

GASPARDO



***COMBINATION IN-LINE
SEED DRILLS***

COMBINATION IN-LINE SEED DRILL RANGE

TWO OPERATIONS AT ONCE

MASCHIO GASPARDO combination in-line seed drills, a combination of reliability and innovation, offer maximum quality and optimal performance in all conditions of use. The experience we've gained in all these years has been incorporated in a high-performance product that prepares the soil and seeds in a single step.

A range that is able to satisfy the most demanding farmers and contractors, from large cereal farms to inter-row grass seeding in vineyards and orchards. These machines allow for considerable savings in time and costs of field operations, a big advantage for farmers.



AGRONOMIC BENEFITS

- *Excellent seedbed preparation*
- *Ideal refinement for rapid growth of the crop*
- *Maintenance of moisture to encourage germination*
- *Reduction of soil compaction*
- *Faster weed control*
- *Mechanical weeding combined with seeding*



CENTAURO PA2 TORO HD

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ECONOMIC BENEFITS

- *Versatility of use*
- *High work efficiency*
- *Reduced operating times and costs*
- *Reduced machine inventory*
- *Rapid deployment in the event of imminent weather events*



GASPARDO seeding units

UNITY MEANS QUALITY

Depending on the type of soil and the operating conditions, it is essential to select the most suitable unit to maximise the seeding quality and to ensure the correct uniform depth of seed placement. The pressure exerted by the elements allows for perfect furrowing of the ground, creating the ideal environment for germination.



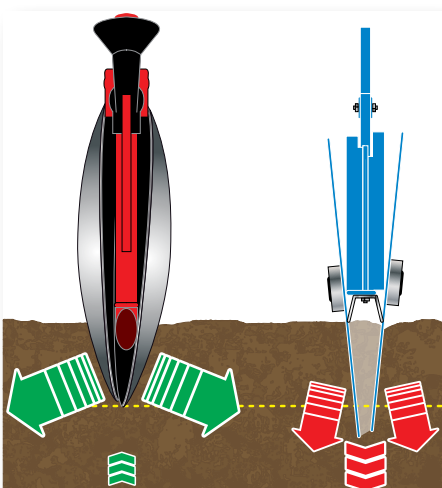
SUFFOLK

Lightweight and simple, this unit is particularly suitable for finely worked soil, especially if stony and with little or no crop residue. The suffolk seeding elements accurately and regularly position the seed in the furrow created. Its arrangement in several well-spaced rows minimises the risk of clogging during seeding.



"VORTEX" SINGLE DISC

Adapts to any type and humidity of the soil, even irregular, loamy soil or with abundant crop residue. The seeding depth is easily managed with the limiting pad or with the rubber wheel, both adjustable. A special rubber rotary scraper always keeps the disc clean, removing any moist soil.



"COREX" DOUBLE DISC

Particularly suited for loose, sandy or peaty soils. The concave geometry of the discs guarantees uniform seeding depth, avoiding going too deep or the formation of aggressive furrows. The unit is available with a rubber depth wheel, which is adjustable for the reconstitution of the seeding line.



"COREX PLUS" DOUBLE DISC

Aggressive and precise, with a diameter of 350 mm and a thickness of 2.5 mm, it allows a clean cut of the furrow and deep seeding. Thanks to its design, it avoids the compaction of the seeding furrows' walls thus allowing for immediate closure, even with wet soil. Depth wheel with scraper available.

"PERFECTA" DOUBLE DISC

The parallelogram system makes it possible to better follow the terrain, even if it's rough or not finely prepared, keeping the unit straight. The PERFECTA double disc guarantees a constant seeding depth. A good outflow of soil – even with crop residue – is guaranteed both by the arrangement on 2 rows and by the wide spacing between them. The technical characteristics of the polyurethane make the rear depth wheel self-cleaning, thus avoiding any risk of wet soil sticking to it.



The seed covering harrow further refines the seed bed. This way the contact between seed and soil is increased, optimising germination conditions for rapid crop growth. It is particularly suited for rough soils, both with and without crop residue. It is possible to vary both the pressure and the inclination of the seed covering bar, depending on the operational needs. Adjustment can be mechanical or hydraulic.



Mechanical distribution

MAXIMUM METERING ACCURACY

The GASPARDO mechanical distribution system, both precise and reliable, is able to guarantee uniform product metering along the whole sowing front.

The special series of metering rollers makes it possible to work with a wide range of seeds, from small sizes like rapeseed, clover and grass to larger diameters like cereals, soybeans, peas and tic beans without compromising the uniformity of the seeding. The GASPARDO mechanical distribution models like COMPAGNA and DAMA are able to distribute a quantity of product from 2 to 500 kg/ha.



DIGITAL CALIBRATION FOR ELECTRIC DRIVE

The distribution system of the DAMA model **ISO-TRONIC** is driven directly by an electric motor. A very comfortable, simple and timely solution that allows you to set the seeding rate directly from the ISOBUS terminal in the tractor cab. On this model the drive wheel and the gear change with crank for adjusting the seeding are no longer present.

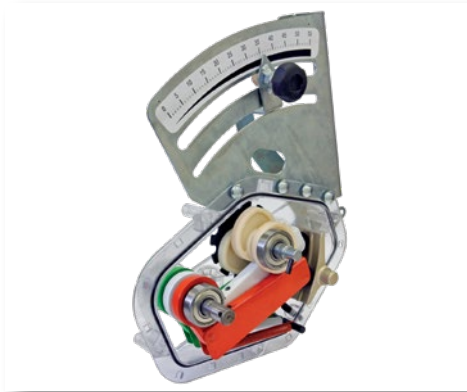


Four steps for perfect adjustment

SIMPLE, FAST ADJUSTMENT

The GASPARDO mechanical distribution system allows metering different types of seeds accurately and delicately. With the quick and versatile adjustment system it is possible to calibrate the seed drill to suit the different agronomic needs required according to the distributional areas around the world.

The adjustment takes place according to the seed, the quantity to be distributed and the distance between the rows, and documentation is provided in the manual and in tables on the seed drill itself. This way it becomes really simple and fast to adjust the system from one type of seeding to another thanks to the following four operations.

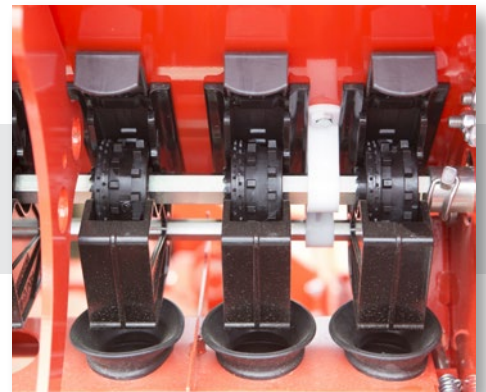


1 - CONTINUOUSLY VARIABLE TRANSMISSION

The three-cam oil bath gearbox situated on the side of the machine transfers movement from the drive wheel to the distribution line. The seeding population can be varied from the transmission by acting on the adjustment lever calibrated on a continuous scale from 1 to 55.

2 - CLOSING LOUVRES

The closing louvres have three positions for adjusting the quantity of seed flowing from the hopper.



3 - METERING ROLLERS

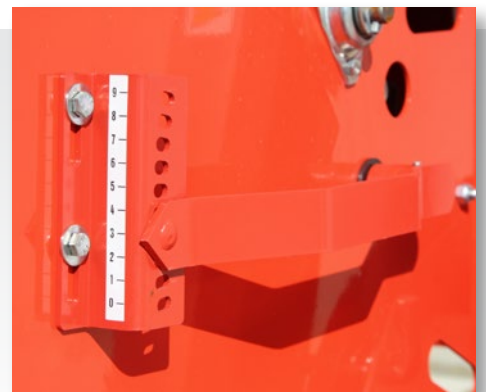
Depending on the size of the seed it is necessary to choose the most suitable type of metering roller.

The large-toothed roller is suitable for large seeds. The selection of the small-toothed roller is necessary for small seeds and is done by inserting the supplied wrench into the hole of the roller and pushing the drive retainer outwards.

4 - PROBES

The correct positioning of the probes ensures a delicate treatment of the seed in order to avoid breakage and to maintain a fluid, constant distribution.

The probe adjustment lever is situated on the left side of the machine and can be set from 0 to 9. Depending on the type of seed used, it is necessary to position the lever according to the number found in the seeding table.



COMPAGNA

Seed drill with mechanical broadcast seeder - from 30 to 130 HP



COMPAGNA 1300

LIGHT AND COMPACT

COMPAGNA is a compact, versatile tool that can be used with low-power tractors. It represents the maximum expression of economically sustainable seeding for soils with low fertility or for coarse grains. It is a mechanical broadcast seeder for cereals, grass and fine and large seeds like peas and soybeans, but it can also be used in orchards and vineyards for inter-row grass seeding.



STONE DEFLECTORS

In fields or vineyards with stones, the harrows can optionally be equipped with deflectors in order to avoid any damage or breakage to the rotors. Easily removable, they are bolted to the outer casing.

LARGE HOPPER

The capacity of the hopper varies according to the model (140-215-285-285 litres) and is equipped with a beater that can be disabled with delicate seeds to avoid any damage to the seeds. Upon request, it is possible to divide the hopper into several compartments, to ensure correct and even seeding even on steep slopes.



ADJUSTABLE DISPENSING OF THE SEED

The transport system is very simple and directly deposits the seeds between the working parts and the rear roller through a special adjustable rod to mix into the soil. The particular configuration of the machine with tilting seed drop tubes ($\pm 25^\circ$) makes it suitable for any type of seeding, even on hills with steep slopes.



A WINNING COMBINATION

COMPAGNA can be combined with a rotary harrow or a tiller as needed. Soil preparation and seeding take place in one single step with a consequent reduction in costs. COMPAGNA can be combined with the B, C, SC tillers and the DELFINO, DELFINO SUPER, DRAGO and DOMINATOR rotary harrows.



COMPAGNA DELFINO	Working width (cm)	Width (cm)	Tractor power (HP)	Hopper capacity (l)	Coul- ters (no.)	Seeding elements (no.)	Row dis- tance (cm)	Weight (kg)*
1300	130	136	30-100	140	10	9	12	768
1500	150	160	35-100	140	12	11	12	832
1800	180	185	45-100	215	14	14	12	931
2000	200	210	60-100	215	16	16	12	1013
2300	230	234	65-120	285	18	18	12	1185
2500	250	259	70-120	285	20	20	12	1256
3000	300	308	80-130	355	24	24	12	1434

* weight of version with PACKER roller

DAMA

Seeder with mechanical distribution - from 90 to 200 HP



DAMA 300

EASY ADJUSTMENT AND USE

The DAMA model is a high performance very compact combination seed drill. It can be used with the DRAGO DC, DOMINATOR DM and ORSO rotary harrows. This equipment lends itself to small and medium-sized companies that need lightweight equipment that is easy to set up and offers low running costs. The metering can be driven mechanically or electrically **ISOTRONIC** depending on the business needs.



HOPPER RAISING

The base hopper has a good capacity, big enough to hold a whole big-bag. It is possible to increase its capacity by applying the hopper extension as an accessory, decreasing the number of stops for refills.

QUICK CALIBRATION TEST

With a convenient lever it is possible to lower the pipe holder rod below the dispensers so that the seed collection tanks can be positioned. Subsequently it will be possible to proceed with the test by weighing the collected seed.



OPTIMUM COMPACTNESS

Lightweight, compact machine with centre of gravity very close to the tractor, which allows for easy lifting and manoeuvrability in the field even with medium/low-power tractors.



TELESCOPIC SEED COVERING HARROW

The innovative telescopic seed covering harrow was designed to eliminate the risk of accumulation of crop residue between the various steps and to reduce the width during transport. Acting on a simple pin system it is possible to reduce the width from 3.2 metres for working to 3 metres for road transport.

Mechanical or electric drive



Telescopic seed covering harrow

High hopper capacity



Speed lift attachments

Floating and detachable side protections

Model	DAMA DRAGO DC COMBI 250 - 300	DAMA DM COMBI 300 - 350 - 400
Width (cm)	262-311	311-361-410
Tractor power (HP)	90-150	120-200
Hopper capacity (l)	480-600	500-575-650
Coulters (no.)	20-24	24-28-32
Seeding elements (no.)	20-24	24-28-32
Row distance (cm)	12.5	12.5
Weight (kg)*	2270-2535	2605-3105-3430

*weight of SINGLE disc version with PACKER Ø 600 roller

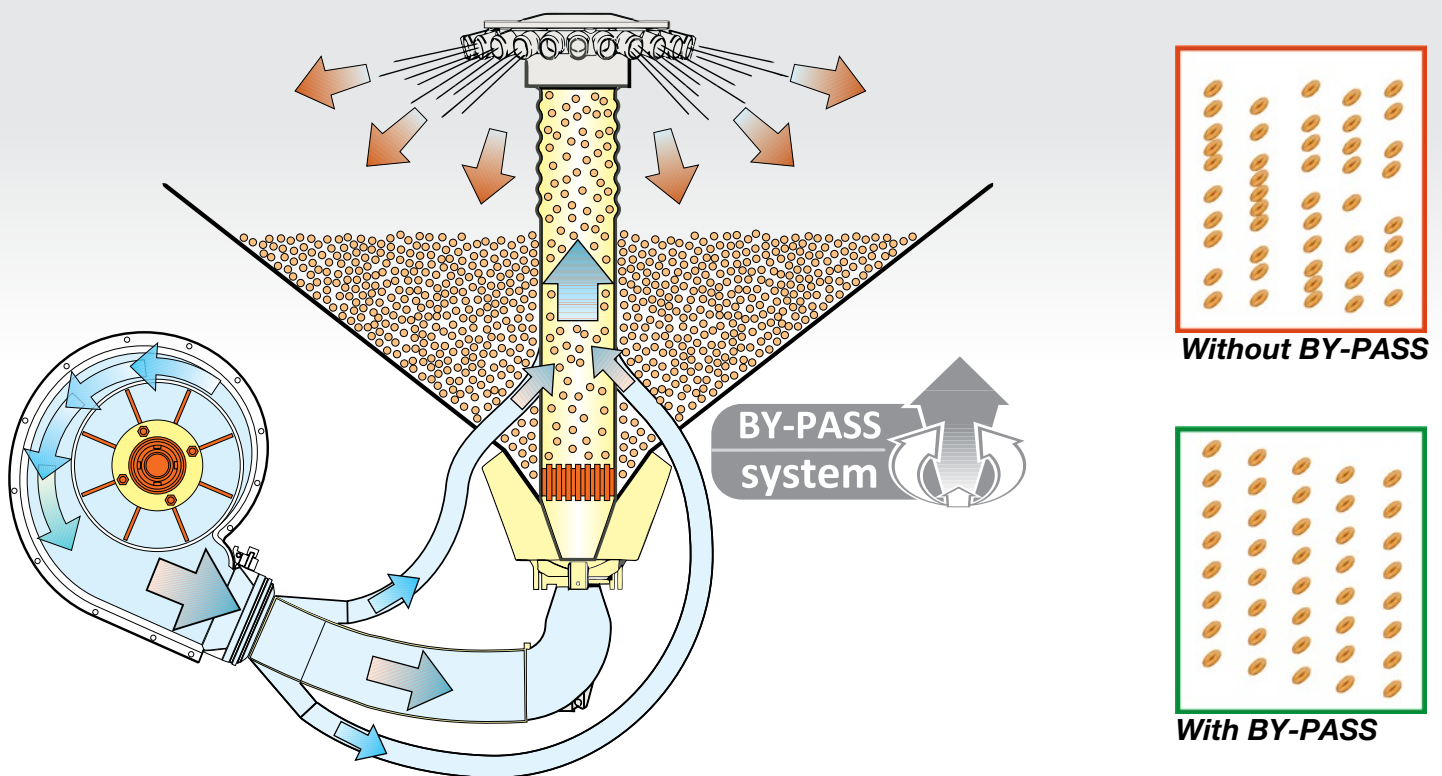
Pneumatic distribution

UNIFORMITY IN ALL CONDITIONS

GASPARDO's reliable volumetric distributor and pneumatic conveying system ensure seeding that is always precise and uniform. By varying the type of metering rollers it is possible to sow different types of seeds like cereals, rice, soybeans, alfalfa, canola and tic beans. The aluminium casing of the distributor and the plastic used for the rollers ensure long service life and corrosion resistance.

BY-PASS SYSTEM: guaranteed patent

The GASPARDO BY-PASS® system maximises the uniformity and consistency of the product's pneumatic transport along the entire working width of the seeder, guaranteeing reliable sowing even on steep slopes.



The right roller for the right seed

Depending on the type and shape of the seed to be distributed, three types of metering rollers are available. They have a large diameter to reduce the number of revolutions and to avoid load loss. A large number of cells offset from one another ensures continuous, uniform metering.



N1000 - Roller for high seeding density

Can be used to distribute large quantities per hectare of large seeds (up to 400 kg/ha).



N500 - Roller for medium seeding density

Suitable for seeding fall and winter cereals with medium quantities to be sown per hectare (250 kg/ha).



G1000 - Steep slope roller

Version suitable for seeding on very steep slopes.



F25 - 125 Roller for small seeds

Ideal for the distribution of small quantities per hectare, even less than 3 kg/ha. Possibility to exclude roller sectors, ensuring a uniform distribution.

Metering drive mechanical or electrical

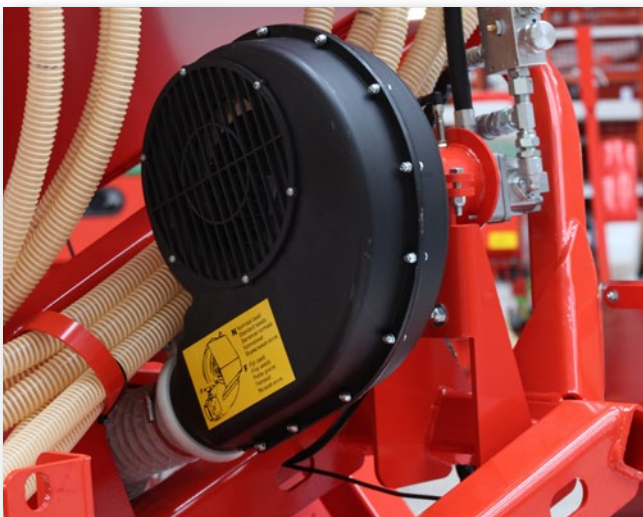
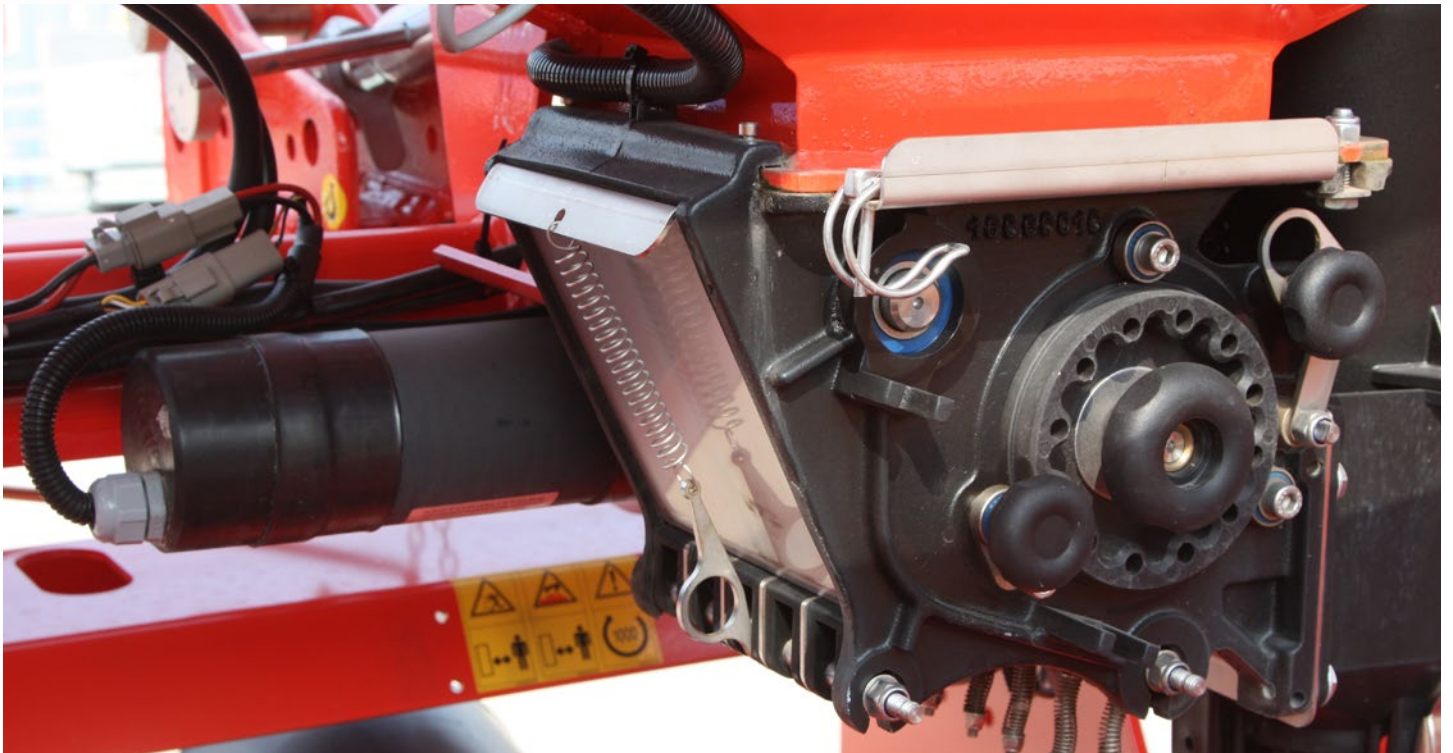
MECHANICAL DRIVE

The transmission is derived from a toothed wheel and transferred to the metering dispenser by means of the three-cam continuously variable transmission. The rate is adjusted using a convenient lever. Simple, affordable solution for everyone.



ELECTRIC DRIVE **ISOTRONIC**

The dispenser is driven directly by the electric motor, with metering managed via ISOBUS from the control terminal in the tractor cab.



Hydraulic blower drive

The pneumatic distribution of the seed is carried out by a blower with hydraulic drive that is easily managed and adjusted from the tractor cab. This way the seed is distributed equally to all the seeding elements.

ALIANTE

*Seeder with pneumatic distribution
from 130 to 200 HP*

ALIANTE 300

Capacious and fast

The ALIANTE seed drill, compatible with the DRAGO DC, DOMINATOR DM-DMR and ORSO harrows, can be used with medium-power tractors.



FLOATING AND DETACHABLE SIDE PROTECTIONS

The side guards are mounted on a parallelogram arm that renders them free floating in order to avoid dragging coarse residual crop material. During transport they can be detached to reduce the transport width to within the allowed limits.

PLATFORM FOR EASY INSPECTION

All models are equipped with ladder and platform to facilitate loading with bags or big bags and to inspect the hopper. For road transport the platform folds away.



OPTIMUM MACHINE BALANCE

The configuration with a seed drill mounted directly above the harrow allows for an excellent distribution of the weights, with centre of gravity extremely close to the lift. This allows for use with reduced-power tractors.



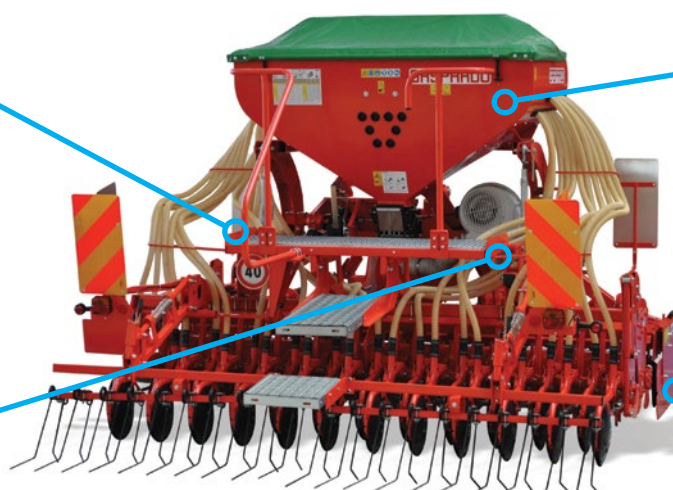
The volumetric distributor can distribute both small and large seeds. The transport of the seed is pneumatic, guaranteeing a uniform and precise distribution to all elements, even on steep slopes. The good seeding speed and the capacity of the 1,000-litre hopper guarantee an optimal seeding capacity.

**Quick connection
harrow/seed drill**

High hopper capacity

**Hydraulic drive
of the blower**

**Can be combined with
DRAGO DC,
DOMINATOR DM-DMR and
ORSO**



Model	U.M.	ALIANTE PLUS DRAGO DC COMBI	ALIANTE PLUS DOMINATOR DM COMBI
Working width	cm	300	300-350-400
Width	cm	300	300-350-400
Tractor power	HP	130-160	150-200
Hopper capacity	l	1000	1000
Coulters	n°	24	24-28-32
Seeding elements	n°	24	24-29-28-32
Row distance	cm	12.5	12.5
Weight*	kg	2775	2895-3105-3345

*weight of SINGLE disc version with PACKER Ø 600 roller

ALITALIA

**Seeder with pneumatic distribution -
from 120 to 300 HP**

ALITALIA 300

Maximum performance for large farms

ALITALIA is the robust combination for the most demanding large farms and contractors. It can be combined with the most robust rotary harrows like DOMINATOR DM-DMR and ORSO. Can be used with high-powered tractors for seeding in various conditions, even on semi-worked ground or directly on solid ground. The hydraulic distributor guarantees accurate, uniform metering of seeds of all sizes.

ORSO comes standard with quick release coulters, an enlarged gearbox and the case-hardened gears.

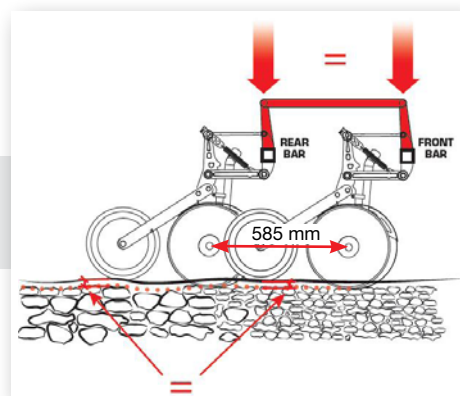


ALITALIA, as well as being equipped upon request with STIVALETTO, "COREX" double disc and "VORTEX" single disc, is available with PERFECTA seeding bar.

**CONSISTENT DEPTH
+
UNIFORM PRESSURE**

GENEROUS WORKING CAPACITY

A large 1500-litre hopper offers significant autonomy that can be increased up to 2000 litres with an extension. The weight of the hopper is discharged on the roller, guaranteeing maximum freedom from oscillation and therefore easy operation even on the most difficult terrains.





Dispenser with mechanical or electric drive

Hydraulic blower drive

High hopper capacity

Inspection platform with ladder

Seeding bar PERFECTA

Simple, fast calibration

Model	U.M.	ALITALIA DOMINATOR DM RAPIDO COMBI	ALITALIA PERFECTA ORSO COMBI
Working width	cm	300-400	300-350-400
Width	cm	311-410	312-362-411
Tractor power	HP	160-200	120-300
Hopper capacity	l	1500	1500
Coulters	n°	24-32	24-28-32
Seeding elements	n°	24-32	20/24-24-28-28/32
Row distance	cm	12.5	15-14.6-14.3
Weight*	kg	3000-3650	3030-3780-4155

*weight of SINGLE disc version with PACKER Ø 600 roller

CENTAURO

Pneumatic distribution seed drill with front hopper - from 120 to 330 HP

CENTAURO TORO HD

A balanced combination

CENTAURO is the combination of a rotary harrow with seeding bar and a front hopper. With its generous load capacity and width, this equipment is ideal for medium/large farms and for demanding contractors. The excellent weight distribution is a clear advantage when it comes to traction, making the machine perfectly stable on hilly and irregular environments.

The metering of the product is entrusted to the electric drive **ISOTRONIC**, which guarantees uniform, flowing distribution. The robust mechanics of the GABBIANO, FALCO, AQUILA, TORO and JUMBO harrows allow excellent performance both on worked and unworked terrains.



A WELL-BALANCED WEIGHT

This combination offers an excellent distribution of the weight for the tractor, offering a clear advantage for its traction, thus reducing soil compaction and improving manoeuvrability. Reliability and safety in all conditions, especially on hilly terrain with steep slopes.

FRONT HOPPERS

PA1: front hopper with a capacity of 1100 litres with only one electrically operated distributor and ISOBUS communication.

PA2: capacity of 1600 litres with electrically operated dual distributor and ISOBUS communication.



HOPPER FOR MULTIPLE WORK SITES

PA front hoppers optimise investments. They can be used for the distribution of seed or fertilizer. The same equipment can be combined with a wide range of MASCHIO GASPARDO equipment, from cultivators to precision seed drills.



A SIMPLE AND EFFECTIVE SOLUTION

For broadcast seeding, the rotary harrow can be equipped with a special adjustable rod fed by the drop tubes. The transport of the seed is pneumatic and is dropped between the working organs and the back roller to mix into the soil.

PA1

Single dispenser

Single distribution head

Optional pneumatic roller

Parallelogram connection system



PA2

Dual dispenser

Seed transport tubes

Dual distribution head



Model	U.M.	CENTAURO GABBIANO	CENTAURO AQUILA RAPIDO COMBI
Working width	cm	400-460	450-500-600
Width	cm	406-466	487-537-637
Tractor power	HP	120-240	200-330
Hopper capacity	l	1100	1600
Coulters	n°	32-36	36-40-48
Seeding elements	n°	32-36	36-40-48
Row distance	cm	12.5	12.5
Weight*	kg	4275-4585-4895	4570-4830-5525

*weight of SINGLE disc version with PACKER Ø 500 roller

Combination compatibility

TILLING, tillers and rotary harrows

Each seed drill can be combined with different rotary harrows, able to adapt to the various types of terrain, both worked and unworked soils. Excellent seedbed preparation and proper seeding are always guaranteed with the right combination.

	COMPAGNA				DAMA				ALIANTE			ALITALIA			CENTAURO			
	150	200	250	300	250	300	350	400	300	350	400	300	350	400	400	450	500	600
B 180-205		•																
B 230			•															
C 205		•																
C 230-250			•															
C 280-300				•														
SC 230-250			•															
SC 280-300				•														
DELFINO 1300-1500	•																	
DELFINO 1800-2000		•																
DELFINO SUPER 2300-2500			•															
DELFINO 3000				•														
DRAGO DC			•	•														
DRAGO DC COMBI					•	•			•			•						
DOMINATOR DM-DMR				•														
DOMINATOR DM-DMR COMBI						•	•	•	•	•	•	•	•	•				
ORSO COMBI						•	•	•	•	•	•	•	•	•				
FALCO COMBI															•	•		
GABBIANO COMBI															•	•		
AQUILA COMBI																•	•	•
AQUILA RAPIDO COMBI																•	•	•
TORO RAPIDO COMBI																•	•	•
JUMBO RAPIDO COMBI																		•

Roller combination

The rear roller has the dual function of determining the working depth and recompact the seedbed after the passage of the harrow. This guarantees optimal contact between the seed and the moisture in the soil, in order to allow quick, uniform germination.

		COMPAGNA	DAMA	ALIANTE	ALITALIA		CENTAURO
	Row spacing (mm)		125	125	125	150	125
	Ø (mm)						
CAGE	370	•					
	450	•					
SPIROPACKER	500	•					
RICE FIELD	500	•					
PACKER	450	•					
	500	•	•	•	•	•	•
	450		•	•	•	•	
RUBBER	500		•	•	•		•
	600		•	•	•		
FLANGED	500	•	•	•	•	•	•
SMOOTH	350	•					
	450	•					
MESH	300	•					
	400	•					
COMBIPACKER	500/125		•	•	•		•
	500/150					•	

Planting terminals

Keep a check on all parameters with the right terminal

Specialist in seeding, GASPARDO offers an array of terminals that can also be used on mechanical drive models, complete with displays for controlling both working parameters and special sowing functions.

HCS



- Area worked, partial and total (ha)

SIMPLE TSH



- Area worked, partial and total
- Speed
- Trace paths for treatments after sprouting (tramline)
- Trace paths for treatments before sprouting (marker discs)

MULTICHECK



- Dispenser rotation control
- Hopper seed level alarm
- Blower revolution control
- Area worked, partial and total
- Speed

MULTICONTROL



- Area worked, partial and total
- Speed
- Dispenser rotation control
- Hopper seed level alarm
- Blower revolution control
- Trace paths for treatments after sprouting (tramline)
- Trace paths for treatments before sprouting (marker discs)



Trace paths for crop treatments

The functions trace paths highlighting transit lanes that can be useful for passing through with equipment to protect the crops and to spread covering fertilisers. This is possible with the exclusion of tramline seeding or with the disc pair marker.

Seeding without delay or waste

With PRE-START and PRE-STOP, waste due to the inherent delay in the pneumatic system at the beginning and end of the field are eliminated.

The automatic PRE-START function preloads the metering rollers with product to avoid seeding delays at restart. The manual PRE-STOP function interrupts the distribution in advance to avoid overlapping or loss of product at the end of the field.

ELECTRIC DRIVE



Electrically driven planters

ISO TRONIC The revolutionary GASPARDO electric drive system with ISOBUS communication protocol. An innovative solution that simplifies the seed drill's mechanical construction: in lieu of gearboxes and chains, the tractor's terminal becomes the seeding control centre. This allows for quick, easy calibration with significantly reduced setup times.



Technology that meets farmers' needs

- Fewer mechanical parts requiring maintenance
- Seed density managed via the tractor terminal
- Planting functions monitored and changed in real time
- ISOBUS communication between planter and tractor
- Management via GENIUS MASTER
- Precision Farming: variable metering and seeding closure (with GPS)
- Remote link with MG-Live (Agriculture 4.0)

Solutions for non-ISOBUS tractors

GASPARDO supplies a compatibility kit, which comprises the ISOBUS terminal and cabling to enable communication between **ISO TRONIC** and non-ISOBUS tractors.



TERA 7

- Seed spacing control
- Planting alarms
- Manual section shut-off
- Planting parameter display



TOUCH 800

- TERA 7 functions
- Prescription map import
- Georeferenced planting data export
- Automatic section shut-off
- Variable seeding rate

GENIUS MASTER



GENIUS MASTER makes communicating with **ISO TRONIC** extremely simple through the tractor's ISOBUS terminal: a single connecting cable is used to link the planter/tractor for monitoring and controlling all planting functions.



Universal connecting cable



Compatibility with MASCHIO
GASPARDO ISOBUS equipment



Universal language
with the main tractor brands

Precision Farming

ISOTRONIC, technology at the cutting edge of Precision Farming

The GENIUS MASTER system fully harnesses Precision Farming-related ISOBUS functionality. In this sense, the terminal takes prescription maps and translates the information they give on the conformation and variable fertility of soils, relaying relevant automatic commands to **ISOTRONIC**.



Universal Terminal

Functionality enabling each ISOBUS terminal to communicate with the GENIUS MASTER system. A single terminal in the tractor cab is all that is needed to control the ISOTRONIC seed drill.



Export work data

It allows you to import and read prescription maps as well as export to a PC the log of georeferenced planting data calculated with **ISOTRONIC**.



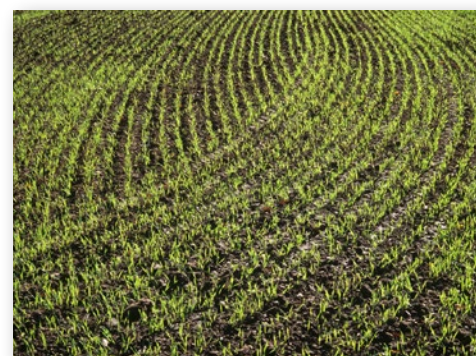
Variable seed rate

It programs variable seed density based on the different production potential of farmlands that often vary widely, making for more efficient use of your farming resources.



Automatic section control

Planting sections are switched on and off automatically thanks to mapping of the field boundaries and recording of areas that have already been worked. There is no overlap of areas that have already been planted, meaning considerable cost savings and more efficient management.



GASPARDO

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