying the opposite side of adjacent rows

Equipped with this option, the Vitiflex boom arch can treat **two complete rows plus two half-rows** during each pass.



The widest arch on the market

With the arms extended to their maximum point, the Vitiflex boom arch has a **total width of 5.30 m**, which makes it possible to bring the cannons close to the vegetation and thus target the outer rows more precisely.



Ultra-compact transport width

Width: 1.65 m
Height: from 2.50 m depending on lift and tyre size.



workability advantage

Lift on guide rail

High clearance under the arms and reduced transport width

Vitiflex and Vitiset boom arches are equipped with a lift on guide rail.

Manual lift (as standard): adjustment range of 600 mm.

Hydraulic lift (optional): travel of 340 or 500 mm.



Sliding guide rail in the chassis uprights

Main chassis with U-shaped uprights

This design, available in the hydraulic version, combines very high clearance under the arms (up to 2.60 m) and a reduced transport height.

Vitiset arch

Manual folding arch

Vines up to 2.50 m (Speedair) or 3 m (Supair).

Compact and convenient, the Vitiset arch is particularly suitable in case of uniform plantation widths and for narrow or intermediate vines.



Compactness and ease of use

Indexed manual folding

Indexing system that locks the boom arms in open or closed position.

Hydraulic folding optional



Two working configurations

Narrow or wide depending on the cannon position.

Distance between external cannons: 2.50 m in narrow position, 3.30 m in wide position.



Orientation of external cannons

Manual or electric (Sitelec optional).

Lift on guide rail

Manual (adjustment range of 600 mm) or hydraulic optional (travel of 340 or 500 mm).

Ultra-compact transport width

Overall width: 1.50 m.

Height : from 2.50 m depending on lift and tyre size.

New generation AB Most

Manual AB Most boom

Ultra-compact boom designed specially for vines 1.40 m to 2 m wide

- > Hydraulic unfolding, lift and GV.
- > Manual movement of sprayers.
- > Control by electro-hydraulic selector (standard) or solenoid valves (optional).

AB Most telescopic booms

- > For vines from 1.80 m to 2.50 m wide.
- > For vines from 2 m to 3.20 m wide. This boom has 3 hydraulic telescoping ranges: 2 m - 2.70 m, 2.30 m - 3 m, 2.50 m - 3.20 m.

Exceptional flexibility of use

> Sequential unfolding and spacing

Only one action is needed to command unfolding and spacing. Right/left movements are independent.



Hydraulic contactors for sequencing unfolding and spacing functions.



Arm support with cut-out for guiding and locking the arm in transport position.

> Telescoping range of 700 mm

> Hydraulic lift on guide rail

Lift of 340 mm as standard, 500 mm optional.

> High clearance under boom

Height under boom up to 2.60 m.

> Simplified transition to transport position

Lowering the GV makes it possible to position the arms directly on their support.

Simplified manoeuvres at row ends

Positive GV

Raising the GV brings the sprayers closer to the machine and thus reduces the overall width of the boom, which makes it easier to turn around at row ends.



ACS



ACS, the automatic controller that simplifies turning
Combined with the VG<0 option, ACS (Simplified Driving Assistance) provides driving assistance:

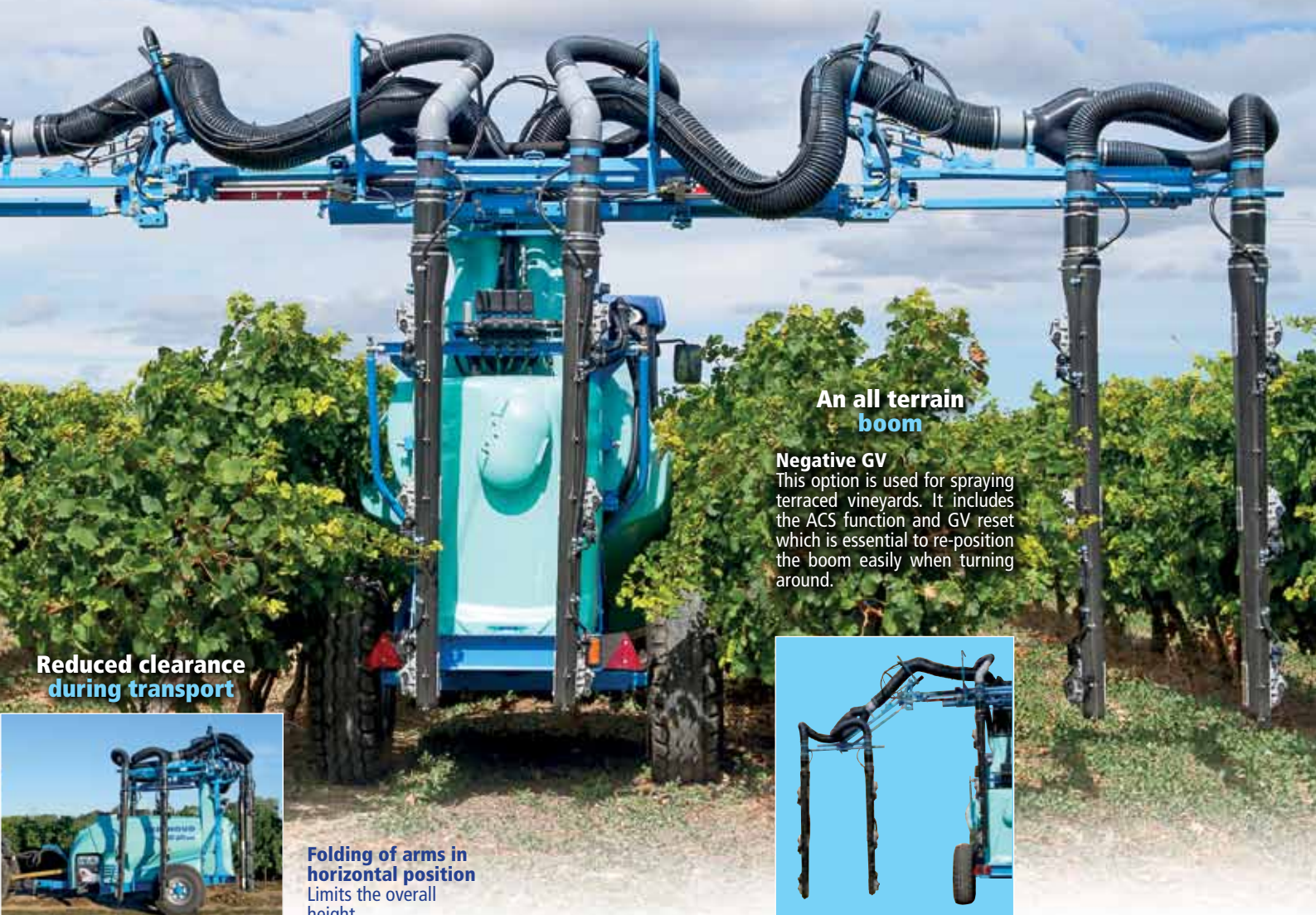
- > at the row end, pressing once cuts off the spraying and raises the GV.
- > at the start of a row, pressing a second time lowers the GV and opens the spraying.

Simplified folding

Pressing just once is enough to retract and fold each boom arm, making it easy to fold arms when this is necessary for turning or avoiding an obstacle.



booms, a must for spraying on each side of rows



An all terrain boom

Negative GV

This option is used for spraying terraced vineyards. It includes the ACS function and GV reset which is essential to re-position the boom easily when turning around.

Reduced clearance during transport



Folding of arms in horizontal position

Limits the overall height.



Simplified adjustments

Graduated indicators

They make it easier to position the boom at the desired width.

Indexed change of range, without using tools

(telescopic boom 2 m - 3.20 m)

This indexing makes it easy to position the sprayers at the right width if the working range changes.

Quick clamping handles (optional) allows this operation to be carried out without tools.



Control by SEH or ED

SEH (standard)

Electro-hydraulic selector with 4 functions (independent unfolding and spacing with left/right uncoupled, lift, coupled GV).

ED (optional)

Block with 5 solenoid valves (independent unfolding and spacing with left/right uncoupled, lift, uncoupled GV).



Win'air, the champion of spraying

Simple, practical units

DPM regulation as standard

DPM regulation, simple and precise regulation

Win'air is equipped as standard with DPM regulation (Flow Proportional to Engine speed), which maintains a constant volume/ha in a selected gear ratio, depending on the forward speed. This is both a simple and economic solution, which is very precise for speed variations of up to 20%.

Pressure adjustment in the cab (DP Elec optional)

The DP Elec option makes it possible to adjust the pressure and thus to modify the volume/ha applied from the cabin.



Machines without solenoid valves or optional EC Control.



Machines with solenoid valves or optional EC Control.

eC Control, a flow controller that is precise, reliable and easy to use

eC Control displays the main spraying parameters during application: volume/ha, forward speed, flow, etc. It also allows the volume /ha to be adjusted from the cab.



Flow measurement by electromagnetic flow-meter

Operating without moving parts, this type of flow-meter does not clog with powders. It provides precise and reliable measurement over time, without requiring any maintenance.



Ease of use

Display and setting are designed for maximum simplicity and ease of use.



Display of pressure in cab (optional)

Speed measurement by phonic wheel

Speed is measured by a phonic wheel mounted on one of the sprayer's wheels.



Display of volume in tank (Nivelec optional)

Simplified adjustment of volume/ha depending on the working width

EC Control comes with a **forward speed** and working width simulation mode, allowing the volume/ha to be corrected when stationary without spraying. This function makes it possible to spray at the correct volume/ha even in the first few metres following a change in width.



Dimensions

| | Capacity | | | |
|----------------------|-------------|-----------|-----------|-----------|
| | 600 L | 800 L | 1000 L | 1500 L |
| | L Min / Max | | | |
| Wheel 165 R 13 | 990/1230 | | | |
| Wheel 185 R 14 | 1060/1290 | 1060/1290 | | |
| Wheel 215/70 R15 | 1100/1320 | | 1100/1320 | |
| Wheel 10.0/75 x 15.3 | 1190/1370 | | | 1300/1630 |
| Wheel 31/15.5 -15 | 1470/1800 | | | 1544/1760 |
| Walking beam RC 16 | 1300 | | | |
| Walking beam RC20 | | 1340 | 1340 | 1340 |
| Walking beam 215/70 | | | 1480 | 1580 |

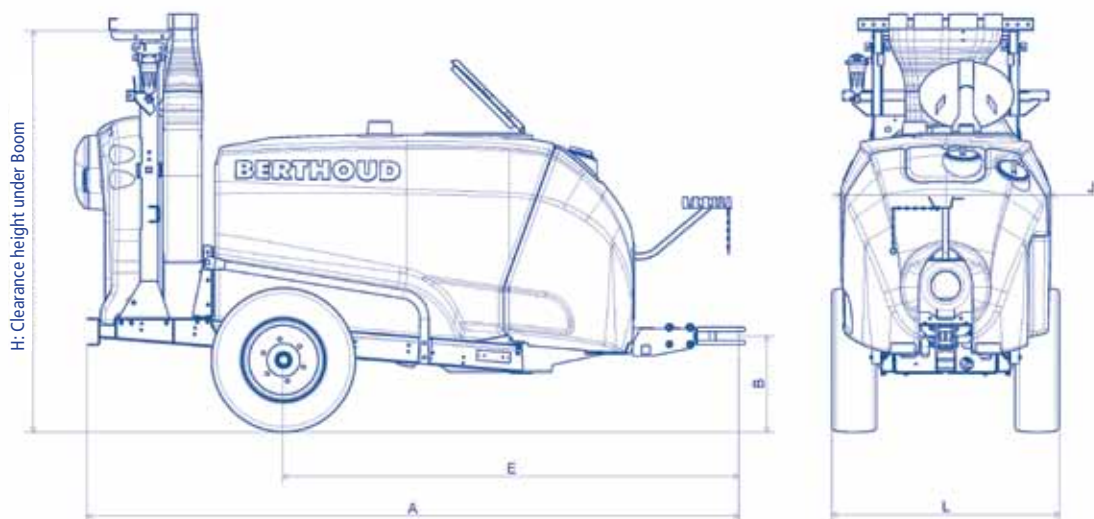
Standard tyres

| | 600 L | 800 L | 1000 L | 1500 L |
|------------------|-----------|-----------|-----------|-----------|
| A** | 2680 | 2990 | 3160 | 3470 |
| E min/max | 1700/1935 | 1900/2130 | 2030/2270 | 2580/2820 |
| J Tank Width | 950 | 1020 | 1020 | 1020 |
| B Wheel standard | 438 | 442 | 465 | 402 |

** + 170 mm in hinged drawbar

H: Clearance height under Boom (Vitifirst, Vitiset, Vitiflex)
(depending on lift type and tyres)

| | Manual lift (min / max) | | Hydraulic lift 340 mm (min max) | | Hydraulic lift 500 mm (min max) | |
|----------------------|----------------------------|------|------------------------------------|------|------------------------------------|------|
| Wheel 165 R 13 | 1836 | 2436 | 1858 | 2198 | 2006 | 2506 |
| Wheel 185 R 14 | 1850 | 2450 | 1872 | 2212 | 2020 | 2520 |
| Wheel 215/70 R15 | 1917 | 2517 | 1939 | 2279 | 2087 | 2587 |
| Wheel 10.0/75 x 15.3 | 1935 | 2535 | 1957 | 2297 | 2105 | 2605 |
| Wheel 31/15.5 -15 | 1970 | 2570 | 1992 | 2332 | 2140 | 2640 |
| Tandem axle RC 16 | 1923 | 2523 | 1945 | 2285 | 2093 | 2593 |
| Tandem axle RC20 | 1974 | 2574 | 1996 | 2336 | 2144 | 2644 |
| Tandem axle 215/70 | 1914 | 2514 | 1936 | 2276 | 2084 | 2584 |



Note: For further information, especially concerning the overall size of the Win'air according to the model of arch or boom, please contact your Berthoud dealer.

WIN'AIR 100% BERTHOUD

BERTHOUD, a success story that started in 1895 on the initiative of Paul **BERTHOUD**. In 1987, the brand joined the Exel Industries group, the world leader in spraying techniques present in the agricultural, industrial and general public fields.

BERTHOUD generates its turnover through its equipment for Row crops, Vines & Fruit bushes and Orchards.



Brand advantage

Berthoud meets all your requirements: wide or narrow vines or large farms. Mounted or trailed machines, straddle sprayers or vine harvester equipment, they all enjoy the best resale value on the used machine market.



Innovation advantage

Berthoud designs all of its sprayers and over 10% of its employees are devoted to Research and Development. BERTHOUD develops its own concepts and holds many patents: Speedair/Supair fans, Airmist diffusers, etc.



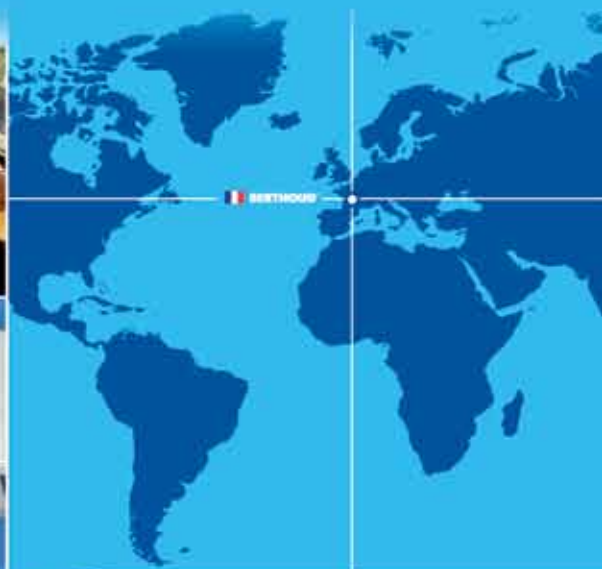
Network advantage

A special partnership of over 50 years with with a network that provides a relay close to your location. 350 dealership technicians are trained every year in our Training Centre.



Service advantage

Delivery of spare parts in less than 24 hours, service level of close to 99% strengthened by the high availability of our teams on the road and the performance of our After Sales hot line.



85980 BE 01/14

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