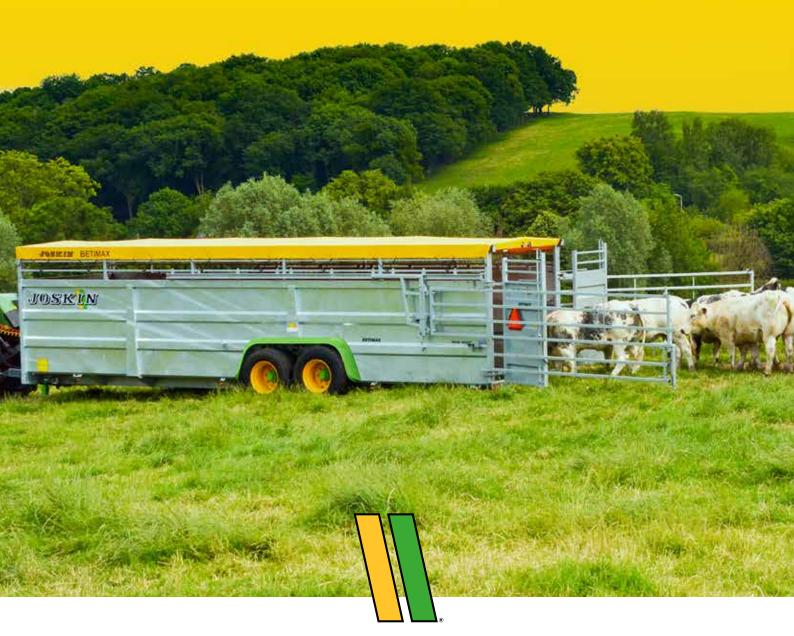




# LIVESTOCK AND GRASS CARE

THE ESSENTIALS FOR YOUR NEEDS AS CATTLE FARMERS!



## 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

77





#### 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**.



## LIVESTOCK AND GRASS CARE

#### THE ESSENTIALS FOR YOUR NEEDS AS CATTLE FARMERS!

Anchored in a grassland area, **JOSKIN** has always been close to customers looking for quality implements allowing them to efficiently take care of their pastures. Convinced that growing grass is a full-time job necessary to get a good quality final product, **JOSKIN** has rapidly made it one of its specialties. The company now benefits from the industrialisation of its production force to keep innovating and offer implements that are even easier to use and more efficient.

The **JOSKIN** rotary pasture toppers and choppers equip your tractor to make your meadows greener, more regular and richer in no time. The range of aerators allows to efficiently maintain and regenerate your meadow and, in this way make sure there is enough quality grass at all times. The **JOSKIN** livestock trailers offer a high level of comfort for the animals and ease of use for the farmer. In the same vein, **JOSKIN** has developed a range of water bowsers providing optimal watering conditions for livestock, while ensuring a maximum handling comfort for the farmer.





## **TABLE OF CONTENTS**



CHOPPERS & ROTARY PASTURE TOPPERS		
General points	7	
BEV & BJ	8	
TR (ATR - DTH3 - TRT)	10	
Tools	12	
Equipment	13	



MEADOW AERATORS			14
General points	15	Scariflex MAX R6D2S3	2
BF GARDEN & BF	16	Scariflex R6S6	22
EBR4S2	18	Purchase guide	23
Scariflex R5S3	19	Equipment	24
Scariflex R6S5	_ 20		



LIVESTOCK TRAILERS	26
General points	27
Betimax R	28
Betimax RDS	29
Equipment	30



WATER BOWSERS	32
General points	32
Aquatrans & Aquatrans XL	32
Equipment	34



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.





## JOSKIN.

# CHOPPERS & ROTARY PASTURE TOPPERS















## **GENERAL POINTS**



#### **DESIGN**

The JOSKIN choppers and rotary pasture toppers are sturdy, efficient and energy-saving machines. Their structure meets the needs of agriculture (mowing of leftovers, fallow land, etc.) and horticulture (maintenance of green spaces, brush cutting, etc.). They are designed for an optimal use. A floating coupling system and 2 XXL skids¹ ensure that the machine follows the ground relief and glides smoothly. Removable, self-retractable floating blades¹ retract in case of obstacles to protect the machine against shocks. In general, the large clearance between the blades and the frame allows air to circulate, thus ensuring that the cut material is mixed without the risk of blockage.

<sup>1</sup> See p. 12 "Tools"



#### **CUTTING WORK**

All frames of the range have an 8-position height adjustment system to adapt the mowing to the conditions encountered. Each machine also uses a horizontal cutting device that ensures a **clean, straight cut** of the grass, preventing it from being damaged and fostering a rapid growth. The cutting work is maximised by the design of the machine frames, whose structure improves the "tornado" effect created by the rotation of the rotors. The vegetation is thus powerfully sucked upwards and held in the movement of the knives, even in the event of damp weather. Once finely chopped, the grass is **uniformly spread** by means of the deflectors under the frame.



#### **MAINTENANCE AND SAFETY**

The **JOSKIN** choppers and rotary pasture toppers are coated with an anti-corrosion paint providing a long-term protection against external aggressions. The sober and timeless design of their special high tensile steel frame is specifically developed to prevent water from stagnating and therefore **making cleaning operations easier**. Using a high-pressure cleaner will be enough to get an implement back in its original state. With a view to safety, and in order to be able to concentrate 100% on mowing, **JOSKIN** offers **a wide range of prevention devices**: inaccessibility of the blades in the working position, anti-projection chains<sup>1</sup>, galvanised discs<sup>1</sup> preventing the blades from rubbing against hard surfaces, etc.

<sup>1</sup> See p. 12 "Tools"

## **BEV & BJ**

#### VERSATILE IN ALL SITUATIONS

BEV and BJ choppers are an excellent compromise between **lightness**, **sturdiness** and **ease of use**. Their hyperventilated horizontal cutting process ensures a clean cut into fine strands, facilitates the distribution of the residues on the ground and also accelerates their decomposition. The BEV is particularly suitable for smaller tractors (12 to 60 hp) for the maintenance of small green spaces of all kinds (parks, sports fields, meadows, etc.). The BJ, on the other hand, is more powerful and can cut fibrous materials with a large diameter (up to 30 mm). It is very effective on fallow land or for other intensive work such as brush clearing, etc.

#### BEV



#### **ROTOR AND FRAME**

Mounted directly on its speed-increasing gearbox, the rotor of the BEV drives no less than 3 floating blades at a speed of 320 km/h, which ensures a **smooth and even cut** of the grass. For mulching, the machine can be completely closed to keep the grass in the rotor for longer, thus producing an even finer result.



#### HITCH

Rear-mounted, the BEV is fitted with a floating hitch system following the ground relief perfectly, for a maximal working precision. The hitch system of the BEV chopper also offers the possibility of a slight offset to the left or right to move the mower out of the track of one of the tractor wheels.

#### BJ



#### **VERSATILITY**

The XXL size of the BJ blades covers a large area. Their weight (2.14 kg/piece) ensures an inertia that allows them to cut through a very dense vegetation. In case of obstacles, 4 rubber shock absorbers on the drive shafts absorb the shocks from the rotors. This quadruple torsion security makes the transmission very flexible in order to **adapt to any type of fallow land**.



#### **TRANSMISSION**

The BJ has a flexible transmission with a quadruple torsion security. Four round rubber shock absorbers are therefore fitted on the drive shafts to absorb all shocks, bumps and vibrations from the rotors. The whole unit (gearboxes, gears, drive shaft, tractor P.T.O., etc.) thus benefits from a **reinforced protection**, adapted to all types of fallow land.

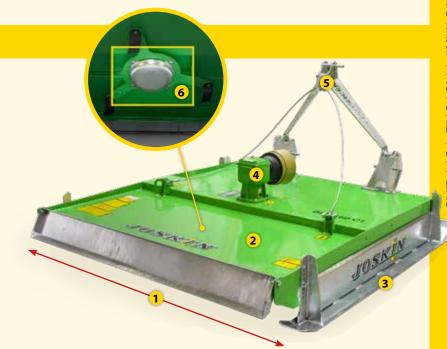






#### BEV

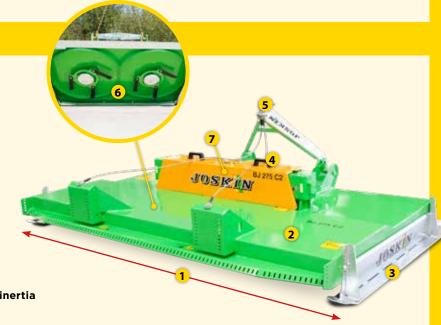
- 1 Working width: from 1.3 m to 1.6 m
- 2 Manufactured in painted or hot-dip galvanised high tensile steel
- **3** Ground contact surface: **150 mm skids**
- 4 P.T.O.-shaft drive: 540 rpm
- 5 Hitch: Ø 22 mm or Ø 28 mm
- 6 Ø 330 mm galvanised disc



Models	Working width (m)	Transport width (m)	Number of rotors	Min./Max. required power (hp)
BEV/130/C1	1.30	1.60	1	12/60
BEV/160/C1	1.60	1.90	1	18/60

#### BJ

- 1 Working width: from 2.75 m to 3.15 m
- Manufactured in painted or hot-dip galvanised high tensile steel
- 3 Ground contact surface: 150 mm skids
- 4 P.T.O.-shaft drive: 1,000 rpm
- 5 Hitch: Ø 22 mm or Ø 28 mm
- 6 Ø 330 mm galvanised disc(s)
- 7 2 rotors and 6 self-retracting blades with high inertia



Models	Working width (m)	Transport width (m)	Number of rotors	Min./Max. required power (hp)
BJ/275/C2	2.75	3.00	2	75/125
ABJ/275/C2*	2.75	3.00	2	75/125
BJ/315/C2	3.15	3.40	2	75/125

<sup>\*</sup> Central front-mounted, with adjustable spring suspension



## TR (ATR - DTH3 - TRT)

#### SPECIALIST IN LEFTOVERS

The TR rotary pasture topper is a real reference in the professional world. Very good at mowing on most medium-sized and large green spaces, it is also very appreciated for its excellent performance in pasture care. Its offset multi-rotor system enables it to work on areas with more compact leftovers, while maintaining a constant flow of work. Available in rear (TR: single version; TRT: double version), front (ATR) or offset (DTH3) position, the TR can truly adapt to any situation!



FOSKEN

5

Hitch: Ø 22 mm or Ø 28 mm

Working width: from 1.8 m to 7.5 m

2 to 4 beltdriven rotors P.T.O.-shaft drive: 1,000 rpm

Ø 330 mm galvanised disc(s)

Front and rear preequipment for antiprojection chains

6

Manufactured in painted or hot-dip galvanised high tensile steel

Contact surface with the ground: 144 x 1,438 mm skids (except on TR/220/C3: 144 x 1,213 mm)

8

Models	Working width (m)	Transport width (m)	Number of rotors	Min./Max. required power (hp)
<b>TR</b> /180/C2	1.80	2.10	2	25/70
<b>TR</b> /220/C3	2.20	2.50	3	25/80
<b>TR</b> /270/C3	2.70	3.00	3	45/85
<b>TR</b> /360/C4	3.60	3.90	4	70/110
<b>ATR</b> /270/C3	2.70	3.00	3	45/85
TR/270/ <b>DTH3</b>	2.70	2.45	3	45/85
<b>TRT</b> /750/C6	7.50	3.00/2.50	2 x 3	100/200









#### **ATR**

The front-mounted rotary pasture topper is hitched by means of a central beam pulling the machine from the front ("Accord triangle" system). It has an excellent manoeuvrability and retains the advantages of the floating hitch thanks to the double spring on the frame. This configuration allows the grass to be mowed before it is crushed by the tractor wheels. It is also recommended to all those who wish to simultaneously use a second type of implement at the back of their tractor, and therefore maximise their working time.

#### DTH3

Thanks to its arm with hydraulic folding system, this version allows to put the rotary pasture topper at the rear right of the tractor (standard). This position is then ideal for all those who do not wish to drive on the leftovers before cutting them. It also increases the **efficiency of the rotary pasture topper** in fields where a lot of finishing work is required at the edges (hills, etc.).

#### **TRT**

The TRT is designed to take the incredible performance of the TR topper to larger pastures. Ideally, it can be combined with the ATR/270/C3 front rotary pasture topper to reach a cutting width of 7.5 m. Thanks to its triangular layout, this combination avoids the crushing effect caused by the tractor wheels and thus ensures an homogeneous mowing in 7.5 m strips in a single pass! This model will therefore be the delight of anyone wishing to maintain large areas in record time.

#### **CUTTING ZONE**

Depending on its size, this model is equipped with 2, 3 or 4 rotors each driving 2 retractable blades. This multiplication of the cutting zones ensures a **perfectly homogeneous work**. It also allows to reduce the pressure on the different knives



in order to mow a higher quantity of vegetation, without any loss of power. Thanks to a V-belt drive, the various rotors are arranged on a non-linear basis. This arrangement maximises the overlap areas of the various knives in the carter so as to ensure a **more precise cut**, for an even finer result.

## **TOOLS**



#### SELF-RETRACTABLE BLADES

Most **JOSKIN** choppers and rotary pasture toppers are equipped with self-retractable blades on pivot points: in the event of contact with an obstacle, the knife can be rotated up to 360° to **prevent any damage**.



## ANTI-PROJECTION CHAINS

The front and/or rear protection chains (available as an option) prevent, or at least slow down, the projection of objects, such as mowing debris, towards the front or rear of the machine. They thus provide additional safety for the operator and those around him.



#### **XXL SKIDS**

The skids of the **JOSKIN** rotary pasture toppers and choppers are bolted and allow the mowing height to be adjusted from 6 to 8 positions, depending on the model and the needs. Thanks to their width, these skids not only ensure a **good operating stability**, but also protect the vegetation by guaranteeing an excellent load-bearing capacity for the machine.



#### **GALVANISED DISCS**

The galvanised discs protect the blade holder and the blades against possible impacts with the ground and better follow the ground relief.



#### P.T.O.-SHAFT

The Walterscheid P.T.O.-shafts fitted as standard on **JOSKIN** machines directly transfer the drive energy produced by the tractor. To increase the protection of your machine, **several shaft securities are available** (standard or optional): shear bolt, cam, free wheel, etc.



#### **TRANSMISSION**

The rotary pasture toppers and BJ choppers are driven at **540 or 1,000 rpm** depending on the model. All transmission components are protected under a bolted cover that complies with CE safety standards.



## TORSION SECURITY

On BJ choppers, torsion couplings are fitted on the drive shafts to provide **additional safety** and add **flexibility to the drive**. As they are made of rubber, they absorb the operating vibrations and possible shocks.



#### **BELTS**

The TR rotary pasture topper can also be driven by 2 V-belts driving the different rotors. If the driving speed is too high, they slip until the operator reduces the driving speed to avoid any mechanical damage to the machine.





As an option, it is possible to equip your **JOSKIN** rotary pasture topper or BJ chopper with one or more support rollers (depending on the model). Fitted behind the mowing table, they not only provide a supporting action to bring soil moisture to the surface, to the grass roots, but they also control the mowing height. On very hilly or wet ground, they support the action of the skids and thus ensure a perfect follow-up of the ground relief.



#### **REMOVABLE AERATOR**

Your **JOSKIN** rotary pasture topper or BJ chopper can be equipped with an aerating/scarifying and scraping unit. In this way, you can combine up to 3 machines in 1. Since this option is bolted, it can easily be added/removed according to the needs.



#### **SET OF REFLECTIVE PANELS**

In order to meet the current safety standards and legislation, the **JOSKIN** rotary pasture toppers and BJ choppers can be fitted with optional reflective panels with red and white stripes.



Configure your chopper in a few clicks!



Configure your rotary pasture topper in a few clicks!







## MEADOW AERATORS













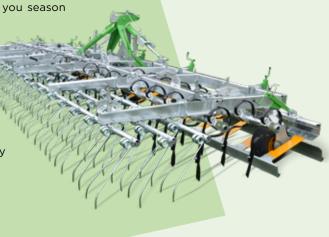


## **GENERAL POINTS**



#### **DESIGN**

The **JOSKIN** meadow aerators are designed to accompany you season after season. The quality of the high tensile steel and their galvanised finish guarantee a **long service life**. This also makes them exceptionally **sturdy**, **compact and light**. Thanks to their universal 2.4 m basic frame, the meadow aerators are efficient and spacesaving. All models in the Scariflex range also have a **hydraulic folding system** to allow passage through the narrowest of paths. For a maximum safety during transport, they also have a mechanical safety device that prevents any accidental unfolding, even at high speed.



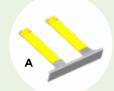


#### **CORRECTIVE ACTIONS**

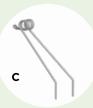
Flora is a major indicator of the condition of a meadow. The cover should be homogeneous and its composition should be close to 70% good grass to ensure a dense and productive grass, between 10 and 20% leguminous plants to improve the forage quality, and a minimum of 10% other plants to make the forage palatable. Several elements (cow dung, moss, large leftovers, soil compaction, etc.) can lead to a dysfunction of this balance and damage the meadow. To prevent such an imbalance, it is necessary to react quickly and take appropriate corrective actions. Use the JOSKIN purchase guide to find out which aerator model is best suited to your needs: https://www.joskin.com/en/purchase-guide-aerators

#### **TOOLS**

Each tool acts according to its purpose to meet the desired requirements:









- A. Leveling scrapers spread out muck and grass heaps as well as molehills.
- B. Spreading paddles remove unfavourable elements, spread heaps, drive out larvae and tear up leftovers.
- C. Spring tines clean, aerate, spread, scarify and revive the vegetation.
- D. Shares scarify more deeply and thus guarantee a regenerative aeration of the damaged plots.

Each row of tools uses the result of the previous one to carry out its work. The best combinations of tools are thus chosen to achieve the desired result.



## **BF GARDEN & BF**

#### HORTICULTURAL AERATOR!

The BF GARDEN and BF are economical aerators optimised for the **maintenance of small areas** with horticultural tractors. Their compactness, lightness and versatility will delight anyone looking to keep meadows, parks or gardens healthy. In particular, the BF GARDEN benefits from a narrow hitch compatible with micro tractors.



#### **DESIGN**

The design of the BF GARDEN and BF is ideal for **gentle dung spreading and scarifying**. Their first row of spreading paddles quickly clears the pasture of cow dung or manure affecting the exploitable surface area. The next two rows of spring tines scarify and aerate the surface to activate the formation of humus from moss or dead grass. The BF GARDEN is suitable for use on smaller areas (< 20 ha) with a tractor of up to 60 hp, while the BF is intended for medium-sized areas (between 20 and 40 ha) with a tractor of up to 90 hp.

Models	Working width (cm)	Type of folding system	Transport width (m) <sup>1</sup>
	120	/	1.20
	150	/	1.50
	180	/	1.80
	210	/	2.10
R3S2	240	/	2.40
	240	Manual	1.22
	270	Manual	1.52
	300	Manual	1.80
	330	Manual	2.10
	180	/	1.80
R4S2	240	Manual	1.22
R452	300	Manual	1.80
	360	Manual	2.40
	240	/	2.40
	300	/	3.00 <sup>2</sup>
D7C2	360	Manual	2.40
K352	420	Manual	3.00 <sup>2</sup>
	480	Hydraulic	2.54
	540	Hydraulic	3.17 <sup>2</sup>
	240	/	2.40
D462	300	/	3.00 <sup>2</sup>
R432	360	Manual	2.40
	420	Manual	3.00 <sup>2</sup>
		R3S2   120   150   180   210   240   270   300   330   330   240   240   300   360   240   300   360   240   480   540   240   480   540   240   300   360   420	R3S2   120





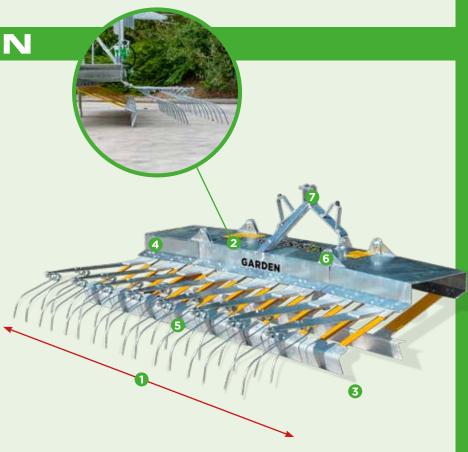


#### **BF GARDEN**

- 1 Working width: from 1.2 to 3.6 m
- 2 configurations of tools possible (BF-R3S2, BF-R4S2)
- Total number of rows: **3** (BF-R3S2) **or 4** (BF-R4S2)



- **Folded sheet steel frame** combining lightness, compactness and sturdiness
- Fully galvanised materials for an exceptional durability
- 6 Manually (un)folding extensions
- Hitch (cat. I) with Ø 22 mm round bar

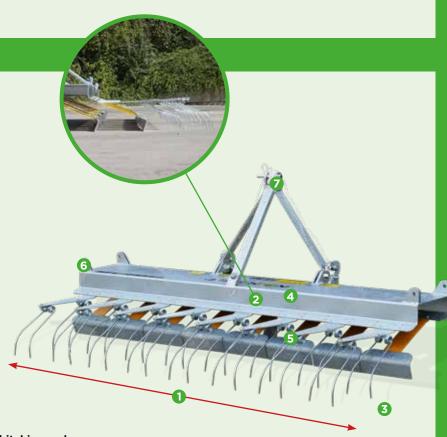


#### BF

- 1 Working width: from 2.4 to 5.4 m
- 2 configurations of tools possible (BF-R3S2, BF-R4S2)
- Total number of rows: **3** (BF-R3S2) **or 4** (BF-R4S2)



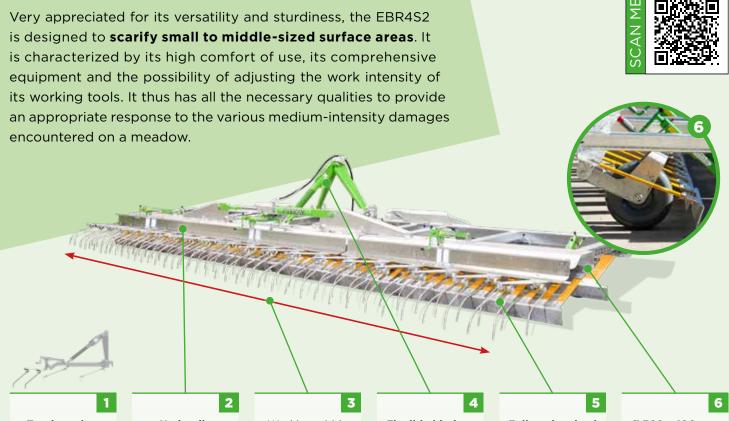
- **Folded sheet steel frame** combining lightness, compactness and sturdiness
- Fully galvanised materials for an exceptional durability
- Manual or hydraulic (un)folding extensions, depending on the width
- Easy hitch to different tractors thanks to the hitching rod





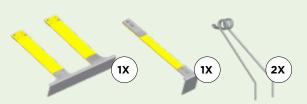
## EBR4S2

#### VERSATILE AERATOR



Total number of rows: 4 Number of different tools: 3 Hydraulic (un)folding of the extensions Working width: from 2.4 to 6.6 m

Flexible hitch to follow the ground relief perfectly and limit vibrations Fully galvanised materials for an exceptional durability Ø 360 x 100 mm steel gauge wheels (for models with a working width from 4.8 to 6.6 m)



#### THE REFERENCE

The work of the EBR4S2 is carried out in 3 stages:

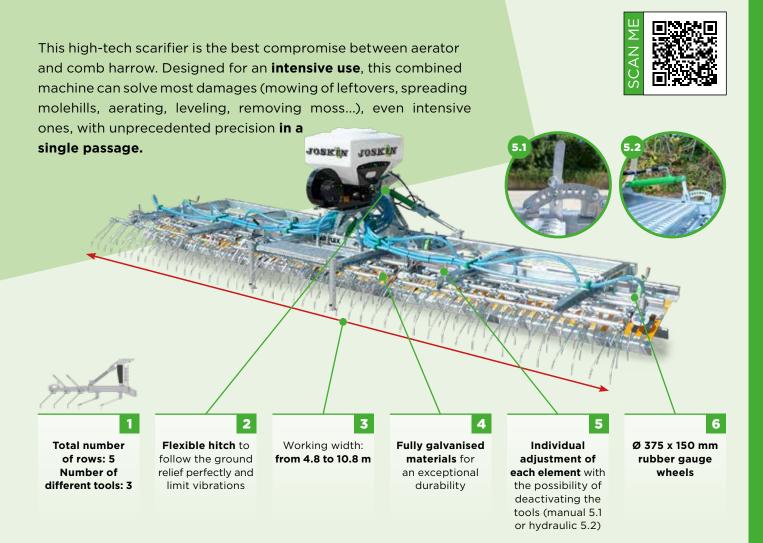
- 1. The **60 cm levelling scrapers** first spread molehills and then level the ground.
- 2. The **10 cm spreading paddles** on semi-flexible blades scrape off the manure and level the agglomerates.
- 3. The **last 2 rows of spring tines** scrape the soil surface to aerate the meadow and activate the humus formation process.

	Working width (cm)	Type of folding system	Transport width (m) <sup>1</sup>
	240	/	2.40
	300	/	3.00 <sup>2</sup>
	360	Manual	2.40
EBR4S2	420	Manual	3.00 <sup>2</sup>
	480	Hydraulic	2.40
	540	Hydraulic	3.00 <sup>2</sup>
	600	Hydraulic	2.40
	660	Hydraulic	3.002

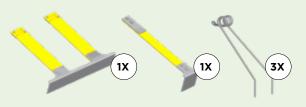
## **SCARIFLEX R5S3**

ALL-IN-ONE AERATOR





#### **COMBINED MACHINE**



The work of the Scariflex R5S3 is carried out in 3 stages. The first row of **60 cm levelling scrapers** on semi-flexible blades spreads out manure and grass heaps as well as molehills. The second row, equipped with **10 cm spreading paddles** on very flexible blades, ensures that the ground relief is followed exactly and that the agglomerates on the surface are levelled. The **last 3 rows of galvanised spring tines** (Ø 8 mm) then complete the work by cleaning the soil surface to remove moss and other dead grass. These tines aerate, spread and scarify the soil, thus activating the formation of humus.

	Working width (cm)	Type of folding system	Transport width (m) <sup>1</sup>	
	480	Hydraulic	2.50	
	600	Hydraulic	2.50	
<b>R5S3</b>	720	Hydraulic	2.50	
	840	Hydraulic	2.50	
	960	Hydraulic	2.50	
	1,080	Hydraulic	2.50	
<sup>1</sup> The user must fold up the machine completely ("transport" mode) in order to drive on public roads.				

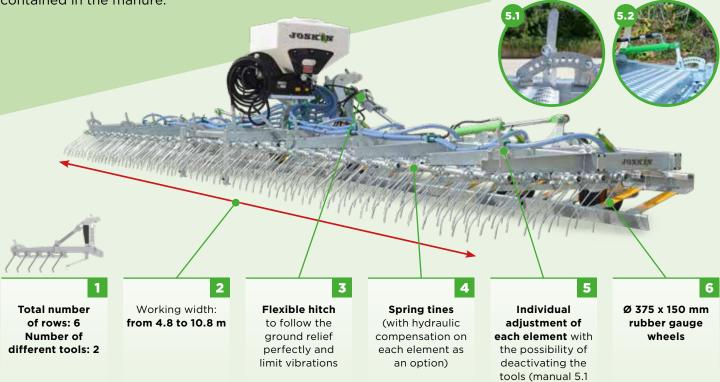


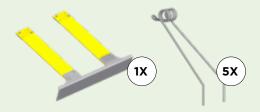
## **SCARIFLEX R6S5**

#### IDEAL MEADOW AERATOR FOR MIXED FARMING

The Scariflex R6S5 is optimised for the conditions encountered in the cattle breeding industry. It is the ideal implement for cattle farmers who want **to keep a dense mass of quality grass** for their cattle. Its 5 rows of spring tines perform an important work of scarification and aeration of the soil for a better penetration of the air and water in the soil, as well as of the nutritive elements contained in the manure.







#### **AERATOR FOR CATTLE FARMERS**

The work of the Scariflex R6S5 is carried out in 2 stages. The **row of 60 cm levelling blades** on semi-flexible blades first prepares the ground for the finishing work carried out by the **5 rows of galvanised spring tines**. These scrape the surface of the soil to remove moss and other dead grass. Since they allow fresh air to circulate on the surface, the action of these rows is more than beneficial for the creation of humus.

or hydraulic 5.2)

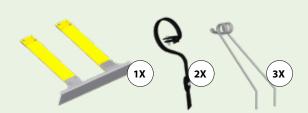
	Working width (cm)	Type of folding system	Transport width (m) <sup>1</sup>
	480	Hydraulic	2.50
	600	Hydraulic	2.50
<b>R6S5</b>	720	Hydraulic	2.50
	840	Hydraulic	2.50
	960	Hydraulic	2.50
	1,080	Hydraulic	2.50

## **SCARIFLEX MAX R6D2S3**

ALL-TERRAIN AERATOR



The Scariflex Max is THE all-terrain model. Skillfully combining a harrow and a regenerator, it accompanies the farmer throughout the seasons: before and after winter to regenerate the meadows, and the rest of the year to aerate and maintain the pastures. The diversity of their tools and their exclusive system of individual adjustment allow a quality intervention, whatever the type of soil or the extent of the damage encountered. 6 **Total number of** Flexible hitch Working width: Sturdy steel Individual Ø 360 x 100 mm to follow the from 6 to 7.2 m adjustment of rows: 6 structure steel gauge wheels **Number of** ground relief optimised for each element with (for models with different tools: 3 perfectly and heavy duty use the possibility of a working width from 4.8 to 6.6 m) limit vibrations deactivating the



#### **AERATE AND REGENERATE**

The Scariflex MAX R6D2S3 is the most complete aerator of the Scariflex range. After levelling the soil with the **60 cm levelling blades**, **two rows of scarifying shares** regenerate the soil in depth (+/- 4 cm) on the most damaged areas (e.g. following the passage of wild boars). To complete the process and activate the formation of humus, **3 rows of galvanised spring tines** then scarify the soil to allow fresh air to circulate on the surface.

tools (manual 5.1 or hydraulic 5.2)

	Working width (cm)	Type of folding system	Transport width (m) <sup>1</sup>
R6D2S3	600	Hydraulic	2.50
ROD233	720	Hydraulic	2.50

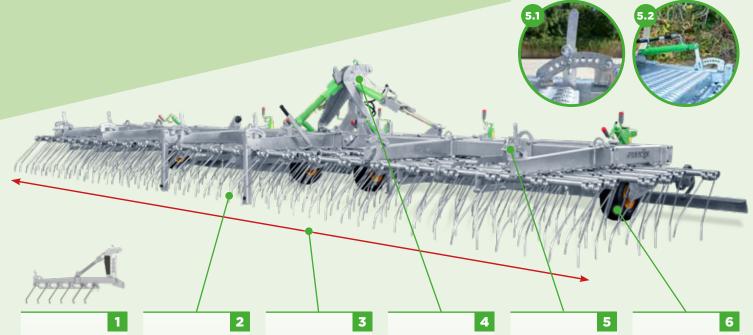


## **SCARIFLEX R6S6**

#### GRASS AERATOR WITH CONSTANT PRESSURE

Fitted with no less than 6 rows of spring tines and individual adjustment devices specific to the Scariflex series, this high-tech model is the perfect harrow for the maintenance of **medium to very large areas of ungrazed forage crops**. As effective on crops as on meadows, the action of this aerator is so precise and regular that it goes far beyond the boundaries of simple scarification.



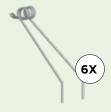


Total number of rows: 6 Number of different tools: 1 Spring tines (with hydraulic compensation on each element as an option) Working width: from 4.8 to 12 m

Flexible hitch to follow the ground relief perfectly and limit vibrations

Individual adjustment of each element with the possibility of deactivating the tools (manual 5.1 or hydraulic 5.2) Ø 375 x 150 mm rubber gauge wheels

#### **WEEDER HARROW**



The **6 rows** of the Scariflex R6S6 are all fitted with **galvanised spring tines** mounted on a rigid frame. Thanks to this structure, more pressure is exerted on the ground. This increase in the aggressiveness of the tines fosters an even more intensive removal of dead grass. The R6S6 is therefore the perfect implement for scarifying pastures, and is therefore also suitable for working on growing crops. As with every model in the Scariflex range, the working intensity of the 6 rows of tools can be adjusted to meet your needs. **As an option, the VARIFLEX system can be used to hydraulically adjust the aggressiveness of all tines without having to leave the tractor (see p. 24).** 

	Working width (cm)	Type of folding system	Transport width (m) <sup>1</sup>
	480 Hydraulic		2.50
	600	Hydraulic	2.50
R6S6	720	Hydraulic	2.50
	840	Hydraulic	2.50
	960	Hydraulic	2.50
	1,080	Hydraulic	2.50
	1,200	Hydraulic	2.50

## **PURCHASE GUIDE**



#### **HOW TO CHOOSE THE MOST SUITABLE AERATOR?**

When choosing an aerator model, it is important to **clearly identify the needs**. The most appropriate way to do this is to determine what corrective actions need to be taken to restore the balance in the meadow.

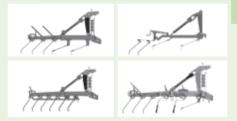
To facilitate the choice, **JOSKIN** has developed a guide that easily compares the conditions encountered on a farm with the specificities of the different products in the **JOSKIN** aerator range. **In just 10 clicks**, this tool allows you to find the most suitable aerator!

The specific action of each of our aerators results from the combination of 5 factors...



#### **USE OF APPROPRIATE TOOLS**

Each tool on the aerator has been chosen according to its field of application in order to meet the specific requirements of flexibility or aggressiveness.



#### THE RIGHT COMBINATION OF TOOL ROWS

Each row of tools uses the result of the previous one to carry out its work. The best combination and number of tools per row to achieve the desired result is therefore sought. The overall action of an aerator thus lies in the succession and accumulation of complementary actions of the different tool lines.



#### **OPTIMAL SPACE BETWEEN ALL ROWS**

A free space is determined between the different rows to ensure that the action in one row is completed before the next row starts working. The distance therefore varies according to the type of tools and the purpose for which they are used.



#### **IDEAL WEIGHT**

Each aerator has a weight adapted to its scope of action in order to guarantee a perfect stability in working conditions. Thanks to the use of special steel, the machine is lighter, while its strength is increased. Among other things, this optimised weight makes it more compatible with lower power tractors.



#### **ADAPTED ADJUSTMENT POSSIBILITIES**

In order to meet the specifications of each meadow and to increase the scope of action of every row of tools, **JOSKIN** aerators are fitted with different types of adjustments in order to adjust the working height to the requested action. As an option, the VARIFLEX system can be used to hydraulically adjust the aggressiveness of all tines without having to leave the tractor (see p. 24).





## AIR SEEDER WITH HYDRAULIC DRIVE

This seeder is equipped with a turbine that blows the seeds through pipes to the distributors. They then eject the seeds evenly after the splash plates, regardless of the side winds or driving style. This technique is an interesting solution for a quality seeding up to 12 m wide. The distribution grooves are available in different models and are ideally adapted to the types of seeds distributed (grass, green fertiliser, etc.). The tank has a capacity up to 300 I of seeds. The seeder usually includes a platform to refill the tank safely. The seeder can be equipped with a DPA system (flow proportional to the driving speed) on GPS signal.

## AIR SEEDER WITH ELECTRIC DRIVE

With this seeder, the material is placed behind the spreading paddles thanks to the action of a turbine which carries the seed away by air pulses. The elements are ejected evenly, regardless of the side winds or tractor driving. The electric drive of this technique is suitable for sowing up to 6 m wide with 8 outlets, or 7.2 m wide with 12 outlets. The distribution grooves are available in different models and are suitable for the different types of seeds distributed (grass, green fertiliser, etc.). Together with the tank, a platform is also fitted for a safe filling (up to 300 I of seeds).

#### **VARIFLEX SYSTEM**

On the Scariflex, the VARIFLEX system allows a continuous modulation of the tine aggressiveness by a hydraulic adjustment using several compensation cylinders and one or two central pressure cylinder(s) according to the model. A graduated marker on the hitch, visible from the driver's seat, is also provided to adjust the aggressiveness of all the tines, and therefore the desired tearing intensity, without having to leave the tractor. This option is particularly advantageous when using the Scariflex R6S6 on arable land to adjust the intensity of the tines according to the needs on the field.



#### **GAUGE WHEELS**

The gauge wheels on the JOSKIN aerators are primarily used as a height adjustment system for some implements (a key element of an aerator). They can be made of steel (advantage: no punctures) or reinforced rubber (advantage: flexibility). When working on very hilly lands, it is advisable to increase the number of gauge wheels to better follow the ground relief. The ground pressure of the spring tine rows can also be easily adjusted by means of cranks on the machine.

#### **SCRAPER BLADES**

Working at the harrow head, the scraper blades spread clods of earth and level out molehills and other ground unevennesses so that the following rows of tools can carry out their work efficiently. Adaptable to all Scariflex models, the blades are usually mounted on semi-flexible springs and can also face more serious damages, such as the ones caused by wild boars.

#### **PROPORTIONAL FLOW SYSTEM**

JOSKIN aerators with an air seeder with hydraulic drive can, as an option, be equipped with a proportional flow system on GPS signal. It regulates the seed quantity so that it remains constant, regardless of the speed of the tractor.



**Configure** your aerator in a few clicks!







## LIVESTOCK TRAILERS













## **GENERAL POINTS**



#### **DESIGN**

All **JOSKIN** livestock trailers are based on a tubular chassis (180 x 100 mm or 220 x 120 mm depending on the model) and 4 mm thick side walls forming a watertight monocoque body. The painted single-axle **Betimax R** has a body that is 5 or 6 m long (11.1 m² to 13.4 m²), 2.1 m high and 2.23 m wide. The structure can contain **7 to 10 animals** depending on the model. The **Betimax RDS** can be painted or galvanised. It has the same dimensions as the R version, except that the body length varies from 5 to 9 m (11.1 m² to 20 m²) with one or two axles. Depending on the model chosen, it can transport from **7 to 14 animals**.











#### **DOORS**

All **JOSKIN** livestock trailers are equipped with a rear door with two independent leaves. These two smooth leaves can be opened fully to offer the cattle a wider passage than the body, hence **more fluidity during unloading**. The user can also decide to open one of the doors and protect himself/herself behind the other, thus making himself/herself safe if the animals are excited when they come out. To make it easier for the farmer to get into the trailer, the Betimax has a side door with a handle on the right front for a safe opening from the outside.

#### **PRE-EQUIPMENT**

Thanks to the extensive standardisation work carried out by **JOSKIN**, several options can be added at a later date to complete your livestock trailer, without having to modify the body. For example, it is possible to add **various outer fences** to facilitate the loading of livestock. The choice of a **cover** can also be useful if the trailer is left outside all year round. For unloading livestock at different locations, **inner partitions** can also be added to the machine. Many other pieces of equipment can complete your livestock trailer for an optimal use (see p. 30 and 31)!



## **BETIMAX R**

#### SAFE TRANSPORT!





#### **LOADING RAMP**

The loading ramp of the Betimax R is designed to have a very slight loading and unloading angle, thus **reducing the risk of livestock falling**. This small angle and low access steps make it safe for both the animals and the operator. In the same vein, treated wood with thin slats prevents cattle from slipping and tripping. The whole structure is supported by a galvanised steel frame to ensure stability when loading the animals.

tensile steel

Axle	Models	Number of animals	Length (m)	Floor (m²)
	R5000S	7 to 8	5.00	11.10
1	R6000S	8 to 10	6.00	13.40

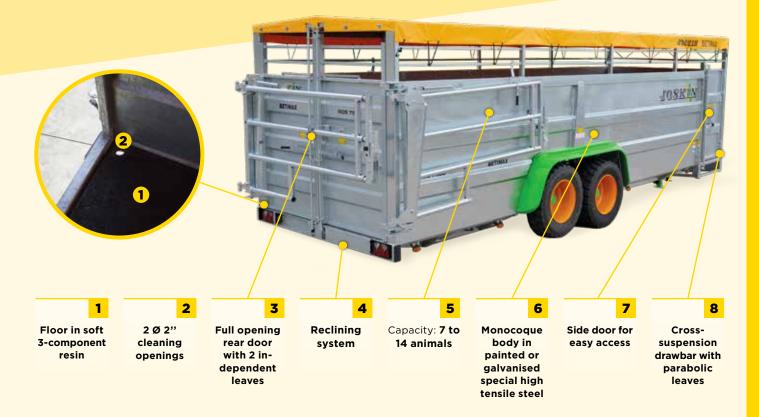
## **BETIMAX RDS**

SAFETY AND COMFORT FOR YOU AND YOUR CATTLE!



The **JOSKIN** Betimax RDS has been developed on the advice of experienced veterinarians and cattle breeders to achieve **the highest possible level of comfort and ease of use**. It is available in painted or galvanised versions, as the metallic-coloured material is part of the animals' usual environment. Both coatings have properties that protect the machine from corrosion so that it will last over time.







#### **RECLINING SYSTEM (RDS)**

The axles of the Betimax RDS are fitted on double-acting **hydraulic cylinders to lower the livestock trailer to the ground**. Each of these is equipped with a safety device to prevent the vehicle from collapsing. The reclining system therefore allows the removal of the loading ramp to achieve a height of only 17 cm for loading/unloading, compared to 63 cm for transport. This lowering allows the user to directly load or unload the cattle without manipulation and without **fear of stumbling** due to a too high body.

Axle(s)	Models	Number of animals	Length (m)	Floor (m²)
1	RDS P5000   G5000	7 to 8	5.00	11.10
	RDS P6000   G6000	8 to 10	6.00	13.40
2	RDS P7500/2   G7500/2	10 to 12	7.50	16.70
	RDS P9000/2   G9000/2	12 to 14	9.00	20.00



## INNER PARTITION (1 OR 2 PARTS)

The Betimax can be equipped with a hinged inner fence supplied with 3 sets of fasteners (optionally adjustable along the length of the livestock trailer) to adapt the size of the compartment. For small livestock, the fence can be fitted with a downward extension to prevent animals from passing under the partition. Usually, the utility of the 2-part fence is justified when loading and unloading livestock at different locations. The compartmentalisation allows to keept some of the cattle inside the trailer when the rear doors are open or to block the cattle if the trailer is not full.

## PRE-EQUIPMENT - FENCES

The Betimax can be equipped with all types of inner and outer fences depending on the user's needs. It is possible to add different side fences that are stored on the sides of the body and therefore do not affect the overall width of the livestock trailer. These can be hinged, rail-mounted or telescopic (fold back). Their suspension is adjustable and therefore allows the best possible balance between the weight of the fences and the anchoring to the ground. Depending on the model chosen, they can be up to 4.5 m long.

#### SAFETY FENCE IN FRONT OF THE REAR DOOR

For maximum safety, a fence in front of the rear door can be added. This option, which is compulsory in some countries, gives the possibility to open the doors in order to ventilate the animals if the trailer is parked too long. When opening the 2 rear doors, it also helps to hold back impatient cattle before letting it out. It also has a side release mechanism positioned on the outside of the body to open it safely.



Configure your Betimax in a few clicks!





The inner rail door is the ideal option to compartmentalise your Betimax in many ways, while keeping animals from seeing each other. It completely obstructs the field of vision of the cattle and allows the safe loading of two powerful animals. Its sliding rail system ensures that the right compartment size is always found, guaranteeing a cost-effective, but above all safe loading of the livestock.



As an option, the painted livestock trailers can be equipped with a 3-component resin coating (resin + rubber + hardener) identical to that found on galvanised livestock trailers. This layer, applied on the steel sheet, increases the comfort of the animals being transported and reduces the noise level, while maintaining an anti-slip surface.

## TOOL BOX + BRUSH HOLDER

TIMAX RDS6000

The PVC tool box (380 x 450 x 368 mm) offers enough space to transport a salt block, a bucket with food concentrates, ropes, straps, etc. The brush holder on the front side of the trailer allows you to take the most interesting tools with you.

#### **CHOICE OF OUTER FENCES WITH SUSPENSION**

Fence type	FOLD-BACK AND TELESCOPIC	PIVOTING	PIVOTING ON RAIL	
Available lengths (m) 2.00 → 3.60		3.50 and 4.50	3.50 and 4.50	
Maximal opening angle	270°	190°	150°	



## **AQUATRANS & AQUATRANS XL**

EASY AND EFFICIENT WATER BOWSERS

The Aquatrans and Aquatrans XL water bowsers are **ideal for quenching the thirst of livestock during grazing**. With a capacity of up to 7,000 litres of water, they can be used in every meadow, regardless of the size of the herd. Their galvanised steel design and full-length reinforced structure ensure them an exceptional strength and durability. The Aquatrans XL is a mobile water bowser especially designed for long journeys with larger volumes of water.





#### **STATIC AQUATRANS**

- 4 mm special high tensile steel (5 mm on XL)
- Galvanised inside and outside
- 3 Level indicator protected against animals
- Bracket on the whole tank length
- Ø 450 mm upper manhole with quick opening

#### **MOBILE AQUATRANS**

#### **SPECIFICATIONS**

1 TO 5 +

- 6 2" 1/2 ball valve
- Ø 40 mm welded flat eyelet
  (Ø 50 mm bolted eyelet on XL)
- Axle without brake

#### **AQUATRANS XL**

#### **SPECIFICATIONS**

1 TO 2 +

- Reinforced self-supporting structure for intensive use
- Dual-line air brakes (hydraulic brakes as an option, see p. 34)
- Built-in lighting

	Models	Theoretical capacity (I)	Tank length (mm)	Tank diameter (mm)	Height of the standard ball valve (mm)
	1100	1,100	1,560	1,000	-
	2100	2,100	2,790	1,000	-
Static	3600	3,600	3,100	1,250	-
	4300	4,300	3,930	1,250	-
	5100	5,100	4,350	1,250	-
	1100	1,100	1,560	1,000	810
	2100	2,100	2,790	1,000	770
	3600	3,600	3,100	1,250	770
Mobile	4300	4,300	3,930	1,250	930
	5100	5,100	4,350	1,250	930
	XL 6000S	6,000	4,120	1,400	930
	XL 7000S	7,000	4,450	1,500	930





#### **DESIGN**

The **JOSKIN** water bowsers can be left outside in the meadows without deteriorating thanks to the galvanised high tensile steel used in their construction. They also benefit from an exceptional sturdiness and a low empty weight thanks to their full-length tank cradle. The cradle serves as a chassis and as an anchoring point for the drawbar and the running gear (mobile version). The Aquatrans have a small diameter and a long structure, ensuring an especially low centre of gravity to avoid the risk of the tank tipping over on hills.



## STANDARD EQUIPMENT

Every **JOSKIN** Aquatrans is equipped as standard with a large-diameter upper manhole (Ø 450 mm) that ensures an easy filling from above, without splashing, thanks to a sufficiently fast air evacuation. In order to monitor their degree of filling, the Aquatrans are all equipped with a level indicator (transparent tube) protected by a deflector strip to prevent it from being damaged by livestock in the field, or even during transport. At the back of the water bowser, there is a 2"1/2 ball valve as standard for a quick and precise dosing.

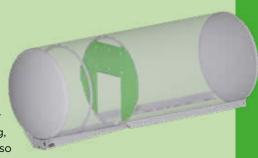


#### STATIC VERSION

The Aquatrans also exists in static version. Available in the same capacity range as the mobile water bowsers, they have no drawbar nor axle and are therefore a very affordable choice. Highly appreciated for their large storage capacity and outstanding stability, they can also be transported directly to the field by trailer or loading tool via the mooring ring on the back of the tank. Thanks to their 2" 1/2 drain valve, they can supply external implements (sprayer, etc.) with water very quickly for a maximum profitability.

#### **AQUATRANS XL**

Designed for longer distances, the Aquatrans XL is equipped with a baffle in the tank to **prevent the water from sloshing** around during transport, thus providing an **ultimate driving comfort**. It is also equipped with dual-line air brakes, large-diameter wheels for an easy towing and a good ground contact, and approved lights for safe driving, even at night. Hydraulic brakes and a built-in lighting system complete the equipment so that it can answer the call in all circumstances.







#### **BRAKES**

The Aquatrans can be equipped with hydraulic (A), air (B) or dual (C) brakes. With the hydraulic system, the braking power depends on the amount of pressure applied to the brake control pedal. The intensity of the air brakes is manually adjusted according to the load to be transported. It is possible to choose an automatic regulator that takes the loading degree into account and adapts the braking power. Finally, the dual brakes (single-line hydraulic brakes and dual-line air brakes) allow the Aquatrans to be hitched to tractors equipped with one of these two systems. This option is ideal for farms or agricultural co-operatives with a fleet of different tractors. The braking system that is not in use simply remains disconnected from the tractor.

#### **DRINKING TROUGH**

Two types of drinking troughs are available on the Aquatrans. First, there is the one for 1 animal (A). Equipped with a mechanism linked to a supply valve, it gives water when the animal pushes the stop with its mouth; as soon as it withdraws, the valve closes and the water remains in the tank for later. It is an ideal solution when the Aquatrans is parked in a meadow as a permanent drinking trough. Then there is the 70 I one (B). Fitted on the rear or side of the water bowser, it is the ideal solution for feeding several animals at the same time. The system has a float gauge and a mechanical valve to open the feed valve in order to transfer water from the tank to the drinking trough, or to close it if the drinking trough is not in use.

## PUMPS AND UNLOADING ACCESSORIES

It is possible to equip your "Aquatrans (XL)" water bowser with a volumetric (non-self-priming) centrifugal filling pump with a **transfer capacity of 1,000 l/min** which is driven by the tractor P.T.O. at 540 rpm. The assembly includes the pump, 6 m of Ø 60 mm hose and a Walterscheid cardan shaft. The tank can be emptied easily, quickly and without leakage by means of a 2" 1/2 valve or a 1/4-turn valve (2" 1/2) allowing a slight spread in width.



#### **MECHANICAL BUMPER**

In most European countries and beyond, a rear bumper is mandatory for the registration of a vehicle or a coupled implement. Its primary purpose is to protect the road user who would hit you from behind. At JOSKIN, most vehicles and implements can be equipped with a rear bumper with European certification. Depending on the model, it can be welded or bolted, and in some cases are manually retractable.

The standards to be met on the road depend on the legislation in your country. Contact us for more information.

#### **CHOICE OF TYRES**

JOSKIN offers you a wide range of tyres from the most renowned manufacturers in the sector. You can therefore equip your vehicle with the best possible choice according to the most demanding criteria: safety, comfort, traction ease, load index, compaction and budget.

#### **HINGED REAR LIGHTS**

The hinged rear lights make your machine more compact in the field: since they can be folded up manually, they are less vulnerable to damage from livestock using them as an occasional scraper.



**Configure** your water bowser in a few clicks!

# JOSKIN.

## LIVESTOCK AND **GRASS CARE**



Discover all our BROCHURES on joskin.com









