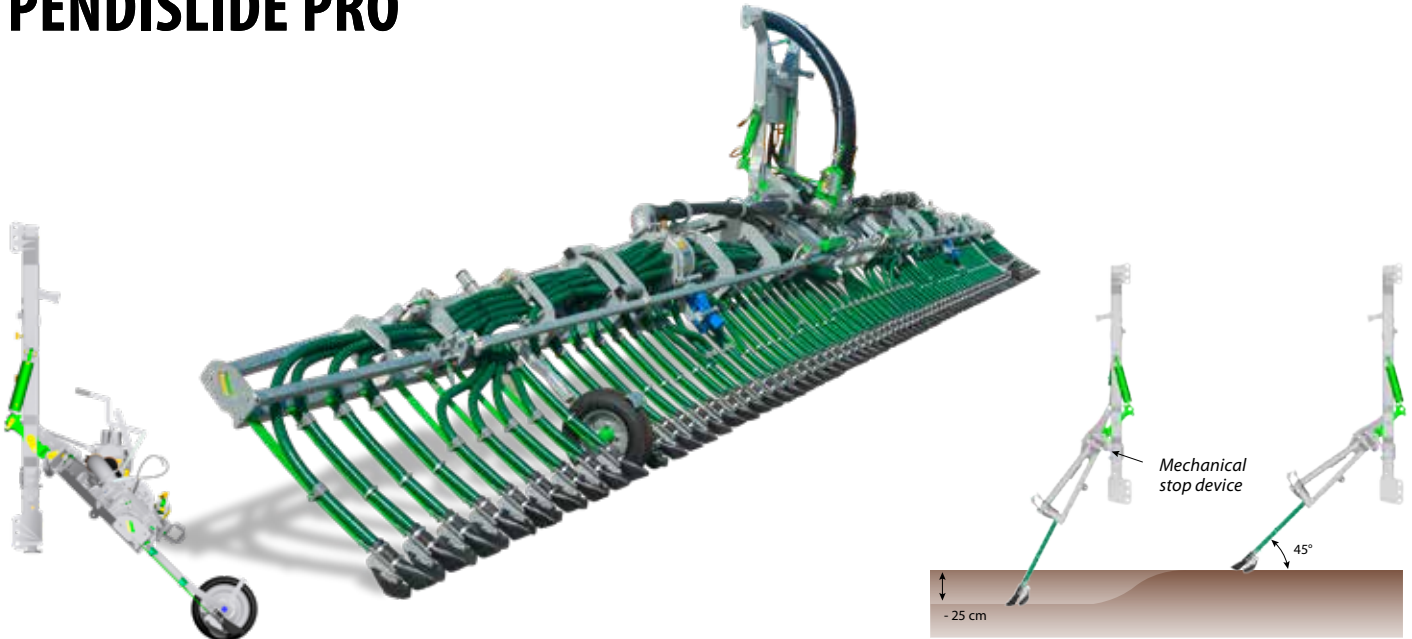


PENDISLIDE PRO



STURDY STRUCTURE

The JOSKIN PENDISLIDE PRO spreading boom increases the spreading precision and has a sturdy and ingenious chassis. This boom has the following specifications:

- During manoeuvres, when the anti-drip system is lifted (at the row end), a pendulum effect is ensured by the 4 hydraulic rams. On hilly grounds, this horizontal balance protects the boom and ensures the required flexibility between the boom and tanker.



- It does not require a traditional 4-point linkage with a wheel diameter lower than or equal to 1,675 mm.
- The 2 vertical SCALPER® macerators ensure an efficient distribution of the slurry, whatever its type. An access to the macerator through a 6" quick coupling makes interventions easier.
- As an option from 15 m, the 2 boom ends can be fitted with a double hydraulic folding system (1.50 m on each side). In this way, the working width can be, if necessary, reduced by means of ball valves. It is also possible to fit them on shorter tankers.
- The boom is also – standard – fitted with an anti-crash safety device (of 80 cm), which allows the outer parts of the boom to retract in case of shock.



EFFICIENT SPREADING SYSTEM

The position of the skids in a 45° angle to the ground allows to ideally follow the unevennesses in all circumstances. For very steep areas, the skids can go down to 250 mm under the zero level. The flexion of the 70 mm bended leaves compensates small unevennesses.

The PENDISLIDE PRO has a 25 c row spacing to ensure an homogeneous spreading pattern.



PENDISLIDE PRO MODELS

Models	Spreading width (m)	Number of outlets	Spacing (cm)	Weight (kg)
120/PS2	12	48	25	N.A.
135/PS2	13.5	54	25	N.A.
150/PS2	15	60	25	N.A.
180/PS2	18	72	25	N.A.

EQUIPMENT MANAGEMENT AND CONTROL

HYDRAULIC MANAGEMENT: JOSKIN CONTROL BOX

Thanks to this installation, it is possible to feed several hydraulic functions, by means of one single hydraulic control valve on the tractor or through the Load Sensing.

They are controlled by switches that are gathered on one single control box in the cabin of the tractor.



IMPLEMENT MANAGEMENT

AUTOMATIC MANAGEMENT

To easily operate the increasing number of hydraulic functions on agricultural machines while protecting the material and the meadows, an automatic management system is absolutely necessary.

A. ELECTRONIC MANAGEMENT: AUTOMATON

Part of the standard equipment on the whole range, the automaton manages the different electro-hydraulic functions by a programmed sequence, depending on the chosen implement. The Touch-Control control box is an ergonomic and efficient solution to easily control a combination of hydraulic functions of a spreading implement. This touch screen is installed in the tractor cabin.



	JOSKIN		
	Terrasoc/flex/disc		
Solodisc	Penditwist 9-12M		
Multiaction	Penditwist 15-18M		
Pendislide		-	5 / 10 +

The spreading sequences differ from one implement to another. That is the reason why there are all recorded in the computer memory. The implement hitched to the vehicle then only has to be selected, which allows an easy use and change of implements.



In automatic mode, the START key launches the registered sequence: opening the feeding valve, starting the macerator, lowering the implement, etc.

A manual mode is also available in order to act on some functions during the sequence.





B. SEQUENTIAL BLOCK



Easymatic



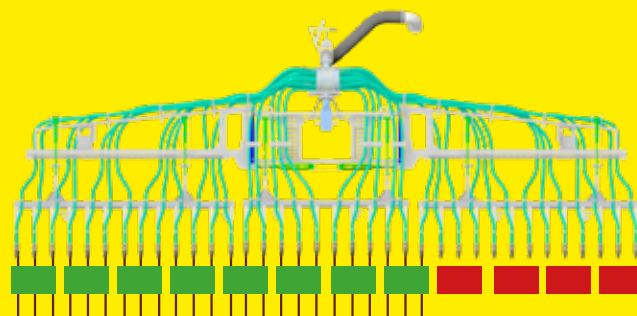
Polymatic

It operates the hydraulic functions that are linked to the working of the spreading implement. Their automated sequence allows the driver to only care about the lowering or lifting and the unfolding of the spreading implement.

Example (depending on the chosen sequential block):

- lifting - lowering the implement (driver);
- lowering speed two times faster in relation to the oil supply of the tractor;
- opening of the slurry feeding valve;
- starting the slurry macerator(s);
- control of the automatic reverse of the macerator;
- opening-closing the hydraulic anti-drip pincers on SOLODISC meadow injectors;
- constant ground pressure according to the height differences;
- etc.

SECTION PILOT



The IsoBus application can control the "Section Control" to automatically open/close the different sections of a slurry injector or spreading boom combined to the spreader itself. An outer GPS antenna receives the position according to the Section Control standard and the IsoBus application compares it with the previously recorded positions in order to close the sections on areas that have already been fertilized.

WET SPOT DEVICE

All arable injectors (TERRASOC, TERRADISC, TERRAFLEX/2 and TERRAFLEX/3) and meadow injectors (MULTI-ACTION and SOLODISC) with sequential block include, standard or as an option depending on the model, a system allowing to lift the injector on wet spots. This device is made up of a valve allowing to lift the rear implement when going from a dry area to a humid one, while the feeding valve and macerator remain active.



EQUIPMENT MANAGEMENT AND CONTROL

ISO BUS

iso-CONTROL 2.0



ISOBUS tractor terminal

TANKER AND IMPLEMENT MANAGEMENT

C. ISOBUS

The interface of the JOSKIN control box, just like that of the automaton, can be replaced by the ISOBUS terminal that is already present in the tractor cabin. If there is none yet, the JOSKIN terminal can be delivered.

The aim is to ensure the communication between different tractors and the many implements (and vice versa) through a standardized language. This international standard is ever more used and allows a quick and easy connection ("plug & play") between various brands.

The AUX-N feature allows to match any Isobus function with a compatible AUX-N Joystick. On top of making it easier to use, the AUX-N feature allows to select the functions associated to the Joystick



EXTRA APPLICATIONS



VARIABLE RATE-CONTROL - Allows to process application maps in Shape format. Up to 5 different flow rates are possible. They are specified by means of maps with theoretical values. Applications are adapted in a specific way to the location, according to the regulations.



TRACK-LEADER TOP - Carries out an automatic guidance via the TRACK-LEADER functions. Besides the App, the system includes an extra guidance computer and a GPS-receiver. The automatic guidance relieves the driver, increases the yield performance per surface and reduces the diesel consumption.



TRACK-LEADER - Allows to have parallel tracks with different driving modes. The guiding direction and the bypass force are displayed on the screen. The software also gives information about the spread area and writes the tracks and field edges to memory.






SECTION-CONTROL - Allows the automatic activation and deactivation of the machines and an automatic partial width change. As soon as a section spreads part of totally on an already spread area, it is deactivated.

AVAILABLE TERMINALS

ISO CONTROL allows, for instance, to centralize the electro-hydraulic controls, the flow meter, the pressure sensors, the Section Pilot, the GPS, etc.

ISO CONTROL TOUCH 800	
<ul style="list-style-type: none"> • 10,4" screen • Touch screen • Multigraphic window • Video input 	
ISO CONTROL TOUCH 1200	
<ul style="list-style-type: none"> • 12,1" screen • Touch screen • Multigraphic window • Video input 	

OPTIONAL ACCESSORIES

PRINTER	JOYSTICKS ISOBUS
	
GPS	
	
System	Precision
<ul style="list-style-type: none"> • DGPS • TERRASTAR • RTK 	<ul style="list-style-type: none"> • 20 cm • 5 cm • 2 cm

ELECTRONIC FLOW METER




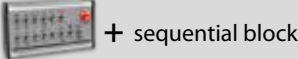


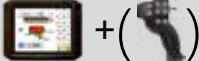

An excellent flow rate is necessary to spread with accuracy! JOSKIN has therefore developed to that end an electronic flow meter (Ø 150 or 200 mm) delivering an exact flow at any time. Whatever the driving speed, the spreading pattern remains uniform thanks to the system adjusting the flow in proportion to the advancement speed (DPA).

The flow meter constantly measures the slurry injection flow while sensors, fitted in the wheels, measure the driving speed.

By interpreting these data, a computer will automatically regulate the slurry flow according to the driving speed, by way of an electric valve. This device requires an ISO terminal.



DETERMINE YOUR MANAGEMENT MODE ACCORDING TO YOUR NEEDS

	Functions	Implements	Flow meter	POSSIBLE MANAGEMENT
	Single	/	/	Direct conn. to tractor
	Many	/	/	
	Many	yes	/	 + sequential block
				 + 
	Many	yes	yes	 + 

NIR TECHNOLOGY

In collaboration with John Deere, JOSKIN offers a real time technology thanks to an infrared lens (subject to availability in your country). The slurry composition (total nitrogen (N), phosphorus (P), potassium (K), ammoniacal nitrogen (NH4) and dry matter) is measured in real time during spreading. JOSKIN integrates this analysis system on its tankers fitted with a proportional flow meter by ISOBUS. The whole allows the DPA to integrate a spreading instruction expressed in units of nitrogen / ha (for example) and not in m³ / Ha as a conventional DPA system.

