

# JOSKIN

EN

TRANSPORT RANGE



[www.joskin.com](http://www.joskin.com)

**TRANSPORT PAYLOAD,  
NOT STEEL!**

# THE JOSKIN QUALITY: 6 Keys to Success



Production site (Belgium)

## 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 m<sup>2</sup>, 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



See conditions on [www.joskin.com](http://www.joskin.com)





Technical Centre (Poland)



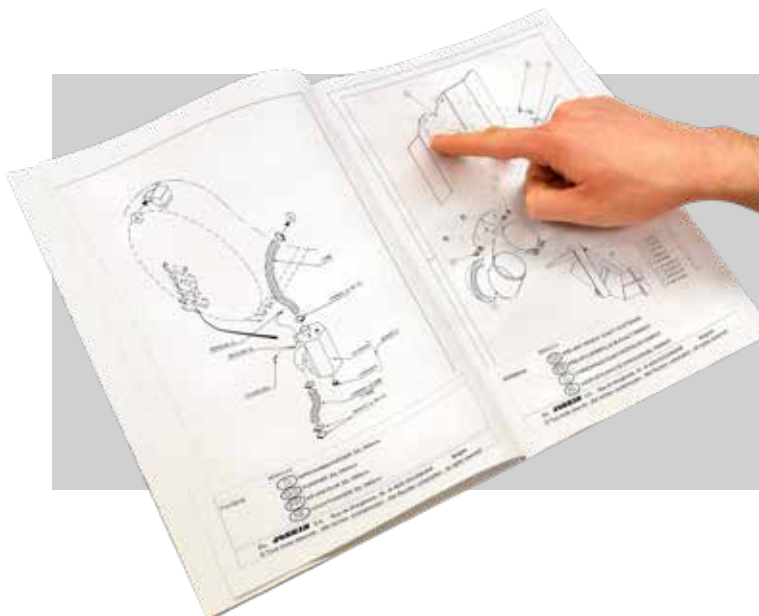
## RESEARCH and DEVELOPMENT

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!

## Transport Range



### ADVANCED TECHNIQUE

Thanks to the outstanding resistance of the high-tensile steel types selected by JOSKIN, the side reinforcements and the crosspieces under the body are now limited, or even useless, while keeping a high sturdiness! The high-tech manufacturing concept goes along with the use of production tools able to handle these steel sheets: 8 m laser cutting tables, 8.2 m press brakes with digital control, automatic folding angle correction device (making sure the steel plate is evenly folded on the whole length), 8 m welding robots, etc.



Lathe with digital control



Welding robot



Laser cutting table



Press brake with digital control

### CAREFUL MANUFACTURING

JOSKIN tipping trailers are manufactured in accordance with the company's production philosophy. Many automated tools ensure a never-ending precision: turning and topping machines, saws, machining centres, lasers, press brakes, welding robots...

In the same way, the assemblies are exclusively mounted and welded on jigs. All components, including the body, are continuously welded. Surface treatment is very carefully carried out: the item is first cleaned by shot-blasting (projection of 2,500 kg of steel balls/minute) and then covered by an Ester Epoxy primer and finally a 2-component finishing coating. As part of the process, the paint is then dried at 60 °C.





## WIN PACK

### "Win Pack" Advantages

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.

### ADAPTED SPECIAL AND HIGH-TENSILE STEEL

JOSKIN machines are completely made of high tensile steel. The constant search for the best steel quality/weight ratio has led to a significant decrease in the empty weight of the JOSKIN machines, while increasing their sturdiness. It is therefore possible to transport ever higher payloads.

The following table aims at comparing the general specifications of the steel types used by JOSKIN:

**Specifications of the steel types used by JOSKIN vs. traditional steel**

Type of steel	Tensile limit (kg/mm <sup>2</sup> )	Ultimate stress (kg/mm <sup>2</sup> )
S235 or St 37-2 (traditional steel)	23.5	40
S355 or St 52-3 (traditional steel)	35.5	48
S420 (JOSKIN high tensile steel)	42	55
S550 (JOSKIN high tensile steel)	55	61
S690 (JOSKIN high tensile steel)	69	75
HARDOX 450 (KTP HARDOX) 	120	140



# APPROPRIATE STRUCTURE



## STRONG AND LIGHT TIPPING TRAILERS

JOSKIN monocoque agricultural tipping trailers (Trans-CAP and Trans-SPACE) embody the new generation of tipping trailers completely made of high tensile steel.

Thanks to this fabrication concept, the empty weight is significantly reduced and therefore allows to transport still higher payloads. Your vehicle will then pay off more quickly.

The body edges on the JOSKIN tipping trailers are smoothed off by successive folds of the two side sheets in order to limit the body/contents contact surface as much as possible when unloading. As a result, friction strains are significantly restricted too.

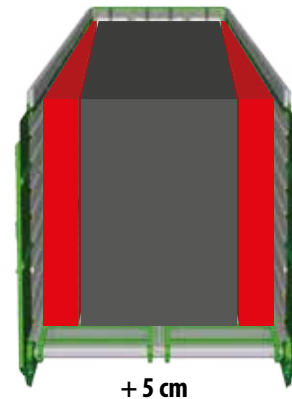


Press brake with digital control and 600 t pressure power

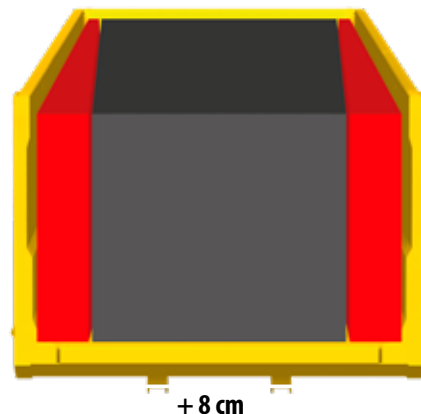


## TAPERED BODIES

Next to being light and strong, the Trans-SPACE, Trans-CAP, Silo-SPACE2 as well as the DRAKKAR also have the particular feature of having a tapered body. It is indeed wider at the back than at the front (+ 8 cm on monocoque bodies and + 5 cm on Silo-SPACE2 and DRAKKAR), which ensures a quicker and easier unloading.



Silo-SPACE2 / DRAKKAR



Trans-CAP / Trans-SPACE



## Range

		Technically permissible payload (t)																						
Product		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	22	24	26	28		
AGRICULTURAL TIPPING TRAILERS	TRANS-CAP								✓		✓		✓		✓		✓						p. 12	
	TRANS-SPACE																✓	✓	✓	✓	✓		p. 13	
TIPPING TRAILERS WITH DROP SIDES	TRANS-EX	✓	✓	✓		✓		✓															p. 18	
	TETRA-CAP						✓		✓		✓		✓		✓								p. 19	
	TETRA-SPACE																✓			✓			p. 20	
	DELTA-CAP						✓	✓		✓		✓		✓									p. 21	
TRAILERS WITH MOVING FLOOR	DRAKKAR																✓		✓	✓		✓	p. 24	
	SILO-SPACE 2																		✓		✓	✓	p. 27	
BALE TRAILERS OR LOW LOADERS	TRAILED WAGO							✓				✓		✓				✓					p. 30	
	SEMI-MOUNTED WAGO						✓	✓			✓												p. 31	
	WAGO-LOADER							✓			✓	✓		✓				✓					p. 32	
	WAGO CARRIER			✓																			p. 33	

## Range

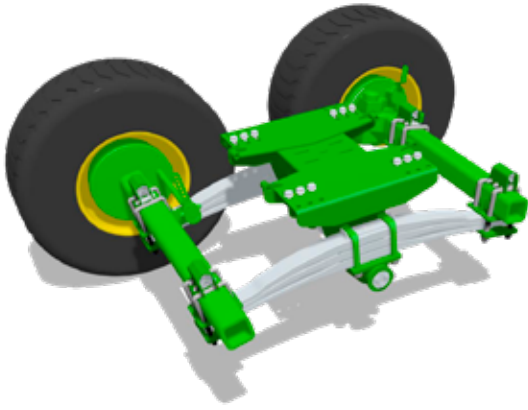
More details in our Heavy Duty catalogue

		Technically permissible payload (t)																						
Product		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	22	24	26	27		
HEAVY DUTY	TRANS-KTP							✓		✓				✓		✓			✓			✓		



# RUNNING GEARS

## A Tested Construction



JOSKIN running gears are designed to meet, in every situation and whatever the vehicle, the criteria of reliability, stability, comfort and safety both on roads and in the fields.

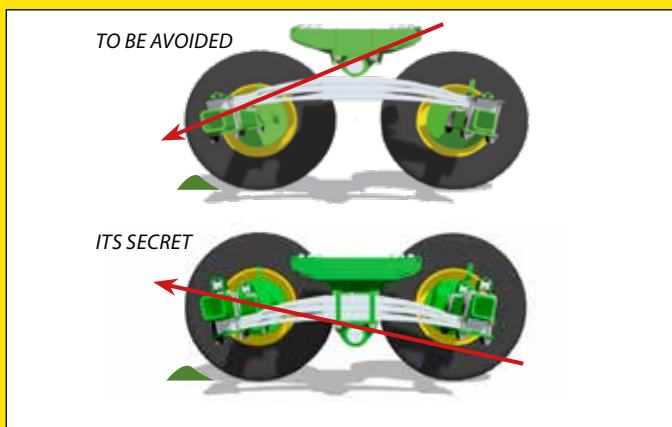
### SINGLE AXLE SUSPENSION

Single-axle vehicles are standard fitted with a fixed axle and can be fitted with a running gear suspension with parabolic leaves.

### JOSKIN ROLL-OVER BOGIE

Thanks to their design, double-axle vehicles with Roll-Over bogie offer an extra suspension system of the wheels and a larger contact surface with the ground. The bogie is made up of 2 axles linked by parabolic leaves and fixed to the chassis by means of a central point. It makes it possible to counterbalance the ground unevenness (up to +/- 240 mm).

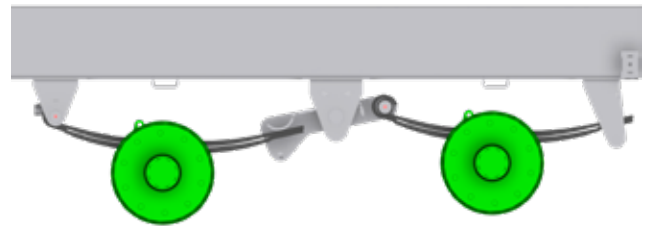
Thanks to the position of the cross-axis under the leaves and of the axles above the ends of the leaves, the drawline pushes the front axle over the obstacle. The traction power needed is therefore reduced. That is why this system is advised in case of intensive use on uneven ground.



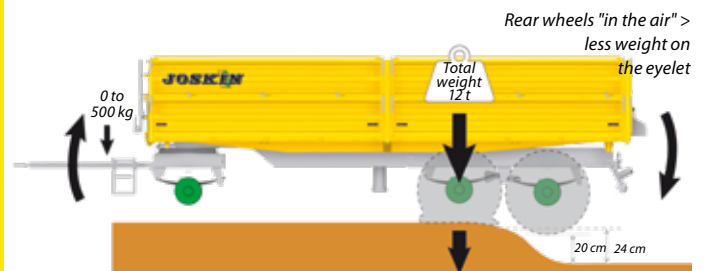
JOSKIN assembles its own bogies, thereby offering personally adapted ones to suit your vehicle. The distance between the leaves and the axle square are elements that can be adapted to each machine. Moreover, all JOSKIN bogies are bolted and adjustable.



### TANDEM/TRIDEM: DESCRIPTION OF A TRADITIONAL TANDEM WITH RODS



- Low cost
- Low clearance ( $\pm 8 - 8$  cm)
- Higher traction needed:
  - more hp needed
  - increased consumption
- Low obstacle clearance potential



- Weight of the whole vehicle supported by one single axle!
- Wheel and axle overloading
- Maximum leaf crushing
- Too high strains on leaf supports, axes, etc.

In order to lessen the impact of these elements, JOSKIN has developed its own hydraulic running gear: Hydro-Tandem + Hydro-Tridem.





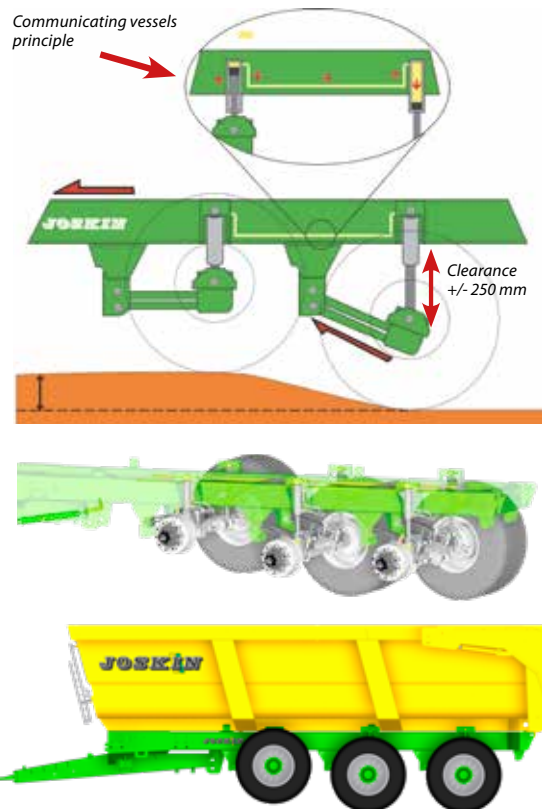
## JOSKIN HYDRAULIC RUNNING GEARS: HYDRO-TANDEM/ HYDRO-TRIDEM

Simplicity, clearance and stability: these are the three key specifications of the Hydro-Tandem/Tridem running gear. It combines the following advantages: the axles can easily be pulled over obstacles and they are semi-independent. That is why they allow a significant clearance (up to +/- 250 mm).

Given the design of the JOSKIN Hydro-Tandem/Hydro-Tridem, the ground pressure is perfectly distributed over the wheels. The ground is therefore less compressed, which allows to spare its structure. The stability of the vehicle will therefore also be significantly improved. Each axle is pulled by leaves attached to a fixing element that is located ahead of the assembly.

Four or six hydraulic rams are placed two by two or three by three on both sides of the chassis. Those of a same side are linked to each other in closed circuit and the oil flow takes place according to the communicating vessels principle. The independence of the circuits on each side of the vehicle, combined with the incompressible properties of oil, ensures a perfect side stability and prevents swaying. This explains why the vehicle is less likely to tilt when driving in bends and on hills.

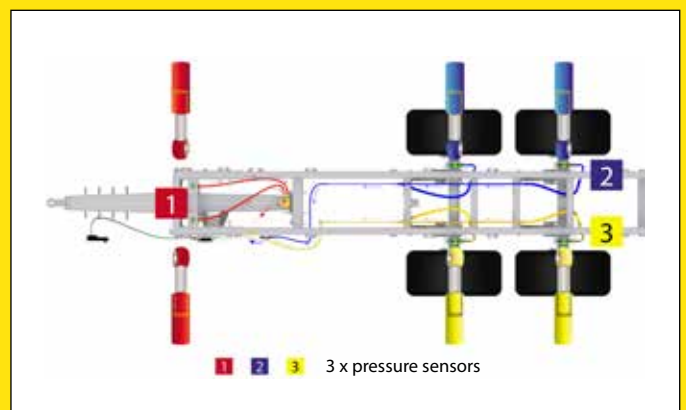
The first lifting axle is standard mounted on all Hydro-Tridem vehicles.



## 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.



# RUNNING GEARS

## Steering Axles

To improve the comfort and security, it is possible to choose between a free or self steering axle system.



### FREE STEERING AXLE (STEERING WHEN DRIVING FORWARD)

The free steering axle follows the direction determined by the tractor. The oscillation range is +/- 15° depending on the tyre size.

To drive on the road (> 15 km/h) or reverse, an hydraulic device ensures a powerful locking and a perfect alignment of the rear axle with the front axle, which thereby ensures the safety of the carriage. A shock-absorber stands for the stability of the free steering axle by preventing too significant vibrations.



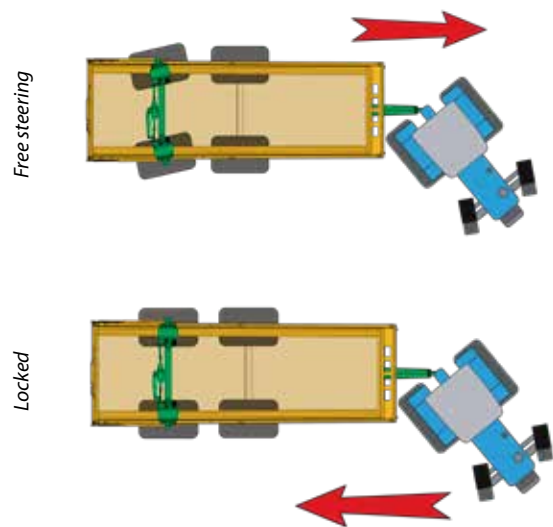
*Free steering axle*

### DOUBLE FREE STEERING AXLE (STEERING WHEN DRIVING FORWARD)

The self-tracking free steering axle proposed by JOSKIN offers the possibility to keep the advantages of the classical free steering axle, both when driving forward and reversing!

A sensor on the axle detects the driving direction of the vehicle and allows the system to automatically lock one of the two cylinders to make sure the axle works properly. With this configuration, the user does not have to intervene; the automatic free steering axle works autonomously, both when driving forward and reversing.

### Free steering axle (50% steering)



*Locked*

*Free steering*



*Double free steering axle*



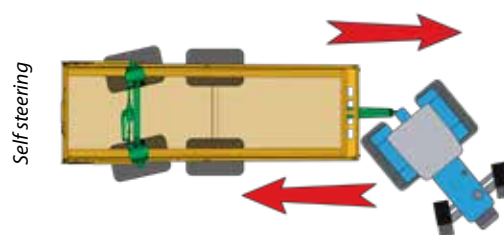
## SELF STEERING AXLE(S) (STEERING WHEN DRIVING FORWARD AND REVERSING)

The self steering axle is an important safety component as it keeps your vehicle in the tractor driving line. JOSKIN triple-axle vehicles are standard fitted with a double self steering system (first and last axles) operating in both directions (forward and reverse).

The axle ram is operated by a sensor cylinder linked to the tractor by a hitching rod with quick coupling. This one is anchored to the drawbar by means of a knee-joint and controls the hydraulic circuit operating the steering cylinder. The system is balanced by the compensated cylinders that apply the same force in both directions. The circuit is fitted with a one-piece set-up unit including a pressure gauge, two nitrogen accumulators, an aligning valve and a calibrating circuit.

Thanks to its device that automatically corrects the position of the vehicle to take it out of ruts, the self steering system turns out to be the safest and easiest solution.

Self steering axle (100% steering)



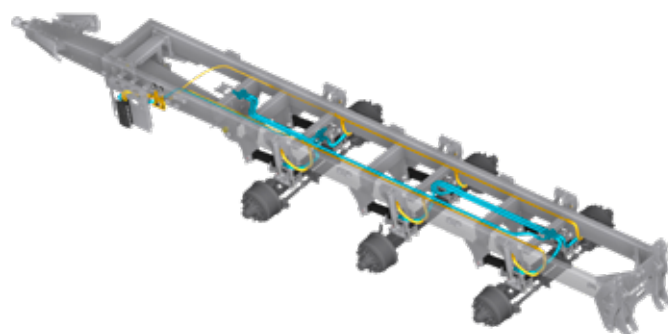
Self steering axle

## ELECTRONIC SELF STEERING SYSTEMS (STEERING WHEN REVERSING AND DRIVING FORWARD)

The electronic steering systems also use hydraulic rams on the axles and keep the same hitching point to the tractor as the traditional models, but they are controlled by a microcomputer, via an angular sensor on the drawbar. Unlike the others, they adapt the steering angle in proportion to the speed. The trailer is therefore stable during road transportation and remains particularly easy to handle during manoeuvres.

To sum up, its advantages are:

- manoeuvrability and stability (in case of speed increase, lowering of the degree of the steering angle and locking at 50 km/h);
- no effort between the tractor and the vehicle, especially when reversing;
- possibility to manoeuvre the trailer so as to get out of a complicated situation thanks to a control box in the cabin (option).



# TRANS-CAP

## Strong and Reliable Tipping Trailer



### HITCHING

The Trans-CAP is fitted with an open drawbar that, given its structure, ensures a very good weight/resistance ratio. Its wide fixing points (same width as the chassis) further improve the manoeuvrability.



### HIGH-TIPPING TRAILER

The high tipping option will allow you to reach the highest tipping points.

### SIDE TIPPING

The bodies of the Trans-CAP 6000/20BC150 and 6500/22BC150 can optionally be fitted with a side tipping system allowing to increase the multi-functionality and making it easier to unload in low buildings.



### GENERAL POINTS

The Trans-CAP are made of a floor sheet and two side sheets in high tensile steel of 4 mm thick.

There is only one side reinforcement on long models. As a consequence, the empty weight is significantly reduced.

### SPECIFICATIONS

	Width: 900 mm
	Steel sections:
<b>Chassis</b>	- Trans-CAP 4500 and 5000: 250 x 100 x 6 mm - Trans-CAP 5500: 300 x 100 x 6 mm - Trans-CAP 6000 and 6500: 300 x 100 x 8 mm
<b>Body</b>	Floor and side walls in 4 mm HLE 420 steel
<b>Running gear</b>	- 4500C and 5000C: single axle - 5000BC to 6500BC: Roll-Over bogie
<b>Max. wheel dimensions</b>	Ø 1,518 mm / width 788 mm

### MODELS<sup>(1)</sup>

	DIN volume (m <sup>3</sup> )	Technically permissible payload	Inner body dimensions (m)					Axle(s): □ (mm) - track (mm) - studs	Brakes (mm)	Ram (l)
			Length under	Length above	Width front	Width back	Height			
4500/10C100 <sup>(2)</sup>	10.20	10 t	4.49	4.72	2.18	2.26	1.00	ADR 90x1900-8S	350 x 90	15
5000/11C100 <sup>(2)</sup>	11.20	12 t	4.97	5.19	2.18	2.26	1.00	ADR 100x2000-10S	400 x 80	18
5000/14C125	14.10	12 t	4.97	5.25	2.18	2.26	1.25	ADR 130x2000-10S	406 x 120	18
5000/11BC100	11.20	12 t	4.97	5.19	2.18	2.26	1.00	ADR 2x90x1900-8S	350 x 60	18
5000/14BC125	14.10	12 t	4.97	5.25	2.18	2.26	1.25	ADR 2x90x1900-8S	350 x 60	18
5500/12BC100	12.30	14 t	5.44	5.67	2.18	2.26	1.00	ADR 2x100x2000-10S	400 x 80	23
5500/15BC125	15.50	14 t	5.44	5.72	2.18	2.26	1.25	ADR 2x100x2000-10S	400 x 80	23
5500/18BC150	18.50	14 t	5.44	5.72	2.18	2.26	1.50	ADR 2x100x2000-10S	400 x 80	23
6000/13BC100	13.30	16 t	5.92	6.14	2.18	2.26	1.00	ADR 2x100x2000-10S	400 x 80	30
6000/17BC125	16.80	16 t	5.92	6.20	2.18	2.26	1.25	ADR 2x100x2000-10S	400 x 80	30
6000/20BC150	20.10	16 t	5.92	6.20	2.18	2.26	1.25	ADR 2x100x2000-10S	400 x 80	30
6500/18BC125	18.10	18 t	6.39	6.67	2.18	2.26	1.25	ADR 2x130x2000-10S	406 x 120	33
6500/22BC150	21.90	18 t	6.39	6.73	2.18	2.26	1.50	ADR 2x130x2000-10S	406 x 120	33

<sup>(1)</sup> The first 4 figures refer to the average length, the next 2 ones to the DIN volume without extensions and the last 3 ones to the height of the monocoque body.

<sup>(2)</sup> For the P.V.A. in Belgium: all options of wheels are not allowed. The max. total load depends on the legislation in force in each country.

# TRANS-SPACE

## Heavy-Duty Running Gear



### GENERAL POINTS

Thanks to its design and manufacturing quality, the empty weight of the Trans-SPACE agricultural tipping trailers is significantly reduced and therefore allows to transport still higher payloads.

Combined to a JOSKIN running gear, they are ideal for intensive transport.

### SPECIFICATIONS

<b>Chassis</b>	Width: 900 mm
	Steel sections: <ul style="list-style-type: none"> <li>- Model 6500: 300 x 100 x 8 mm</li> <li>- Models from 7000 to 9200: 300 x 100 x 10 mm</li> </ul>
<b>Body</b>	- Floor: 4 mm HARDOX 400
	- Sides: 4 mm HLE 550
<b>Running gear</b>	- 6500 BC and 7000 BC: Roll-Over bogie
	- 7500 BC: Hydro-Tandem
	- 7500 TRC and 9200 TRC: Hydro-Tridem, hydraulic axle suspension with 1,550 mm wheel base (1,820 mm on 9200)
<b>Max. wheel dimensions</b>	Ø 1,518 mm / width 788 mm

### DESIGN

The Trans-SPACE are made of a floor sheet in HARDOX and two side sheets (four from the Trans-SPACE 8000) in high tensile steel. The underside of the Trans-SPACE is meant for the most constraining works: two opposing stringers support the body with unmatched stability. The first rather big one links both side reinforcements to each other while the other is placed at the level of the anchoring point of the hydraulic tipping ram.



### HITCHING

The "girder" drawbar was tested to withstand the highest loads and intensive works.



### MODELS<sup>(1)</sup>

	DIN volume (m <sup>3</sup> )	Technically permissible payload	Length under	Inner body dimensions (m) Length above	Width front	Width back	Height	Axle(s): □ (mm) - track (mm) - studs	Brakes (mm)	Ram (l)
6500/18BC125	18.1	18 t	6.39	6.67	2.18	2.26	1.25	ADR 2x130x2100-10S	406 x 120	44
6500/22BC150	21.9	18 t	6.39	6.73	2.18	2.26	1.50	ADR 2x130x2100-10S	406 x 120	44
7000/19BC125	19.4	20 t	6.87	7.15	2.18	2.26	1.25	ADR 2x130x2100-10S	406 x 120	62
7000/23BC150	23.5	20 t	6.87	7.20	2.18	2.26	1.50	ADR 2x130x2100-10S	406 x 120	62
7500/21BC125	20.7	22 t	7.34	7.62	2.18	2.26	1.25	ADR 2x150x2100-10S	420 x 180	62
7500/25BC150	25.1	22 t	7.34	7.68	2.18	2.26	1.50	ADR 2x150x2100-10S	420 x 180	62
7500/21TRC125	20.7	24 t	7.34	7.62	2.18	2.26	1.25	ADR 3x130x2100-10S	406 x 120	70
7500/25TRC150	25.1	24 t	7.34	7.68	2.18	2.26	1.50	ADR 3x130x2100-10S	406 x 120	70
8000/22TRC125	22.7	26 t	8.08	8.36	2.18	2.26	1.25	ADR 3x150x2100-10S	420 x 180	70
8000/27TRC150	27.4	26 t	8.08	8.41	2.18	2.26	1.50	ADR 3x150x2100-10S	420 x 180	70
9200/30TRC150	30.8	26 t	9.08	9.41	2.18	2.26	1.25 - 1.50	ADR 3x150x2100-10S	420 x 180	70

<sup>(1)</sup> The first 4 figures refer to the average length, the next 2 ones to the DIN volume without extensions and the last 3 ones to the height of the monocoque body. The max. total load depends on the legislation in force in each country.

# MONOCOQUE AGRICULTURAL TIPPING TRAILERS

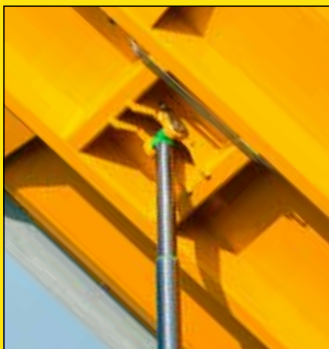
## General Points



### SAFE TIPPING

The **position of the tipping ram on the front part** of the chassis allows to reduce the stresses to the body and makes the vehicle as stable as possible.

Standard mounted on all models of the JOSKIN tipping trailer range, the **safety valve**, which is directly placed on the tipping ram, prevents the body from unexpectedly falling down (e.g. when hydraulic hoses break). The **double oscillating frame** on which the ram is mounted allows to compensate the torsions due to the tipping strains and effectively protects the trailer from distortions.



Anchoring point of the ram on the body



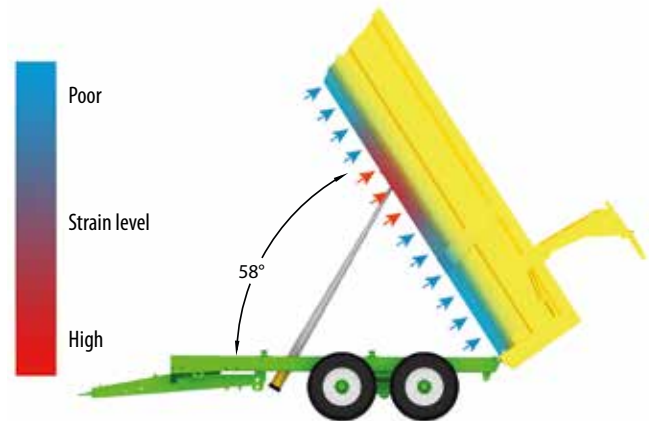
Double oscillating frame in which the ram is placed

### TIPPING

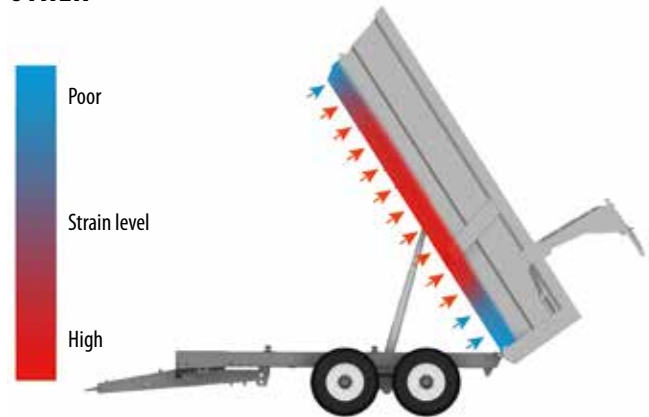
The tipping system is standard oil fed. There is an option that makes it possible to replace it by a hydraulic pump, which may be fitted with a hydraulic or electric lowering control.



### JOSKIN PRINCIPLE



### OTHER



### TIPPING STABILIZER

The tipping stabilizer with weight transfer system (or its pre-equipment) is standard mounted on Hydro-Tandem and Hydro-Tridem.

On a Roll-Over bogie, two rams are connected to the chassis. When tipping, the circuit will exert a pressure on the rear axle of the bogie in order to lock it in its position and in this way stabilize the tipping trailer.



## BRAKING SYSTEM

In order to adapt your machine in the best possible way to the braking system of your tractors, it is possible to choose between **hydraulic, air or dual (hydraulic/air) braking system**.

The air braking system is part of the standard equipment on triple-axle models and also allows you to choose a proportional system regulating the braking power in proportion to the load.

## BOLTED EYELET

### HITCHING

Although each vehicle is standard equipped with an appropriate eyelet, JOSKIN proposes different alternatives so as to adapt to your needs, whatever the case: fixed (Ø 40 mm or 50 mm), swivel, knee-joint or swivel knee-joint eyelet.



## PARKING STANDS

According to the model, the JOSKIN machines of the "Transport" range are fitted either with an adjustable manual stand, a hydraulic stand or a retractable skid.



Retractable skid



Hydraulic stand

## DOOR: TIGHT AND SAFE

Monocoque tipping trailers are fitted with very resistant synthetic **rubber seals** all around the body. The door is kept closed by a **side locking device** (except on vehicles with drop sides).

This system allows a perfect tightness of the JOSKIN tipping trailers, even with small grains.

The doors of the JOSKIN tipping trailers are fitted with two safety devices:

- a **pressure relief valve** that regulates the oil pressure if the door cannot be completely closed, e.g. due to an obstacle, in order to prevent system damage;
- a **double steered valve** on each door ram holds the door in position if hydraulic hoses break or if the tractor stops.



## SIGHT WINDOWS

The front wall of the monocoque tipping trailers is standard fitted with four perspex sight windows.

As an option, it is also possible to choose one single sight window. These two models can also be protected by galvanized rods.



Standard sight windows



Optional sight window

# MONOCOQUE AGRICULTURAL TIPPING TRAILERS

## Common options



### EXTENSIONS

Each body can be fitted with an aluminium extension(s) (250 or 500 mm high) and/or grated silage extensions. The different models can also be combined. For some tipping trailers hydraulic extensions are proposed to reduce the loading height (e.g. when harvesting potatoes and beets) and so significantly reducing the fall of material.



*Grated "silage" type extension*



*Watertight alu extension*



*Interlocking system of the alu extensions*



*Combination of alu extensions and a hydraulic steel extension (50 cm)*

### LANDING SHEET FOR POTATOES

The Trans-CAP and Trans-SPACE agricultural tipping trailers can also be fitted with a landing sheet for potatoes of 1,800 x 2,500 mm.



### COVER FOR POTATOES

This cover with manual winding is special since it does not rest on arches and is higher on one side.



### TRANSFER AUGER

A transfer system can be mounted as an option on the rear door of the Trans-SPACE tipping trailers. Two augers, one that is horizontally placed over the whole width of the body and the other vertically, drive the matter at 450 t/h. A second door is provided to use the trailer without the auger.







### COVER WITH MANUAL WINDING

This cover winds around a long tube from the front to the back of the body, resting on a structure made up of three bolted arches and two supports, at the front and at the back. Three ratchet straps are fixed on the side of the tipping trailer, on the two supports and on the central arch, which allow to fold and unfold the cover uniformly.

This system provides a good sealing thanks to the support on the rear door, thereby preventing water from entering the body.



### GRAIN CHUTES



2nd grain chute (as an option)

### COVER WITH HYDRAULIC FOLDING SYSTEM

The second available cover on the Trans-CAP and Trans-SPACE (from models 6500) is the Cabriolé one with hydraulic folding system. It is completely tight and very easy to handle. The control box indeed allows to open/close it from the tractor cabin. In order to be opened, it slides on two rails, one on each side of the body, to be put at the front of the body.

Note that this model does not allow to tip if the body is covered.



### COVER WITH HYDRAULIC TELECOVER

The sturdy watertight TELECOVER cover is ideal to transport potatoes or grains.

It is available as an option on all models of tipping trailers and on the DRAKKAR multi purpose trailer.

It is fastened on a sub-frame bolted to the body and it is hydraulically controlled. The structure allows to open the door even when the cover is closed.



TELECOVER cover compatible with the hydraulic extensions

# TIPPING TRAILERS

## Multi-functional, Strong and Compact tipping trailer



### TESTED STRUCTURE

The trapezium-shaped chassis of the Trans-EX tipping trailers combines simplicity and robustness: its sturdiness lies in its cold-formed beams made of special high tensile steel. On the Trans-EX tipping trailers, the hitching system is a strong bolted monoblock drawbar with height adjustment and which is reversible for low or high hitching. The parking stand is a wheel stand and its height can be adjusted by means of a handle. The wheel is folded upwards when driving for an optimal safety.

The rear electric lighting is integrated into a galvanized box covering the width of the vehicle and acting as a bumper. The chassis, narrower than the body, can be fitted as an option with a tool box (1,500 x 400 x 270 mm)



The double-axle models, available from 5 T are equipped with a Roll-Over bogie, allowing to compensate the ground unevenness, increasing braking power and the driving comfort. For further information, see page 8.

### GENERAL POINTS

The Trans-EX tipping trailer with drop sides is a compact vehicle that can easily be modified. Once the drop sides are removed, the user indeed has a platform on which he can easily load different types of products. He can also mount 200 mm or 400 mm extensions on the trailer to increase the loading capacity.



### SPECIFICATIONS

	Width: 900 mm
	Steel sections:
<b>Chassis</b>	- 3 T: 195 x 70 x 4 mm
	- 4 T: 195 x 70 x 5 mm
	- 5 T: 195 x 70 x 6 mm
	- 7/9 T: 250 x 78 x 8 mm
<b>Body</b>	Body floor: 4 mm thick
	Side panels in closed profiles
<b>Running gear</b>	• On single axle: Adjustable bracket(s)
	• On double axle: Roll-Over bogie with bolted table
<b>Max. wheel dimensions</b>	Ø 1,080 mm / width 500 mm

### MODELS

	Technically permissible payload	Empty weight	Dimensions (mm) <sup>(1)</sup>			Floor height <sup>(2)</sup>	Axle(s): □ (mm) - track (mm) - studs	Wheels	Brakes (mm)
			Length	Width	Height				
3T	3 t	0,9 t	2.860	1.690	400	922 mm	ADR 60x1500-6S	10.0/75-15.3 14 PR	250 x 60
4T	4 t	1 t	3.380	1.690	400	1.020 mm	ADR 60x1500-6S	11.5/80-15.3 10 PR	250 x 60
5T	5 t	1,14 t	3.900	1.690	400	1.097 mm	ADR 70x1500-6S	15.0/55-17 14 PR	300 x 60
7T <sup>(3)</sup>	7 t	1,75 t	4.160	1.990	400	1.195 mm	ADR 90x1600-8S	455/40R22.5	350 x 60
9T	9 t	2 t	4.500	1.990	500	1.195 mm	ADR 100X1600-8S	455/40R22.5	400 x 80
D5T	5 t	1,68 t	3.900	1.690	400	1.097 mm	ADR 2x70x1500-6S	15.0/55-17 14 PR	300 x 60
D7T	7 t	1,9 t	4.160	1.990	400	1.195 mm	ADR 2x70x1500-6S	15.0/55-17 14 PR	300 x 60
D9T	9 t	2,6 t	4.500	1.990	500	1.195 mm	ADR 2x70x1500-6S	15.0/55-17 14 PR	300 x 60

<sup>(1)</sup> Inner body dimensions - <sup>(2)</sup> Height with standard wheels (adjustable axle supports) - <sup>(3)</sup> In France, payload of 6 t.

# TETRA-CAP

## Rolling and Manoeuvrable Tipping Trailer par Excellence



### GENERAL POINTS

The chassis of the Tetra-CAP tipping trailers combines simplicity, sturdiness and durability, thanks to, among other things, the galvanization and its cold-formed structure made of special high tensile steel. The front axle on turntable provides all the agility of a truck.

### SPECIFICATIONS

<b>Chassis</b>	Width: 1100 mm
	Steel sections:
	- 6 T: 200 x 100 x 5 mm
	- 8 T: 250 x 100 x 6 mm
	- 10 T: 250 x 100 x 6 mm
- 12/14 T: 300 x 100 x 6 mm	
- 14 T (5 m): 250 x 100 x 8 mm	
<b>Body</b>	Body floor: 4 mm thick
	Side panels in closed profiles
<b>Running gear</b>	Parabolic leaves
<b>Max. wheel dimensions</b>	Ø 1,230 mm / width 550 mm

### USE COMFORT

The chassis of the Tetra-CAP is mounted on a running gear with parabolic leaves ensuring flexibility and driving comfort both in fields and on the road. If used under extreme conditions, bump stops made of rubber can also limit the leaf crushing while keeping a flexible and soft damping of the machine.

The lowered chassis lowers the center of gravity and makes the loading operation easier. Its narrowness allows the fitting of very wide wheels to maximize the stability.



### MODELS<sup>(1)</sup>

	Body volume (m <sup>3</sup> )	Technically permissible payload	Body dimensions (m)			Floor height (m)	Axle: □ (mm) - track (mm) - studs	Wheels	Brakes (mm)	Ram (l)
			Length	Width	Height					
4525/11DR100	10.89	8 t	4.50	2.42	0.50 + 0.50	1.10	ADR 2x80x1750-65	14.0/65-16 14 PR	300 x 60	9
5025/12DR100	12.10	10 t	5.00	2.42	0.50 + 0.50	1.33	ADR 2x90x1850-85	385/65R22.5	350 x 60	14
5025/15DR120	14.52	10 t	5.00	2.42	0.60 + 0.60	1.33	ADR 2x90x1850-85	385/65R22.5	350 x 60	14
5525/13DR100	13.31	12 t	5.50	2.42	0.50 + 0.50	1.33	ADR 2x90x1900-85	385/65R22.5	400 x 80	18
5525/16DR120	15.97	12 t	5.50	2.42	0.60 + 0.60	1.33	ADR 2x90x1900-85	385/65R22.5	400 x 80	18
6025/15DR100	14.52	14 t	6.00	2.42	0.50 + 0.50	1.36	ADR 2x130x1950-10S	385/65R22.5	406 x 120	23
6025/17DR120	17.42	14 t	6.00	2.42	0.60 + 0.60	1.36	ADR 2x130x1950-10S	385/65R22.5	406 x 120	23
5025/17DR140	16.94	14 t	5.00	2.42	0.80 + 0.60	1.33	ADR 2x130x1950-10S	385/65R22.5	406 x 120	17
5025/19DR160	19.36	14 t	5.00	2.42	0.80 + 0.80	1.33	ADR 2x130x1950-10S	385/65R22.5	406 x 120	17
6025/20DR140	20.30	16 t	6.00	2.42	0.80 + 0.60	1.36	ADR 2x130x1950-10S	385/65R22.5	406 x 120	23
6025/23DR160	23.20	16 t	6.00	2.42	0.80 + 0.80	1.36	ADR 2x130x1950-10S	385/65R22.5	406 x 120	23

<sup>(1)</sup> The first 4 figures refer to the average length, the next 2 ones to the DIN volume and the last 3 ones to the height of the body

# TETRA-SPACE

## Ideal for Transport



### COMFORTABLE RUNNING GEAR

The Tetra-SPACE is standard fitted with a double axle at the back and a suspension with parabolic leaves ensuring smooth driving on the road. The front axle is mounted on a turntable. The trailer is therefore very easy to handle and benefits from an optimal comfort, even on long-distance and high-speed road journeys.

### STRONG GALVANIZED CHASSIS

The chassis of the Tetra-SPACE tipping trailers combines simplicity and high resistance to repeated strains, as well as long lifespan. Its rear girders are made up of large closed steel sections (300 x 100 x 10 mm) ensuring a high sturdiness. It is also fully galvanized, which ensures resistance over time. Its narrow design makes it possible to add many types of tyres: a wide range of widths, heights and profiles is indeed available.



### GENERAL POINTS

Tetra-SPACE tipping trailers were especially designed to transport heavy loads on long distances. In order to face high strains, the chassis includes many cross-reinforcements. The lowered body provides a low centre of gravity, giving more stability to the trailer.



### SPECIFICATIONS

<b>Chassis</b>	Width: 1,100 mm Steel sections: 300 x 100 x 8 mm
<b>Body</b>	Body floor in special steel: 4 mm thick Side panels in closed profiles
<b>Running gear</b>	Parabolic leaves
<b>Max. wheel dimensions</b>	Ø 1,140 mm / width 550 mm

### MODELS <sup>(1)</sup>

	Body volume (m <sup>3</sup> )	Technically permissible payload	Body dimensions (m)			Floor height (m)	Axle: □ (mm) - track (mm) - studs	Wheels	Brakes (mm)
			Length	Width	Height				
7525/22DR120	21	18 t	7,5	2,42	0,6 + 0,6	1,36	ADR 3x130x1950-10S	385/65R26.5	406 x 120
7525/25DR140	25	18 t	7,5	2,42	0,8 + 0,6	1,36	ADR 3x130x1950-10S	385/65R26.5	406 x 120
7525/28TR160	28	24 t	7,5	2,42	0,8 + 0,8	1,36	ADR 3x150x1950-10S	385/65R26.5	420 x 180
7525/31TR180	31	24 t	7,5	2,42	3 x 0,6	1,36	ADR 3x150x1950-10S	385/65R26.5	420 x 180

<sup>(1)</sup> The first 4 figures refer to the average length, the next 2 ones to the DIN volume and the last 3 ones to the height of the body.

# DELTA-CAP

## Choose both Multi-functionality and Capacity



### GENERAL POINTS

The Delta-CAP range combines all the advantages of the Tetra-CAP with the driving comfort and stability of monocoque trailers. The design of the chassis and drawbar is based on the Trans-CAP range, with the difference that they are entirely galvanized.

The running gear, i.e. the JOSKIN Roll-Over® bogie, is bolted and movable.

Different combinations of drop sides (500, 600, 800 mm) are available.

### SPECIFICATIONS

	Width: 900 mm
	Steel sections:
<b>Chassis</b>	- 7/8 T: 250 x 100 x 6 mm
	- 10/12 T: 300 x 100 x 6 mm
	- 14 T: 300 x 100 x 8 mm
<b>Body</b>	Steel body floor: 4 mm thick
	Side panels in closed profiles 500, 600 or 800 mm height each.
<b>Running gear</b>	Parabolic leaves
<b>Max. wheel dimensions</b>	Ø 1,230 mm / width 550 mm

### UNIQUE MULTI-FUNCTIONAL BODY

The body of the Delta-CAP, identical to that of the Tetra-CAP, has many advantages: the **three-way tipping system**, but also the multiple possible combinations of side panels that make it possible to reach volumes from 4 to 26 m<sup>3</sup> for the biggest model. The tipping trailer can also be fitted with extensions for silage and with an unloading auger driven by hydraulic motor.

### DIFFERENT HITCHING GEARS AVAILABLE

Thanks to its three-way tipping system, the Delta-CAP can be used alone or with a Tetra-CAP (with the same or a smaller capacity) hitched at the back. In this way, the transported volumes can significantly be increased.

Thanks to the weight transfer onto the eyelet of the Delta-CAP improving the grip of the tractor and to the carrier system connected to the tractor, the combined machine is very easy to pull on all types of ground.

Two 5025 models of Delta-CAP or en Tetra-CAP hitched together to a standard tractor, do not exceed 18.75 m length (regulations in several European countries), offer volumes up to 38 m<sup>3</sup>.



### MODELS<sup>(1)</sup>

	Body volume (m <sup>3</sup> )	Technically permissible payload	Inner body dimensions (m)			Height (m)	Axle: □ (mm) - track (mm) - studs	Brakes (mm)	Ram (l)
			Length	Width	Height				
4020/8SR100	8,20	7 t	4	2,05	0,5 + 0,5	1,38	ADR 90x1600-8S	390 x 90	9
4525/11SR100	10,89	8 t	4,5	2,42	0,5 + 0,5	1,38	ADR 100x2000-10S	400 x 80	9
5025/12SR100	12,10	10 t	5	2,42	0,5 + 0,5	1,42	ADR 130x2000-10S	406 x 120	14
5025/15SR120	14,52	10 t	5	2,42	0,6 + 0,6	1,42	ADR 130x2000-10S	406 x 120	14
5025/12DR100	12,10	10 t	5	2,42	0,5 + 0,5	1,38	ADR 2x90x1900-8S	350 x 60	14
5025/15DR120	14,52	10 t	5	2,42	0,6 + 0,6	1,38	ADR 2x90x1900-8S	350 x 60	14
5525/13DR100	13,31	12 t	5,5	2,42	0,5 + 0,5	1,43	ADR 2x90x1900-8S	350 x 60	18
5525/16DR120	15,97	12 t	5,5	2,42	0,6 + 0,6	1,43	ADR 2x90x1900-8S	350 x 60	18
6025/15DR100	14,52	14 t	6	2,42	0,5 + 0,5	1,43	ADR 2x100x2000-10S	400 x 80	23
6025/17DR120	17,42	14 t	6	2,42	0,6 + 0,6	1,43	ADR 2x100x2000-10S	400 x 80	23
5025/17DR140	16,94	14 t	5	2,42	0,8 + 0,6	1,38	ADR 2x100x2000-10S	400 x 80	17
5025/19DR160	19,36	14 t	5	2,42	0,8 + 0,6	1,38	ADR 2x100x2000-10S	400 x 80	17

<sup>(1)</sup> The first 4 figures refer to the average length, the next 2 ones to the DIN volume and the last 3 ones to the height of the body

# TIPPING TRAILER WITH DROP SIDES

## General Points and Options



### STRONG AND TIGHT BODIES

Tipping trailers with drop sides are standard manufactured in the same special high tensile steel as the one used to manufacture road transport vehicles. It is the best guarantee of solidity for a relatively low weight. The bottom plate is 4 mm thick. The drop sides have a structure with closed profiled tubes, which allows to increase the resistance to pressure of the walls and give a fluid and modern design to the machine.

In order to ensure a longer life span, the chassis of the JOSKIN tipping trailers with drop sides, except the one of the Trans-EX, are completely hot dip galvanized.

The tipping trailers with drop sides are standard fitted with highly resistant synthetic rubber seals all around the body allowing a perfect tightness of the tipping trailer, even with small grains or products like rapeseed.



### MODULARITY AND SIMPLICITY

JOSKIN tipping trailers with drop sides were developed to be as modular as possible. Many volumes and heights are available, which allows to reach higher loading volumes. The side panels can be de-mounted in order to have a bale trailer.

The handles to open the side panels were designed in such a way that they are easy to use. With their large length and the rubber at their end, they ensure an easy opening/closing.

### TIPPING ADAPTED TO ALL SITUATIONS

In some difficult to reach places or in order to tip precisely, it is sometimes useful to be able to tip on the sides of the trailer. It is the main specification of the JOSKIN tipping trailers with drop sides: it allows to tip backwards, to the left or to the right. In this case, the tipping ram is fastened to an oscillating frame and the side tipping angle is limited by an end of stroke cable.

### SAFETY AND COMFORT

JOSKIN tipping trailers with drop sides are all standard fitted with a rear yoke with complete connections for the lighting, braking system and tipping of a second trailer.

The low center of gravity of the tipping trailers ensures a better stability and in this way an improved driving comfort both on the roads and in the fields.



*Delta-CAP and Tetra-CAP*



## COMMON OPTIONS

### BRAKING SYSTEM

All tipping trailers with drop sides are standard fitted with the air braking system, except the Trans-EX. Other systems are available:

- single-circuit air braking system;
- braking power in proportion to the load (only with air brakes);
- hydraulic braking system instead of air braking system.

### COVER

In order to better protect the loads, a (green) cover can be provided with supports, reel and access platform.

### BODY ACCESSORIES

A grain chute (260 x 200 mm) with spout, as well as a 2-part rear door (oscillating or not, height: 800 mm), are available on Trans-EX tipping trailers. When the side panels are demounted, the 3 to 5T models can be fitted with a 80 cm rear extension of the loading floor, 60 cm widening extensions as well as front and rear ladders.

For the other models of the range, an unloading auger on grain chute (Ø 140 mm - length 4.15 m - hydraulic drive min. 20 / max. 40 l/min) and a (1-part) rear door with hydraulic opening are proposed as an option. Return springs to lift the side panels more easily are also available.



## SIDE PANELS

The Trans-EX tipping trailers can be fitted with extensions of 200 and 400 mm.

On the other models of the range of JOSKIN tipping trailers with drop sides, side panels of 500, 600 and 800 mm high are available. It is then possible to choose between drop sides made of steel sheet and silage side panels with grate.



# DRAKKAR

Does not Push,  
Does not Tilt,  
Transports!



## DRAKKAR'S REVOLUTIONARY SYSTEM

The DRAKKAR has an industrial fluid-tight conveyor belt that is going, for the unloading operation, to move the material. This high-resistance conveyor is rolled up on a cylinder driven by 2 hydraulic engines at the back of the trailer. During the unloading operation, the front wall, which is connected to the moving floor moves backwards in order to accompany the matter without compressing it.

At the end of the operation, it is going to have a pushing effect forming compact and firm heaps. The use of a transparent perspex plate (10 mm thick) ensures an excellent visibility when loading and unloading.

The floor and the wall resume their initial positions thanks to a hydraulic engine at the front of the trailer, which is connected to a system of shipping chains.



## GENERAL POINTS

The JOSKIN DRAKKAR is a multi-purpose trailer allowing to transport many different types of material (silage, grains, pulp, beets, potatoes, etc.). Thanks to the UV-resistant polyester/polyethylene side walls, the empty weight of the vehicle is lower. You can therefore transport a higher payload.

## SPECIFICATIONS

<b>Chassis</b>	Width: 900 mm
	Steel sections: 300 x 100 x 6 mm
<b>Body</b>	Tapered body with steel and polyethylene sides
<b>Running gear</b>	- 6600D and 7600D: JOSKIN Roll-Over bogie with bolted table
	- 8600D: Hydro-Tandem
	- 8600T and 9600T: Hydro-Tridem
<b>Hitching</b>	- 6600D/7600D/8600D: sprung drawbar
	- 8600T and 9600: hydropneumatic drawbar
<b>Max. wheel dimensions</b>	Ø 1,080 to 1,510 mm / width 750 mm

## MODELS

DIN	Volume (m <sup>3</sup> )		Technically permissible payload	Body				Axle(s): □ (mm) - track (mm) - studs	Brakes (mm)
	300 mm heap			Inner body dimensions (m)					
	Length under	Length above		Width	Height				
<b>DOUBLE AXLE</b>									
6600/23D150	23	26	18 t	6.30	6.70	2.38	1.50	ADR 2x130x2000-10S	406 x 120
6600/28D180	28	31	18 t	6.30	6.70	2.38	1.80	ADR 2x130x2000-10S	406 x 120
7600/27D150	27	30	22 t	7.30	7.70	2.38	1.50	ADR 2x150x2000-10S	420 x 180
7600/33D180	33	36	22 t	7.30	7.70	2.38	1.80	ADR 2x150x2000-10S	420 x 180
8600/31D150	31	34	22 t	8.30	8.70	2.38	1.50	ADR 2x150x2000-10S	420 x 180
8600/37D180	37	41	22 t	8.30	8.70	2.38	1.80	ADR 2x150x2000-10S	420 x 180
<b>TRIPLE AXLE</b>									
8600/31T150	31	34	28 t	8,30	8,70	2,38	1,50	ADR 3x150x2000-10G	420 x 180
8600/37T180	37	41	28 t	8,30	8,70	2,38	1,80	ADR 3x150x2000-10G	420 x 180
9600/35T150	35	38	28 t	9,30	9,70	2,38	1,50	ADR 3x150x2000-10G	420 x 180
9600/41T180	41	46	28 t	9,30	9,70	2,38	1,80	ADR 3x150x2000-10G	420 x 180





## GREAT REAR DOOR CLEARANCE

The trailer is unloaded easily and without blocking thanks to the significant clearance (40 cm) of the rear door (operated by two double-acting rams) above the body.

A locking device mounted on the ram makes sure the door is properly closed and avoids any unexpected opening during transportation.

A "stop" sensor on the door allows the floor to start moving only when the door is fully open.

In standard, three grain chutes allow a precise, quick and flexibel unloading. For this use or when it's needed to only slightly open it, there are two control boxes at the back of the vehicle that allows to progressively make the floor move forward or backward.



Three grain chutes in standard

## SCRAPERS

The rear (upper and lower) scrapers allow to remove any remaining material on the moving floor. The one at the front prevents foreign bodies to accumulate between the bottom and the moving floor.



Front scraper



Rear scraper

## DRAKKAR BODY OPTIONS



Folding side with hydraulic control

The DRAKKAR can be fitted with rigid or hydraulic extensions. Thanks to the hydraulic system, the loadings are made easier and the falling of material is reduced. Different choices are possible according to the model (independent operating system on the left and right), 4 sides hydraulic extensions, drop sides, ...



A transfer system can be mounted on the rear door of the DRAKKAR. Two augers, one that is horizontally placed over the whole width of the body and the other vertically, drive the matter at 450 t/h. A second door is provided to use the trailer without the auger.

The sturdy watertight TELECOVER cover is an ideal tool to transport potatoes or grains. Available on DRAKKAR as well as on all tipping trailer models, it is fastened on a sub-frame bolted to the body and it is hydraulically controlled. The structure allows to open the door even when the cover is closed.



# CARGO SYSTEM

## Implements



### DRAKKAR-CARGO

This multi-purpose trailer with conveyor belt, with design identical to the Drakkar, is to be placed on a JOSKIN CARGO chassis. A patented system allows to unload by means of a conveyor belt and a moving front wall. The conveyor belt winds and brings the matter out of the body for an easy emptying.

The low center of gravity of the machine, combined with the fact that there is no tipping, increases the stability of the vehicle in all circumstances.



Two extra grain chutes as an option



Mobile front wall



Hydraulic extensions as an option

### MODELS DRAKKAR-CARGO<sup>(1)</sup>

	Inner body dimensions (m)			Volume (m <sup>3</sup> )	
	Length (under - above)	Width (Front - Back)	Height	DIN	300mm dome
Drakkar-CARGO 7600/27/150	7,30 - 7,70	2,34 - 2,38	1,50	27	30
Drakkar-CARGO 7600/33/180	7,30 - 7,70	2,34 - 2,38	1,80	33	36
Drakkar-CARGO 8600/31/150	8,30 - 8,70	2,34 - 2,38	1,50	31	34
Drakkar-CARGO 8600/37/180	8,30 - 8,70	2,34 - 2,38	1,80	37	41

<sup>(1)</sup> Road versions approved for 80 km/h available (body from 6600 to 12600) For more information, please contact your representative.

# Silo Space<sup>2</sup>



# SILO-SPACE 2

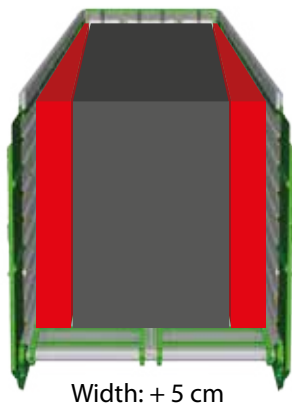
Volume and profitability  
For your silage works

**NEW**



## TAPERED BODY

To unload with minimum friction, the profile of the side and rear walls of the Silo-SPACE 2 is vertical. They are indeed 5 cm wider at the back in comparison to the front. This tapered shape ensures a quick and smooth unloading of the silage (maize, grass, etc.).



## GREAT REAR DOOR CLEARANCE

The trailer is unloaded easily and without blocking thanks to the rear door with wide opening angle, operated by two double-acting hydraulic rams. A locking device on spring makes sure the door is perfectly closed and avoids any unexpected opening during transportation.

## GENERAL POINTS

The Silo-SPACE looks like a new man. This new version, which includes all strong points (running gear, moving floor, air brakes, etc.) that contributed until now to its success, pushes the boundaries regarding loading capacity and manoeuvrability. The Silo-SPACE 2 is made up of a tapered body with moving floor ensuring a fluid and fast unloading. Its special feature lies in the high loading capacity: up to 59 m<sup>3</sup> with a dome. Designed on a particularly sturdy basis, the silage trailer is fitted with a JOSKIN hydraulic suspension, which makes it very stable and comfortable to drive, both in the fields and on the road.



## SPECIFICATIONS

<b>Chassis</b>	Width: 900 mm
	Steel sections: 250 x 100 x 6 mm
<b>Body</b>	Side and rear walls in galvanized shaped steel sheets with inner plastic paintwork
<b>Running gear</b>	• 480D: Hydro-Tandem
	• 540D: Hydro-Tandem
	• 540T: Hydro-Tridem
	• 590T: Hydro-Tridem
<b>Hitching</b>	• 480D: Drawbar with cross-springs
	• 540D: Drawbar with cross-springs
	• 540T: Hydropneumatic drawbar
	• 590T: Hydropneumatic drawbar
<b>Max. wheel dimensions</b>	Ø 1.400 (mm) / Width 800 (mm)

## MODELS

	Volume (m <sup>3</sup> )		Technically permissible payload	Length under	Body Inner dimensions (m)			Axle(s): □ (mm) - track (mm) - studs	Brakes (mm)
	DIN	600 mm heap			Length above	Width (F-R)	Height		
Silo-SPACE 480D	44	48	22 t	7.78	8.58	2.34 - 2.38	2.28	ADR 2x150x2100-10G	420 x 180
Silo-SPACE 540D	49	54	22 t	8.76	9.56	2.34 - 2.38	2.28	ADR 2x150x2100-10G	420 x 180
Silo-SPACE 540T	49	54	26 t	8.76	9.56	2.34 - 2.38	2.28	ADR 3x150x2100-10G	420 x 180
Silo-SPACE 590T	54	59	28 t	9.74	10.54	2.34 - 2.38	2.28	ADR 3x150x2100-10G	420 x 180



## MOVING FLOOR

In order to ensure its sturdiness, the moving floor of the Silo-SPACE 2 standard includes 2 moving parts with chains driven by 2 hydraulic motors with side box. Their profiled slats are alternately placed in order to ensure an even load distribution. The yaw chains offer a high resistance to traction. Two sets of 4 wearing-off Ertalon rails are placed on both sides of the body to prevent the moving floor and the floor from scraping each other (silencing floor). The two hydraulic motors (protected under the floor), which drive the moving floor, are fitted with two gears: the first one allows to set the moving floor in motion and progressively increase its power, while the second one ensures a quick and regular unloading of the silage trailer.



*Moving floor driven by two hydraulic motors*

## SLOPING FRONT WALL

Painted and perforated, the front wall is designed to maximize the payload. To that end, our engineers provided it with a 22° angle and a hinge system making the unloading operations easier by pushing and breaking the material. This mechanism ensures, among other things, a bigger loading area.



## MANOEUVRABILITY

Fitted with a leaf suspension, the monoblock structure of the drawbar, which is sloping and directly fixed to the body, was very refined. Thanks to this new form, the tractor manoeuvrability is improved. The widened steering angle also makes manoeuvres easier.



## SELF-SUPPORTING CHASSIS

The use of a lowered monocoque body allowed to increase the body height (180 mm higher than on the Silo-SPACE) and to reduce the weight. As a result, the payload is higher. This feature allows, among other things, to disassemble the machine to put it in a container for the export.



## FOLDING BUMPER

The bumper is now hydraulically folded under the machine when it is loaded. This new feature allows to avoid the accumulation of silage in the groove. This system also reduces the possible risks of silage losses on the public highway.



# TRAILED WAGO

From 8 to 20 T



## REVOLVING PLATE

The trailed WAGO combines two separate running gears: a single axle on turntable at the front and a single or double axle (standard with tandem suspension) at the back, according to the model. All bale trailers are standard fitted with the hydraulic braking system (except 10000T15 and 12000T15). Finally, the drawbar is fitted with a spring allowing to hold it in high position. The revolving plate (Ø higher than 100 cm) will allow easy manoeuvres and a higher steering angle for more manoeuvrability. This trailed trailer will provide the users with a high driving comfort.



Load up to 32 pallox on our WAGO TR10000T20 bale trailer



As an option on models 8000D13, 10000T15 and 10000T20, side hydraulic ladders (2 SA) ensure use safety and rapidity

## GENERAL POINTS

To transport straw bales, JOSKIN proposes, among others, the trailed WAGO. Available with a length of 8, 10 or 12 m, it is manufactured by means of automated machines (cutting and welding) and with special steel ensuring a high resistance. The floor has a 4 cm side edge for a secure transport.

## SPECIFICATIONS

	Width: 1,460 mm
	Steel sections:
<b>Chassis</b>	- TR8000D08: 120 x 114 x 8 mm
	- TR8000D13: 160 x 152 x 6-9 mm
	- Other models: 120 x 120 x 8 mm
<b>Floor</b>	Chequered plate with 4 cm side edge
<b>Hitching</b>	Front axle on turntable
<b>Max. wheel dimensions</b>	Ø 930/1,090 mm / width 445 mm

# TRAILED WAGO

## MODELS

	Floor dimensions (m)		Technically permissible payload	Axle(s): □ mm - track (mm) - studs	Wheels	Dimensions of the wheels (m)		Axle(s) suspension	Brakes (mm)
	Length	Width				Min./max. Ø	Max. width		
<b>WAGO : 1 FRONT AXLE / 1 REAR AXLE</b>									
TR8000D08	8	2.50	8 T	ADR 2x80x2000-6S	11.5/80 x 15.3	840 / 930	445	Front	4 x 300 x 60
TR8000D13	8	2.50	13 T	ADR 2x90x2000-8S	385/65R22.5	930 / 1,090	438	Front	4 x 350 x 60
TR8000D15	8	2.50	15 T	ADR 2x100x2000-8S	385/65R22.5	930 / 1,090	438	Front + rear	4 x 400 x 80
TR10000D15	10	2.50	15 T	ADR 2x100x2000-8S	385/65R22.5	930 / 1,090	438	Front + rear	4 x 400 x 80
TR10000T13	10	2.50	13 T	ADR 3x80x2000-8G	385/65R22.5	890 / 1,090	438	Front + rear	4 x 350 x 60
<b>WAGO FB: 1 FRONT AXLE / 2 REAR AXLES</b>									
TR10000T15	10	2.50	15 T	ADR 3x80x2000-8S	385/65R22.5	890 / 1,090	438	Front + rear	4 x 350 x 60
TR10000T20	10	2.50	20 T	ADR 3x100x2000-8S	385/65R22.5	930 / 1,090	438	Front + rear	6 x 400 x 80
TR12000T15	12	2.50	15 T	ADR 3x80x2000-8S	385/65R22.5	930 / 1,090	438	Front + rear	4 x 350 x 60
TR12000T20	11.75	2.50	20 T	ADR 3x100x2000-8S	385/65R22.5	930 / 1,090	438	Front + rear	6 x 400 x 80

# SEMI-MOUNTED WAGO

From 7 to 12 T



## GENERAL POINTS

Another solution proposed by JOSKIN to transport straw is the semi-mounted WAGO.

Manufactured according to the same manufacturing principle as the trailed WAGO, the semi-mounted model is characterized by its available lengths: 6, 8 and 10 m. Furthermore, all axles are fitted with the hydraulic braking system.

Rounded ladders of 1,000 mm high (+ 800 mm available as an option) make it easier to transport straw.

The floor in chequered plate is also fitted with a 4 cm side edge increasing the safety level during transport.

## SPECIFICATIONS

<b>Chassis</b>	Width: 1,460 mm
	Steel sections:
	- 200 x 100 x 9 mm - ST10000D12: 300 x 100 x 9 mm
<b>Floor</b>	Chequered plate with 4 cm side edge
<b>Hitching</b>	Reinforced rigid drawbar
<b>Max. wheel dimensions</b>	Ø 930 mm / width 445 mm

## REINFORCED RIGID DRAWBAR

The WAGO semi-mounted bale trailers are fitted with a reinforced rigid drawbar with two reinforcements welded on each side of the drawbar and on the chassis.

A lengthwise sprung drawbar is proposed as an option.

According to the model, this vehicle will be fitted with one single fixed axle or two rear axles with tandem suspension (standard).

Single-axle trailers are fitted with an adjustable manual stand and the double-axle ones with a hydraulic stand.

This semi-mounted WAGO bale trailer allows an easy and pleasant transport of straw on the fields.



*Straight ladders available as an option*

## SEMI-MOUNTED WAGO

### MODELS

	Floor dimensions (m)		Technically permissible payload	Axle(s): □ mm - track (mm) - studs	Wheels	Wheel dimensions (m)		Brakes (mm)
	Length	Width				Min./max. Ø	Max. width	
<b>ONE REAR AXLE</b>								
ST6000S07	6	2,50	7 t	ADR 70x2000-6S	11.5/80x15.3	840 / 930	350	2 x 300 x 60
ST8000S08	8	2,50	8 t	ADR 90x2000-8S	15.0/55-17	890 / 930	350	2 x 350 x 60
<b>TWO REAR AXLES</b>								
ST8000D08	8	2,50	8 t	ADR 2x80x2000-8S	15.0/55-17	890 / 930	445	4 x 300 x 60
ST8000D12	8	2,50	12 t	ADR 2x90x2000-8S	15.0/55-17	890 / 930	440	4 x 350 x 60
ST10000D12	10	2,50	12 t	ADR 2x90x2000-8S	15.0/55-17	890 / 930	440	4 x 350 x 60

# WAGO-LOADER

## From 8 to 20 T



### EASY AND SAFE TRANSPORT

The WAGO-LOADER is a multi-functional trailer: it allows to transport bales but also machines thanks to its two loading ramps with hydraulic lowering and lifting.

In order to load machines more easily, the back side of the floor (made of wood or chequered plate) is tilted on approx. 1 m. And finally, for a proper stability during the handling, two telescopic supporting stands, with mechanical folding system (hydraulic in option), are standard mounted at the back of the vehicle.



### GENERAL POINTS

The WAGO-LOADER trailers allow to transport tools and other machines as well as straw.

They are manufactured in special steel, cut and welded in an automated way, and fitted with floor crosspieces and a reinforced chassis, in order to benefit from a higher resistance and liability for various transports.

### SPECIFICATIONS

	Width: 1,460 mm
	Steel sections:
<b>Chassis</b>	- Semi-mounted: 300 x 100 x 8.5 mm
	- Trailed: 120 x 120 x 8 mm (TR 8000D13: 160 x 152 x 6/9 mm)
	- Other models: 120 x 120 x 8 mm
<b>Floor</b>	Wooden (40 mm thick) or 3/5 chequered plate with edges
<b>Hitching</b>	Semi-mounted: reinforced rigid drawbar Trailed: front axle on turntable
<b>Max. wheel dimensions</b>	Ø 930 mm / width 440 mm

## WAGO-LOADER

### SEMI-MOUNTED MODELS

	Floor dimensions (m)		Technically permissible payload	Axle(s): □ mm - track (mm) - studs	Wheels	Dimensions of the wheels (m)		Axle(s) suspension	Brakes (mm)
	Length	Width				Min./max. Ø	Max. width		
LST8000D08	8	2.50	8 t	ADR 2x80x2000-6S	11.5/80x15.3	840 / 930	440	YES	4 x 300 x 60
LST8000D12	8	2.50	12 t	ADR 2x90x2000-8S	15.0/55-17	890 / 930	440	YES	4 x 300 x 60
LST10000D12	10	2.50	12 t	ADR 2x90x2000-8S	15.0/55-17	890 / 930	440	YES	4 x 350 x 60

### TRAILED MODELS

	Floor dimensions (m)		Technically permissible payload	Axle(s): □ mm - track (mm) - studs	Wheels	Dimensions of the wheels (m)		Axle(s) suspension	Brakes (mm)
	Length	Width				Min./max. Ø	Max. width		
<b>1 REAR AXLE</b>									
LTR8000D13	8	2.50	13 t	ADR 2x90x2000-8S	385/65R22.5	930 / 1,090	440	NO	4 x 350 x 60
<b>2 REAR AXLES</b>									
LTR10000T15	10	2.50	15 t	ADR 3x80x2000-8S	385/65R22.5	930 / 1,090	440	Front + rear	4 x 350 x 60
LTR12000T20	11,75	2.50	20 t	ADR 3x100x2000-8S	385/65R22.5	930 / 1,090	440	Front + rear	6 x 400 x 80



# WAGO-CARRIER

## 5T



### GENERAL POINTS

The Wago-CARRIER is a low loader allowing to easily transport implements and other machines since the trailer floor can be completely lowered.

Available with lengths of 5 and 6 m, this trailer is standard fitted with a wooden floor of 40 mm thick.

Two ladders (straight at the front - rounded at the back) are available as an option.

### SPECIFICATIONS

<b>Chassis</b>	Width: 1,460 mm
	Steel sections: 180 x 200 x 5 mm
<b>Floor</b>	Wooden (40 mm thick) or 3/5 chequered plate with edges
<b>Hitching</b>	Semi-mounted: reinforced rigid drawbar
<b>Max. wheel dimensions</b>	Ø 856 mm / width 287 mm

### LOWERING THE TRAILER FLOOR

The main specification of the WAGO-CARRIER is that it can be completely lowered.

Once it is lowered with the double-acting hydraulic stand (600 mm course) and the two rear rams, it is 18 cm high. On the road, it is 69 cm high (with standard wheels).

The WAGO-CARRIER is particularly useful to transport several implements (comb harrow, regenerator, sandblaster, etc.) to the working area.



## WAGO-CARRIER

### MODELS

	Floor dimensions (m)		Technically permissible payload	Axle(s): □ mm - track (mm) - studs	Wheels	Wheel dimensions (m)		Brakes (mm)
	Length	Width				Min./max. Ø	Max. width	
CST5000S05	5	2.40	5 t	ADR 80x2000-6S	400R22.5 cover	856 / 287	312	2 x 300 x 60
CST6000S05	6	2.40	5 t	ADR 80x2000-6S	400R22.5 cover	889 / 307	312	2 x 300 x 60

# CARGO CHASSIS

## Multi-Purpose Chassis

TRM SERIES



TSM SERIES

### RUNNING GEAR

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.

### MANAGEMENT AND CONTROL

The machines fitted with electrovalves gathered on a monoblock basis are 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, macerator(s), etc.



Quick couplings



Hydraulic box

### 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 other implements, like a muck spreading body, a silage body, a Drakkar body or a monocoque agricultural tipping body.

### PLACING/REMOVING BASIC IMPLEMENTS

For a modular concept to be the most practical, it is essential that the basic implements can be placed/removed with few means and very quickly. The implement can easily be placed on the chassis thanks to guides, also acting as a protection of the rams for the hydraulic suspension. Implements are fixed on the chassis by means of 2 x 3 "Twist Locks" placed all along the chassis.

The CARGO is fitted with rear hooks that support the strains brought by the implement. The combination of these ingenious systems ensures a high comfort use and profitability.



Twist-Lock



Guides

### MODELS

	Chassis length (m)	Stand	Axle(s): □ (mm) - track (mm) - studs	Brakes (mm)
CARGO TSM (6.6)	6.60	Hydraulic skid direct conn. to tractor (DA)	ADR 2x150x2000-10S	420 x 180
CARGO TRM (7.5)	7.55	Hydraulic skid direct conn. to tractor (DA)	ADR 3x150x2000-10S	420 x 180

# CARGO SYSTEM Implements



## P.T.O.-SHAFT TRANSMISSION

Depending on the used implement, the drive shafts are easily installed to operate the tipping pump of your Trans-CARGO or the shredding beaters of your Silo-CARGO.



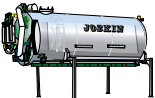



P.T.O.-shaft transmission

## HITCHING ACCESSORIES

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



## MODELS

	<b>CARGO TSM 6.6 m</b>	<b>CARGO TRM 7.5 m</b>
 Vacu-CARGO	Free steering axle Low hitching only  18,000 l 20,000 l	2 self steering axles Low hitching only  23,000 l 25,500 l
 Drakkar-CARGO	7600/27 7600/33	8600/31 8600/37
 Ferti-CARGO <sup>(3)</sup>	6011/17	7011/20 7014/25
 Ferti-CARGO HORIZON <sup>(3)</sup>	6011/17	7011/20 7014/25
Wheels: max. dimensions	Ø 1,500 x 750 mm	Ø 1,500 x 750 mm

<sup>(1)</sup> The first 4 figures refer to the average body length and the next 2 ones to the DIN volume without extensions.

<sup>(2)</sup> The 7500 body on TSM cannot be mounted on TRM and inversely (different ram position).

<sup>(3)</sup> 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.

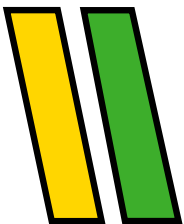
# JOSKIN



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