

PRECISION PAIRED WITH SAFETY THE EFFICIENT PRECISION FERTILISER SPREADER



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

PENDULUM FRAME

automatic SLOPE COMPENSATION

> LIGHTING WITH WARNING SIGNS

HEIGHT ADJUSTMENT

adjustable MUDGUARDS

pneumatic 2-circuit

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



BECAUSE EVERY GRAIN OF FERTILISER COUNTS – AERO GT SETS NEW PERFORMANCE STANDARDS

Only the combination of perfect metering and fertiliser distribution guarantees maximum profitability when it comes to cost-effective fertilisation. This is why the AERO GT 60.1 pneumatic fertiliser spreader with boom versions for 30, 32 and 36 metre spreading widths completely redefines the limits of performance in the field of professional fertiliser technology. The systematic use of state-of-the-art technologies in combination with future-proof ISOBUS electronics makes nutrient supply with the AERO GT even more precise, even safer, even more comfortable and even more profitable.

AN IMPRESSIVE BALANCE SHEET

What you save with AERO GT per 1,000 hectares of arable land: over €40,000 / year!

► ALREADY SAVE COSTS WHEN BUYING FERTILISER

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The AERO GT also distributes material that is more difficult to toss, such as fine, prilled granules, with high precision. This creates lucrative cost advantages when you purchase your fertiliser.

LONGER FERTILISER APPLICATION PERIODS

Regardless of wind, weather, slopes and fertiliser quality – the AERO GT spreads with absolute precision at all times and under all conditions.

HIGHER YIELD THANKS TO HIGH PRECISION

In the field, on headlands, on wedge-shaped fields and along field boundaries – the AERO GT booms with 6-fold boom section control including the new 6-fold volume control distribute valuable fertilisers here and there with maximum precision.

LOWER COSTS THANKS TO MORE EFFICIENCY

Daily outputs of 350 hectares, area gain due to fewer tramlines and tracks, lower expenditure for diesel and labour – all of these result in increased efficiency.

SPREADING TECHNOLOGY AT ITS BEST – **EXACT METERING AND DISTRIBUTION**

Boom section 1

Boom section 2

Boom section 3

PRECISION SPREADING AT A GLANCE

- High distribution accuracy of up to 36 metres, even with difficult fertilisers
- Sharply defined spreading pattern at the edge of the field
- Environmentally optimised mineral fertilisation
- Use application cards to spread accurately with six separately controlled metering wheels. This enables precision farming up to an accuracy of 6 metres.
- New! 25% more fertiliser throughput

PRECISION METERING WITH SPECIAL WHEELS

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

CONSISTENT RESULTS

This is all made possible thanks to the highest degree of metering accuracy, regardless of the properties and the quality of the spreading material. Even at varying forward speeds, the application rate remains constant all times.

The concept of the AERO GT 60.1 pneumatic fertiliser spreader convinces with its unbeatable metering and distribution accuracy. That's why this technology is also referred to as a "precision spreader". Due to forced metering via a cam wheel and distribution via rods, and a vortex 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.



in a spreading pattern for each nozzle. The overlapping of the nozzles results in a spreading pattern which, under ideal conditions, has a variability of 2 - 5%. The fertiliser has just a short trajectory – the air-supported falling distance. 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.

A separate metering unit for each boom section

AN OUTSTANDING PLUS - DESIGNED FOR PRECISION





Three separately adjustable metering units on each side



Calibration test device

VARIABLE SPREADING WIDTHS FOR MAXIMUM PRECISION

The AERO GT is available with a 36 metre boom or with a reduced 32 metre or 30 metre spreading width. Spreading to these large working widths is done with maximum precision compared to a disc fertiliser spreader, where the spreading accuracy decreases with increasing spreading width. 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 BOOM SECTION

Six metering units, three on both the right and left sides, dispense even difficult to work with fertilisers with a high degree of precision. The basis for the metering accuracy of a pneumatic fertiliser spreader lies in the precise forced dispensing of the granulates through the six gear wheel shafts. These are hydraulically driven – one for each metering unit – depending on the current travel speed. The spread rate can be set separately for each of the six boom sections.





Vortex chamber manifold



Pendulum frame suspension

STAINLESS STEEL BOOM

The sturdy boom made entirely of stainless steel ensures that even fertilisers with problematic flight properties can be spread with absolute precision and safety. 36 vortex chamber manifolds distribute the spreading material in a fan shape with a double overlap. The higher the boom, the greater the overlap. The height of the boom is not decisive and should be adjusted in such a 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 even more stable. It also makes the AERO GT virtually independent of wind and weather.

Perfect boom guidance

Thanks to the intelligent coordination of pendulum frame suspension, the boom parallelogram with shock absorption and the hydro-pneumatic chassis, the boom stabilises itself even at high travel speeds.

Convenient operation

The complete boom is operated safely and easily using the joystick. All six boom sections and slope compensation can be activated conveniently at the touch of a button. This means that wedge-shaped fields can also be spread with a high degree of efficiency.

Elegant calibration test

With the integrated, convenient calibration test device, the AERO GT can be quickly and easily adjusted to the desired spreading material with a high degree of precision.

PRECISE SPREADING PATTERNS – **PRECISION WORK AT THE EDGE OF THE FIELD, NEAR TRACKS AND MORE**

EXACT BORDER SPREADING

The last manifold is not located directly on the border, rather it sits half a manifold length (60 cm) further inside, so that the overlap of the manifold is the same when the spreader moves in the opposite direction on the field. As a result, when boundary spreading up to approx. 30 cm to the boundary, the full quantity is spread in a sharply defined pattern so that virtually no fertiliser falls over the boundary. This results in full spreading up to the field-edge without losing any fertiliser beyond the boundary.

Double effect

According to studies carried out by independent bodies, normal fertilisation with a disc spreader results in a loss of 5 - 7% of the field area at the boundary, depending on the field size. These reduced yield areas are non-existent when a precise spreader is sent to do the job. The AERO GT meets all the requirements of the German Fertiliser Ordinance and the European standard EN13739 Agricultural machinery - Solid fertiliser broadcasters and full width distributors - Environmental protection. The impact of the AERO GT boundary spreader on public health is also very positive, as hardly any fertiliser falls on roads or paths.



CLEAR ADVANTAGES

In contrast to disc fertiliser spreaders, the AERO GT spreads the fertiliser in a single line. This is a particular advantage when switching on and off in headlands, since it is possible to continue spreading at the exact spot where you left off. But even when spreading in field corners, there are significantly fewer blank spots.



Tramlines and tracks are exempt from fertilising

FREELANE

No fertilising in tracks and field lanes

Thanks to the special "FreeLane" accessory, it is possible to prevent fertiliser being spread in the wheel tracks of the field lanes. Special deflector plates on the nozzles combined with special metering wheels, which deliver less fertiliser to the respective manifolds, exclude these areas. Practical trials have shown that the plants to the right and left of the light shafts have absolutely no nutritional deficits. And so the right fertiliser balance can be properly kept. Depending on the width of the tyres and the spreading area, this reduces fertiliser expenditure by 3 - 5%.

ENVIRONMENTALLY OPTIMISED MINERAL FERTILISATION

The AERO-GT offers the technology to carry out environmentally optimised mineral fertilisation. It offers:

- Excellent spreading patterns
- Less over-fertilisation on headlands and wedge-shaped fields
- Low wind susceptibility
- Exact boundary spreading
- Precise metering
- High fertiliser efficiency

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

PRECISION FARMING

Highest part surface accuracy

In precision farming, fertilisation is carried out with partial area accuracy either via online nitrogen sensors or GPS-controlled using specified application maps. The quantity of fertiliser is thereby changed in certain 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. Therefore, it is not possible to exactly match fertiliser quantities with the exact partial to be spread using a disc spreader. The AERO-GT also convinces users with its high degree of precision, since the application via the boom in one line enables a significantly better adaptation to the small-scale quantity change in precision farming (6 m grid). The AERO-GT can spread at a different spread rate per boom section – that's precision farming. The AERO-GT implements data from online sensors and application cards much better than disc fertiliser spreaders are able to do.



UTILISING SYNERGIES AND INCREASING EFFICIENCY – with all the comfort and convenience of being easy to use



INNOVATIVE RAUCH ISOBUS TECHNOLOGY

The existing and familiar ISOBUS operator terminals from a wide variety of suppliers and machines can also be used trouble-free. Thus, the RAUCH AERO GT is ready to be used in common ISOBUS applications such as:

- Task control
- Section control
- Parallel tracking

ISOBUS USE

The standard AERO GT ISOBUS job computer is compatible with a number of universal terminals, including Müller Elektronik, John Deere, and more.

The future-proof AERO-GT ISOBUS electronics make fertiliser application even more precise, efficient and convenient. The CCI-1200 universal terminal with its high-resolution 12" colour touch screen offers perfect operating comfort day and night. The operator can choose between a clear display with 2 large screens or one extra large screen. At the same time, up to four mini-view screens are always displayed, for example for the standard rear view camera. With the included intelligent help app, electronic problems can be solved all by yourself. The optional joystick provides an ergonomically perfect working position. The result: no fatigue even after many hours of heavy duty work.

FOR MAXIMUM EFFICIENCY IN EVERY APPLICATION

Optional electronic assistants:

Distance control

Enables fully automatic boom guidance with two ultrasonic sensors on the booms. Distance control keeps the booms parallel to the ground. This relieves the operator in difficult terrain and/or at night. (Optional)

AERO GT with N-Sensor

Section control

GPS-supported boom section and headland control with parallel tracking function.

N sensor

The AERO GT electronics is N-Sensor ready. The connection is made via an SCU-L.





Distance control: Ultrasonic sensor



Distance control: Automatic boom guidance

REAL WORLD QUALITY – strong parts that pay, day in, day out

Automatic boom collision protection





Remote-controlled hopper cover

Maintenance-free, high-performance blowers

Intelligent chassis technology

The hydro-pneumatic AERO GT suspension offers the highest safety standards for speeds up to 40 km / h. Intelligent, electronically controlled shock absorber technology not only enables high working speeds in the field, but also permanently protects and stabilises the boom.

Long-life boom made of 100% stainless steel

The complete AERO GT boom is made of stainless steel. The stainless steel fertiliser tubes contribute to the extreme stability offered by the well thought-out design. This protects the machine against corrosion, wear and load peaks. Only a few of the tubes are made of abrasion-resistant plastic. The boom arms can be safely folded out and retracted hydraulically in just 90 seconds.

Remote-controlled hopper cover

The hydraulically powered remote control of the hopper cover allows you to carry out efficient transfer operations without dismounting.

- Wear-optimised air duct
- Safe and secure folding, even on slopes

Automatic boom collision protection

Even if the operator happens to overlook an obstacle in the field, the AERO GT has built-in safety devices. If the boom collides with a tree, power pole or wind turbine, for example, the last 2.5 metres of the boom ends can move forwards or backwards. (Optional)

High-performance blower

Two speed stabilised, high-performance blowers generate a constant, powerful air flow and guide the precisely metered fertiliser at a speed of up to 175 km/h almost distortion-free to the ends of the booms.

Special metering shafts

With the special metering shafts (optional), very small quantities of slug pellets or fine seeds can be precisely distributed.

High quality materials

The extensive paint work on the remaining parts and the use of high-quality components will ensure the value of your investment for many years to come.

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 (approx. 4,700 kg urea)
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 (relative to lower edge of frame)	0.7 m
Track width	2.25 m - others on request
Axle	Hydro-pneumatic suspension
Towing device	Towing eye or ball head - top attachment
Support load	2,000 kg
Brake system	Air brake system
Support foot	Hydraulic height adjustment, manually foldable
Hopper cover	Hydraulic, remote-controlled folding
Maximum spread rate (approx.)	320 kg/ha urea at 15 km/h
Boom working width	30 m / 32 m / 36 m
Number of injectors	30 pieces at 36 m (gap = 1.20 m)
Tyres (series)	520/85 R42
	Additional tyres available on request

Machine functions	 Six metering units transverse to the direction of travel (three units on both left / right side arranged one behind the other under the container) Six-fold boom section control, GPS-controlled on request (section control) Hydraulic drive for the metering shafts with separate quantity control for each unit Speed measurement of the cam wheels via rotary encoder Level sensors in the container Vario blowers: PTO shaft speed from 600 to 1,300 min-1 Blower fan drive via on-board hydraulic system
	 Boom: Three stainless steel boom segments on each side Hydraulic boom actuation, triple folded Suspension via pendulum frame with slope compensation Height adjustment via parallelogram from 1 m to 2 m ground clearance Optional automatic boom guidance (distance control)
Tractor requirements	Power class from 135 kW / 180 PS, hydraulic supply 60 l/min at 180 bar, 2 double- acting control valves, one free return or 1 double-acting control valve and Power Beyond connection
Options	 ISOBUS terminal Boom with collision protection Distance control boom guidance Special metering wheels for small seeds Compressed air cleaning pistol FreeLane: no fertiliser in the tracks and lanes







RAUCH homepage Much more useful information is available on the RAUCH website

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