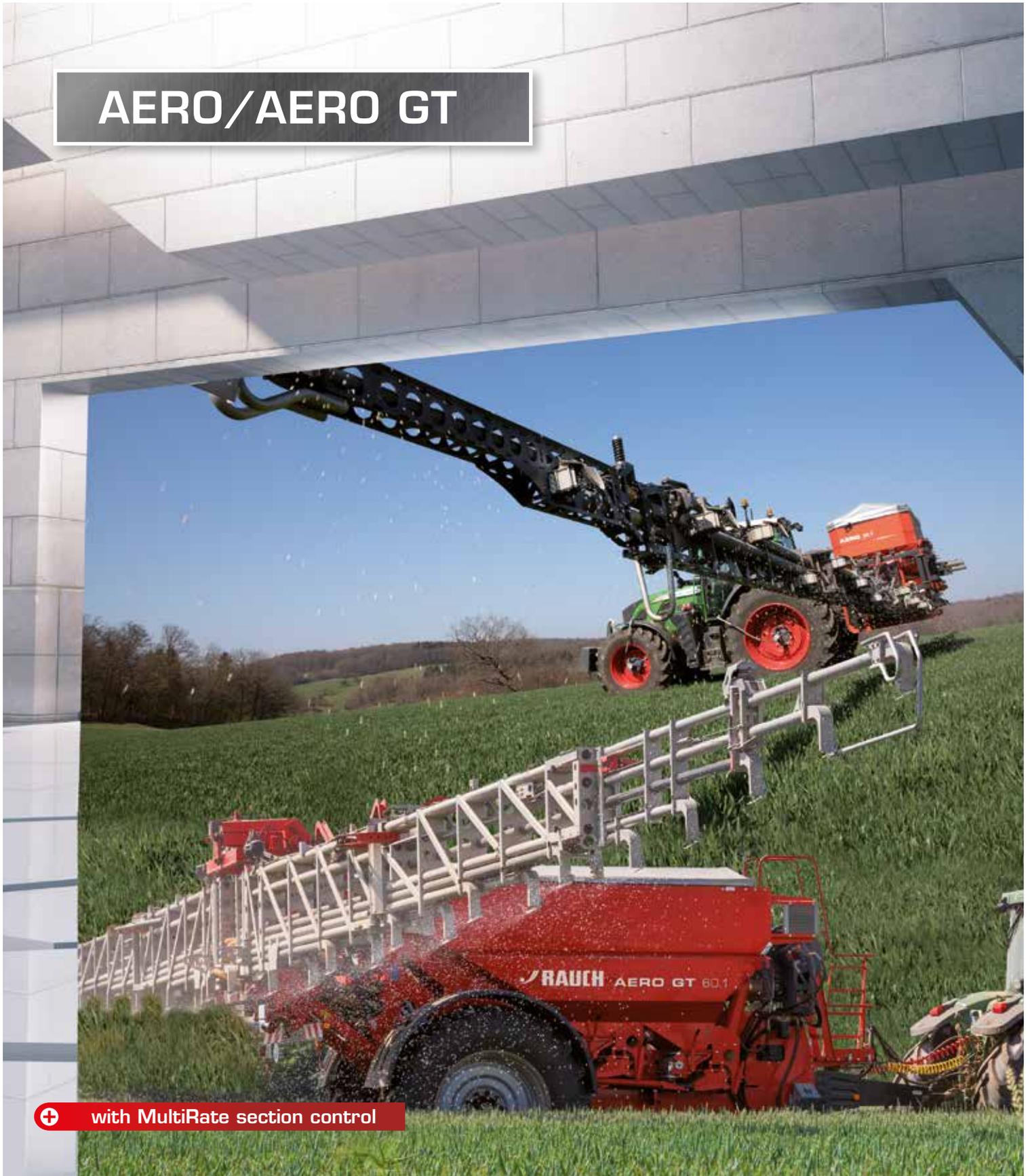


PRECISION MEETS SAFETY  
THE EFFICIENT PRECISION FERTILISER SPREADERS

AERO/AERO GT



⊕ with MultiRate section control

# PRECISION IS BUILT INTO AERO – SO YOU CAN FOCUS ON SAFETY WHEN FERTILISING

- ▶ **ENVIRONMENTALLY-FRIENDLY FERTILISING TECHNOLOGY**



- ▶ **LONG APPLICATION WINDOW**  
No matter the wind

- ▶ **EASY TO USE**  
No need for spreading charts or settings for different fertilisers

- ▶ **PERFECTION UP TO THE FIELD BOUNDARIES**  
Full application right to the last plant

- ▶ **FERTILISER PROPERTIES ARE IRRELEVANT**  
Save money on fertiliser

- ▶ **PRECISE METERING**  
Best nutrition for plants

Only the best fertiliser metering and spreading can guarantee the highest returns on cost-intensive fertilising. The AERO pneumatic fertiliser spreader completely redefines the performance limits of professional fertilising technology. The consistent use of modern technology in combination with future-proof ISOBUS electronics further increases precision, safety, comfort and profitability of AERO fertilisation.

► **HIGHLY ECONOMICAL**

compared to fertilising with a disc spreader:

**++ Precision gains:**

2-3% more stable yields due to even lateral spread no matter the flight characteristics of the fertiliser

**++ Boundary gains:**

Avoid 2-3% losses in yield by fertilising the whole field up to the boundaries without wasting fertiliser outside of them

**++ Purchasing gains:**

Save up to 0.20 €/kg N by purchasing fertiliser without having to check the flight characteristics

► **SPREADS DIFFERENT SUBSTANCES**

Such as seeds, anti-slug pellets or mixed fertilisers

► **PRECISE LATERAL SPREADING**

No stripes

## PRECISE AND RIGHT TO THE POINT –

### A NEW GENERATION OF AERO PROMISES A NEW LEVEL OF FERTILISING

#### PRECISE SPREADING

through turbulence chamber nozzles with switchable deflector plates for late top dressing

#### ISOBUS JOB COMPUTER

with WLAN connection to RAUCH app

#### ACS – ANTI CORROSION SHELL

with double powder coating

#### V-POSITION BOOM IN HEADLANDS

#### DISTANCE CONTROL

sensor for automatic boom guidance

RAUCH has a long tradition in manufacturing pneumatic fertiliser spreaders. Between 1981 and 2007, the company manufactured and sold 4,500 machines from the series AERO 1012 to AERO 2224. "It was always our biggest concern to further develop our highly precise machines in order to meet the constantly growing demand for optimal plant nutrition", says Wilfried Müller, Managing Director at RAUCH Landmaschinenfabrik GmbH. "With the new precision spreaders, we have redefined tried and tested technology and reached another milestone in the future-oriented dosing and distribution of fertiliser, seeds and microgranules."

## CYLINDER FOR V-POSITION

In headlands or uneven terrain

## BOOM GUIDANCE WITH CENTRAL SPRING PENDULUM

## FOLDING TARPAULIN

with viewing window

## BOUNDARY SPREADING PLATE

right and left

VOLUMES  
UP TO 3200 LITRES

INTEGRATED  
WEIGHING FRAME

HIGH-PERFORMANCE  
BLOWER

## 4 SECTIONS

with section control

## MULTIRATE 4

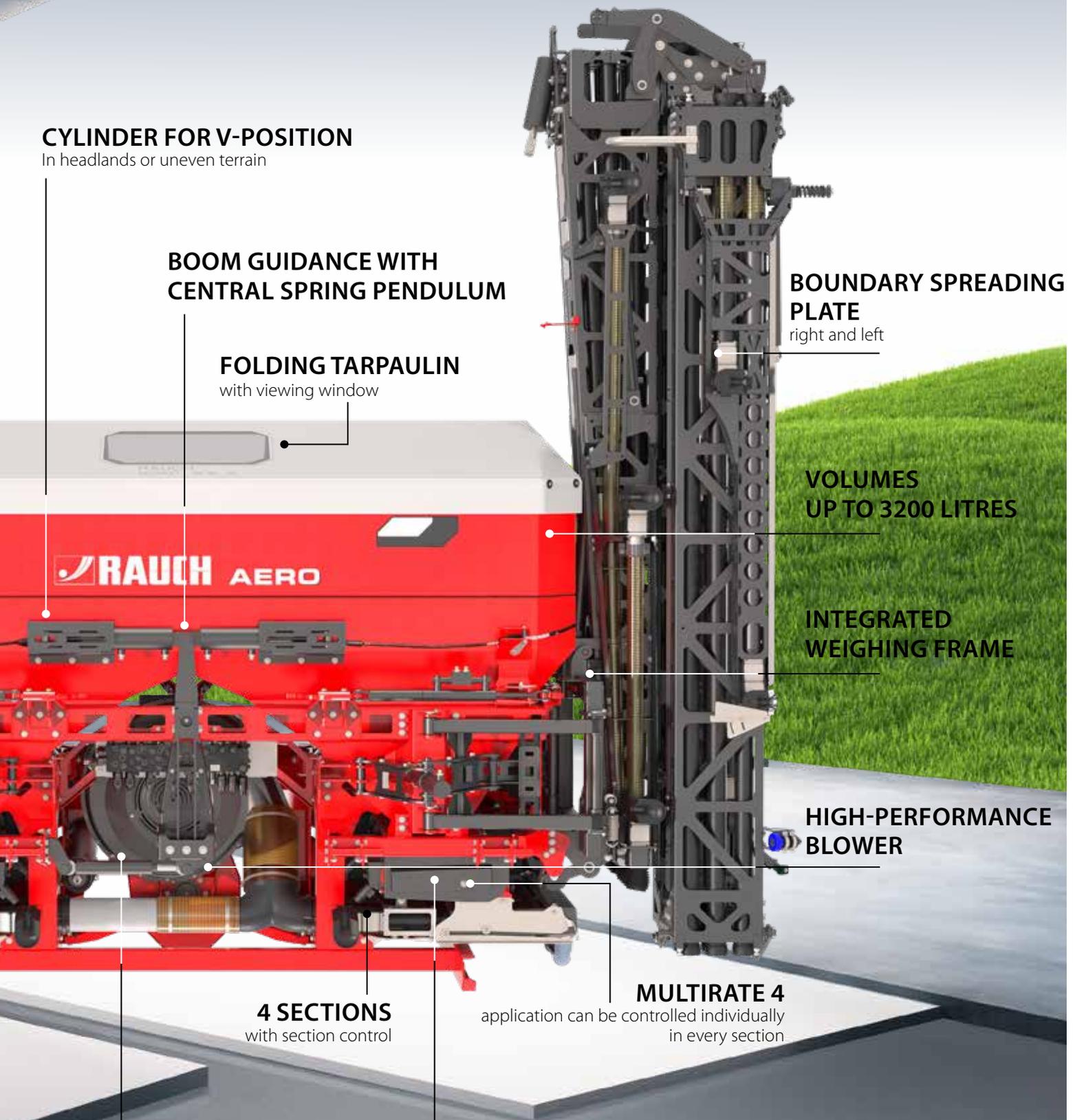
application can be controlled individually  
in every section

## HILLSIDE COMPENSATION

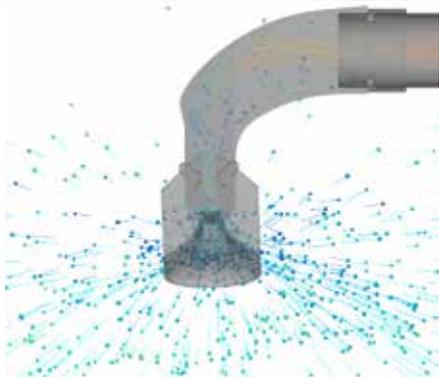
optional automatic distance control

## PRECISE METERING

with cam wheel rollers



# THE BEST SPREADING TECHNOLOGY – PRECISION WORK AT FIELD BOUNDARIES, DRIVING LANES AND MORE



## PRECISION DISTRIBUTION IN THE FIELD

Fertiliser is blown out into specially shaped turbulence chamber manifolds with cam-tipped deflector plates. This technology allows for a very exact spreading pattern for each nozzle. Overlapping nozzles result in a spreading pattern with impressive variation coefficients. The fertiliser has just a short trajectory, the air-supported falling distance to the ground. As a result, wind hardly influences the lateral distribution and fertiliser flight characteristics are of lesser importance. The spreading patterns measured in the field under normal working conditions hardly differ from those measured in the spreading hall.



## HIGH YIELDS

Reliable lateral distribution with any fertiliser prevents stripes in the field. This is proven to stabilise crop yields by 2 to 3% compared to a disc spreader. This is the so-called precision gain.

The concept of the AERO pneumatic fertiliser spreader is unbeatable in terms of metering and spreading accuracy. That's why this technology is also referred to as a "precision spreader". Due to forced metering via cam wheel rollers and distribution via boom, and a turbulence chamber manifold with deflector plates, the fertiliser is always distributed with a very high degree of precision and virtually regardless of the flight characteristics and environmental conditions, such as wind or slopes.



## PROFILED BOUNDARY SPREADING

The last manifold is not right at the boundary, it is a half-manifold length further in, so that the overlap of the manifold is the same when the spreader moves in the opposite direction on the field. This means that the full quantity is spread right up to the boundaries and almost no fertiliser is spread beyond the boundaries thanks to the boundary spreading plates. This means stock right up to the boundaries without losing fertiliser outside of them.

### ► Double effective

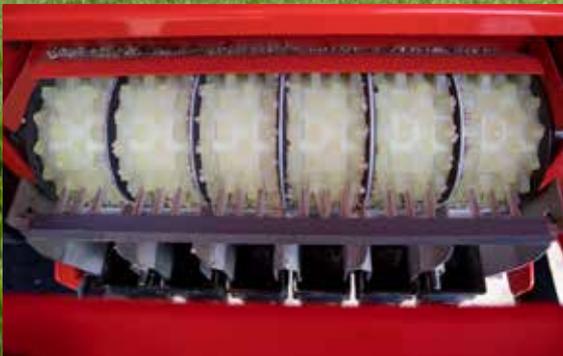
According to studies carried out by independent bodies, normal fertilisation with a disc spreader results in a loss of 5 to 7% of the field area at the boundaries depending on the field size. These reduced yield areas are non-existent when a precision spreader is sent to do the job. AERO meets all the requirements of the German Fertiliser Ordinance and the European environmental standard for fertiliser spreading EN13739. The AERO boundary spreading is also very positive for the public because hardly any fertiliser is spread onto roads and paths.

## LONG APPLICATION PERIODS

As it is not dependent on wind, AERO has a significantly longer period of application compared to disc spreaders. This is an unbeatable argument, especially in spring, when every minute must be used because of weather and accessibility of the land. "When I have to stop spraying, I attach the AERO and keep going," as many farmers say.



THE BIGGEST PLUS –  
ENGINEERED FOR PRECISION



One metering unit per section

ONE METERING UNIT FOR EACH SECTION

Four metering units – two on each side – ensure high-precision metering of fertiliser with problematic pouring properties. This advanced metering accuracy of the pneumatic fertiliser spreader is based on precise forced metering of granulates by means of cam wheel shafts. These cam wheel shafts, one in each metering unit, are hydraulically driven depending on the real forward speed. Application rates can be set separately for each section.



Easy swivelling of the injector cassettes



Undersowing maize



Residual quantity discharge

SEEDS AND FINE TUNING

Small quantities can be spread with the special RAUCH finely tuned metering wheels. These can be used for spreading seeds for undersowing, such as maize, or for sowing for greening purposes, for spreading slug pellets or for special applications using soil healing agents and the like.



AERO 32.1 weighing frame

## AERO SELF-REGULATING FERTILISER SPREADER

AERO is also a weighing spreader, although control is not really necessary due to the forced metering with cam wheel rollers. The major advantage is that you don't need to set anything with AERO. There are no spreading patterns, just fill the fertiliser, enter the desired application rate and get started. The weighing frame automatically calibrates the speed of the metering wheels on the fertiliser. The driver is shown the remaining amount in the container and the remaining reach.

## MULTIRATE SECTION METERING

The MultiRate metering system is a metering and distribution system for small-scale and highly precise crop nutrition. MultiRate can individually switch the four spreading sections on and off. The application rates for each section can also be controlled individually. Application rate fertilising reaches a new level, and precision farming becomes even more precise.

## IMPRESSIVE TECHNOLOGY – DOWN TO THE SMALLEST DETAIL



### HILLSIDE COMPENSATION

The central spring pendulum means that the AERO boom remains stable, even at high working speeds, and compensates for unevenness in the ground. The upper hydraulic cylinder permits a V-position for uneven terrain and quick turning manoeuvres in the headlands. Positioning the boom on a slant allows it to adapt to hillsides. This is also optionally available with automatic distance control with ultrasonic sensors.



Distance control: Ultrasonic sensor



Automatic boom collision protection



Switch the deflector plates for late top dressing



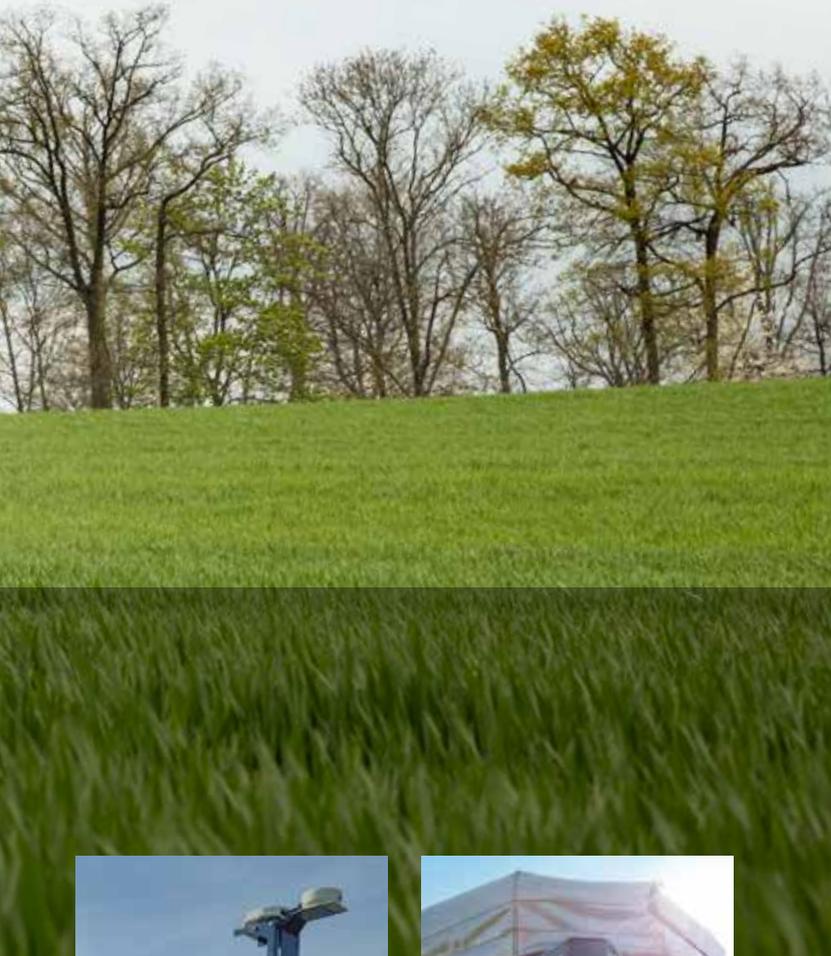
Easy to clean



Optional remote-controlled tarpaulin with AP Drive



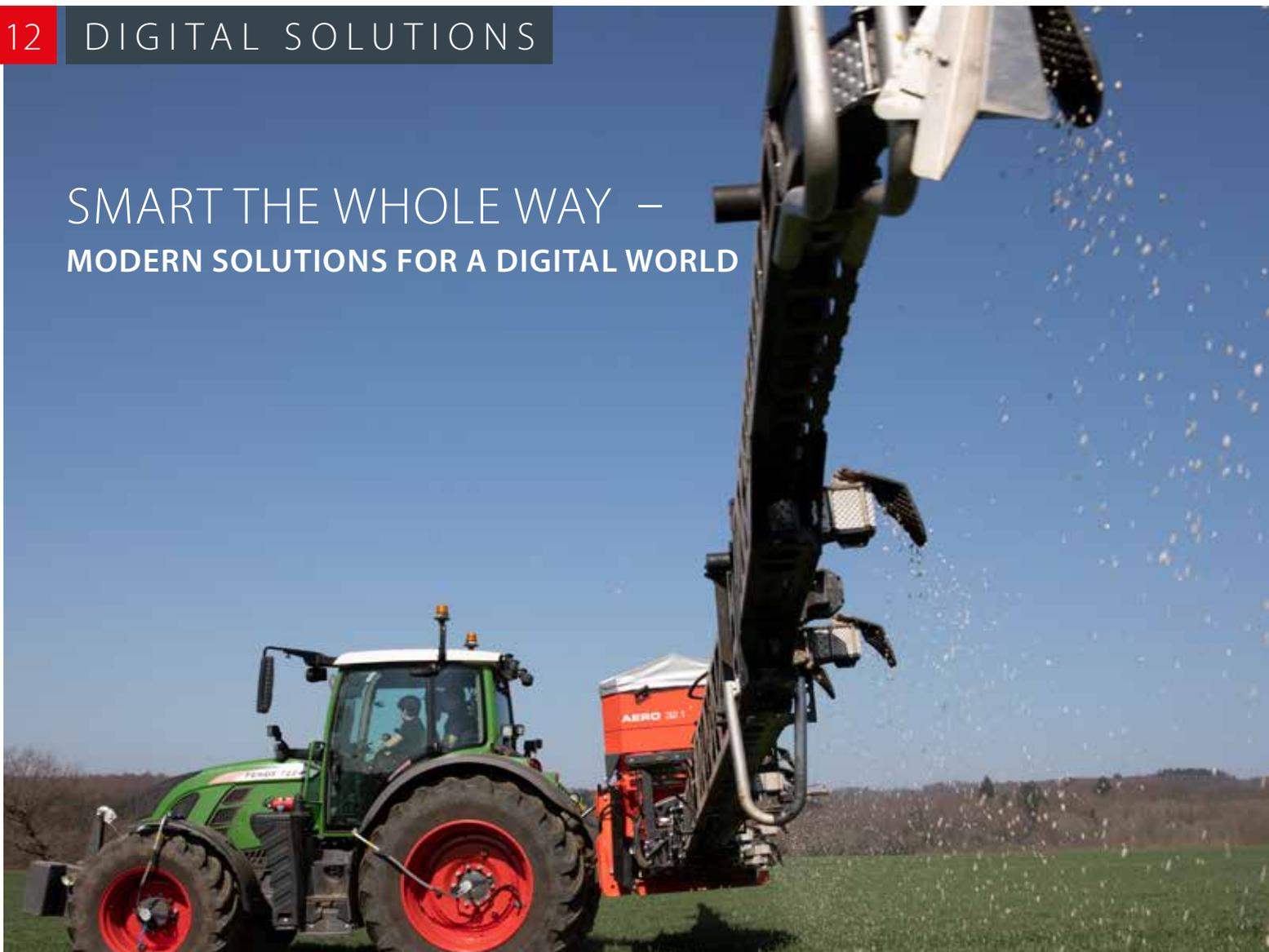
Fold-out support feet



## INTEGRATED N SENSORS

There is also the option of AERO with factory-installed ISARIA Pro Compact plant sensors for online measurement and control of application rates customised for plants. The sensors are ideally positioned with a special bracket on the fertiliser spreading hopper. The sensor electronics and cabling are sealed to the machine and connected to the wiring harness. To use it, the spreader is attached to the tractor, the ISOBUS plug connected, and you're ready. No additional attachments to the exterior mirror or front hydraulics, no more terminals or cables to be laid.

## SMART THE WHOLE WAY – MODERN SOLUTIONS FOR A DIGITAL WORLD



### PRECISION FARMING

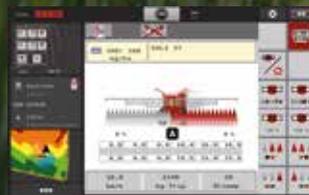
#### Highest level of section precision

Precision farming fertilises in sections using either online nitrogen sensors or GPS-controlled using application maps. The quantity of fertiliser is changed in particular grids. A disc spreader, which works with double overlapping due to the system itself, does not have the option of adjusting the quantity on the basis of these grids. This is another area where AERO and AERO GT impress with high precision, because application with booms in one line results in a significantly improved adaptability to small-scale application rate alterations in precision farming. AERO and AERO GT can spread with a different application rate per section – that's precision farming. AERO and AERO GT can implement the data from online sensors and application maps with high precision.



CCI 1200 ISOBUS terminal and touch joystick





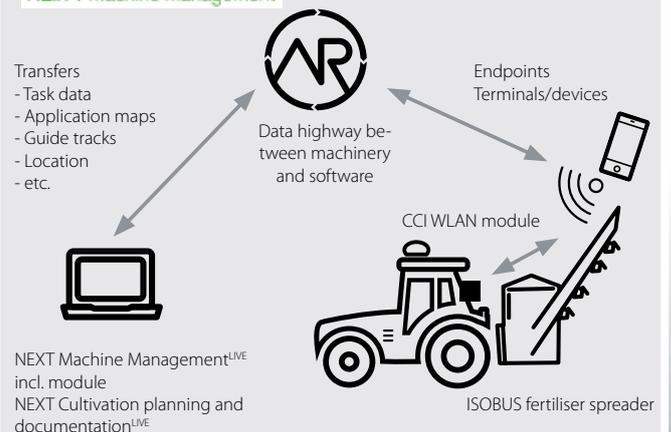
## INNOVATIVE RAUCH ISOBUS TECHNOLOGY

It enables familiar operation with existing ISOBUS operation terminals from different providers. This means AERO is ready to be used in common ISOBUS applications such as:

- ▶ **Task Control:** Task and area management, documentation and application maps
- ▶ **Section Control:** automatic headland and section control
- ▶ **Parallel tracking:** Parallel driving display
- ▶ **CCI.Assist:** Assistance system shows the remaining range (only AERO)

## NEXT MACHINE MANAGEMENT

### NEXT Machine Management



## FOCUS ON PERFORMANCE – THE AWE-INSPIRING SUM OF ITS STRONG PARTS

automatic  
**HILLSIDE COMPENSATION**

**PENDULUM FRAME**

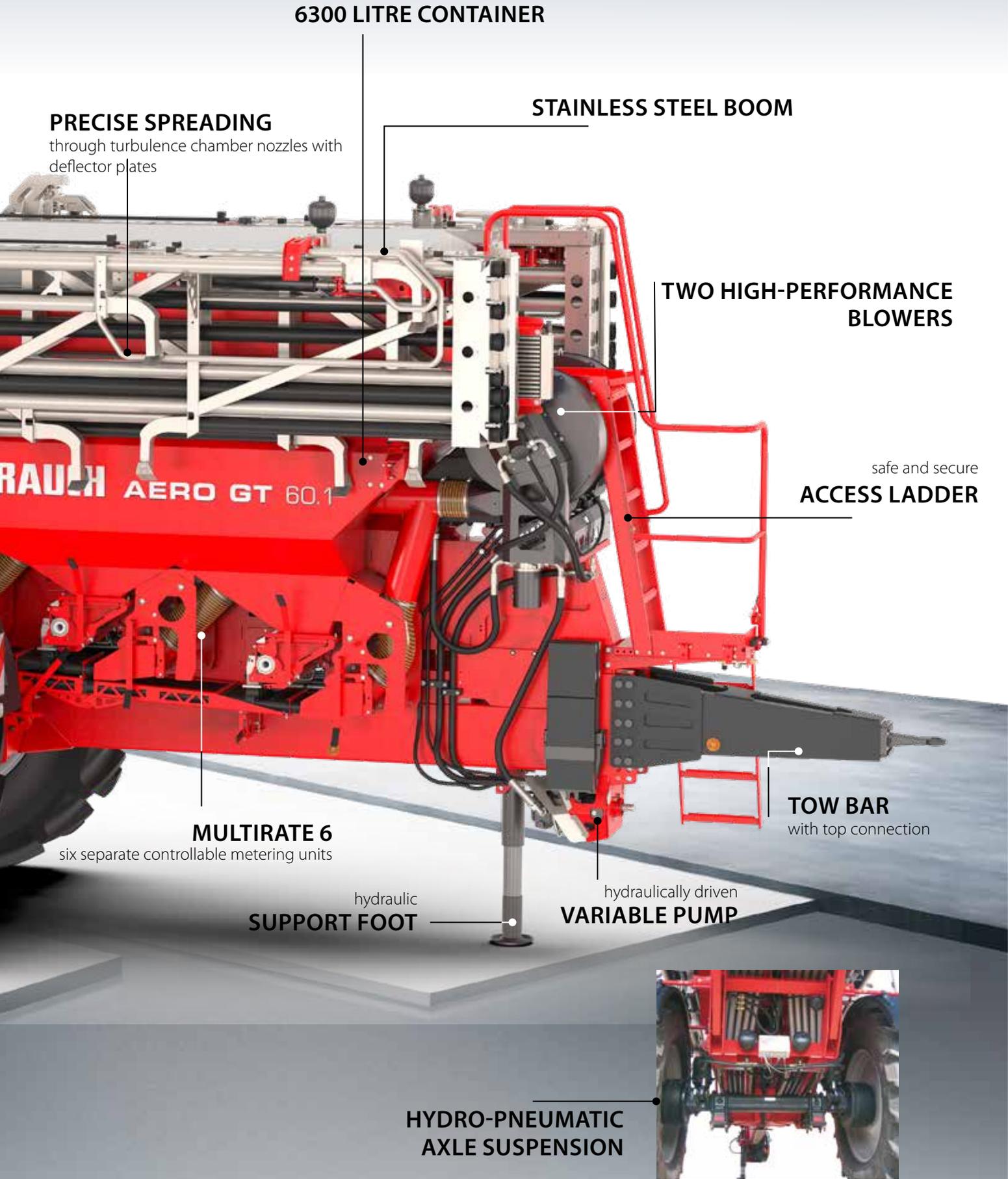
**ILLUMINATED  
WARNING SIGNS**

**HEIGHT ADJUSTMENT**

adjustable  
**MUD GUARDS**

pneumatic  
**TWO-CIRCUIT  
BRAKE SYSTEM**

The sum of its many detailed solutions is decisive for how the whole machine functions. This is how AERO GT impresses with high precision, power and profitability in the field. AERO GT also offers many practical advantages when it comes to overloading, transport and cleaning and maintenance. All AERO components are systematically designed for long service life and high stability in order to withstand the stresses of heavy duty, professional use. The booms have been tested in demanding load tests in the state-of-the-art test rigs from the aircraft industry.



**6300 LITRE CONTAINER**

**PRECISE SPREADING**

through turbulence chamber nozzles with deflector plates

**STAINLESS STEEL BOOM**

**TWO HIGH-PERFORMANCE BLOWERS**

safe and secure  
**ACCESS LADDER**

**RAUH AERO GT 60.1**

**MULTIRATE 6**

six separate controllable metering units

hydraulic  
**SUPPORT FOOT**

hydraulically driven  
**VARIABLE PUMP**

**TOW BAR**  
with top connection

**HYDRO-PNEUMATIC AXLE SUSPENSION**



## THE BIGGEST PLUS – ENGINEERED FOR PRECISION



Section 1

Section 2

Section 3

Volume A

Volume B

Volume C



One metering unit per section



Three separately adjustable metering units on each side



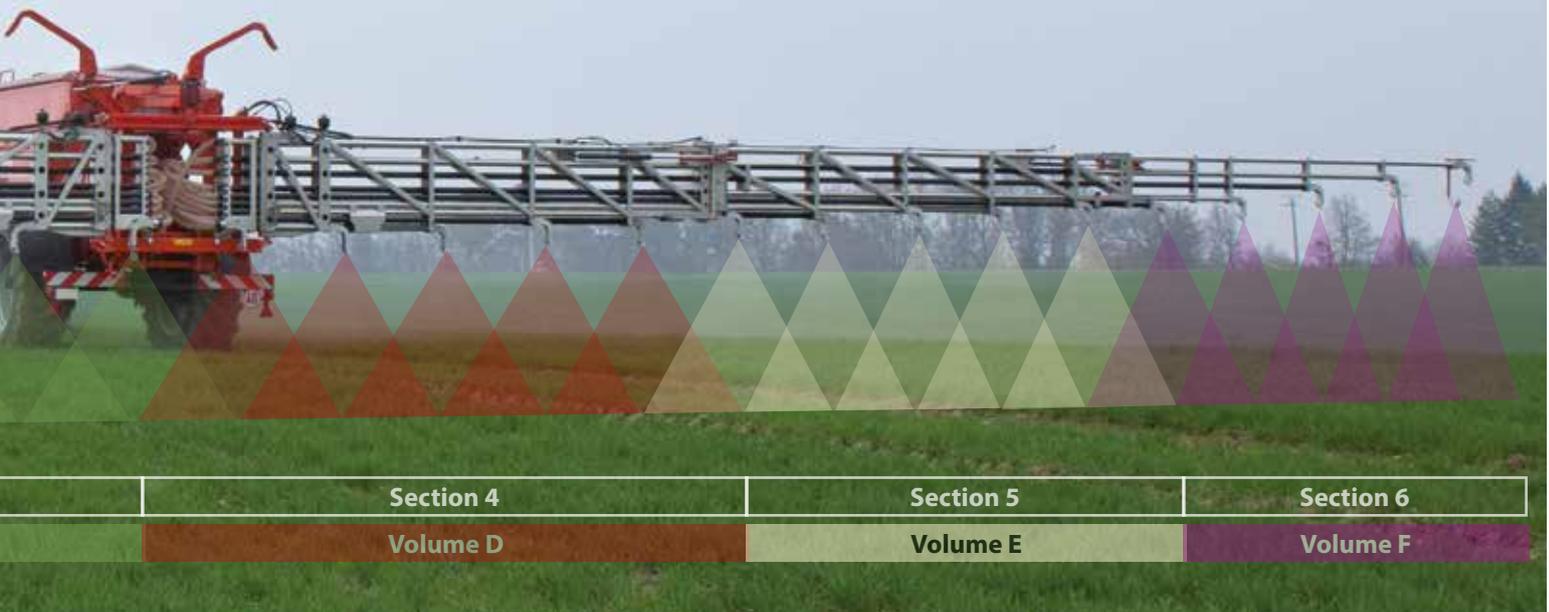
Calibration test system

### WORKING WIDTHS FOR MAXIMUM PRECISION

AERO GT is available with a 36 m boom linkage or in a reduced version with a 30 m working width. Compared to disc spreaders, fertiliser can be spread across wider working widths at maximum precision, because disc spreaders lose precision as working widths increase. By using the AERO GT, many farms are able to convert the track system into wider working widths and thus fertilise and protect crops much more efficiently. By reducing the number of tracks, the yield per unit area increases, the distance travelled and the travel time are both reduced, ultimately resulting in more efficiency and a high cost saving potential.

### ONE METERING UNIT FOR EACH SECTION

Six metering units – three on each side – also ensure high-precision metering of fertiliser with problematic pouring properties. This advanced metering accuracy of the pneumatic fertiliser spreader is based on precise forced metering of granulates by means of the six cam wheel shafts. These cam wheel shafts, one in each metering unit, are hydraulically driven depending on the real forward speed. The application rates can be set separately for each of the six sections.



## STAINLESS STEEL BOOM

Thanks to the stable stainless steel boom, fertilisers with problematic spreading properties can also be distributed at high precision and safety. 36 turbulence chamber manifolds ensure fan-shaped distribution with double overlapping. This higher the boom, the greater the overlap will be. So the height of the boom is not decisive and should be adjusted in a such way that there is still sufficient clearance for the boom to make compensating movements. The spreading accuracy is not endangered when the boom is higher up. On the contrary, the ever-increasing overlap makes the spreading pattern more stable. This makes the AERO GT almost independent of wind and weather.

### ► Optimum boom guiding

Thanks to intelligent coordination of the pendulum frame suspension, the boom parallelogram with shock absorption and the hydropneumatic chassis, the booms stabilise themselves even at high travel speeds.

### ► Comfortable operation

The entire boom can be controlled easily and safely with the joystick. Any of the six sections and the slope compensation system can be activated conveniently at the push of a button. This enables high-efficient spreading, also on wedge shaped fields.

### ► Elegant calibration

Thanks to its integrated, convenient calibration test system, AERO GT provides easy and quick high-precision adjustment for any desired material to be spread.



AERO GT with MultiRate 6



Pendulum frame suspension

## EXACT SPREADING PATTERNS – PRECISION WORK AT FIELD BOUNDARIES, TRAMLINES AND MORE



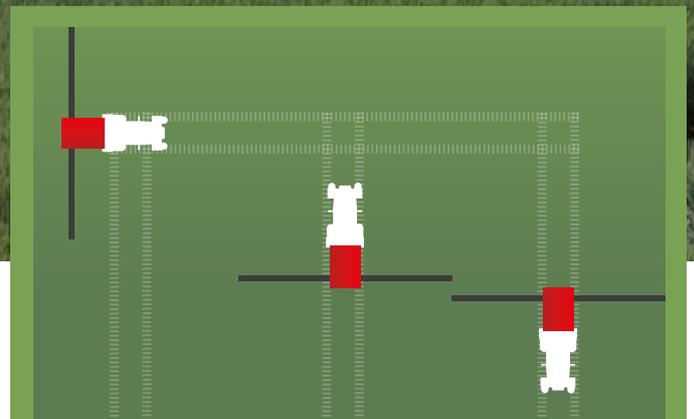
### PROFILED BOUNDARY SPREADING

The last manifold is not right at the boundary, it is a half-manifold length (60cm) further in, so that the overlap of the manifold is the same when the spreader moves in the opposite direction on the field. This means that the full quantity is spread right up to 30cm of the boundaries and only then does the spreading pattern reduce, so that almost no fertiliser is spread beyond the boundaries. This means plant stock right up to the boundaries without losing fertiliser outside of them.

#### ► Double effective

According to studies carried out by independent bodies, normal fertilisation with a disc spreader results in a loss of 5 to 7% of the field area at the boundaries depending on the field size. These reduced yield areas are non-existent when a precision spreader is sent to do the job. AERO GT meets all the requirements of the German Fertiliser Ordinance and the European environmental standard for fertiliser spreading EN13739. The AERO GT boundary spreader is also very positive for the public because hardly any fertiliser is spread onto roads and paths.

#### Seamless spreading in the headlands and corners



### CONSIDERABLE ADVANTAGES IN THE HEADLANDS

Unlike disc spreaders, fertiliser is spread in one line with AERO GT. This is especially advantageous when switching on and off in the headlands, because it is possible to continue spreading right where you left off. There are also significantly fewer blank spots when spreading in the corners of the fields.

## ENVIRONMENTALLY-OPTIMISED MINERAL FERTILISATION

AERO GT offers the technology for environmentally optimised mineral fertilisation. It offers:

- ▶ **Excellent spreading patterns**
- ▶ **Less over-fertilisation of headlands and wedges**
- ▶ **Less susceptible to wind**
- ▶ **Exact boundary spreading**
- ▶ **Precise metering**
- ▶ **High fertilising efficiency**

These are some strong arguments when it comes to portraying agriculture to the general public as being as environmentally friendly as possible.

Tracks are not fertilised



## FREELANE

### No fertiliser in the tracks

With the special "FreeLane" accessory, no fertiliser is spread in the wheel tracks of tramlines. Special deflector plates on the nozzles combined with special metering wheels that convey fertiliser to every manifold prevent these areas from being fertilised. Practical trials have shown that crops on the right and left of the light shafts do not exhibit nutritional deficiencies. The right fertiliser balance can be properly kept. Depending on the working width and the tyres, fertiliser expenditure is reduced by 3 to 5%.



Mixed fertilisers



Urea



Sulfuric acid ammonia

## USING SYNERGIES, INCREASING EFFICIENCY – EASY AND CONVENIENT TO USE



**Automatic boom collision protection**



**Intelligent chassis technology**



**Remote-controlled tarpaulin**



**Maintenance-free high-performance blower**

### ▶ **Intelligent chassis technology**

The hydropneumatic AERO GT chassis offers maximum safety standards at transport speeds of up to 40 km/h. The intelligent, electronically controlled shock absorber technology does not only enable high working speeds in the field but also constantly eases the load on and stabilises the boom.

### ▶ **Long life boom linkage completely made of stainless steel**

The entire AERO GT boom linkage is made of stainless steel. The stainless steel fertiliser tubes further contribute to the high stability of the sophisticated design. This protects the machine from corrosion, wear and load peaks. Only a few tubes are made of abrasion-resistant plastic. The booms can be hydraulically remote controlled and folded in and out in not more than 90 seconds.

### ▶ **Remote-controlled tarpaulin**

The hydraulic remote control of the tarpaulin enables efficient transfer operations without dismounting.

### ▶ **Wear-optimised air duct**

### ▶ **Safe and secure folding, even on slopes**

### ▶ **Automatic boom collision protection**

The AERO GT features integrated safety systems in case the driver does not notice an obstacle in the field. For instance, if the boom is in danger of colliding with a tree, pylon or wind turbine, the rear 2.5 m of the lever ends can be swivelled to the front or back. (optional)

### ▶ **High-performance blower**

Two RPM-stabilised high-performance blowers generate a constant, powerful air current and guide the exactly metered fertiliser at speeds of up to 175 km/h to the ends of the boom almost without any delay.

### ▶ **Specialised metering shafts**

Thanks to specialised metering shafts (optional), tiny quantities of anti-slug pellet or fine seeds can be distributed precisely.

### ▶ **High-quality materials**

Extensive painting of all parts and use of high-quality materials preserve the value of the investment for many years.



AERO GT with N sensor

### MAXIMUM EFFICIENCY FOR EVERY USE

#### Optional electronic assistance systems:

▶ **Distance Control pro**

The new, completely re-worked Distance Control boom guidance system proactively regulates the boom parallel to the ground through the ultrasonic sensors on the boom and the position sensors on the pendulum and on the machine. The boom remains stable even on uneven surfaces or during fast turning manoeuvres in the headlands. This relieves the strain on the driver in difficult terrain and/or at night. (optional)

▶ **Section Control**

GPS-supported section and headlands control with parallel tracking function.

▶ **N sensor**

The AERO GT electronics also supports the N sensor.

**New Improved**



Series: Rear view camera



Distance Control: Ultrasonic sensor



Distance Control: Automatic active boom guidance

## AERO 32.1

<b>Boom variants/working widths</b>	24 m / 27 m / 28 m / 30 m
<b>Base machine container volume</b>	1,900 l
<b>Container volume with extension</b>	+1.300 l = 3.200 l
<b>Maximum load capacity</b>	3,200 kg
<b>Filling opening</b>	280 x 130 cm
<b>Fill height of base machine/with extension</b>	140 cm / 178 cm
<b>Road transport height</b>	400 cm
<b>Dimensions of machine in transport position L x W x H</b>	250 cm x 290 cm x 355 cm
<b>Base machine empty weight</b>	2,150 kg
<b>Centroidal distance</b>	125 cm
<b>Number of nozzles</b>	20 pieces (24 m); 24 pieces (27-30 m)
<b>Maximum mass flow</b>	up to 360 kg/min (depending on fertiliser)
<b>Number of sections</b>	4x 24 m = 4 x 6.00 m, manifold distance 1.20 m 27 m = 4 x 6.75 m, manifold distance 1.12 m 28 m = 4 x 7.00 m, manifold distance 1.16 m 30 m = 4 x 7.50 m, manifold distance 1.25 m
<b>MultiRate</b>	MultiRate 4, each section can be switched and controlled individually (4 control points)

<b>Machine functions</b>	<ul style="list-style-type: none"> <li>• Remaining volume scale with automatic application rate calibration</li> <li>• German Road Traffic Act illuminated warning signs for rear</li> <li>• Collision protection on the boom</li> <li>• Manifold deflector plates switchable for late top dressing</li> <li>• Dirt deflector with quick release fastener</li> <li>• ISOBUS electronics without terminal</li> <li>• GPS control preparation</li> <li>• Variable rate control preparation</li> <li>• Fold-out support feet</li> <li>• Booms: <ul style="list-style-type: none"> <li>– Boom travels via central spring pendulum with flat springs</li> <li>– Boom height is controlled via tractor three-point linkage</li> <li>– V-position in headlands and in dips (hydraulic)</li> <li>– Boom slope for hillside compensation (hydraulic)</li> </ul> </li> </ul>
<b>Requirements for the tractor</b>	<p>Blower drive with propeller shaft 1000 RPM</p> <p>Control units:</p> <p>1x single-acting [P] and 1x free return flow [T] min. 60 l/min at 180 bar for metering wheel drive, boom functions (incline, V-position) and boom folds</p> <p>1 x double-acting for swivelling boom, 1x double-acting for locking boom</p> <p>Three-point connection CAT III/IV</p> <p>ISOBUS connection</p>
<b>Options</b>	<ul style="list-style-type: none"> <li>• Mounting device</li> <li>• Extension</li> <li>• Tarpaulin</li> <li>• Electric remote controlled tarpaulin with AP drive</li> <li>• Electric remote controlled boundary spreading plate</li> <li>• Automatic boom guidance Distance Control</li> <li>• Finely tuned shafts for seeds, anti-slug pellets, etc.</li> <li>• German Road Traffic Act lighting for front</li> <li>• Level sensors via each metering wheels</li> <li>• CCI ISOBUS universal terminal</li> <li>• CCI apps: CCI.Control, Section Control, Parallel Tracking, Task Controller, CCI.Assist</li> <li>• ISOBUS AUX-N Joystick CCI A3</li> <li>• Plant sensor Isaria Pro Compact integrated in the machine</li> </ul>

# AERO GT 60.1

Maximum permissible total weight	12,000 kg
Transport speed	40 km/h
Empty weight	7,000 kg
Hopper capacity	6,300 l
Filling level	3.15 m
Transport width	2.98 m
Transport height	3.85 m
Vehicle length (towing eye to vehicle end)	7.90 m
Vehicle length (towing eye to axle)	5.10 m
Ground clearance (relating to lower edge of frame)	0.7 m
Track width	2.25m, others on request
Axle	Hydropneumatic spring suspension
Towing equipment	Towing eye or trailing ball - top hitching
Static load	2,000 kg
Braking system	Pneumatic braking system
Support foot	Hydraulic height adjustment, manually folding
Hopper cover/tarpaulin	Hydraulic folding, remote-controlled
Maximum application rate (approx.)	320 kg/ha urea at 15 km/h
Boom working width	30 m/36 m
Number of injectors	30 pieces with 36 m (distance = 1.20 m)
Tyres (standard)	520/85 R42 Other tyres available on request

<b>Machine functions</b>	<ul style="list-style-type: none"> <li>• Six metering units across direction of travel (three units each left and right under the hopper)</li> <li>• Six-fold section control, GPS-controlled on request (Section Control)</li> <li>• Hydraulically driven metering shafts with separate volume control for each unit</li> <li>• Speed recording system of cam wheels with rotary pulse sensor</li> <li>• Level sensors in the hopper</li> <li>• Vario blower:             <ul style="list-style-type: none"> <li>- PTO shaft speed of 600 to 1300 RPM</li> <li>- Blower drive by on-board hydraulic system</li> </ul> </li> <li>• Boom:             <ul style="list-style-type: none"> <li>- Three stainless steel boom segments per side</li> <li>- Hydraulically activated boom, trifold</li> <li>- Pendulum frame suspension with hill compensation</li> <li>- Height adjustable via parallelogram for ground clearance from 1 m to 2 m</li> <li>- Optional automatic lever guidance (Distance Control)</li> </ul> </li> </ul>
<b>Requirements for the tractor</b>	Power class from 135 kW/180 HP, hydraulic supply 60 l/min at 180 bar, 2 double acting control units, free return flow or 1 double acting control valve and Power Beyond connection
<b>Options</b>	<ul style="list-style-type: none"> <li>• ISOBUS terminal</li> <li>• Booms with collision protection</li> <li>• Distance control boom guidance</li> <li>• Specialised metering shafts for fine seeds</li> <li>• Compressed air cleaning gun</li> <li>• FreeLane: no fertiliser in the driving lanes</li> </ul>



**RAUCH Homepage**  
For more useful information,  
visit the RAUCH website

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