Aeromat C "E-motion"



Electrically-driven precision drilling technology for narrow row widths



Becker Aeromat C "E-Motion"

- Electrically-driven precision drilling technology for narrow row widths



Maize production is changing

Modern agriculture is undergoing change. In recent times, the production of maize in particular has changed fundamentally with the boom in biogas plants and also with new legislation surrounding erosion prevention, under which more closely spaced rows than the hitherto-normal 75 cm assume greater importance. This change imposes new requirements and challenges not only on farmers and contractors, but also on the manufacturers of precision seed drills, which Becker, as specialists in precision-drilling technology, are able to meet with the new Becker Aeromat C "E-motion".

Innovative frame design

- A newly-developed frame design for closely-spaced sowing, thanks to 40 years' experience and expertise in precision drilling technology.
- Hydraulic parallel folding frame –
 6.00 m frame width 3.00 m transport width
- Two 29x12, 5-15 front support wheels, positioned in front of the frame, replace the support and drive wheels in between individual row units.
- This results in the following possible row widths: 75 cm, 50 cm, 44 cm or 37.5 cm.
- The new frame design allows closer coupling to the tractor, thereby achieving optimal weight distribution and a good centre of gravity.

Optimal adjustment to suit the terrain and outstanding accuracy when drilling – even at higher speeds – are achieved with the standard-production DTE mulch-seed row unit.

- The calibration-free compressedair propulsion system separates the seed extremely reliably at high operating speeds, and with unprecedented accuracy. This was confirmed in DLG test report 5719F.
- Optimal adjustment to ground conditions with the DTE mulch seed row unit, with a large low-set disc opener. The mulch seed unit adjusts individually, and accurately follows the terrain.
- The large-size double disc sowing openers of the DTE mulch seed unit, which are arranged in a V shape, minimize any potential seed movement on entering the soil.
 This provides optimum conditions for rapid plant emergence as seeds are deposited directly into the nutrient-rich soil in front, within the V-shaped wedge of the disc opener, thereby reducing the need for any additional firming-down.



Aeromat C "E-motion" 16 DTE with front fertiliser tank NS 1904.



Aeromat C "E-motion" 16 DTE in conjunction with trailed fertiliser hopper Aeromat "Maxiline"



Row unit DTE M20 "E-motion".



Reduced down time and greater effectiveness coupled with cost savings and flexible deployment options are just some of the benefits of electric power.

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. Field-Operator 300 uses a large-size colour display which complies with the latest ISOBUS requirements.

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 hectarecounter, the electric drive provides the followingn 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 preemergence 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.

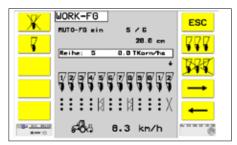
Moreover, drill- and customer-specific data can be processed and assessed using Field-Operator 300. This makes Becker Aeromat "E-motion" ideally suited for integration with electronic data-processor-supported documentation and production procedures.



ISOBUS connection and the standard Field-Operator 300 terminal.



 $\label{thm:continuous} \mbox{Tramline menu-setting tramline parameters.}$



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 data



Complete product range forall narrow row spacing requirements

Becker Aeromat C "E-motion" is available in the following versions:

8 rows
6,00 m working width
12 rows
6,00 m working width
50 cm row spacing
13 rows
5,72 m working width
44 cm row spacing
16 rows
6,00 m working width
37,5 cm row spacing

All 4 options above can be retrospectively converted to a different version.

Fertiliser can be carried in either a 1,500 or 1,900 litre front-mounted tank, or by the innovative 4,800 litre trailed Becker Aeromat "Maxi-Line" fertiliser hopper.

The perfect machine for the professional contractor

The 16-row version is the perfect contractor's machine, with the flexibility of also being used as an 8-row machine without any major conversion expense. To achieve this, alternate rows are switched off and raised out of work, in order to prevent unnecessary wear-and-tear on those 8 units, and thanks to the innovative fertiliser distribution system, the fertiliser pipe layout is unchanged. Simply set the tracker to position 2, and the 16-row close-space sowing machine can be used as a conventional 8-row machine.

This version is therefore the ideal solution for the professional contractor, who can now offer his customers close-space sowing as well as the normal 75 cm row spacing with the same machine, with little or no conversion costs.

| Model | No. of rows | Row spacing cm | Weight kg | Tractor horsepow- er require- ment (kW / hp) | Recommended tractor performance | | Carrying wheels | Hopper volume, litres | | | | |
|-----------------------|-------------|----------------------|--------------|--|---------------------------------------|-------|---------------------------------------|--------------------------|----|-----------------|-----------------|-----------------|
| | | | | | mech. | hydr. | Front support wheels 29x12.5x15 | Seed | | Fertiliser | | |
| | | | | | | | | 30 | 55 | 1.500 | 1.900 | 4.800 |
| Aeromat "E-motion" | 8 | 75 | 2490 | 110/150 | • | 0 | • | • | 0 | O ¹⁾ | O ²⁾ | O ³⁾ |
| | 12 | 50 | 3020 | 151/205 | • | 0 | • | • | 0 | O ¹⁾ | O ²⁾ | O ³⁾ |
| | 13 | 44 | 3150 | 151/205 | • | 0 | • | • | 0 | O ¹⁾ | O ²⁾ | O ³⁾ |
| | 16 | 37,5 | 3550 | 162/220 | • | 0 | • | • | - | O ¹⁾ | O ²⁾ | O ³⁾ |

• Standard equipment o Optional equipment (additional cost) – not available

1) Front tank NS 1504 (optional) 2) Front tank NS 1904 (optional) 3) Fertiliser trailer Becker Aeromat "Maxi-Line (optional)







