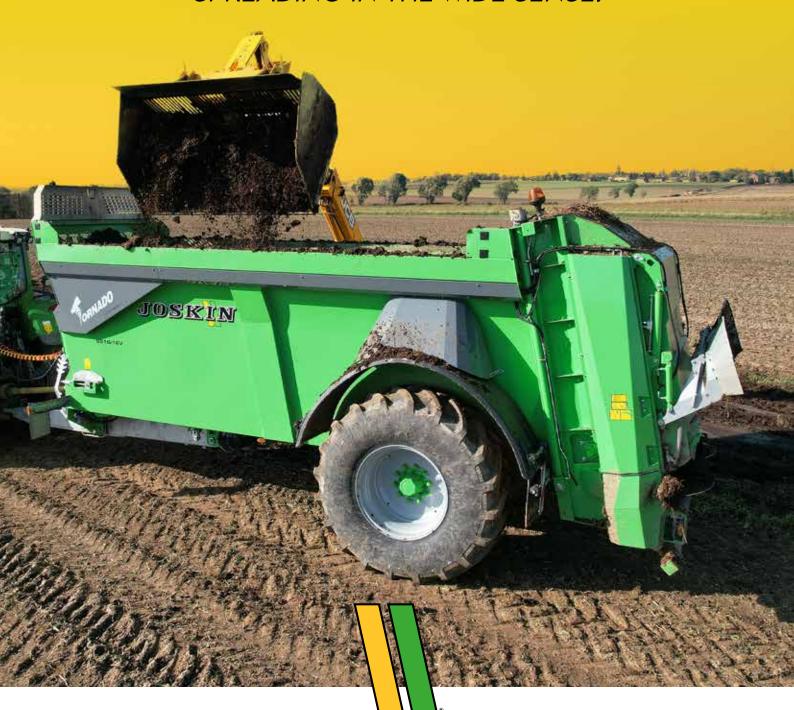
MUCK SPREADING

SPREADING IN THE WIDE SENSE!



6 KEYS

to Success



STRENGTH OF EXPERIENCE

With over **50 years of experience** and over **120,000 machines sold** throughout the world, JOSKIN puts its resources at the service of the farmer by offering products adapted to the evolution of the agricultural world. To see through this mission, we are constantly investing in the design and production of your machines. Either in the research and development of new solutions, in production techniques or in the search for better materials, we are working hard to keep improving the production standards in order to offer you the best agricultural machinery.



TECHNICAL SKILLS WITHIN

To meet your requirements for agricultural machinery, we opt for high-quality materials and our factories are equipped with state-of-the-art precision tools. We use, among other things, 3D dynamic simulation, automated cutting lasers, press brakes, high tensile steel, hot-dip galvanising (galvanising unit of the JOSKIN Group), automated continuous welding (performed by robots), robotic machining, etc. Mastered technology and knowledge for an uncompromising quality.



BUY WITH CONFIDENCE

All products manufactured by JOSKIN have a **3-year warranty** against manufacturing defects, which includes 1 year on everything, followed by 2 years on parts manufactured by JOSKIN. Thanks to the chassis number, JOSKIN guarantees a perfect traceability of its machines in order to always find the necessary parts in case of repair. JOSKIN is one of the only manufacturers in the agricultural industry to offer such a long warranty period, without limitation of hours or wear, as well as an individualised parts book for each machine.

2





RESEARCH AND DEVELOPMENT

In order to efficiently and quickly face the constant evolution of your needs regarding agricultural machinery, JOSKIN has a **multidisciplinary team** made of engineers, draughtsmen and field workers, who focuses daily on the research and **development of innovative solutions**. State-of-the-art dynamic three-dimensional engineering software helps the team to the research and development of ever more efficient machines. The production is standardised to the maximum in order to guarantee a precise and reliable manufacturing over time, while offering hundreds of options!



AT THE SERVICE OF OUR CUSTOMERS

Victor Joskin, founder of the JOSKIN brand, has always considered the spare parts as the nerve centre of the Group: without spare parts, no repair possible. Given **the permanent stocks of spare parts**, we guarantee their availability even years later, which will secure the value of your machine through time. Either regarding the pre-sales advising or the after-sales service, we are working hard to ensure you an experience that meets your expectations.



INDIVIDUALISED PARTS BOOK

Each machine has its own individual parts book. Indeed, at JOSKIN, the parts book and the user's manual are supplied with your purchase. They are also available at any time online via the book icon () on the JOSKIN website (www.joskin.com). They include the drawings and part numbers of the components fitted to your machine so that, even years later, you can order spare parts efficiently. The parts book therefore guarantees that your equipment will be of **undeniable value over time**.



MUCK SPREADING

SPREADING IN THE WIDE SENSE!

Today, the mastery of steel processing and the wide choice of quality materials make it possible to reduce – or even eliminate – the crosspieces and side reinforcements on our muck spreaders, in order to obtain a reduced weight, more sturdiness as well as clear and elegant lines.

More cost-effective production techniques are also available to standardise designs. Modern, high-quality spreading and transport technologies are thus made affordable to the greatest number of people, while meeting each specific need. There is a winning formula for every request! At JOSKIN, each spreader is individually manufactured on the basis of standardised components.

The range of JOSKIN muck spreaders includes six models designed to meet the different demands of the market. Capacities range from 8 to 25 m³, with one, two or three axles. The JOSKIN muck spreaders are equipped with vertical or horizontal beaters to spread all types of organic fertilizers. These machines are designed to ensure a wide and uniform spreading pattern for all sorts of solid fertilisers. It can be heavy manure or lighter fertilisers (compost, lime, chicken manure, etc.).

The JOSKIN muck spreaders are sturdy, safe, easy to maintain and simple to use machines offering the highest level of working comfort whatever the material to be spread.



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To access a maximum of exclusive content (videos, photos...), this brochure includes "QR codes".



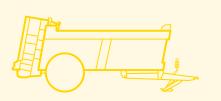
How to use them? Nothing easier...

- Download a free "QR code" application from the App store or Play store (if your smartphone does not automatically have a "QR code" scan).
- Scan/take a picture of the QR code.
- Surf and enjoy.





VERTICAL BEATERS











GENERAL POINTS



VERTICAL BEATERS

Thanks to their vertical and slightly forward orientation, the beaters

achieve a higher rotation speed (up to 423 rpm) and are

therefore suitable for spreading heavier manure with a lot of straw. The combination of their design (forward orientation, shape of the teeth, number of spirals, etc.) and rotation speed makes it possible to finely chop the material, which is then spread more easily over an area of 7 to 16 m, depending on the model of spreader used and the material being spread.









DRAWBAR SUSPENSION

Depending on the muck spreader model, there are **3 different drawbar suspensions**: the parabolic leaves provide a real driving comfort and a good drawbar clearance without deforming the traction line of the vehicle, while improving its stability; the silent-blocks (the most economical solution on the market) absorb the vehicle vibrations; and finally, the automatic hydraulic suspension with a cylinder on either side of the drawbar, each combined with a nitrogen accumulator, provides an unequalled driving comfort, even at higher speeds, and maintains the traction line continuously for all journeys with the vehicle loaded.

STANDARD EQUIPMENT

Standardisation ensures uniform designs and implies costeffective production techniques. High-quality spreading and transport technologies are thus affordable to the greatest number of people. The JOSKIN muck spreaders therefore have a large standard equipment: beaters with folded spirals, control of the moving floor drive by regulator, moving floor tensioners placed outside the body, etc. Thanks to these features, the JOSKIN muck spreaders are **easy to operate** and offer a greater working comfort to the users.



SIROKO & TORNADO

LOWERED NARROW BODY FOR QUALITY SPREADING!

The Siroko and the Tornado unite the principles that led to the very concept of this type of machine: **lightness, sturdiness and easy maintenance**. Their special low, narrow body combined with large-diameter wheels ensures an easy traction and reduces the pressure on the ground thanks to a bigger contact surface, whatever the terrain. The Siroko is economical in terms of both budget and energy and is intended for medium-sized farms. The Tornado, with its large capacity and sturdiness ensured by its body formed by successive folds and a side reinforcement, perfectly meets the needs of agricultural contractors and larger structures.





LOWERED NARROW BODY

The capacity of a narrow body may seem smaller than that of a wide one, but when comparing volumes, they are equivalent. Narrow models do indeed benefit from a lowered design and both side walls are often higher than on wide-body muck spreaders. This structure offers loading capacities from 5 to 14.17 m³ for the Siroko, and from 8.6 to 22.4 m³ for the Tornado. This lowered design also **makes it much easier to load the material**.





SPREADING AND BEATERS

The spreading width usually varies according to the products to be spread (Siroko: 7 to 12 m; Tornado: 7 to 16 m). To achieve it, the two vertical beaters **rotate at a speed of 423 rpm** and project the material to be spread with their **bolted teeth**. At the base of these beaters, **2 retractable blades** spread out the manure and act as a "splitting" hammer. In the event of stones, the blades retract to absorb shocks and thus protect the entire drive system of the beaters (P.T.O.-shaft, gearboxes, etc.).





RUNNING GEAR

The Siroko and Tornado have an **oversized axle bolted under the monocoque body**. It can therefore be moved, allowing a perfect balance with sufficient weight on the eyelet, regardless of the tyre configuration. The tyres can therefore be easily changed without having to move other elements. The double-axle Tornado models are equipped as standard with a Hydro-Tandem running gear, which ensures traction ease and an optimal stability both on fields and on the road.





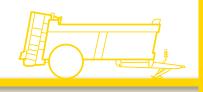
MOVING FLOOR

The moving floor of the vertical muck spreaders with narrow body consists of **2 shipping chains** (Siroko: Ø 14 mm; Tornado: Ø 16 mm) of grade 80. To make maintenance easier, on the Tornado, the slats are bolted to the chains which are placed above the welded high tensile steel floor (4 mm). The moving floor moves over the floor, bringing the manure to the spreading frame which, being wider than the body, allows the conveyed material to expand before ejection by the beaters.











SIROKO

- 1 Vertical beaters with 3 to 5 folded spirals
- 2 Tractor power: max. 130 hp
- 3 Monocoque structure in galvanised high tensile steel
- Drawbar suspension: cross-suspension with parabolic leaves
- 5 Removable teeth in HARDOX 450 steel
- 6 Wide tyres with a large diameter

Axle	Siroko models	Manure volume up to beaters (m³)	Off-road payload (t)	Length inside the body, before door (m)	Height inside the body (m)
	\$4008/8V	8.10	8	4.15	0.85
	S4010/9V	9.40	9	4.20	1.09
1	S5010/11V	11.55	11	5.20	1.09
	S5013/12V	12.96	12	5.10	1.34
	S5513/13V	14.17	13	5.50	1.34





- 1 Vertical beaters with 4 to 7 folded spirals
- 2 Removable teeth in HB 400 steel
- 3 Tractor power: min. 120 hp
- 4 Wide tyres with a large diameter
- 5 Drawbar suspension: hydraulic with closed circuit
- 6 Tapered body: + 30 mm at the back

Axle(s)	Tornado models	Manure volume up to beaters (m³)	Off-road payload (t)	Length inside the body, before door (m)	Height inside the body (m)
	T5011/11V	12.00	12	5.00	1.13
	T5511/12V	13.30	12	5.50	1.13
	T5513/14V	16.10	13	5.50	1.37
1	T5516/16V	17.80	14	5.50	1.57
	T6013/16V	17.60	15	6.00	1.37
	T6016/17V	19.30	15	6.00	1.57
	T6516/19V	20.90	16	6.50	1.57
	T6013/16BV	17.60	15	6.00	1.37
2	T6516/19BV	20.90	18	6.50	1.57
	T7016/21BV	22.40	20	7.00	1.57

FERTI-CAP & FERTI-SPACE2

MULTI-TALENTS TO SPREAD AND TRANSPORT!

Like all JOSKIN muck spreaders, the Ferti-CAP and Ferti-SPACE2 are light, sturdy and easy to maintain. Both durable and extremely manoeuvrable, they represent a **profitable investment from both an economic and energy point of view**. Thanks to their wide body with a bolted spreading table, they can easily be converted into a silage trailer. In short: real multi-talents! The Ferti-SPACE2 is recommended for a more intensive use and for large quantities of material to be spread, while the Ferti-CAP is suitable for a smaller farm.





VERSATILE WIDE BODY

Depending on the Ferti-CAP or Ferti-SPACE2 model, the loading capacity varies from $6.91\,\mathrm{m^3}$ to $27.2\,\mathrm{m^3}$ (+ possibility of adding extensions). Their wide monocoque body made of high tensile steel (4 mm) is formed by successive folds and a very resistant rectangular upper body edge strip that protects the walls during loading. These lightweight machines with a low centre of gravity ensure **stability during transport**. They are versatile and can be used as harvesting trailers (silage or other) since the beaters can be easily removed.





SPREADING AND BEATERS

The spreading width varies according to the products to be spread (Ferti-CAP: 7 to 12 m; Ferti-SPACE2: 8 to 16 m). To achieve it, the two vertical beaters with spirals (Ferti-CAP: 3 spirals; Ferti-SPACE2: 4 spirals) **rotate at a speed of 423 rpm** and project the material to be spread with their bolted teeth. **Two discs** (Ferti-CAP: Ø 1,140 mm; Ferti-SPACE2: Ø 1,000 mm) **with 3 blades each** are located at the base of the beaters and also eject the remaining material up to the bottom.









RUNNING GEAR

The axles of the Ferti-Cap and Ferti-SPACE2 are bolted, and therefore movable, in order to achieve a **perfect balance** with sufficient weight at the eyelet, regardless of the tyres. The double-axle versions of these muck spreaders are equipped with a Roll-Over bogie running gear. The Ferti-SPACE2 FS7011/20 and FS7014/25 models have a Hydro-Tandem/Tridem running gear for traction ease and an optimal stability on roads and fields.



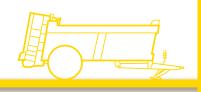


MOVING FLOOR

The moving floor of the Ferti-CAP consists of **2 shipping chains** (Ø 14 mm) with grade 80 and **welded slats in closed profiles**. It moves on a bolted galvanised floor, which can be replaced easily in case of wear. The moving floor of the Ferti-SPACE2 is welded and made of 4 shipping chains with grade 80. This has many advantages: the bolted wear slats make maintenance easier; the return system is improved; the space between the tensioners is increased; and the gearwheels are enlarged to fit the moving floor chains completely.









Ferti-CAP

- Monocoque structure in galvanised high tensile steel
- 2 Removable teeth in HARDOX 450 steel
- 3 Beater rotation speed: 423 rpm
- Moving floor with two Ø 14 mm shipping chains (grade 80)
- Drawbar suspension: cross-suspension with parabolic leaves
- 6 Running gear: single axle or Roll-Over bogie

Axle(s)	Models	Manure volume up to beaters (m³)	Off-road payload (t)	Length inside the body, before door (m)	Height inside the body (m)
	FC4008/9U	10.25	8	4.20	0.81
1	FC5008/10U	12.22	10	4.90	0.81
	FC5508/12U	13.97	12	5.70	0.81
2	FC5508/12BU	13.97	12	5.70	0.81



Ferti-SPACE2

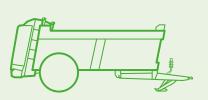
- Running gear: Hydro-tandem/-tridem or Roll-Over bogie
- Moving floor with four Ø 14 mm shipping chains (grade 80)
- 3 Dual-line air brakes
- 4 Drawbar suspension: silent-blocks
- 5 Removable teeth in HB 400 steel (HARDOX type)
- 6 Beater rotation speed: 423 rpm

Axles	Models	Manure volume up to beaters (m³)	Off-road payload (t)	Length inside the body, before door (m)	Height inside the body (m)
	FS5511/15BU	17.04	14	5.50	1.05
	FS6011/17BU	18.42	16	6.00	1.05
2	FS6511/18BU	19.79	18	6.50	1.05
	FS7011/20BU	21.17	20	7.00	1.05
	FS7014/25BU	27.20	22	7.00	1.35
3	FS7011/20TRU	21.17	20	7.00	1.05
3	FS7014/25TRU	27.20	26	7.00	1.35





HORIZONTAL BEATERS



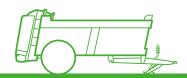








GENERAL POINTS



HORIZONTAL BEATERS

The Tornado and Ferti-SPACE2 HORIZON are designed to spread light materials (compost, chicken manure, lime, etc.). The horizontal orientation of their beaters leads to a wider **spreading table that will cover large widths**. The teeth are designed to crumble the material and throw it against the canopy. The material then falls back onto the

spreading table, which then ejects it by means of **6 adjustable fixed blades**. It is also possible to operate with the canopy open to spread heavy, wet manure.







DRAWBAR SUSPENSION

The Tornado HORIZON is fitted with an automatic hydraulic drawbar suspension. The principle lies in the fitting of a hydraulic ram on both sides of the drawbar, each combined with a nitrogen accumulator. This shock-absorbing system provides an **unequalled driving comfort at higher speeds**, regardless of the terrain conditions. It also maintains the traction line continuously, without deformation during journeys with the vehicle loaded. The Ferti-Space2 HORIZON is fitted with a drawbar suspension with silent-blocks. This system reduces vibrations and provides **extra comfort to the user**. For even more comfort, the Ferti-SPACE2 HORIZON can be fitted with an optional hydropneumatic drawbar suspension.

FERTI-CONTROL 4000

All JOSKIN muck spreaders with spreading table have a **Ferti-Control 4000 control box**. It includes a high-tech colour screen to display the functions of the muck spreader and allows the electronic control of the moving floor speed and direction of rotation. Thanks to its advanced level of technology, it allows to control all the functions of the machine: moving floor, flow meter, weighing system, guillotine door, limitation board, etc.



TORNADO & FERTI-SPACE2 HORIZON

STURDY AND PRECISE UNIVERSAL SPREADERS!

The concept of the HORIZON spreaders is based on the same principles as their vertical version, but with horizontal beaters and a spreading table. The spreading table is designed to crumble and spread all kinds of products on a large width (cattle manure, compost, organic wastes, lime, poultry manure, etc.). The combined work of the spreading table and the horizontal beaters guarantees a perfect distribution of the manure, even at low doses.



GALVANISED GUILLOTINE DOOR

All HORIZON spreaders are fitted with a guillotine door. It is tight for the loaded manure and is continuously adjustable over the entire height of the beaters. It not only regulates the dosage during spreading, but also prevents losses of load during transport. It is also essential for the intended use of the HORIZON spreaders. Without dosing, the lighter manure may fall quickly and too much material could therefore accumulate on the spreading table. For more precision, a sensor under the spreader body regulates the opening of the guillotine door.





SPREADING AND BEATERS

The beaters of the spreaders with spreading table rotate at a speed of 320 rpm in order to break up the pile of material to be spread. It is then crumbled and projected against the closed spreading canopy to finally fall on the discs (Ø 1,040 mm) rotating at a speed of 500 rpm. The 6 adjustable blades then take up all the finely crumbled material and spread it evenly over a large width (from 12 to 22 m depending on the products spread). If the material is too fibrous, the spreading canopy opens to 100° and allows the work to be carried out mainly by the beaters.







RUNNING GEAR

The oversized axles of the running gear have powerful brakes proportional to high traffic speeds (up to 60 km/h). The axles are bolted under the body and can therefore be moved, allowing a perfect balance with sufficient weight on the eyelet, regardless of the tyre configuration. A hydraulic axle suspension ensures traction ease and an optimal stability. The Ferti-Space2 HORIZON is also equipped with a front lifting axle to keep an ideal traction while counterbalancing the loss of weight at the eyelet due to the material moving towards the rear side of the spreader.



MOVING FLOOR

The moving floor of the JOSKIN spreaders consists of shipping chains of grade 80 (2 with Ø 16 mm on the Tornado and 4 with Ø 14 mm on the Ferti-SPACE2). It is bolted to the slats (closed profiles on Tornado and galvanised U-shaped sections on Ferti-SPACE2) and moves over a welded steel floor. The side moving floor tensioners are easily accessible and allow to adjust the tension at any time. The pipes and electrical cables are fastened underneath the crosspieces of the chassis to limit the space requirement, thus providing a large clearance under the body. This design therefore ensures a better evacuation of the manure trapped between the chains.















- 1 Tractor power: min. 160 hp
- 2 Wide tyres with a large diameter
- Moving floor with two Ø 16 mm shipping chains (grade 80)
- Monocoque structure in painted special high tensile steel
- 5 Tapered body: + 30 mm at the back
- Spreading table with 2 spreading discs with 6 adjustable blades

Axle(s)	Models	Manure volume up to beaters (m³)	Off-road payload (t)	Length inside the body, before door (m)	Height inside the body (m)
	T5513/14V	16.10	13	5.50	1.37
	T5516/16V	17.80	14	5.50	1.57
1	T6013/16V	17.60	15	6.00	1.37
	T6016/17V	19.30	15	6.00	1.57
	T6516/19V	20.90	16	6.50	1.57
	T6013/16BV	17.60	15	6.00	1.37
2	T6516/19BV	20.90	18	6.50	1.57
	T7016/21BV	22.40	20	7.00	1.57



Ferti-SPACE2

- 1 Tractor power: min. 160 hp
- 2 Running gear: **Hydro-tandem/-tridem**
- Moving floor with four Ø 14 mm shipping chains (grade 80)
- 4 Drawbar suspension: silent-blocks
- 5 Versatile wide body
- 6 Removable teeth in S700MC steel

Axles	Models	Manure volume up to beaters (m³)	Off-road payload (t)	Length inside the body, before door (m)	Height inside the body (m)
	FS5511/15BU	17.04	14	5.50	1.05
	FS6011/17BU	18.42	16	6.00	1.05
2	FS6511/18BU	19.79	18	6.50	1.05
	FS7011/20BU	21.17	20	7.00	1.05
	FS7014/25BU	27.20	22	7.00	1.35
3	FS7011/20TRU	21.17	20	7.00	1.05
3	FS7014/25TRU	27.20	26	7.00	1.35



EQUIPMENT

(vertical and horizontal beaters)





CANOPY WITH QUICK COUPLING SYSTEM

JOSKIN offers a canopy with quick coupling system in its range of muck spreaders. It can easily be attached to the back of the frame for **spreading fine, lumpy products** (such as poultry manure). It is fitted on the inside with a stainless steel plate so that the product to be spread does not stick and can easily fall back onto the discs or the retractable blades without obstructing the passage. For a frequent mixed use (with/without canopy), JOSKIN also offers a 2-part canopy with hydraulic opening (on Tornado only).



FLOW PROPORTIONAL TO THE DRIVING SPEED (DPA)

For a precise work, JOSKIN offers an electronic spreading management system (proportional flow system) available on ISOBUS and Ferti-Control 4000. During the use, the operator indicates the loaded volume, the desired output per hectare, the effective working width and the product density. He/she then chooses the position of the door according to the material to be spread. Once this information has been entered into the terminal, the moving floor drive is automatically adjusted according to the required flow rate and the driving speed of the spreader.



HYDRAULIC INSTALLATION

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



HARDOX PROTECTION PLATE

If it is not part of the standard equipment of the vehicle, the spreading table can be equipped with a highly abrasion-resistant HARDOX steel protection plate. This is the ideal equipment for intensive use of your muck spreader. In this case, the protection plate is painted green (instead of hot-dip galvanised) so as not to affect the strength of the materials.

EXTENSIONS

JOSKIN offers different types of extensions bolted to the body in order to further increase the transported volumes. They are made of aluminium or wood and can be up to 250 mm high! It is also possible to protect the upper body edge strip with a PVC protection when loading material.

MANAGEMENT AND CONTROL

JOSKIN offers 3 possibilities to control its spreaders: directly via the spool valves of the tractor, electrohydraulically via Ferti-Control (models 300, 500 and 4000) or with Isobus via Iso Control Touch or the Isobus terminal of the tractor.





Configure your muck spreader in a few clicks!



DYNAMIC WEIGHING SYSTEM

The new JOSKIN dynamic weighing system is a highly efficient and reliable solution to ensure that the right quantity is always spread in the right place. It continuously weighs and monitors the weight loss in the body and compares it with the preset quantity. Depending on the data received, the material flow is continuously adjusted. This system guarantees a high precision work, regardless of the consistency of the product to be spread and the working conditions. As standard, the weighing system is managed by the Ferti-4000. Integrated into the ISOBUS software, the weighing system works with maps to be even more accurate.

CENTRAL SEPARATOR

The galvanised rear central separator is a deflector positioned on the central end of the spreading table. It deflects the spread material outwards to reduce the overlap of the two spreading sheets. It can therefore be of interest when spreading lime or similar materials. This deflector is usually bolted and has a pivot system so that it can easily be folded under the table as required.

LIMITATION BOARDS

The left and right limitation boards allow to **limit the spreading width**. They are **hydraulically controlled** and can be adjusted comfortably from the driver's seat. They can therefore be used independently and adapted according to the needs. These boards are the ideal tool for headland spreading.



GUILLOTINE DOOR

A guillotine door can be fitted as an option on the muck spreaders with vertical beaters. It is tight for the manure and continuously adjustable over the entire height of the beaters. It therefore not only prevents losses of load during transport, but also regulates the dosage during spreading.

HYDRAULIC MOVING FLOOR TENSIONERS

Every JOSKIN muck spreader is fitted with mechanical moving floor tensioners. As an option, there is a hydraulic model with a hand pump that makes it easier to adjust the tension of the chains.

HOUR COUNTER

JOSKIN offers several types of hour counters: cardan shaft rotation counter, vibration counter, etc. This allows you to easily monitor the use of your machine park (e.g. for rentals, in agricultural cooperatives, etc.).





Configure your muck spreader in a few clicks!

MUCK SPREADING



Discover all our **BROCHURES** on **joskin.com**







