MUCK SPREADER RANGE

"SPREADING IN THE WIDE SENSE"
THE JOSKIN QUALITY: 6 Keys to Success

Strength of EXPERIENCE
FOUNDED IN 1968, the JOSKIN family business became A LEADER in the design and manufacture of agricultural machines. SPREAD OVER BELGIUM, POLAND AND FRANCE on a total surface area of almost 150,000 m², the JOSKIN production sites are EXPORTING TO MORE THAN 60 COUNTRIES.

TECHNICAL SKILLS within
VERY MODERN AND HIGHLY PRECISE TECHNIQUES are used: dynamic 3D simulation, automated lasers, folding presses, high tensile steel, hot-dip galvanization, automated continuous weldings.

Buy with CONFIDENCE
3 year warranty
See conditions on www.joskin.com
The PARTS BOOK and the USER’S MANUAL are provided in your language when purchasing a machine. The parts book includes drawings and references of the components mounted on your machine. Even years later, spare parts can be ordered efficiently!

RESEARCH and DEVELOPMENT
JOSKIN has its own industrial design offices and 3D static and dynamic engineering software. The production is standardized as much as possible in order to ensure a precise manufacturing and a deadline compliance, while proposing hundreds of options! Our technicians and dealers are constantly trained in our technical centres.

At the SERVICE of our customers
Our great strength: the AVAILABILITY OF SPARE PARTS at any time and anywhere. Thanks to our permanent stocks, we send your parts as quickly as possible. The JOSKIN dealers undertake to have a stock of the most important spare parts of the machines.

Individualized PARTS book
The PARTS BOOK and the USER’S MANUAL are provided in your language when purchasing a machine. The parts book includes drawings and references of the components mounted on your machine. Even years later, spare parts can be ordered efficiently!
At JOSKIN, there is not one winning solution, but well as many as different requests; that is why each spreader is manufactured individually with standardized components. During the manufacture, a special attention will be paid to your future machine. Just like all JOSKIN products, the muck spreaders benefit from an optimal surface treatment: cleaning by shot-blasting, Ester Epoxy finishing coating and thermal drying. Since JOSKIN galvanizes its machines in its factory, muck spreaders can also possibly be galvanized for a maximal protection against corrosive matters.

**MANUFACTURING THE SPREADERS**

ADVANCED TECHNIQUE

The steel processing knowledge and the material choice are essential. Special steel types with high tensile limit allow to reduce – or even remove – the crosspieces and side reinforcements. Vehicles are in this way lighter, stronger and benefit from clear and elegant lines. The steel sheets are processed by modern tools like a 8 m laser cutting table, a 8.2 m folding press with digital control and automatic folding angle correction device (making sure the steel plate is evenly folded on the whole length), 8 m welding robots, etc.

**ADVANCED TECHNIQUE**

- Lathe with digital control
- Welding robot
- Laser cutting table
- Folding machine with digital control
- Manual welding
- Hot galvanizing bath (inside and outside)
To combine quality manufacturing and shortened delivery time, JOSKIN proposes WIN PACK machines. They are:

- reliable and of high quality thanks to the standardized manufacturing process;
- adapted to your farm and affordable;
- in stock or rapidly available;
- fitted with pieces of equipment that were tested in real working conditions;
- modular given the many options.
APPROPRIATE STRUCTURE
Unique Design of the JOSKIN Muck Spreaders

Models:
• SIROKO
• FERTI-CAP
• TORNADO3 - TORNADO3 HORIZON
• FERTI-SPACE 2 - FERTI-SPACE 2 HORIZON
• FERTI-CARGO

MADE BY JOSKIN
The standardization offers possibilities to uniformize designs and to make more profitable production techniques. Modern and high quality spreading and transport technologies are made affordable to most customers.

All spreaders of the JOSKIN range have a large standard equipment:
• beaters with folded spirals for intense splitting and a large spreading width;
• drive shaft and reinforced P.T.O.-shaft;
• control of the moving floor drive by regulator with constant pressure;
• moving floor with shipping chain with grade 80 (the highest grade in traction chains currently existing);
• easy to reach floor tensioner located outside the body and compensation spring for the adjustment;
• hitching suspension with parabolic leaves (hydraulic suspension on Tandem model).

These pieces make JOSKIN muck spreaders very easy to use and ensure a better working comfort to the users.
## SPREADER RANGE

<table>
<thead>
<tr>
<th>Model</th>
<th>Vol.</th>
<th>Illustration</th>
<th>Specifications</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VERTICAL BEATERS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIROKO</td>
<td>8/13 M³</td>
<td><img src="siroko.jpg" alt="Image" /></td>
<td>Narrow body, Low centre of gravity, Large wheels, Standard galvanized</td>
<td>P.8</td>
</tr>
<tr>
<td>FERTI-CAP</td>
<td>9/12 M³</td>
<td><img src="ferti-cap.jpg" alt="Image" /></td>
<td>Wide body, Wheels under the body, Standard galvanized</td>
<td>P.10</td>
</tr>
<tr>
<td>TORNADO3</td>
<td>11/24 M³</td>
<td><img src="tornado3.jpg" alt="Image" /></td>
<td>Narrow body, Machine with very high capacity, Low centre of gravity, Large wheels</td>
<td>P.9</td>
</tr>
<tr>
<td>FERTI-SPACE 2</td>
<td>15/25 M³</td>
<td><img src="ferti-space2.jpg" alt="Image" /></td>
<td>Wide body, Machine with very high capacity, Wheels under the body, Double moving floor</td>
<td>P.11</td>
</tr>
<tr>
<td>FERTI-CARGO</td>
<td>16/25 M³</td>
<td><img src="ferti-cargo.jpg" alt="Image" /></td>
<td>Interchangeable body, Universal chassis</td>
<td>P.17</td>
</tr>
</tbody>
</table>

| **SPREADING TABLE**                                      |           |              |                                                    |      |
| TORNADO3    | 14/16 M³  | ![Image](tornado3-horizontal.jpg) | Lowered and sturdy body, Precise spreading, Low center of gravity, Large wheels | P.14 |
| FERTI-SPACE 2 | 15/25 M³ | ![Image](ferti-space2-horizontal.jpg) | Wide body, Fine and precise distribution, Double moving floor | P.15 |
| FERTI-CARGO | 16/25 M³  | ![Image](ferti-cargo-horizontal.jpg) | Interchangeable body, Universal chassis            | P.17 |
SIROKO

Lowered Narrow Body for Quality Spreading

GENERAL POINTS

The JOSKIN SIROKO spreader with lowered galvanized body is remarkable in many ways: its innovative design makes maintenance much easier. The cross-suspension hitching and the large dimensions of the wheels provide it with an excellent stability both when working and on the road. Its body in HLE 550 high tensile steel is made up of successive foldings and has a rectangular upper strip. The side walls of 850 mm, 1,090 mm or 1,340 mm high offer a load capacity from 5 m³ to 14.17 m³. According to the product, the two beaters with folded spirals split and spread from 7 to 10 m away per row.

TRANSMISSION

The transmission is protected by elastic couplings between the boxes (1).

SPECIFICATIONS

Hitching suspension

Cross-suspension with parabolic leaves

Moving floor

2 Ø 14 mm shipping chains

Vertical beaters

Ø 785 mm, 1,750 mm or 2,000 mm high, with 4 or 5 folded spirals

Teeth

Removable in HARDOX 450 steel (80 x 6 mm)

Discs

Ø 829 mm with retractable blades

Drive

1,000 rpm

Rotation speed of the beaters

423 rpm

NB: the technical specifications of the SIROKO 4008/8V are totally different from the rest of the range.

SIROKO MODELS (1)

<table>
<thead>
<tr>
<th>Model</th>
<th>Off-road payload</th>
<th>Length before door</th>
<th>Inner body dimensions (m)</th>
<th>Width</th>
<th>Height</th>
<th>Body volume before door</th>
<th>Manure volume before door</th>
<th>Manure volume up to beaters</th>
<th>Axle: [ ] (mm) - track (mm) - studs</th>
<th>Brakes (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S4008/8V</td>
<td>8 t</td>
<td>4.15</td>
<td>4.65</td>
<td>1.45</td>
<td>0.85</td>
<td>5 m³</td>
<td>7.7 m³</td>
<td>8.1 m³</td>
<td>ADR 100x2000-105</td>
<td>400 x 80</td>
</tr>
<tr>
<td>S4010/9V</td>
<td>9 t</td>
<td>4.18</td>
<td>4.67</td>
<td>1.45</td>
<td>1.09</td>
<td>6.44 m³</td>
<td>8.41 m³</td>
<td>9.40 m³</td>
<td>ADR 100x2000-105</td>
<td>400 x 80</td>
</tr>
<tr>
<td>S5010/11V</td>
<td>11 t</td>
<td>5.21</td>
<td>5.70</td>
<td>1.45</td>
<td>1.09</td>
<td>8.10 m³</td>
<td>10.56 m³</td>
<td>11.55 m³</td>
<td>ADR 130x2100-105</td>
<td>406 x 120</td>
</tr>
<tr>
<td>S5013/12V</td>
<td>12 t</td>
<td>5.05</td>
<td>5.54</td>
<td>1.45</td>
<td>1.34</td>
<td>9.43 m³</td>
<td>11.78 m³</td>
<td>12.96 m³</td>
<td>ADR 130x2100-105</td>
<td>406 x 120</td>
</tr>
<tr>
<td>S5513/13V</td>
<td>13 t</td>
<td>5.50</td>
<td>5.99</td>
<td>1.45</td>
<td>1.34</td>
<td>10.40 m³</td>
<td>12.98 m³</td>
<td>14.17 m³</td>
<td>ADR 130x2100-105</td>
<td>406 x 120</td>
</tr>
</tbody>
</table>

(1) The first 2 figures refer to the average length, the next 2 ones to the average height and the last ones to the manure volume before the door.
The transmission is protected by elastomer couplings between the boxes and the beaters (1) that will absorb shocks and therefore increase the lifespan of these boxes.

**GENERAL POINTS**

The TORNADO3 is also a muck spreader with lowered narrow body in HLE steel and wheels with a large diameter as well. Its high capacities and sturdiness are ensured by its body made up of successive foldings and by a side reinforcing post.

This body has a height varying from 1,130mm to 1,370mm, and offers load volumes from 8.6 to 25.8 m³, depending on the model. The beaters with folded spirals spread evenly on a width from 7 to 16 m per row, depending on the product.

### TORNADO3 MODELS①

<table>
<thead>
<tr>
<th>Model</th>
<th>Payload capacity (t)</th>
<th>Length before door (m)</th>
<th>Length up to beaters (m)</th>
<th>Width (m)</th>
<th>Height (m)</th>
<th>Body volume before door (m³)</th>
<th>Manure volume before door (m³)</th>
<th>Manure volume up to beaters (m³)</th>
<th>Axle: □ (mm) - track (mm) - studs (mm)</th>
<th>Brakes (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T75011/11V</td>
<td>11</td>
<td>5.0</td>
<td>5.5</td>
<td>1.45</td>
<td>1.13</td>
<td>8.6 m³</td>
<td>10.8 m³</td>
<td>12.0 m³</td>
<td>ADR 130x2100-105 406 x 120</td>
<td></td>
</tr>
<tr>
<td>T7511/12V</td>
<td>12</td>
<td>5.5</td>
<td>6.0</td>
<td>1.45</td>
<td>1.13</td>
<td>9.5 m³</td>
<td>11.9 m³</td>
<td>13.3 m³</td>
<td>ADR 130x2100-105 406 x 120</td>
<td></td>
</tr>
<tr>
<td>T7513/14V(H*)</td>
<td>13</td>
<td>5.5</td>
<td>6.0</td>
<td>1.45</td>
<td>1.37</td>
<td>11.5 m³</td>
<td>14.4 m³</td>
<td>16.1 m³</td>
<td>ADR 130x2100-105 406 x 120</td>
<td></td>
</tr>
<tr>
<td>T8013/16V(H*)</td>
<td>15</td>
<td>6.0</td>
<td>6.5</td>
<td>1.45</td>
<td>1.37</td>
<td>13.1 m³</td>
<td>16.0 m³</td>
<td>17.8 m³</td>
<td>ADR 150x2100-105 420 x 180</td>
<td></td>
</tr>
<tr>
<td>T8016/17V</td>
<td>15</td>
<td>6.0</td>
<td>6.5</td>
<td>1.45</td>
<td>1.37</td>
<td>13.1 m³</td>
<td>16.0 m³</td>
<td>17.8 m³</td>
<td>ADR 150x2100-105 420 x 180</td>
<td></td>
</tr>
<tr>
<td>T8516/19V</td>
<td>16</td>
<td>6.5</td>
<td>7.0</td>
<td>1.45</td>
<td>1.57</td>
<td>15.6 m³</td>
<td>19.0 m³</td>
<td>20.9 m³</td>
<td>ADR 150x2100-105 420 x 180</td>
<td></td>
</tr>
<tr>
<td>T9013/16BV(H*)</td>
<td>15</td>
<td>6.0</td>
<td>6.5</td>
<td>1.45</td>
<td>1.37</td>
<td>12.70 m³</td>
<td>15.90 m³</td>
<td>17.60 m³</td>
<td>ADR 2x130x2300-105 406 x 120</td>
<td></td>
</tr>
<tr>
<td>T9516/19BV</td>
<td>16</td>
<td>6.5</td>
<td>7.0</td>
<td>1.45</td>
<td>1.57</td>
<td>15.6 m³</td>
<td>19.0 m³</td>
<td>20.9 m³</td>
<td>ADR 2x130x2300-105 406 x 120</td>
<td></td>
</tr>
<tr>
<td>T1016/19BV</td>
<td>16</td>
<td>6.5</td>
<td>7.0</td>
<td>1.45</td>
<td>1.57</td>
<td>15.6 m³</td>
<td>19.0 m³</td>
<td>20.9 m³</td>
<td>ADR 2x130x2300-105 406 x 120</td>
<td></td>
</tr>
<tr>
<td>T1018/20BV</td>
<td>20</td>
<td>7.0</td>
<td>7.5</td>
<td>1.45</td>
<td>1.57</td>
<td>16.8 m³</td>
<td>20.6 m³</td>
<td>22.4 m³</td>
<td>ADR 2x150x2300-105 420 x 180</td>
<td></td>
</tr>
<tr>
<td>T7018/24BV</td>
<td>21</td>
<td>7.0</td>
<td>7.5</td>
<td>1.45</td>
<td>1.57 + 0.25</td>
<td>20.3 m³</td>
<td>23.9 m³</td>
<td>25.8 m³</td>
<td>ADR 2x150x2300-105 420 x 180</td>
<td></td>
</tr>
</tbody>
</table>

① The first 2 figures refer to the average length, the next 2 ones to the average height and the last ones to the manure volume before the door.

(H*) Also available in HORIZON version.
**FERTI-CAP**
Wide Body for Spreading and Transport

**GENERAL POINTS**
The JOSKIN Ferti-CAP with wide monocoque body in HLE 550 steel of 810 mm high spreads on a wide surface. With its capacities from 6.91 to 13.97 m³, it is very multi-functional in spreading and transport of various materials. According to the product, the large diameter of the vertical beaters with folded spirals allow to spread on a width from 8 to 12 m per row.
The beaters can easily be removed to convert the Ferti-CAP into a harvest trailer (silage and others).

**TRANSMISSION**
The transmission is protected by elastic couplings between the boxes (1).

**SPECIFICATIONS**
- Hitching suspension: Cross-suspension with parabolic leaves
- Moving floor: 2 Ø 14 mm shipping chains
- Vertical beaters: Ø 1,080 mm, 1,500 mm high, with 3 folded spirals
- Teeth: Removable, in HARDOX 450 steel (80 x 6 mm)
- Discs: Ø 1,140 mm with 3 blades
- Drive: 1,000 rpm
- Rotation speed of the beaters: 423 rpm

**FERTI-CAP MODELS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Off-road payload</th>
<th>Inner body dimensions (m)</th>
<th>Body volume before door (m³)</th>
<th>Manure volume before door (m³)</th>
<th>Manure volume up to beaters (m³)</th>
<th>Axle: Δ (mm) - track (mm) - studs</th>
<th>Brakes (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC4008/9U</td>
<td>8 t</td>
<td>4.17</td>
<td>6.91</td>
<td>9.01</td>
<td>10.25</td>
<td>Δ 90 x 2000-8S</td>
<td>400 x 80</td>
</tr>
<tr>
<td>FC5008/10U</td>
<td>10 t</td>
<td>4.87</td>
<td>8.10</td>
<td>10.54</td>
<td>12.22</td>
<td>Δ 100 x 2000-10S</td>
<td>400 x 80</td>
</tr>
<tr>
<td>FC5508/12U</td>
<td>12 t</td>
<td>5.67</td>
<td>9.45</td>
<td>12.29</td>
<td>13.97</td>
<td>Δ 130 x 2000-10S</td>
<td>406 x 120</td>
</tr>
<tr>
<td>FC 5508/12BU</td>
<td>12 t</td>
<td>5.67</td>
<td>9.45</td>
<td>12.29</td>
<td>13.97</td>
<td>Δ 2x90 x 2000-8S</td>
<td>350 x 60</td>
</tr>
</tbody>
</table>

(*) The first 2 figures refer to the average length, the next 2 ones to the average height and the last ones to the manure volume before the door.
FERTI-SPACE 2
A Spreader in the Wide Sense...

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Hitching suspension</th>
<th>Cross-suspension with parabolic leaves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving floor</td>
<td>4 Ø 14 mm shipping chains</td>
</tr>
<tr>
<td>Vertical beaters</td>
<td>Ø 1,060 mm, height 1.830 mm (serie 11) or 2,080 mm (serie 14) with 4 folded spirals</td>
</tr>
<tr>
<td>Teeth</td>
<td>Removable, in HB 400 high tensile steel (type HARDOX), 80 x 12 mm</td>
</tr>
<tr>
<td>Discs</td>
<td>Ø 1,000 mm with 3 blades</td>
</tr>
<tr>
<td>Drive</td>
<td>1,000 rpm</td>
</tr>
<tr>
<td>Beater rotation speed</td>
<td>361 rpm</td>
</tr>
</tbody>
</table>

GENERAL POINTS

The Ferti-SPACE 2 has a wide monocoque body in HLE steel, 1.050 mm or 1.350 mm high, offering a large spreading width. With its strong design and its capacities from 12 to 21 m³, it is a multi-functional machine for intensive use. The large diameter of the vertical beaters with folded spirals, allows the Ferti-SPACE2 to spread on a width from 8 to 16 m per row, depending on the product.

The hydraulic suspension is bolted to allow to adapt to different configurations. The drive shaft is perfectly adapted to powerful tractors (Ø 45).

The welded bottom has a reinforced moving floor with various advantages: the bolted wear slatts make maintenance operations easier, return to the tank is improved, the space between the tensioners is increased, the gearwheels are enlarged to completely follow the chains of the floor.

Furthermore, the pulleys are made of Ø 135 cast-iron and the two floors are fitted with a central separator.

TRANSMISSION

The transmission is protected by elastomer couplings between the boxes and the beaters (1) that will absorb shocks and therefore increase the lifespan of these boxes.

FERTI-SPACE 2 MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Off-road payload</th>
<th>Length before door</th>
<th>Length up to beaters</th>
<th>Inner body dimensions (m)</th>
<th>Width</th>
<th>Height</th>
<th>Body volume before door</th>
<th>Manure volume before door</th>
<th>Volume volume up to beaters</th>
<th>Axle: Ø (mm) - track (mm) - studs</th>
<th>Brakes (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS5511/15BU(H*)</td>
<td>14 t</td>
<td>5.5</td>
<td>6.05</td>
<td>2.05</td>
<td>1.05</td>
<td>12.32 m³</td>
<td>15.49 m³</td>
<td>17.04 m³</td>
<td>ADR 100/130x2100-10S</td>
<td>400 x 80</td>
<td></td>
</tr>
<tr>
<td>FS6011/17BU(H*)</td>
<td>16 t</td>
<td>6</td>
<td>6.55</td>
<td>2.05</td>
<td>1.05</td>
<td>13.41 m³</td>
<td>16.87 m³</td>
<td>18.42 m³</td>
<td>ADR 2x130x2100-10S</td>
<td>406 x 120</td>
<td></td>
</tr>
<tr>
<td>FS6511/18BU(H*)</td>
<td>18 t</td>
<td>6.5</td>
<td>7.05</td>
<td>2.05</td>
<td>1.05</td>
<td>14.51 m³</td>
<td>18.24 m³</td>
<td>19.79 m³</td>
<td>ADR 2x130x2100-10S</td>
<td>406 x 120</td>
<td></td>
</tr>
<tr>
<td>FS7011/20BU(H*)</td>
<td>20 t</td>
<td>7</td>
<td>7.55</td>
<td>2.05</td>
<td>1.05</td>
<td>15.60 m³</td>
<td>19.62 m³</td>
<td>21.17 m³</td>
<td>ADR 2x150x2100-10S</td>
<td>420 x 180</td>
<td></td>
</tr>
<tr>
<td>FS7014/25BU(H*)</td>
<td>22 t</td>
<td>7</td>
<td>7.55</td>
<td>2.05</td>
<td>1.35</td>
<td>20 m³</td>
<td>25.2 m³</td>
<td>27.2 m³</td>
<td>ADR 2x150x2100-10S</td>
<td>420 x 180</td>
<td></td>
</tr>
<tr>
<td>FS7011/20TRU(H*)</td>
<td>20 t</td>
<td>7</td>
<td>7.55</td>
<td>2.05</td>
<td>1.05</td>
<td>15.60 m³</td>
<td>19.62 m³</td>
<td>21.17 m³</td>
<td>ADR 3x150x2100-10S</td>
<td>420 x 180</td>
<td></td>
</tr>
<tr>
<td>FS7014/25TRU(H*)</td>
<td>26 t</td>
<td>7</td>
<td>7.55</td>
<td>2.05</td>
<td>1.35</td>
<td>20.50 m³</td>
<td>25.75 m³</td>
<td>27.80 m³</td>
<td>ADR 3x150x2100-10S</td>
<td>420 x 180</td>
<td></td>
</tr>
</tbody>
</table>

(1) The first 2 figures refer to the average length (in dm), the next 2 ones to the average height (in dm) and the last ones to the manure volume before the door (in m³).

(H*) Also available in HORIZON version
OPTIONS FOR MODELS WITH VERTICAL BEATERS

Good Equipment for a Better Work!

JOSKIN MUCK SPREADERS, A FEW OPTIONS...

Unless otherwise indicated, all options are available on the whole range of JOSKIN muck spreaders.

GUILLOTINE DOOR

A tight guillotine door, which can be adjusted on the full height of the beaters, can be installed. It avoids load losses during transport and makes it possible to regulate the flow while spreading.

EXTENSIONS

- PVC protection for upper body strip
- Aluminium or wooden extensions (250 mm)

HYDRAULIC INSTALLATION

An independent hydraulic installation is available to drive the moving floor or all hydraulic elements of the machine. This option is interesting for use of the spreader by several owners (avoid oil mixing) or with a tractor with no sufficient hydraulic circuit.

FLOOR TENSIONER

Every JOSKIN muck spreader is standard fitted with a mechanical floor tensioner. As an option, it is possible to choose a hydraulic model with hand pump.
These limitations boards, which can be mounted on the left or right-hand side, are used to spread at the field edge. A double limitation board can also be mounted. The two parts are then independently opened. It is used for headland spreading.

**REAR GRATE**

Protection grate for the beaters with hydraulic opening upwards (compulsory in some countries). On some models, the limitations boards can be combined with the rear grate.

**CANOPY**

JOSKIN proposes canopies with quick uncoupling or hydraulic opening, which are interesting tools to spread lighter products (poultry manure). They can be fitted with a limitation board with hydraulic opening/closing to spread at the field edge.
**GENERAL POINTS**

The inside of the body measures respectively 5.5 m and 6 m long. The HORIZON swinging scatterer is made up of two horizontal beaters with Ø 600mm of diameter (rotation: 300 rpm) and two wide spreading discs (Ø 1,100 mm) with 3 blades ensure an optimal spreading pattern (rotation: 425 rpm).

The spreading table was designed to crumble and throw on large widths all type of products (cattle manure, compost, organic wastes, lime, poultry manure, etc.). The horizontal beaters and the spreading table allow to spread perfectly, even with a low flow.

The ovoid shape and the entangling of the spreading discs allow their integration in 1,100 mm on a narrow body. This large diameter and their perfect synchronization with the horizontal beaters allow a wide and homogeneous spreading.

The inside of the canopy is padded to prevent the matter to agglomerate against the rear wall.

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**TRANSMISSION**

The beaters are driven by P.T.O.-shaft (1,000 rpm) and turn at 300 rpm. Two P.T.O.-shafts with cam security protects the mechanism (the rotations systems of the beaters and discs are separate and the same applies to those of the discs and drive shaft).

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Hitching suspension</th>
<th>Cross-suspension with parabolic leaves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving floor</td>
<td>2 Ø 16 mm shipping chains</td>
</tr>
<tr>
<td>Horizontal beaters</td>
<td>Ø 600 mm rotation speed 445 rpm</td>
</tr>
<tr>
<td>Teeth</td>
<td>Removable, in S700MC steel (194 x 50 mm)</td>
</tr>
<tr>
<td>Discs</td>
<td>Ø 1,100 mm with 3 blades (420 rotations min. rpm)</td>
</tr>
<tr>
<td>Drive</td>
<td>1,000 rpm</td>
</tr>
<tr>
<td>Overall dimensions of the spreading table</td>
<td>1,400 mm with 4 folded spirals</td>
</tr>
</tbody>
</table>

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**COMMON CHARACTERISTICS OF TORNADO3 HORIZON ET FERTI-SPACE 2 HORIZON**

**Ø 600 MM HORIZONTAL BEATERS**

The macerator, fitted with two horizontal beaters with a diameter of 600 mm and with two spreading discs, crumbles and shreds the matter very well.

**MECHANICAL TRANSMISSION BY P.T.O.-SHAFT**

The beaters are driven by P.T.O.-shafts (1,000 rpm) to ensure the safety and the protection of the whole mechanism.
**FERTI-SPACE 2 HORIZON**
Universal spreader high capacity

**GENERAL POINTS**
The Ferti-Space 2 Horizon is designed to spread different products (cattle manure, compost, organic wastes, lime, poultry manure, etc.) on large widths. The horizontal beaters and the spreading table allow to spread evenly, even with a low flow. The ISOBUS applications (through the FC4000 terminal) allow a highly precise spreading.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hitching suspension</td>
<td>Cross-suspension with parabolic leaves</td>
</tr>
<tr>
<td>Moving floor</td>
<td>4 Ø 14 mm shipping chains</td>
</tr>
<tr>
<td>Horizontal beaters</td>
<td>Ø 600 mm rotation speed 320 rpm</td>
</tr>
<tr>
<td>Teeth</td>
<td>Removable, in S700MC steel (230 x 50 mm)</td>
</tr>
<tr>
<td>Discs</td>
<td>Ø 1,040 mm with 6 blades (500 rotations min. rpm)</td>
</tr>
<tr>
<td>Drive</td>
<td>1,000 rpm</td>
</tr>
<tr>
<td>Overall dimensions</td>
<td>1,300 mm height (serie 11) or 1,550 mm (serie 14)</td>
</tr>
<tr>
<td>the spreading table</td>
<td>with 4 folded spirals</td>
</tr>
</tbody>
</table>

**FERTI-SPACE 2 MODELS SEE PAGE 11**

**TRANSMISSION**
The beaters are driven by P.T.O.-shafts (1,000 rpm) and turn at 320 rpm. Security P.T.O.-shafts ensure the protection of the mechanism by separating the central box from the beaters and the loaders.

**LIMITATION BOARD ON THE LEFT/RIGHT**
To spread at the field edge, JOSKIN spreaders can be fitted with an independent hydraulically controlled limitation board on the left and right.

**GUILLOTINE DOOR**

SEE PAGE 12
CARGO CHASSIS
Multi-Purpose Chassis

MODULAR CONCEPT
The CARGO concept allows to maximize the use of your agricultural implements thanks to a single basic chassis for 5 types of implements! It is a flexible and economical solution. Next to a slurry tanker, with or without spreading tool, the chassis can be fitted with a muck spreading body, a silage body, a Drakkar body or a monocoque agricultural tipping body.

HITCHING
The CARGO chassis are standard fitted with the Hydro-Tandem (CARGO TSM) or Hydro-Tridem (CARGO TRM) hydraulic axle suspension.
This type of running gear combines the advantages of the axles that can easily be pulled over obstacles and the semi-independent axles offering a large clearance. This suspension works in closed circuit according to the communicating vessels principle. Large section pipes are used to improve the reactivity of the system, which is extremely useful in case of significant ground unevenness.
Finally, their 250 mm clearance ensures an optimal distribution of the loads in all circumstances.

TSM SERIES
Hydropneumatic suspension
Mounted on hydraulic ram with two nitrogen accumulators, it offers a high flexibility.

CARGO CHASSIS MODELS

<table>
<thead>
<tr>
<th>Chassis length (m)</th>
<th>Stand</th>
<th>Axle(s):</th>
<th>Brakes (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARGO TSM (6.6)</td>
<td>6.60</td>
<td>ADR 2x150x2000-10S</td>
<td>420 x 180</td>
</tr>
<tr>
<td>CARGO TRM (6.6)</td>
<td>6.60</td>
<td>ADR 3x150x2000-10S</td>
<td>420 x 180</td>
</tr>
<tr>
<td>CARGO TRM (7.5)</td>
<td>7.55</td>
<td>ADR 3x150x2000-10S</td>
<td>420 x 180</td>
</tr>
</tbody>
</table>

MANAGEMENT AND CONTROL
The CARGO chassis are fitted with electrovalves gathered on a monoblock basis and protected by a galvanized box.
This hydraulic distribution installation includes an entry block (capacity: 60 l/min or 120 l/min). A high number of hydraulic functions of the vehicles requires a low flow, but it is important to know which ones require a high flow, like the hydraulic motors of the turbo-filler, macerators, etc.
**GENERAL POINTS**

The JOSKIN CARGO multi-module carrier can be fitted with 2 models of Ferti-CARGO muck spreader with wide body for high capacities:

- a muck spreader with two vertical beaters with folded spirals to spread in a quality way and to spread on a 8 to 16 m width, depending on the product;
- the HORIZON model, designed to spread various products (cattle manure, compost, organic wastes, lime, poultry manure, etc.) on large widths, with horizontal beaters and spreading table for a good distribution.

---

**FERTI-CARGO MODELS(1)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Length before door</th>
<th>Length up to beaters</th>
<th>Width</th>
<th>Height</th>
<th>Body volume before door</th>
<th>Manure volume before door</th>
<th>Manure volume up to beaters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferti-CARGO 6011/17</td>
<td>6.00</td>
<td>6.35</td>
<td>2.05</td>
<td>1.05</td>
<td>13.41 m³</td>
<td>16.87 m³</td>
<td>18.42 m³</td>
</tr>
<tr>
<td>Ferti-CARGO 7011/20</td>
<td>7.00</td>
<td>7.35</td>
<td>2.05</td>
<td>1.05</td>
<td>15.60 m³</td>
<td>19.62 m³</td>
<td>21.17 m³</td>
</tr>
<tr>
<td>Ferti-CARGO 7014/25</td>
<td>7.00</td>
<td>7.35</td>
<td>2.05</td>
<td>1.35</td>
<td>20.00 m³</td>
<td>25.20 m³</td>
<td>27.20 m³</td>
</tr>
</tbody>
</table>

---

**FERTI-CARGO HORIZON MODELS(1)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Length before door</th>
<th>Length up to beaters</th>
<th>Width</th>
<th>Height</th>
<th>Body volume before door</th>
<th>Manure volume before door</th>
<th>Manure volume up to beaters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferti-CARGO 6011/17</td>
<td>5.50</td>
<td>6.05</td>
<td>2.05</td>
<td>1.05</td>
<td>12.32 m³</td>
<td>15.49 m³</td>
<td>17.04 m³</td>
</tr>
<tr>
<td>Ferti-CARGO 7011/20</td>
<td>6.00</td>
<td>6.35</td>
<td>2.05</td>
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</tr>
</tbody>
</table>

(1) The first 2 figures refer to the average length, the next 2 ones to the average height and the last ones to the manure volume before the door.
MANAGEMENT AND CONTROL

JOSKIN proposes three ways to control its spreaders:

1. A DIRECT CONNECTION TO THE TRACTOR (DISTRIBUTORS)
2. AN ELECTRO-HYDRAULIC CONTROL VIA FERTI-CONTROL
3. AN ISOBUS SYSTEM VIA FERTI-ISOCONTROL OR THE ISOBUS TERMINAL OF THE TRACTOR

DYNAMIC WEIGHING SYSTEM ON HYDRAULIC SUSPENSION

Vehicles fitted with a hydraulic hitching suspension and a hydraulic running gear can be fitted with this device.

Two pressure sensors located on the hydraulic circuit of the running gear, as well as one on the hitching suspension, are connected to a computer on the running gear. These sensors send cable signals so that the weight can be displayed on a screen in the tractor cabin. Another screen can be installed on a loader or on the vehicle in order to see the load weight at any time. This system is also compatible with Isobus and can be controlled through the Isobus terminal that replaces in this case the separate screen. It is available on tipping trailers, muck and slurry spreaders, multi-purpose and silage trailers.

On a muck spreader, the dynamic weighing system allows the “DPA” (flow in proportion to the driving speed) to be regulated according to the weight and to spread very precisely.

FERTI-CONTROL

There are four control boxes to manage and control the JOSKIN muck spreaders. They each have their own functions and specifications.

• FERTI-CONTROL 200:
  - Door opening indicator
  - Spreader counter
  - Display of the moving floor speed (option)

• FERTI-CONTROL 300:
  - Floor on/off switch
  - Electric moving floor control
  - Inversion of the moving floor direction by tractor distributor

• FERTI-CONTROL 500:
  - Floor on/off switch
  - Electric moving floor control
  - Electric inversion of the moving floor direction
  - Any extra electro-hydraulic function (option)

• FERTI-CONTROL 4000:
  - Floor on/off switch
  - Electric moving floor control
  - Electric inversion of the moving floor direction
  - Any extra electro-hydraulic function (option)
  - Door opening indicator (option).
  - Flow proportional to the driving speed (DPA, option).
FLOW PROPORTIONAL TO THE DRIVING SPEED (DPA)

To spread precisely, JOSKIN proposes an electronic spreading management (DPA), which is available on ISOBUS and Ferti-Control 4000.

During the use, the operator indicates the loaded volume (full load, half load, etc.), the flow per hectare (in m³ or t/ha), the effective working width as well as the product density. If the system is combined with a weighing device, the operator first has to validate the load in the spreader (available on the weighing device). From this data and the selected loaded volume (full load, half load, etc.), the density will be calculated.

Then, he will choose the position of his door according to the matter to spread. Once this information is introduced in the terminal, the movement of the moving floor will be automatically controlled according to the demanded flow and to the driving speed of the spreader.

The regulation works in closed circuit and the moving floor speed is continuously controlled. This system ensures that the necessary floor speed will be respected even if the body is almost empty or if, on the contrary, it is well filled and if the spreader drives on a slope.

ISOBUS

The interface of the JOSKIN control box, just like that of the automaton, can be replaced by the ISOBUS terminal that is already present in the tractor cabin. If there is none, the JOSKIN terminal can also be delivered. The aim is to ensure the communication between different tractors and the many implements (and vice versa) through a standardized language. This international standard is ever more used and allows a quick and easy connection (“plug & play”) between various brands. One single control box in the cabin replaces several ones: a direct way to high-tech agriculture!

At JOSKIN, the ISOBUS allows to centralize, for instance, the electro-hydraulic controls, pressure sensors, injectors, the flow proportional to the advancement speed, or the dynamic weighing system.

Moreover, the Terminal is compatible with a GPS system for a precise guiding while spreading on the different parcels. Most tractor manufacturers are using this technology. Do not hesitate to consult us in case of doubt regarding the compatibility.
"QUALITY WITHOUT COMPROMISE"