

Aeromat



Eco-Line - Farm-Line - Profi-Line - E-motion

Accuracy is the key



The well-known Becker Aeromat has been developed based on 35 years of experience of precision drill technology. A precise drilling distance, equal drilling depth and high working speeds are always the demands to fulfill for an effective way of planting. Therefore all Becker Aeromat precision drills are equipped with the patented Compressed Air System to separate the seed.

Each metering unit is mounted to the frame in a stable and robust parallelogram suspension, which is simple and easy to understand and adjust.

To be able to full-fill as many demands as possible, the Becker Aeromat is available with either a rigid frame, telescopic frame, or in a vertical or hydraulic parallel folding frame.

The Becker Aeromat is available in working widths from 3.00 to 9.00 m and with row widths from 30 cm. The standard row spacing is 75 cm.

As standard the metering unit is equipped with large rubber pressure/depth control wheels with a diameter of 500 mm. (Type S).

To be able to drill under difficult circumstances, e.g. when minimum-tillage is practised, the metering units can be equipped with large disc openers combined with twin (rear) seed press wheels mounted in a V form. (Type DTE).

The Becker Aeromat M20 cell wheel with rotating ejector ensures even more precise seed spacing in the field. In addition to this, the high standard of singulation has been improved with the new M20 metering unit.

The new system of a rotating ejector does not need to go as deep in the cell wheel as the previous system. Therefore the air-pressure can be reduced from 140 mBar to as little as 80mBar.



The Aeromat principle: Blowing is superior

The most ingenious solutions are usually the most simple. A cell-wheel with cone-shaped compartments, rotates inside the metering house, positioned under the seed hopper's outlet.

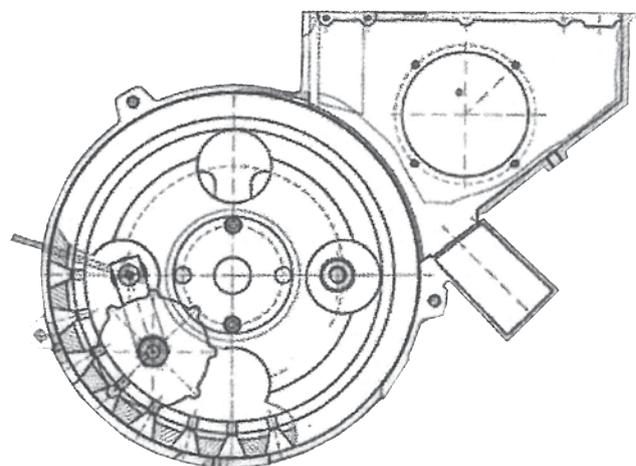
The cone-shaped compartments will then be filled with several seeds. Excess seeds from each compartment are blown out by a guided airstream created by a nozzle so that only one single seed remains at the bottom of the coned compartment - held in place by air pressure until the compartment reaches the point where the seed is to be placed into the soil.

This system will ensure that only one seed remains in the coned compartment independent of the seed size.

This type of technology has absolutely no need for replacable air-seals as it always works with clean air so hardly any wear and tear.

The result of this is high lifetime, high resale value and from an environmental point of view the right concept.

Metering system M20





Eco-Line



Less is more
The Aeromat basic model.

Easy, simple but complete and equipped as a basic seed-drill. Equipped with the new M20 metering unit, but fertilizer equipment is an option. Available in 4, 6, 8 or 12 row models.

All models can be ordered with double disc openers and V-shaped pressure wheels for heavy soils (type DTE) or (type S) equipped with rear mounted pressure/depth control wheels.

As flexible as the other 2 ranges, the Eco-Line series is available with different type of frames: rigid, telescopic and parallel foldable.

Equipped with the mechanical blower drive and 30 l seedhoppers, the Eco-Line series is aimed at the small to medium size farmers.

Your "Eco-Line" can be tailor-made to your own requirements; e.g. for fertiliser application, most models can be combined with a front hopper or the Becker Aeromat "Maxi-Line" trailed fertilizer hopper.

In addition to this, the Eco-Line models can of course be equipped with other accessories at the point of order, or at a later stage so that the machine can also full-fill changeable future demands.

- M20 metering unit as standard equipment, S or DTE version
- Variety of different accessories
- Ideal for on-farm use
- The perfect entry-level model



Farm-Line



As standard all the models from the Farm-Line range are equipped with fertilizer hopper.

From 4 row, as a solo machine or in combination with a power harrow, all the way up to a 12 row with 9.00 m working width: Everything depending on farm size and way of use, the Farm-Line range is built up to suit the independent farmer.

Even contractors often choose these models as standard equipment.

The fertilizer is placed in the soil with either a spring loaded tine coulter or by means of disc-openers in combination with the DTE-type metering unit.

Both solutions secure an optimum placement of the fertilizer, 5 cm below and 5 cm to the side of the seeds in the row.

Large sized metering units combined with a stepless gearbox ensures accuracy independent of the application rate.

Air support is used for the rows situated further away from the fertilizer hopper.

- M20 metering unit, fertilizer equipment, S or DTE version
- Variety of different accessories
- The well-equipped model



Profi-Line



The top class model range where special attention is given to the combination of performance and ease to use.

Capacity is the key-word for the Profi-Line machines. High capacity hoppers for both seed and fertilizer minimize down-time and ensure effective drilling time from early to late into the season.

The use of a hydraulic driven fan in combination with the classic 8-row contractor machine, ensures that both singulation of the seed and the necessary air flow for the fertilizer placement can be reached at a low tractor engine speed.

This saves both energy and extra costs.

The use of the machines from the Profi-Line range is compared to the ones from the other two ranges, based on comfort and user friendly-ness. After adjustment of the basic settings all the operational functions are continuously electronically controlled so the operator can concentrate on driving.

From experience, both contractor and large scale farmers appreciate this.

- M20 metering unit, high specification level, S or DTE version
- High degree of productivity
- Ideal for contractors / large farms
- The professional model





E-motion



Becker Aeromat C "E-motion" is a new generation of precision drilling machine employing electrically-driven row units, thus meeting the needs of the most demanding contractor.

Each row unit of the Becker Aeromat C "E-motion" is powered by an electric motor, thereby eliminating the high maintenance levels and expensive wear-and-tear associated with traditional mechanical drives. As a result down-time is minimised, maintenance costs are kept low, and the machine's performance and effectiveness are increased during the short drilling period. Its compact design allows smooth operation and low power consumption, with trouble-free power supply through the tractor's own electronic system. Becker Aeromat C "E-motion" is controlled, monitored and adjusted from the simple and intuitively-operated standard Field-Operator 300 terminal; all operating functions are controlled directly from the tractor seat. Consequently this minimises the need to leave the tractor seat when moving from field to field, an important feature for professional contractors. Other unnecessary downtime on mechanical adjustments (e.g. seed spacing) is therefore avoided, further increasing output and effectiveness during the brief drilling window, as all adjustments, including customer-specific applications, tramline settings etc are controlled directly from the terminal.

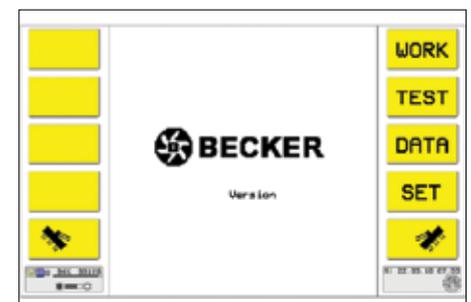
Field-Operator 300 uses a large-size colour display which complies with the latest ISOBUS requirements. By using the job computer incorporated into the Aeromat E-Motion, other ISOBUS-compatible computers can be used to control the machine! The Becker Aeromat "E-motion" is equipped with Field-Operator 300 as standard, and the use of another ISOBUS-compatible computer (from tractor, sprayer etc) is only recommended if smooth and trouble-free functionality can be guaranteed.



Row unit DTE M20 "E-motion".



ISOBUS connection and the standard Field-Operator 300 terminal.



The start-up menu – sub-menu "WORK" is the main working screen during field work – sub-menu "TEST" to test the motors and sensors – sub-menu "DATA" for operational data – sub-menu "SET" to adjust sowing-machine parameters.

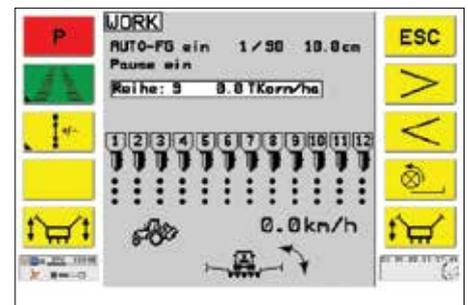


Aeromat "E-motion" contains as standard a full array of electronic equipment, As well as all the usual functions, such as continuous displays of real time seeding volumes per row, magic eye seed monitoring, fan speed sensing and hectare-counter, the electric drive provides the following functions:

- Seed spacings or seeding volumes can be instantly adjusted in work
- Switching-off of individual rows
- Individual switching of tramline widths – tramlines can be set for any spraying width
- "Flagging" of tramlines at pre-emergence stage
- Increased seed volume on rows adjoining tramlines
- GPS interface for section control. Automated partial width switching for seed-conserving drilling in irregularly-shaped fields.

Moreover, performance and customer-specific data can be managed and assessed using Field-Operator 300. There is even a facility to copy this data onto a computer, using a memory card or USB stick, in order to manage and assess it back at the office. This makes Becker Aeromat "E-motion" ideally suited for integration with electronic data-processor--supported documentation and production procedures.

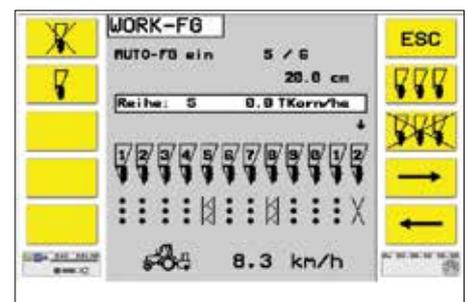
- M20 metering unit, DTE version
- Highly cost-effective due to reduced down time
- For professional contractors
- New generation precision drilling machine



Principal working screen during field work on the WORK menu.



Tramline menu – setting tramline parameters.



Tramline menu – rows 5 and 8 have been switched off by the automatic tramline controller with row 12 permanently switched off (by the operator).

Technical Information

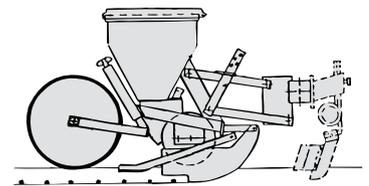


Model	no. of rows	aggregate	weight (kg)	power requirement (kW/hp)	type of frame				blower drive		drive/support wheels	
					rigid	tele-scopic	hydr. foldable		mec.	hydr.	5.00-15	7.50-15
							parallel	vertical				
Aeromat "Eco-Line"	4	S DTE	580 740	30/40 52/70	● ●	— —	— —	— —	● ●	— —	● —	— ●
	6	S DTE	750 990	52/70 59/80	● ²⁾ ● ²⁾	— —	— —	— —	● ●	— —	● —	— ●
	6	S DTE	920 1160	52/70 59/80	— —	● ●	— —	— —	● ●	— —	● —	— ●
	8	S DTE	980 1320	59/80 66/90	● ²⁾ ● ²⁾	— —	— —	— —	● ●	— —	● —	— ●
	8	S DTE	1550 1980	74/100 90/122	— —	— —	● ●	— —	● ●	— —	● —	— ●
	12	S DTE	1380 1860	66/90 90/122	● ²⁾ ● ²⁾	— —	— —	— —	● ●	— —	— —	— ●
Aeromat "Farm-Line"	4	S DTE	820 1020	52/70 59/80	● ●	— —	— —	— —	● ●	— —	— —	● ●
	6	S DTE	1020 1350	59/80 66/90	● ²⁾ ● ²⁾	— —	— —	— —	● ●	— —	— —	● ●
	6	S DTE	1220 1530	66/90 74/100	— —	● ●	— —	— —	● ●	— —	— —	● ●
	8	S DTE	1230 1670	66/90 74/100	● ²⁾ ● ²⁾	— —	— —	— —	● ●	— —	— —	● ●
	8	S DTE	2000 2440	90/122 100/136	— —	— —	● ●	— —	● ●	— —	— —	● ●
	12	S DTE	1610 2100	74/100 90/122	● ²⁾ ● ²⁾	— —	— —	— —	● ●	— —	— —	— ●
Aeromat "Profi-Line"	4	S DTE	880 1080	52/70 59/80	● ●	— —	— —	— —	● ●	— —	— —	● ●
	6	S DTE	1320 1630	66/90 74/100	— —	● ●	— —	— —	● ●	— —	— —	● ●
	8	S DTE	2150 2580	90/122 100/136	— —	— —	● ●	— —	— —	● ●	— —	● ●
	12	S DTE	2350 2960	110/136 110/150	— —	— —	— —	● ●	● ●	○ ○	— —	● ●
Aeromat "E-motion"	6	DTE	1630	74/100	—	●	—	—	●	—	—	●
	8	DTE DTE	1980 2580	90/122 100/136	— —	— —	● ●	— —	● —	○ ●	— —	● ●
	12	DTE	2960	110/150	—	—	—	●	●	○	—	●

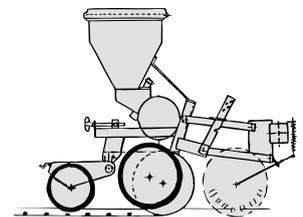
● standard equipment ○ optional equipment (surplus price) — not available ¹⁾ transport width 3,30 m ²⁾ exceeds the max. permitted transport width of 3,00 m



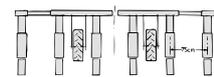
hopper capacity, l				hydr. marker arms		Monitor
seed		fertiliser		single folding	double folding	
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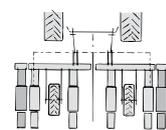
Type S



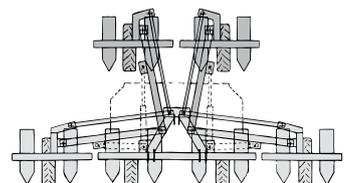
Type DTE



Type telescopic folding



Type parallelogram folding



Type combined vertical/telescopic folding

Made in Germany



Since 1972 the company Becker, based in Oberweser (D), is using and continuously further developing the world-wide patented Compressed Air System. A whole new direction in singulation of seed was started in that year.

Since then, Becker is on the market with the precision seed-drill „Aeromat“ for maize and other irregular shaped seed. Singulation independent of the calibration of the seed combined with a user friendly machine. Continuous new developments like the DTE-system for minimum-tillage, the new generation of Compressed Air System singulation or the innovative rotating ejector on the

M20 metering unit have always been very much appreciated by all end-users, both locally and world-wide. Recent German DLG-tests (Focus test 5719F) state best or second best features.

„Accurate and precise“ is the conclusion, which is also confirmed to be the number 1 statement of every end-user. Due to the use of the unique Compressed Air System, the Becker Aeromat is the only precision drill on the market that can fulfill the high standards for minimum emission of seed coating dust without the use of additional air-flow equipment. Becker, also an environmentally right choice.

