

JOSKIN

EN CARGO MODULAR SYSTEM



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MODULARITY AND EASE OF USE
FOR MAXIMUM PROFITABILITY

CARGO CHASSIS

Multi-Purpose Chassis



A professional's opinion:

Vital Lashet is a delighted Belgian contractor: his company invested 4 years ago in a Cargo chassis fitted with a 26,000 l tanker and a Silo-Space. It only takes 30 minutes to the 2 workers to change the implements (usually before and after the maize harvest). He is happy with his choice and he did not hesitate long; the other brands were way more expensive. He saved money on the purchase of the chassis, not only thanks to its multipurpose character, but he also has the same advantages as with other machines: the very handful lifting axle in humid conditions, the higher lifting capacities, a tanker filled in max. 3 minutes, brakes and axles of an excellent quality, etc. Despite an intensive use, he is sure he bought for the long run.



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 of 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 hydraulic rams, which is extremely useful in case of significant ground unevenness.

Finally, their 250 mm clearance ensures a perfect distribution of the loads in all circumstances.

MANAGEMENT AND CONTROL

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. Guides allow to place the implement on the chassis more easily. 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 supporting 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	Hydr. skid - direct con. tractor (DA)	ADR 2x150x2000-10S	420 x 180
CARGO TRM (6.6)	6.60	Hydr. skid - direct con. tractor (DA)	ADR 3x150x2000-10S	420 x 180
CARGO TRM (7.5)	7.55	Hydr. skid - direct con. tractor (DA)	ADR 3x150x2000-10S	420 x 180

CARGO MODULAR 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

RIDING COMFORT

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



MODELS

	CARGO TSM 6.6 m	CARGO TRM 6.6 m	CARGO TRM 7.5 m	Cargo-TRACK
	Free steering axle Low hitching only	2 self steering axles Low hitching only	2 self steering axles Low hitching only	3 steering axles
 Vacu-CARGO	16,000 l 18,000 l 20,000 l	16,000 l 18,000 l 20,000 l 22,500 l 24,500 l	21,000 l 23,000 l 26,000 l	20,000 l 21,000 l 22,500 l 23,500 l 24,000 l 26,000 l
 Silo-CARGO / DraKKAR-CARGO	40 m ³ / 33 m ³	40 m ³ / 33 m ³	45 m ³ / 37 m ³	45 m ³ / 37 m ³
 Trans-CARGO ⁽¹⁾	7000/19 7000/23 7500/21 ⁽²⁾ 7500/25 ⁽²⁾	7500/21 ⁽²⁾ 7500/25 ⁽²⁾	8000/22 8000/27	8000/22 8000/27
 Ferti-CARGO ⁽³⁾	6011/17	6011/17	7011/20 7014/25	7011/20 7014/25
Wheels: max. dimensions	Ø 1,500 x 750 mm	Ø 1,380 x 770 mm	Ø 1,500 x 750 mm	Consult us

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

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

⁽³⁾ 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.

DRAKKAR-CARGO



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.



Hydraulic extensions as an option



Two extra grain chutes as an option



Mobile front wall

DRAKKAR-CARGO MODELS⁽¹⁾

	Inner body dimensions (m)			DIN volume (m ³)	
	Length (under - above)	Width (Front - Back)	Height	DIN	300 mm heap
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

⁽¹⁾ Road versions approved for 80 km/h available (body from 6,600 to 12,600). For more information, please contact your representative.



Moving floor

SILO-CARGO

The standard equipment of the Silo-CARGO includes a hydraulic headboard, a hydraulic rear door, a hydraulic moving floor, an integrated control of the moving floor and rear door, and 2-gear hydraulic motors.

The Silo-CARGO can also be fitted with shredding beaters that are mechanically driven by a drive-shaft under the CARGO chassis.

Hydraulic side extensions are available as an option to increase the loading capacity.



Hydraulic extensions as an option



Side inspection gate on the left, with access ladder

SILO-CARGO MODELS

	Inner body dimensions (m)			DIN volume (m ³)	
	Length (under - above)	Width (Front - Back)	Height	DIN	300 mm heap
Silo-CARGO 20/40	7,50 - 7,90	2,35 - 2,40	2.10	38.10	41.67
Silo-CARGO 24/45	8,50 - 8,90	2,35 - 2,40	2.10	42.80	46.80

TRANS-CARGO



TRANS-CARGO

With a view to standardizing – and therefore a cost reduction – the body of the Trans-CARGO tipping trailer is the same as on the Trans-SPACE. The Trans-CARGO range includes 6 models with bodies of 7, 7.5 and 8 m long. The telescopic hydraulic tipping ram is integrated into the chassis. Since a sub-frame is not added, the centre of gravity is low and ensures good road-holding qualities. The hydraulic ram is simply anchored by a system of pins. The implement is then very easily placed/removed.



Rear hooks



Rear pivot point



The rear hooks serve as support and transfer the tipping strains homogeneously to the whole vehicle. The rear pivot point of the body is fixed to the chassis by an anchoring in the support hooks and is locked by a set of Twist-Locks at the back of the chassis.



Hydraulic tipping ram



Ram anchoring

TRANS-CARGO MODELS⁽¹⁾

	Inner body dimensions (m)			DIN volume (m ³)
	Length (under - above)	Width (Front - Back)	Height	
Trans-CARGO 7000/19	6,87 - 7,15	2,18 - 2,26	1.25	19.40
Trans-CARGO 7000/23	6,87 - 7,20	2,18 - 2,26	1.50	23.50
Trans-CARGO 7500/21	7,34 - 7,62	2,18 - 2,26	1.25	20.70
Trans-CARGO 7500/25	7,34 - 7,68	2,18 - 2,26	1.50	25.10
Trans-CARGO 8000/22	8,08 - 8,36	2,18 - 2,26	1.25	22.70
Trans-CARGO 8000/27	8,08 - 8,41	2,18 - 2,26	1.50	27.40

⁽¹⁾ The first 4 figures refer to the average length (in mm) and the next 2 ones to the DIN volume (in m³) without extensions.



REAR BUTTRESSES

The rear linkage is bolted to the two buttresses that are welded at the back of the tank. They have a resting point on the chassis through the support hooks. Consequently, the load strains from the rear implement are evenly transferred to the whole vehicle. In this way, the rear implement remains fastened to the tank.



GENERAL POINTS

The VACU-CARGO was created in such a way as to improve the modularity. It is a removable slurry tank to be placed on a CARGO chassis. It is compatible with the whole range of rear spreading implements (booms and injectors).

SPECIFICATIONS

Pumping system	Vacuum
Pumping Accessories	All types
Rear implements	All types ⁽¹⁾

(1) Suited to the dimensions of the vehicle

PUMP COMBINED WITH THE TANK

The pump, which can be mechanically or hydraulically driven, is fastened to a side support base welded to the tank. All specific implements of the tank will thus remain linked to it.



TWIST LOCK

The "Twist Lock" couplings allow to lock the implement on the chassis.



VACU-CARGO MODELS

	Theoretical capacity (l)	Standard pump	Tank Ø (mm)
VACU 16.000	16,450	PN130/D JUROP	1,800
VACU 18.000	18,615	PN130/D JUROP	1,900
VACU 20.000	20,465	PN130/D JUROP	2,000
VACU 21.000	21,274	PN130/D JUROP	1,900
VACU 22.500	22,587	PN130/D JUROP	2,100
VACU 23.000	23,414	PN130/D JUROP	2,000
VACU 24.500	24,800	PN130/D JUROP	2,200
VACU 25.500	25,840	PN130/D JUROP	2,100

FERTI-CARGO



GENERAL POINTS

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

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



Vertical beaters



Spreading table on Ferti-SPACE HORIZON

FERTI-CARGO MODELS⁽¹⁾

	Length before door	Inner body dimensions (m)		Height	Body volume before door	Manure volume before door	Manure volume up to beaters
		Length up to beaters	Width				
Ferti-CARGO 6011/17	6.00	6.55	2.05	1.05	13.41 m ³	16.87 m ³	18.42 m ³
Ferti-CARGO 7011/20	7.00	7.55	2.05	1.05	15.60 m ³	19.62 m ³	21.17 m ³
Ferti-CARGO 7014/25	7.00	7.55	2.05	1.35	20.00 m ³	25.20 m ³	27.20 m ³

FERTI-CARGO HORIZON MODELS⁽¹⁾

Ferti-CARGO 6011/17	5.50	6.05	2.05	1.05	12.32 m ³	15.49 m ³	17.04 m ³
Ferti-CARGO 7011/20	6.00	6.55	2.05	1.05	13.41 m ³	16.87 m ³	18.42 m ³
Ferti-CARGO 7014/25	7.00	7.55	2.05	1.35	20.00 m ³	25.20 m ³	27.20 m ³

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



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.

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

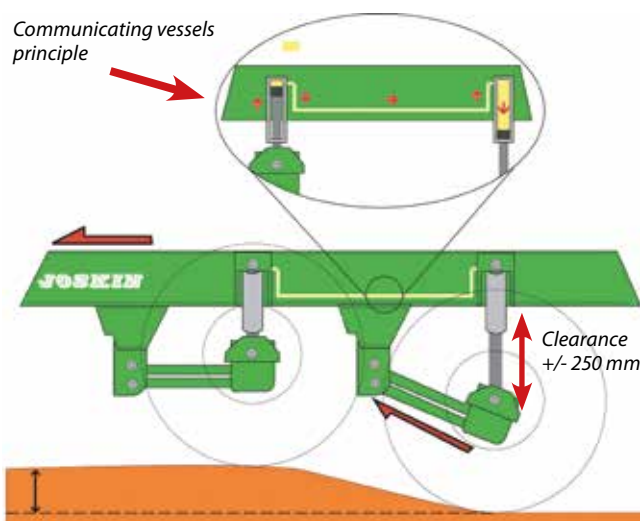
Simplicity, clearance and stability: these are the three key specifications of the Hydro-Tandem/Tridem running gear. It combines the following advantages: the axles can easily be pulled over obstacles and they are semi-independent. That is why they allow a significant clearance (up to ± 250 mm).

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.

Communicating vessels principle



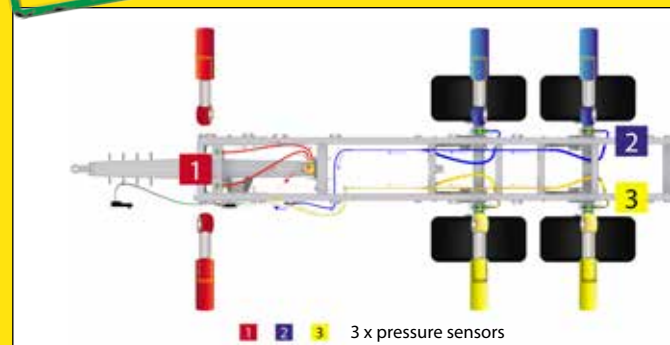
DYNAMIC WEIGHING SYSTEM ON HYDRAULIC SUSPENSION

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.

NEW



RUNNING GEARS

Steering Axles

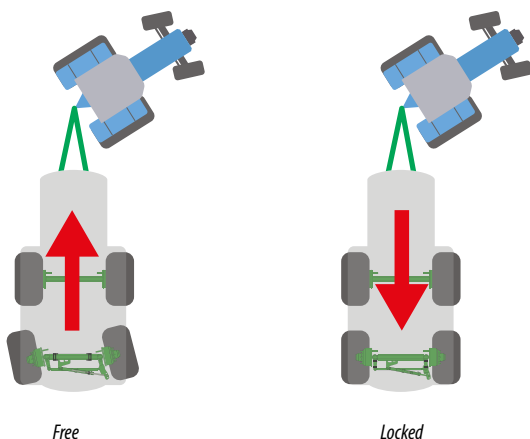
To improve the comfort and security, it is possible to choose between a free or self steering axle system.

FREE STEERING AXLE (STEERING WHEN DRIVING FORWARD)

The free steering axle follows the direction determined by the tractor. The oscillation range is $\pm 15^\circ$ 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 significant vibrations.



Free steering axle (50% steering)



Free

Locked



DOUBLE FREE STEERING AXLE (STEERING WHEN REVERSING AND 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! The automatic self-tracking axle is fitted with two electronically controlled hydraulic rams for its locking and alignment.



Double free steering axle

A sensor on the axle detects the driving direction of the vehicle and allows the system to automatically lock one of the two hydraulic rams 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.

HITCHINGS





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

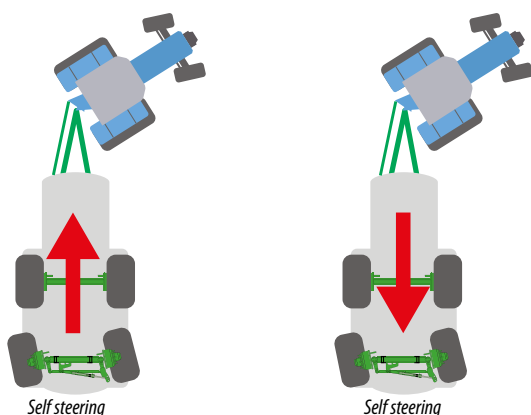
The self steering axle is an important safety component as it keeps your vehicle in the tractor driving line. JOSKIN triple-axle vehicles are standard fitted with a double self steering system (first and last axles) operating in both directions (forward and reverse).

The hydraulic 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 hydraulic rams 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. An electric realignment is also available as an option.



Self steering axle (100% steering)

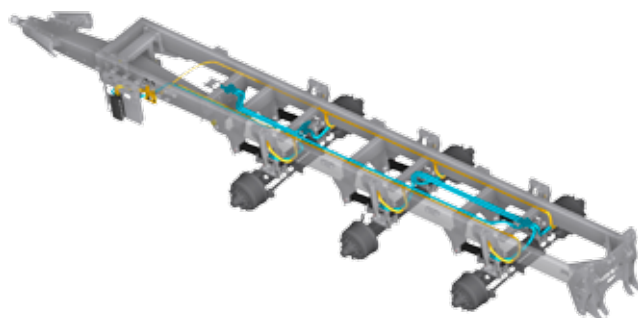


ELECTRONIC SELF STEERING SYSTEMS (STEERING WHEN REVERSING AND DRIVING FORWARD)

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

The advantages of the compact electronic system are:

- manoeuvrability and stability (in case of speed increase, lowering of the degree of the steering angle and locking at 50 km/h);
- no mechanical connection between the tractor and the steering axles, which reduces the efforts on the steering system in extreme conditions;
- possibility to manoeuvre the vehicle independently from the tractor so as to get out of a complicated situation thanks to a control box in the cabin (option).



JOSKIN

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.



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