M.T

Non till triple disc seed drills

SOLA

THE WELL-DONE SOWING

www.solagrupo.com


SOLA

Accuracy, efficiency and versatility

Our innovative triple disc non till machine combines cutting-edge technology and a robust design to maximise productivity in any type of soil. This system, which includes a double opening disc and a front turbo disc, guarantees precise, efficient and environmentally friendly sowing. The main advantages it offers are:

1. Optimal soil preparation

Front turbo disc: easily cuts and clears crop residues, minimising compaction and facilitating the penetration of the opening disc. Ideal for soils with high levels of stubble.

2. Precise and uniform sowing

Double opening disc: creates a clean, well-defined furrow, ensuring uniform seeding depth and optimal contact between the seed and the soil. This promotes uniform germination and more vigorous crop development.

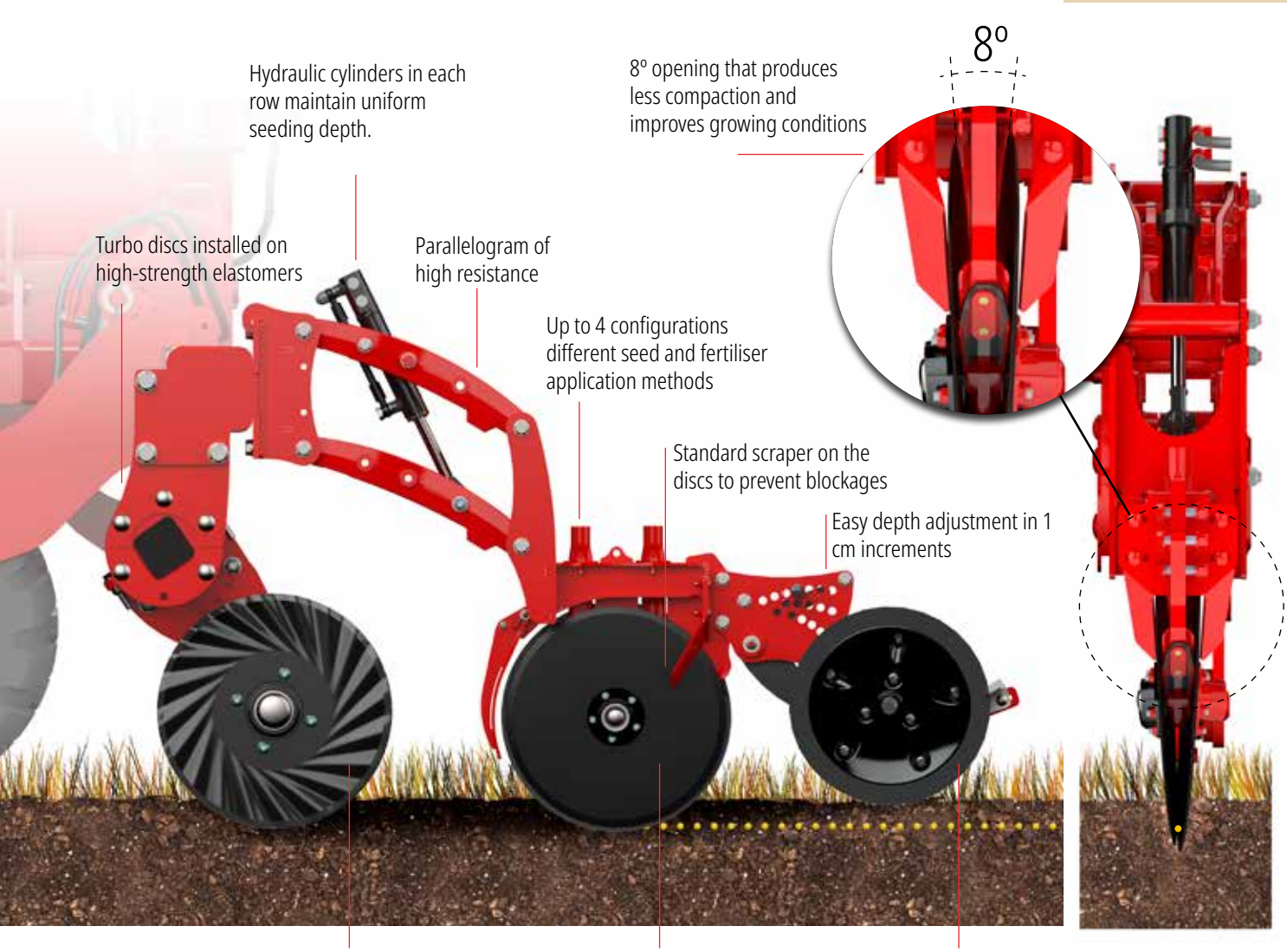
Double opening disc, compact design with minimal ground disturbance

Our unique 16" and 15" double disc coulter design features an angle of only 8° between the discs. Such a low penetration angle reduces the power, fuel and downforce requirements of the seeding row unit, minimises compaction of the coulter side walls and contributes to better seedbed formation.

The 16" disc acts as the primary opening disc, while the 15" disc complements and reinforces the furrow formation task, ensuring a more uniform and efficient opening.

The difference in size between the discs allows for easier penetration into the soil, reducing friction and resistance during sowing, which improves operational efficiency.

Tests and practical use in various soil types, climatic conditions and tillage practices have confirmed that this design promotes better and more uniform seed germination, resulting in higher yields year after year. The opening angle, together with the hydraulic pressure control of the row unit, ensures uniform seeding depth and provides the best environment for the development of each seed, resulting in optimal results.



NT aura

3m
5m
6m
7m

NT Vesta
Vesta P

5m
6m
7m

Configuration with maximum versatility

We know that farmers require highly versatile solutions, where neither the working surface nor the tractor's capacity determine the choice of implement. At Solà, we have developed a technical proposal that responds to this need with an NT solution that can be configured in two versions, adaptable to different operating scenarios and available power levels.

The first configuration is designed for medium and high-powered tractors and consists of a pressurized AURA front hopper responsible for metering and transporting the seed to the NT sowing equipment attached to the rear three-point hitch. This arrangement allows for a three point hitched assembly of 3 or 5 m, with limited weight and outstanding manoeuvrability, ideal for farms that require agility and precision in demanding environments with medium-power tractors or larger assemblies of 6 or 7 m but with an equally limited total tractor-seed drill length.

The second option consists of a system trailed by a Vesta or Vesta-P trolley with a capacity of 7,000 kg, to which the NT sowing equipment is coupled. This configuration is designed for larger farms and much greater continuous working capacity. Despite its large capacity, the power requirements remain moderate compared to other non till solutions on the market, optimising performance without compromising the energy efficiency of the tractor-implement combination.


SOLA
Vesta
SOLA

Front turbo disc

The 16" front turbo disc installed on elastomers is an essential component in non till machines. Designed to optimise performance in soils with high amounts of stubble and in challenging conditions. Its elastomer installation provides flexibility, durability and operational efficiency.

Main Functions

1. Efficient waste cutting

The turbo disc cuts and fragments plant residues (stubble) on the soil surface, ensuring that they do not interfere with the opening of the furrow or the precise placement of the seeds.

2. Initial opening of the soil

It pre-opens the soil, facilitating the penetration of the opening discs and improving the quality of the furrow for more uniform sowing.

Similarly, it reduces wear on the opening discs, thereby lowering maintenance costs and machine downtime.

3. Waste flow management

Channel waste in a controlled manner, preventing accumulations that could obstruct the equipment and ensuring continuous and efficient operation.

4. Shock absorption

Installed on elastomers, the blade can adapt to uneven terrain and absorb impacts from stones or other obstacles, reducing wear and protecting the machine's structure.

Parallelogram of the row unit

The high-strength cast steel parallelogram is a key component in our sowing technology, designed to offer stability, precision and long service life in the most demanding field conditions. It incorporates an advanced design that eliminates the need for continuous lubrication, thanks to an ingenious sealing system and the use of state-of-the-art wear-resistant materials.

Hydraulic pressure on the seeding row unit: adjustable power and precision

The use of hydraulic pressure in the seeding row unit is an advanced technological solution that guarantees superior performance in any soil condition. This system allows controlled and uniform force to be applied to each seeding row unit, optimising precision and adaptability in the field.

Hydraulic pressure in the seeding row unit is an indispensable tool for those seeking maximum precision, efficiency, and adaptability in their agricultural work, even on the most challenging terrain. This system ensures that each seed has the ideal conditions to germinate and develop, optimising the results of each hectare sown.

Main Functions

1 - Precise and dynamic adjustment

Hydraulic pressure allows the force applied to the seeding row unit to be precisely adjusted, adapting to different types of soil, from soft to compacted, to ensure uniform seeding depth.

2 - Better seed-soil contact

The hydraulics ensure that seeds are placed at the correct depth with the exact pressure, maximising contact between seed and soil. This improves moisture and nutrient absorption, promoting faster and more uniform germination.

3 - Adaptability on uneven terrain

Each seeding row unit responds independently to the undulations of the terrain, maintaining stability and precision regardless of conditions. This is particularly beneficial on stony or uneven ground.

4 - Reduction of soil compaction

Unlike mechanical pressure systems, hydraulic pressure distributes force in a controlled manner, minimising impact on the soil and reducing compaction that can harm root development.

5 - Increased operational efficiency

This system allows you to work at higher speeds without compromising sowing quality, increasing productivity and reducing operating time.

6 - Durability and reliability

The hydraulics are designed to withstand demanding working conditions and long working hours, ensuring consistent performance with minimal maintenance.

Weight Transfer

The SOLA weight transfer system is specifically designed for seed drills with a 3-point coupling, ensuring consistent seeding depth regardless of speed or soil conditions, without the need for additional counterweights.

When activated, a hydraulic cylinder transfers the weight of the tractor to the seed drill frame, maintaining the necessary downward force at all times. This ensures optimal seed placement without increasing soil compaction or energy consumption.

The pressure of the weight transfer system is easy to adjust and, for greater flexibility and control by the operator, the system can be deactivated when not required.

Internal and external scrapers on sowing discs

Internal and external scrapers are essential row units designed to ensure optimal performance by preventing the accumulation of soil, mud or debris on the discs. Their advanced design, featuring high-strength materials and adjustment systems, ensures precise and efficient sowing in any type of soil, protecting the discs from blockages caused by material adhesion.

Closing and depht control wheels

The 350x50mm trapezoidal rear wheel made of semi-pneumatic rubber is a key component that offers multiple advantages in the sowing process. It fulfils two crucial functions: covering the furrow and controlling seeding depth, ensuring optimal and consistent performance.

In summary, the semi-pneumatic trapezoidal rubber rear wheel is essential for ensuring accurate, efficient and long-lasting sowing, contributing to better yields and reduced operating effort.

Main Functions

1 - Efficient furrow covering

The trapezoidal shape of the wheel allows for more effective closing of the furrow, ensuring that the seed is properly covered and protected. This promotes better germination by keeping the seed in contact with the soil and preventing moisture loss.

2 - Precise control of seeding depth

Thanks to the semi-pneumatic composition of the wheel, which combines rubber with an internal air chamber, it dynamically adjusts to uneven terrain, maintaining constant seeding depth and ensuring uniform seed placement, as well as shedding mud in wet working conditions and sticky soils.

3 - Greater traction and stability

The 350x50mm wheel provides excellent traction on difficult ground, ensuring that the equipment remains stable during operation, even on more compact or wet terrain.

4 - Less soil compaction

Semi-pneumatic rubber has the ability to adapt to the terrain, distributing pressure evenly without compacting the soil, which promotes better root development and greater aeration in the sowing area.

5 - Durability and low maintenance

Semi-pneumatic rubber material is highly wear-resistant, extending the service life of the wheel. In addition, less maintenance is required compared to metal wheels, reducing operating costs.

6 - Operational efficiency

The wheel design ensures that both functions (covering and depth control) are performed simultaneously and effectively, optimising working time and improving overall productivity in the field. As the wheel is located at the rear of the seeding row unit, this ensures the flow of crop residues between the seeding row units and much freer working in conditions of soil with heavy vegetation cover.

Metering unit system: Maximum flexibility in seed and fertiliser application

The incorporation of a system with two inlet tubes for products, one for seed and the other for fertiliser, offers a versatile and efficient solution that adapts to the specific needs of each crop and terrain.

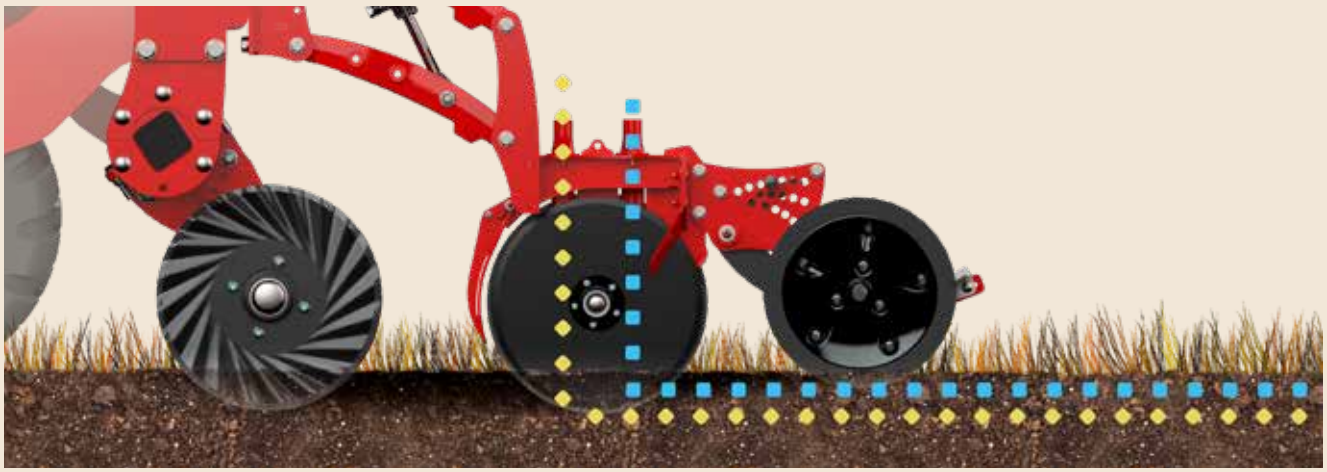
This design allows you to choose between single shot or double shot application options, optimising both the sowing process and crop yield.

Single Shot: Seed and fertiliser are applied together at the same point, ideal for low-fertility soils or crops that require a quick and uniform start.

Double Shot: Seed and fertiliser are deposited independently in two separate tubes, minimising direct contact between the two products.

Sowing settings Maximum versatility

The NT seed drill offers up to six metering units to adapt to different agronomic strategies and optimise crop establishment. Total flexibility: depending on the option selected, the NT seed drill can incorporate a half-machine lock, avoiding overlap and optimising sowing efficiency. This versatility allows sowing to be adapted to different conditions and agronomic strategies, maximising the productive potential of each plot.



1 Sowing: allows for simple dosing through tube 1 or 2 according to user preference, ensuring uniform distribution.

2 In-row sowing and fertiliser mixing (Single Shot): an efficient solution that improves nutrient availability in the furrow from the outset, optimising crop development.

3 Sowing two types of seeds mixed in a row (Single Shot): ideal for complementary crops, promoting biodiversity and resource utilisation.

4 Seed and fertiliser sowing in independent rows (Double Shot): allows the position of the fertiliser to be adjusted in relation to the seed, reducing the risk of phytotoxicity and improving absorption efficiency.

5 Sowing two types of seed in the same furrow with independent drops (Double Shot): an optimal strategy for companion crops, ensuring precise distribution of both seeds.

6 Sowing two types of seed in alternating furrows: promotes crop diversification, improving soil structure and reducing competition between species.


SOLA
MAGDA
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MAGDA

MAGDA N.T

NON-TILL TRIPLE DISC SEED DRILL

The **MAGDA-NT** is a seed drill with NT non till seeding equipment, designed to work on large areas without compromising precision. With a working width of **12 metres** and a reduced transport width of only **3 metres**, it offers maximum productivity in the field along with excellent manoeuvrability on roads or in narrow areas.

Available in a configuration of 48 row units at 25 cm, it provides a working capacity far superior to that of conventional seed drills. These models set a new standard in high-capacity sowing, combining exceptional operational efficiency with the most advanced technology on the market.

DREAMED, DESIGNED AND MADE IN SOLA BARCELONA

SOLA

MAGDA MT

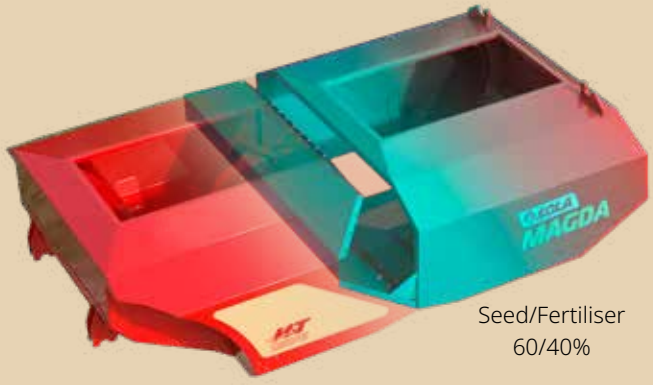
NON-TILL TRIPLE DISC SEED-DRILL

Large capacity

MAGDA seed drills are available in two different configurations, both equipped with a large 8,000-litre hopper that can be adapted to the requirements of each job.

In the first version, the hopper is used entirely for seed. The second version divides the main hopper into 60% for seed and 40% for fertiliser.

Seed



Seed/Fertiliser
60/40%

Great agility

Despite its high working capacity in the field, the MAGDA-NT stands out for its ease of transport and manoeuvrability. Its design allows the machine to be folded to a width of just 3 metres, facilitating road travel and access to plots with narrow entrances. This design combines high operational performance with maximum logistical convenience, allowing for a quick transition between plots without the need for additional equipment.

WITH FRONT HOPPER AURA - THREE POINT HITCHED

	aura				
Hopper capacity (L)	2000				
Width (mm)	2300				
Length (mm)	1690				
Height (mm)	1725				
Weight (kg)	450				
Weight with counterweights (kg)	900				
Weight with counterweights and wheels (kg)	1110				
Speed source	7 pins.				
Controller / Monitor	Optional: isobus or Non-isobus				
Hopper pressurisation control	Standard analogue pressure gauge				
Tractor requirements	Front hydraulic three point hitch. Front hydraulic control (1 SE + free return). Front female electrical connector DIN/ISO: 1724.				
	N.T				
Coupling category	Cat. III				
Type of furrow opener	Triple NT disc				
Working width (m)	3		5	6	7
Number of rows	2		2	2	2
Transport width (m)	3		3	3	3
Number of rows	12	15	20	24	28
Distance between rows (cm)	25	20	25	25	25
Seed coverage and depth control	Simple trapezoidal swivel wheel				
Row unit down force	Hydraulic cylinders in each row, up to 265 kg of pressure				
Number of support wheels	2 wheels				4 wheels
Wheel measurements	18x7-8		23x8,5		
Sowing equipment weight (kg)	2470	2600	3250	3800	4350
Distribution heads	1 head or 2 heads to choose from				
Weight transfer from tractor	Optional		Standard		

VESTA / VESTA-P / MAGDA Trolleys - TRAILED

	Vesta	Vesta P	MAGDA
Seed hopper capacity (L)	7000		8000
Seed and fertiliser hopper capacity (L)	4380/2620		4800/3200
Refill opening (cm)	196X252	2 openings measuring 670 x 2500	2 openings measuring 147 x 82
Type of metering unit	With interchangeable modular rollers		
Metering unit drive	Electric isobus		
Speed source	7 pins - Other options available		
Fan drive	Hydraulic		
Controller / Monitor	From isobus monitor (not included as standard)		
Total sowing shut off	Standard		
Half-machine shut off	Only available on machines with 2 distribution heads. Automatic when combined with GPS antenna.		Automatic when combined with GPS antenna
Third coupling for the equipment	Mechanical tensioner	Hydraulic cylinder	-

Coupling category	Cat. III			-
Type of furrow opener	Triple NT disc			
Working width (m)	5	6	7	12
Number of rows	2			
Transport width (m)	3			
Number of rows	20	24	28	48
Distance between rows (cm)	25			
Seed coverage and depth control	Simple trapezoidal swivel wheel			
Row unit down force	Hydraulic cylinders in each row, up to 265 kg of pressure			
Number of support wheels	2 wheels		4 wheels	2 wheels
Wheel measurements	23X8.50			400/60-15.5
Weight of hopper + sowing equipment (kg) Vesta Vesta P	8090 / 8220	8610 / 8740	9130 / 9260	-
Approval for road transport	Check approvals available by market			

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CERTIFIED ISO 9001

CN-822015/EN-R3