## **GASPARDO**

# PRECISION SEED DRILLS









## **GASPARDO PRECISION** SEED DRILLS ...give you more

OPICO are the sole UK importer for the GASPARDO range of Vacuum Precision Drills, the range currently consists of three main types of Precision Drilling units with a variety of frame types. These offer precision drilling for a wide range of crops.

GASPARDO started producing planting machines for delicate seed types in 1834, in 1950 they made their first precision drill and later developed vacuum precision drills in 1972. 50 years on they are one of the largest manufacturers of vacuum precision planters in Europe producing approximately 28,000 planter units in 2011, exporting them all over the world including Europe, Russia and America to name a few.

It is clear to see with the current volume of vacuum precision drilling units sold across the world the GASPARDO machines are tried and tested to say the least! Around 500 machines have been sold in the UK since 1992 when they were first imported so they have also been well proven in the UK.

Every model is built under extreme scrutiny ensuring excellent quality, reliability and very low maintenance.

The GASPARDO philosophy "EASY MAINTENANCE" can be clearly seen throughout every machine, each one is fully loaded with simple but great ideas enabling maintenance and setup modification to be carried out quickly at the most part without the need of any tools.



## Contents

Fertiliser Units

Key Features	3
SP Precision Drills	4-5
SARA - STELLA	
MT Precision Drills  MTE - MARTA - MONICA	6-7
MTR Precision Drills  MTE(R) - MARTA(R) - MONICA(R)	8-9
MTR Precision Drills  MARISA(R) - MIRKA(R)	10-11
MTR Precision Drills	12-13
MANTA(R) - MANTA XL(R)	

## Key Features

## Easy Maintenance

One of GASPARDO's main philosophies is "Easy Maintenance" all machines should be easy to maintain on farm or even in the field. This philosophy keeps running cost down to a minimum as most functional parts are designed to have a long lifespan and be MAINTENANCE-FREE.



### Shaft Drive

Throughout the whole Precision Planter range each unit utilises SHAFT DRIVE rather than traditional chains etc. SHAFT DRIVE units are maintenance free and each row can be manually disengaged to prevent overlapping on finishing passes. Optional in cab row shut-off control is available on request allowing the operator to disengage single units on the move without leaving the tractor cab.





## Self-lubricating Bushes

Specialised oil impregnated bushes are used on the main parallelogram connecting each precision planter unit to the main frame; these are also MAINTENANCE-FREE! No need to oil or grease. There are only two greasing points on the complete unit.



## Arm Strong (MTR only)

This planting unit is designed for seeding in rough conditions and at high working speeds. The parallel linkage arm is made of one high tensile cast steel piece. This design prevents from twisting and bending under loads and impacts which can occur in the toughest working conditions.

## Super Sealed Hub

The double row ball bearing is oversized and guarantees great reliability in the most demanding working conditions. Long life is guaranteed by triple seal protection, meaning the hub is dust proof and ideally suited to work in wet or dry conditions.



## Metering Unit

All the vacuum metering systems across the full range of precision planters are constructed from the highest quality materials, the main body is made from light weight cast aluminium with a Teflon gasket. A large variety of stainless steel seeding plates are available to suit different seed types and sizes.

Seeding plate replacement, checking and seed unload are easy to do thanks to the hinged cover and the lower hatch for seed discharge. The seeding plate can easily be changed without the use of tools (this can be done in less than 30 seconds per unit). The two singulators prevent seed doubles. The fixed kicker singulation is carried out from the bottom of seed holes while the adjustable kicker action is from the top.





### Control Box

Muller Precimat All Precision drills come with the Muller PRECIMAT control box. It has been designed to be very simple to use, all the different reading modes can be displayed at a press of a button. Most commonly used readings i.e. hours worked or area worked have their own buttons.



PRECIMAT control box features:

- Digital display
- Start / Stop
- Precision planter unit "switch-off" (each unit can be de-activated when fitted with electronic disengagement option)
- Precision planter unit "allon" (all planter units can be re-activated with one touch when fitted with electronic disengagement option).
- LED showing each unit is active or inactive. (when

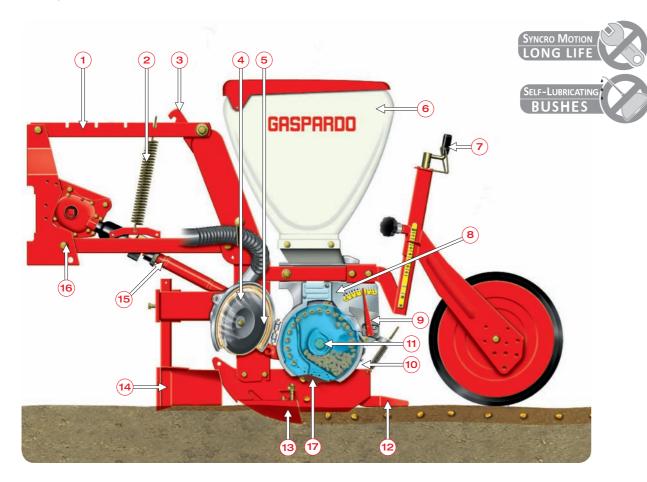
fitted with electronic disengagement option)

- Seeds per hectare
- Fan rpm
- Hours worked Area worked (ha)
- Total area worked (ha)
- Current area performance
- Distance (km)
- Speed (km/h)

## SP Seeding Unit

The GASPARDO SP Planter is designed for precision planting on soils that have been worked down to a fine seedbed with little or no crop residues.

The SP Precision Planting unit comes in two different versions. Both units are equipped with a shoe furrow opener and a very short dropping distance between the metering unit and the seed trench to prevent seed bounce or roll, greatly improving seed placement accuracy.



#### **SARA Precision Drill**



#### 6 Row, Min 90hp, Telescopic Frame

The Gaspardo SARA model is a 6 row precision drill primarily designed for planting maize in well prepared seedbeds. It utilises the SP planting unit, has 75cm row spacing and a double telescopic frame that closes down to 2.5m for easy and safe road transport.

#### STELLA Precision Drill



#### 6 Row, Min 80hp, Telescopic Frame

The Gaspardo STELLA model is a 6 row precision drill primarily designed for planting maize. It utilises the SP planting unit, has 75cm row spacing and comes equipped with a telescopic frame that closes down to 3m for easy and safe road transport.

## **FEATURES**

1 Short Parallelogram The short parallelogram enables the planter to stay level whilst seeding on undulating ground, ensuring the seed is placed at a constant depth.

2 Pressure/Relief Spring The adjustable Pressure or Relief Spring controls the pressure applied to the opener.

3 Locking System Each SP Planting Unit can be put into a locked position for safe transport.

4 Hinged Metering Unit Cover The Hinged Metering Unit Cover enables quick access to the inner metering unit, allowing the operator to change the metering disc or perform any maintenance required.

5 Teflon Gasket A hard wearing Teflon gasket inside the metering unit prevents air leakage even after hours of use due to the Teflon's low coefficient of friction.

6 34L Plastic Hopper The SP Precision Planter unit comes as standard with a large 34L plastic hopper.

(7) Rear Wheel Adjuster The planting depth is precisely controlled by the rear wheel adjuster.

8 Cast Aluminium Unit The metering/vacuum unit is made from light weight corrosion resistant cast Aluminium.

9 Twin Seed Singulators The Twin Seed Singulators give the SP Planter Unit very accurate seed singulation with all seed shapes and sizes. The fixed Singulator runs along the inside of the metering disc holes. There is also special lower seed Singulators on the sugar beet versions, the

adjustable Singulator runs along the top connected to a lever system and gauge. The inspection hatch is spring loaded and can be opened without the need of any tools. It allows the operator to inspect how the seed is being metered, how well both the Seed Singulators are working and to make any fine adjustments that maybe needed.

(10) Seed Removal Hatch The Seed Removal Hatch allows the metering unit to be emptied and prevents the loss of seed when having to perform maintenance or whilst changing the metering disc.

SP Planter Unit specifications

STELLAwith SP Units and Big Bag Fert/Suffolk

STELLA with SP Units and Fert/Suffolk & Micro

STELLA with SP Units and Big Bag Fert/Suffolk & Micro



(11) Metering Disc The seed metering disc can be chosen according to the seed type and spacing required (see back cover of leaflet).

(12) Furrow Closer There are two types of Furrow Closer, the SP standard planter unit utilises the finger type whilst the sugar beet versions have an extra press wheel that ensures seed placement accuracy.

13 Furrow Opener The Furrow is created by a hard wearing cast shoe.

(14) Clod Pusher A height adjustable Clod Pusher clears any large clods or trash that might still be on the surface that could potentially interrupt the seed placement accuracy.

(15) Shaft Drive Reliable quick disengaging Shaft drive transmission is used to drive the metering unit, it comes with a mechanical alarm and is totally maintenance free! An electronic disengagement system is available as an option to allow the operator to start and stop each seeding unit from the tractor cab.



(16) Lubricated Bushes Maintenance free self-lubricating, oil impregnated steel bushings slowly release oil whilst being used. This makes them extremely hard wearing and means they should out last most other similar forms of bushing on Precision Seed drills.



(17) Optical Seed counter Extremely accurate dual optical sensors count every seed then relay the readings back to the control box inside the tractor cab. The sensors are enclosed under the metering unit and above the seed tube to prevent dust and soil particles being counted as seed and potentially causing an inaccurate seed count readings.

(18) Mechanical Gear Shift The mechanical gear shift allows quick and easy changes to the Precision Seed drill. Various configurations are available to adapt the units to different soils and crops.

1270

1230

1285

1x1000

2x200

1x1000



Suffolk Coulte

Suffolk Coulter

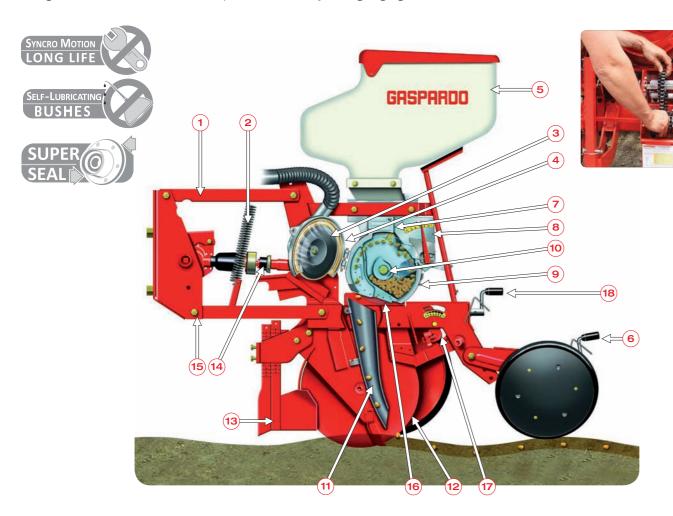
Suffolk Coulter

Model Description	Rows Nr.	Frame Width m	Row Width cm	Power Req'd hp	Fertiliser Tank Capacity Nr x1	Weight kg	Micro Applicator	Fertiliser Coulter Type	Transport m
SARA Base Drill with SP Units	6	4	75	90		973	-	-	2.5
SARA with SP Units and Microgranulator	6	4	75	90		1042	Yes	-	2.5
SARA with SP Units and Fert/Suffolk	6	4	75	90	1x850	1150	-	Suffolk Coulter	2.5
SARA with SP Units and Fert/Suffolk & Micro	6	4	75	90	1x850	1196	Yes	Suffolk Coulter	2.5
STELLA Base Drill with SP Units	6	4	75	80		993	-	-	3
STELLA with SP Units and Microgranulator	6	4	75	80		1052	Yes	-	3
STELLA with SP Units and Fert/Suffolk	6	4	75	80	2x200	1170	-	Suffolk Coulter	3.2

75

## MT Seeding Unit

The MT Planter unit is designed for precision planting on tilled or minimum tilled soils and able to cope with clods and uneven surfaces. MT Precision planter unit is extremely reliable and works with high accuracy, the furrow is created using a DOUBLE DISC with the depth controlled by dual gauging wheels.



#### MTE Precision Drill



6 Row, Min 90hp, Telescopic Frame
The Gaspardo MTE model is a 6 row
precision drill primarily designed for
planting maize into cultivated seedbeds.
It is fitted as standard with MT planting
units at 75cm spacing and has a
telescopic frame that closes down to 3m
for easy and safe road transport.

## MARTA Precision Drill



6 Row, Min 90hp, Telescopic Frame
The Gaspardo Marta model is a 6 row
precision drill primarily designed for
planting maize in cultivated seedbeds. It
is fitted with MT planting units, has a row
spacing of 75cm and a double telescopic
frame that closes down to 3m for easy
and safe road transport.

### MONICA Precision Drill



6 Row, Min 90hp, Telescopic Frame
The Gaspardo Monica model is a 6
row precision drill primarily designed for
planting maize in cultivated seedbeds.
It utilises MT planting units which can be
set at variable planting widths and has
a telescopic frame that closes down to
2.55m for easy and safe road transport.

## **FEATURES**

1 Short Parallelogram The short parallelogram enables the planter to stay level whilst seeding on undulating ground, ensuring the seed is placed at a constant depth.

2 Pressure/Relief Spring The adjustable Pressure or Relief Spring controls the pressure applied to the disc coulter.

3 Hinged Metering Unit Cover The Hinged Metering Unit Cover enables quick access to the inner metering unit, allowing the operator to change the metering disc or perform any maintenance required.

4 Teflon Gasket A hard wearing Teflon gasket inside the metering unit prevents air leakage even after hours of use due to the Teflons' low coefficient of friction.

(5) 36L Plastic Hopper The MT Precision Planter unit comes as standard with a large 36L plastic hopper.

(6) Rear Wheel Adjuster The planting depth is precisely controlled by the rear wheel adjuster.

Cast Aluminium Unit The metering/vacuum unit is made from light weight corrosion resistant cast Aluminium.

8 Twin Seed Singulators Twin Seed Singulators give the MT Planter Unit very accurate seed singulation with all seed shapes and sizes. The fixed Singulator runs along the inside of the metering disc holes, the adjustable Singulator runs along the top connected to a lever system and gauge. The inspection hatch is spring loaded and can be opened without the need for any tools, it allows the operator inspect how the seed is being metered, how well both the Seed Singulators are working and to make any fine adjustments that maybe

9 Seed Removal Hatch The Seed Removal Hatch allows the metering unit to be emptied and prevents the loss of seed when having to perform maintenance or whilst changing the metering disc.

(10) Steel Metering Disc The seed metering disc can be chosen according to the seed type and population (spacing) required. Suction from the vacuum unit gently holds each seed "one by one" into the metering disc holes. The metering disc can be changed quickly and easy, no tools are needed. It is possible to switch crops or seed size in less than 30 seconds per unit.

(1) Seed Delivery Pipe The graduated seed tube gives consistent seed delivery, the long tube prevents the seed from bouncing keeping seed placement accurate.

(12) Furrow Opener Disc The Double Disc opener creates a perfect furrow in all soil types and conditions. The disc itself is 3mm thick and 370mm in diameter providing a long working life whilst at the same time reducing operating costs. The unit also comes as standard with high quality bearings protected by the SUPER SEAL sealing system. The SUPER SEAL combines three levels of ingress protection preventing contamination or lubricant loss that might cause premature bearing failure; this gives a long term maintenance free unit.

(13) Clod Pusher 1. Height adjustable clod pusher mounted in front of the DOUBLE DISC furrow opener, clears any large clods or trash that might still be on the surface that could potentially interrupt the seed placement accuracy. 2. The optional depth adjustable disc mounted in front of the DOUBLE DISC furrow opener, increases the furrow opening capability.

(14) Shaft Drive Reliable quick disengaging shaft drive transmission is used to drive the metering unit, it comes with a mechanical alarm and is totally maintenance free! The electronic disengagement system is available as an option to allow the operator to stop the seeding of each row unit from the tractor cab.



(15) Lubricated Bushes Maintenance free selflubricating, oil impregnated steel bushings slowly release oil whilst they being used, this makes them extremely hard wearing and they should out last most other similar forms of bushing on precision drills.



(16) Optical Seed counter Extremely accurate dual optical sensors count every seed then relay the readings back to the control box inside the tractor cab for the operator, the sensors are enclosed under the metering unit and above the seed tube to prevent dust and soil particles being counted as seed and potentially causing an inaccurate seed count readings.

(17) Seed Depth Adjuster The working depth is controlled by a manual adjuster that raises and lowers the disc.

(18) Break-Back Regulator The Break-Back depth regulator keeps a constant seeding depth by allowing each rubber depth wheel to move independently as a single unit. This is achieved by using a cast rocker that enables one rubber depth wheel to raise over large clods and stones without effecting the disc and other depth wheel, the rocker system also makes sure each planting unit follows the contours of the soil, so for instance if you hit a sudden rise in the soil level both rubber depth wheels raise up at the same time. This limits the range of movement to ensure the planting depth is accurate.

19 Mechanical Gear Shift The mechanical gear shift allows quick and easy changes to the precision drill. Various configurations are available to adapt the units to different soils and crops.

#### MT Planter Unit specifications

Model Description	Rows Nr.	Frame Width m	Row Width cm	Power Req'd hp	Fertiliser Tank Capacity Nr x1	Weight kg	Micro Applicator	Fertiliser Coulter Type	Transport m
MTE Base Drill with MT Units	6	4.3	75	90		1220	-		3
MTE with MT Units and Microgranulator	6	4.3	75	90		1310	Yes	-	3
MTE with MT Units and Big Bag Fert/Suffolk	6	4.3	75	90	1x1000	1500	-	Suffolk Coulter	3
MTE with MT Units and Big Bag Fert/Suffolk & Micro	6	4.3	75	90	1x1000	1545	Yes	Suffolk Coulter	3
MTE with MT Units and Big Bag Fert/Disc	6	4.3	75	90	1x1000	1545	-	Double Disc	3
MTE with MT Units and Big Bag Fert/Disc & Micro	6	4.3	75	90	1x1000	1545	Yes	Double Disc	3
MARTA Base Drill with MT Units	6	4	75	90		1090	-	-	2.55
MARTA with MT Units and Microgranulator	6	4	75	90		1180	Yes	-	2.55
MARTA with MT Units and Big Bag Fert/Suffolk	6	4	75	90	1x850	1250	-	Suffolk Coulter	2.55
MARTA with MT Units and Big Bag Fert/Suffolk & Micro	6	4	75	90	1x850	1340	Yes	Suffolk Coulter	2.55
MARTA with MT Units and Big Bag Fert/Disc	6	4	75	90	1x850	1250	-	Double Disc	2.55
MARTA with MT Units and Big Bag Fert/Disc & Micro	6	4	75	90	1x850	1340	Yes	Double Disc	2.55
MONICA Base Drill with MT Units	6	4.3	45-75	90		1220	-	-	2.55
MONICA with MT Units and Microgranulator	6	4.3	45-75	90		1260	Yes	-	2.55
MONICA with MT Units and Big Bag Fert/Suffolk	6	4.3	45-75	90	1x850	1660	-	Suffolk Coulter	2.55
MONICA with MT Units and Big Bag Fert/Suffolk & Micro	6	4.3	45-75	90	1x850	1720	Yes	Suffolk Coulter	2.55

## MTR Seeding Unit

The MTR Planter unit has evolved from the MT unit and is designed for precision planting at greater speeds giving higher outputs for the professional farmer. It is suitable for working on tilled or minimum tilled soils and able to cope with clods, uneven surfaces and crop residues. The MTR Precision Seed Drill Unit boasts the largest opening disc in its category at 420mm diameter and the new ARMSTRONG cast steel parallelogram linkage which is 30% stronger than the traditional linkage. These two features combine to quarantee greater stability which is a fundamental requirement whilst working at higher speeds and still ensuring constant seeding depth.



### MTE(R) Precision Drill



#### 6 Row, Min 90hp, Telescopic Frame The Gaspardo MTE(R) model is a 6 row precision drill primarily designed for planting maize in cultivated seedbeds. It is fitted with MTR planting units, has a row spacing of 75cm and a double telescopic frame that closes down to 3m for easy and safe road transport.

### MARTA(R) **Precision Drill**



6 Row, Min 90hp, Telescopic Frame The Gaspardo Marta(R) model is a 6 row precision drill primarily designed for planting maize into cultivated seedbeds. It is fitted as standard with MTR planting units at 75cm spacing and has a double telescopic frame that closes down to 2.55m for easy and safe road transport.

### MONICA(R) **Precision Drill**



6 Row, Min 90hp, Telescopic Frame The Gaspardo Monica model is a 6 row precision drill primarily designed for planting maize in cultivated seedbeds. It utilises MTR planting units which can be set at variable planting widths and has a telescopic frame that closes down to 2.55m for easy and safe road transport.

### **FEATURES**

1 Short ARMSTRONG Parallelogram The short cast steel ARMSTRONG parallelogram enable the planter to stay level during seeding on undulating ground ensuring the seed is placed at a constant depth. 30% stronger than the standard linkage systems it enables increased stability at faster working speeds and in hard

(2) Pressure/Relief Spring The adjustable Pressure or Relief Spring controls the pressure applied on to the unit, up to 150kg per unit.

3 Hinged Metering Unit Cover The Hinged Metering Unit Cover enables quick access to the inner metering unit, allowing the operator to change the metering disc or perform any maintenance required.

(4) Teflon Gasket A hard wearing Teflon gasket inside the metering unit prevents air leakage even after hours of use due to the Teflon low coefficient of friction resistance.

(5) 60L Plastic Hopper The MTR Precision Planter unit comes as standard with a large 60L plastic hopper (36L on Marta and Monica).

(6) Rear Wheel Adjuster The furrow closing pressure is precisely controlled by the new extended rear wheel adjuster

(7) Cast Aluminium Unit The metering/vacuum unit is made from light weight corrosion resistant cast Aluminium.

8 Twin Seed Singulators Twin seed Singulators give the MTR Planter Unit very accurate seed singulation with all seed shapes and sizes. The fixed Singulator runs along the inside of the metering disc holes (special lower seed Singulator on the sugar beet versions), the adjustable Singulator runs along the top and connected to a lever system and gauge.



(9) Seed Removal Hatch The Seed Removal Hatch allows the metering unit to be emptied and prevents the loss of seed when having to perform maintenance or whilst changing the metering disc.

(10) Steel Metering Disc The seed metering disc can be chosen according to the seed type and population (spacing) required. Suction from the vacuum unit gently holds each seed "one by one" into the metering disc holes. The metering disc can be changed quickly and easy, no tools are needed. It is possible to switch crops or seed size in less than 30 seconds per unit

(11) Seed Delivery Pipe The redesigned seed tube gives consistent seed delivery, the long tube prevents the seed from bouncing keeping seed placement accurate

(12) Extra Large Furrow Opening Disc 420mm The extra large 420mm Double Disc opener creates a perfect furrow in all soil types and conditions. The disc itself is 4mm thick and 420mm in diameter providing a long working life at the same time reducing operating costs, the large Double Disc also means the MTR Precision Planter Unit can work faster in harder conditions and still maintain constant

accuracy and seeding depth. The unit also comes as standard with high quality bearings protected by the SUPER SEAL sealing system. The SUPER SEAL combines three levels of ingress protection, preventing contamination or lubricant loss that might cause premature bearing failure; this gives a long term maintenance free unit

(13) Row Equipment Clod Pusher: Height adjustable clod pusher mounted in front of the DOUBLE DISC furrow opener, clears any large clods or trash that might still be on the surface that could potentially interrupt the seed placement accuracy. Optional Coulter Disc: Depth adjustable mounted in front of the DOUBLE DISC option furrow opener, increases the furrow opening capability. Optional Trash Wheels: attached in front of the double disc opener and removes crop residues away from the planting row, Seed Press Wheel: Seed to soil contact maximised by eliminating the possibility of air pockets in the seed furrow using the optional Seed Press Wheel. The wheel pressure can be adjusted and a Tungsten carbide coated scraper keeps the

(14) Shaft Drive Reliable quick disengaging shaft drive transmission is used to drive the metering unit, comes with a mechanical alarm and is totally maintenance free! The electronic disengagement system is available as an option to allow the operator to stop the seeding of each planter unit from within the tractor cab.



(15) Self-lubricating Bushes Maintenance free self-lubricating, oil impregnated steel bushings slowly release oil whilst they being used. This makes them extremely hard wearing and they should out last most other similar forms of bushing on precision drills

(16) Optical Seed counter Extremely accurate dual optical sensors count every seed then relay the readings back to the control box inside the tractor cab for the operator. The sensors are enclosed under the metering unit and above the seed tube to prevent dust and soil particles being counted as seed and potentially causing an inaccurate seed count readings.

(17) Seed Depth Adjuster The working depth is controlled by a manual adjuster that raises and lowers the disc.

(18) Break-Back Regulator The Break-Back depth GRSPARDO regulator keeps a constant seeding depth by allowing each rubber depth wheel to move independently as a single unit. This is achieved by using a cast rocker that enables one rubber depth wheel to raise over large clods and stones without effecting the disc and other depth wheel, the rocker system also makes sure each planting unit follows the contours of the soil. so for instance if you hit a sudden rise in the soil level both rubber depth wheels raise up at the same time. This limits the range of movement to ensure the planting depth is accurate.

(19) Mechanical Gear Shift The mechanical gear

shift allows quick and easy changes to the precision drill. Various configurations are available to adapt the units to different soils and crops.

Model Description	Rows Nr.	Frame Width	Row Width	Power Req'd	Fertiliser Tank Capacity Nr x1	Weight kg	Micro Applicator	Fertiliser Coulter	Transport m
		m	cm	hp	Capacity Nr X I		Applicator	Туре	
MTE(R) Base Drill with MTR Units	6	4.5	75	90		1475	-	-	3
MTE(R) with MTR Units & Microgranulator	6	4.5	75	90		1565	Yes	-	3
MTE(R) with MTR Units & Big Bag Fert/Suffolk	6	4.5	75	90	1x1000	1755	-	Suffolk Coulter	3
MTE(R) with MTR Units & Big Bag Fert/Suffolk & Micro	6	4.5	75	90	1x1000	1800	Yes	Suffolk Coulter	3
MTE(R) with MTR Units & Big Bag Fert/Disc	6	4.5	75	90	1x1000	1800	-	Double Disc	3
MTE(R) with MTR Units & Big Bag Fert/Disc & Micro	6	4.5	75	90	1x1000	1800	Yes	Double Disc	3
MARTA(R) Base Drill with MTR Units	6	4.5	75	90		1345	-	-	2.55
MARTA(R) with MTR Units & Microgranulator	6	4.5	75	90		1435	Yes	-	2.55
MARTA(R) with MTR Units & Big Bag Fert/Suffolk	6	4.5	75	90	1x850	1505	-	Suffolk Coulter	2.55
MARTA(R) with MTR Units & Big Bag Fert/Suffolk & Micro	6	4.5	75	90	1x850	1595	Yes	Suffolk Coulter	2.55
MARTA(R) with MTR Units & Big Bag Fert/Disc	6	4.5	75	90	1x850	1505	-	Double Disc	2.55
MARTA(R) with MTR Units & Big Bag Fert/Disc & Micro	6	4.5	75	90	1x850	1595	Yes	Double Disc	2.55
MONICA(R) Base Drill with MTR Units	6	4.5	45-75	90		1455	-	-	2.55
MONICA(R) with MTR Units & Microgranulator	6	4.5	45-75	90		1515	Yes	-	2.55
MONICA(R) with MTR Units & Big Bag Fert/Suffolk	6	4.5	45-75	90	1x850	1915	-	Suffolk Coulter	2.55
MONICA(R) with MTR Units & Big Bag Fert/Suffolk & Micro	6	4.5	45-75	90	1x850	1975	Yes	Suffolk Coulter	2.55

## MTR Seeding Unit

The MTR Planter unit has evolved from the MT unit and is designed for precision planting at greater speeds and giving higher outputs for the professional farmer. It is suitable for working on tilled or minimum tilled soils and able to cope with clods, uneven surfaces and crop residues. The MTR Precision Seed Drill Unit boasts the largest opening disc in its category at 420mm diameter and the new ARMSTRONG cast steel parallelogram linkage is 30% stronger than the traditional linkage. These two features combine to guarantee greater stability which is a fundamental requirement whilst working at higher speeds and still ensuring constant seeding depth.



#### MARISA(R) Precision Drill



8 row Min 100hp Trailed, folding frame

The Gaspardo MARISA(R) combines a trailed folding frame with the proven MTR units giving accuracy at speed in a trailed folding format that suits some customers better. As with other models the 8 MTR units are set at 75cm centres but the trailed frame allows fertiliser, microgranules and seed to all be carried on the drill.



#### MIRKA(R) Precision Drill



8 row Min 170hp Mounted, folding frame

The Gaspardo MIRKA(R) combines a Mounted folding frame with the proven MTR units giving accuracy at speed whilst being able to carry big bag fertiliser on the rear. As with other models the 8 MTR units are set at 75cm centres but the heavier mounted frame allows fertiliser, microgranules and seed all to be carried on the drill.



## **FEATURES**

(1) Short ARMSTRONG Parallelogram The short cast steel ARMSTRONG parallelogram enable the unit to stay level during seeding on undulating ground ensuring the seed is placed at a constant depth. 30% stronger than the standard linkage systems, this enables increased stability at faster working speeds and in hard conditions.

2 Pressure/Relief Spring The adjustable Pressure or Relief Spring controls the pressure applied to the unit, up to 150kg per unit.

3 Hinged Metering Unit Cover The Hinged Metering Unit Cover enables quick access to the inner metering unit, allowing the operator to change the metering disc or perform any maintenance required.

4 Teflon Gasket A hard wearing Teflon gasket inside the metering unit prevents air leakage even after hours of use due to the Teflon low coefficient of friction resistance.

(5) 60L Plastic Hopper The MTR Precision Planter unit comes as standard with a large 60L plastic hopper.

6 Rear Wheel Adjuster The furrow closing pressure is precisely controlled by the new extended rear wheel adjuster.

Cast Aluminium Unit The metering/vacuum unit is made from light weight corrosion resistant cast Aluminium.

8 Twin Seed Singulators The Twin seed Singulators give the MTR Planter Unit very accurate seed singulation with all seed shapes and sizes. The fixed Singulator runs along the inside of the metering disc holes (special lower seed Singulator on the sugar beet versions), the adjustable Singulator runs along the top and connected to a lever system and gauge.



9 Seed Removal Hatch The Seed Removal Hatch allows the metering unit to be emptied and prevents the loss of seed when having to perform maintenance or whilst changing the metering disc.

(10) Steel Metering Disc The seed metering disc can be chosen according to the seed type and population (spacing) required. Suction from the vacuum unit gently holds each seed "one by one" into the metering disc holes. The

population (spacing) required. Suction from the vacuum unit gently holds each seed "one by one" into the metering disc holes. The metering disc can be changed quickly and easy, no tools are needed. It is possible to switch crops or seed size in less than 30 seconds per unit.

(1) Seed Delivery Pipe The redesigned seed tube gives consistent seed delivery, the long tube prevents the seed from bouncing keeping seed placement accurate.

12 Extra Large Furrow Opening Disc 420mm The extra large 420mm Double Disc opener creates a perfect furrow in all soil types and conditions. The disc itself is 4mm thick and 420mm in diameter providing a long working life at the same time reducing operating costs. The large Double Disc also means the MTR Precision Planter Unit can work faster in harder conditions and still maintain constant accuracy and seeding depth. The unit also comes as standard with high quality bearings protected by the SUPER SEAL sealing system. The SUPER SEAL combines three levels of ingress protection, preventing contamination or lubricant loss that might cause premature bearing failure; this gives a long term maintenance free unit.

(13) Row Equipment Clod Pusher: Height adjustable clod pusher mounted in front of the DOUBLE DISC furrow opener, clears any large clods or trash that might still be on the surface that could potentially interrupt the seed placement accuracy. Optional Coulter Disc: Depth adjustable mounted in front of the DOUBLE DISC furrow opener, increases the furrow opening capability. Optional Trash Wheels: attached in front of the double disc opener and removes crop residues away from the planting row. Seed Press Wheel: Seed to soil contact maximised by eliminating the possibility of air pockets in the seed furrow using the optional Seed Press Wheel. The wheel pressure can be adjusted and a Tungsten carbide coated scraper keeps the wheel

14 Shaft Drive Reliable quick disengaging shaft drive transmission is used to drive the metering unit, comes with a mechanical alarm and is totally maintenance free! The electronic disengagement system is available as an option to allow the operator to stop the seeding of each planter unit from within the tractor cab.



(15) Self-lubricating Bushes Maintenance free self-lubricating, oil impregnated steel bushings slowly release oil whilst they being used, this makes them extremely hard wearing and they should out last most other similar forms of bushing on precision drills.

(16) Optical Seed counter Extremely accurate dual optical sensors count every seed then relay the readings back to the control box inside the tractor cab for the operator. The sensors are enclosed under the metering unit and above the seed tube to prevent dust and soil particles being counted as seed and potentially causing an inaccurate seed count readings.

(17) Seed Depth Adjuster The working depth is controlled by a manual adjuster that raises and lowers the disc.

(8) Break-Back Regulator The Break-Back depth regulator keeps a constant seeding depth by allowing each rubber depth wheel to move independently as a single unit. This is achieved by using a cast rocker that enables one rubber depth wheel to raise over large clods and stones without effecting the disc and other depth wheel, the rocker system also makes sure each planting unit follows the contours of the soil, so for instance if you hit a sudden rise in the soil level both rubber depth wheels raise up at the same time. This limits the range of movement to ensure the planting depth is accurate.

(19) Mechanical Gear Shift The mechanical gear shift allows quick and easy changes to the precision drill. Various configurations are available to adapt the units to different soils and crops.



#### MTR Planter Unit specifications MARISA(R) with MTR Units and Big Bag Fertilser 75 100 1x1600 4000 Disc MARISA(R) with MTR Units and Big Bag Fertiliser & Micro 100 1x1600 4200 MIRKA(R) with MTR Units and Big Bag Fertilser 75 170 1x1400 2980 Disc MIRKA(R) with MTR Units and Big Bag Fertiliser & Micro 75 170 1x1400 3050 Yes Disc

\*Fertiliser Tank optional

## MTR Seeding Unit

The MTR Planter unit has evolved from the MT unit and is designed for precision planting at greater speeds and giving higher outputs for the professional farmer. It is suitable for working on tilled or minimum tilled soils and able to cope with clods, uneven surfaces and crop residues. The MTR Precision Seed Drill Unit boasts the largest opening disc in its category at 420mm diameter and the new ARMSTRONG cast steel parallelogram linkage is 30% stronger than the traditional linkage. These two features combine to guarantee greater stability which is a fundamental requirement whilst working at higher speeds and still ensuring constant seeding depth.



## MANTA(R) Precision Drill

8 - 12 Rows, Min 110hp, Folding Frame



The Gaspardo Manta(R) model is an 8 to 12 row precision drill primarily designed for planting maize in cultivated seedbeds. It utilises MTR planting units which can be set at 75cm and 45cm spacings and has a hydraulic folding frame that closes down to 3m for easy and safe road transport.



#### MANTA XL(R) Precision Drill

12 Rows, Min 130hp, Folding Frame



The Gaspardo MANTA XL(R) is a 12 row model ideal for planting maize on all types of fields and conditions. It is equipped with MTR planting units set at 75cm row spacings. It is a Hydraulic Folding unit and features "wing lift" for headland turns to prevent the outer units catching the ground.



## **FEATURES**

1 Short ARMSTRONG Parallelogram The short cast steel ARMSTRONG parallelogram enable the unit to stay level during seeding on undulating ground ensuring the seed is placed at a constant depth. 30% stronger than the standard linkage systems, this enables increased stability at faster working speeds and in hard conditions.

2 Pressure/Relief Spring The adjustable Pressure or Relief Spring controls the pressure applied on to the unit, up to 150kg per unit.

3 Hinged Metering Unit Cover The Hinged Metering Unit Cover enables quick access to the inner metering unit, allowing the operator to change the metering disc or perform any maintenance required.

4 Teflon Gasket A hard wearing Teflon gasket inside the metering unit prevents air leakage even after hours of use due to the Teflon low coefficient of friction resistance.

(5) 36L Plastic Hopper The MTR Precision Planter unit comes as standard with a large 36L plastic hopper.

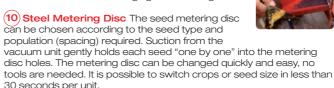
6 Rear Wheel Adjuster The furrow closing pressure is precisely controlled by the new extended rear wheel adjuster.

Cast Aluminium Unit The metering/vacuum unit is made from light weight corrosion resistant cast Aluminium.

8 Twin Seed Singulators The Twin seed Singulators give the MTR Planter Unit very accurate seed singulation with all seed shapes and sizes. The fixed Singulator runs along the inside of the metering disc holes (special lower seed Singulator on the sugar beet versions), the adjustable Singulator runs along the top and connected to a lever system and gauge.



9 Seed Removal Hatch The Seed Removal Hatch allows the metering unit to be emptied and prevents the loss of seed when having to perform maintenance or whilst changing the metering disc.



11) Seed Delivery Pipe The redesigned seed tube gives consistent seed delivery, the long tube prevents the seed from bouncing keeping seed placement accurate

12 Extra Large Furrow Opening Disc 420mm The extra large 420mm Double Disc opener creates a perfect furrow in all soil types and conditions. The disc itself is 4mm thick and 420mm in diameter providing a long working life at the same time reducing operating costs. The large Double Disc also means the MTR Precision Planter Unit can work faster in harder conditions and still maintain constant

accuracy and seeding depth. The unit also comes as standard with high quality bearings protected by the SUPER SEAL sealing system. The SUPER SEAL combines three levels of ingress protection, preventing contamination or lubricant loss that might cause premature bearing failure; this gives a long term maintenance free unit.

(13) Row Equipment Clod Pusher: Height adjustable clod pusher mounted in front of the DOUBLE DISC furrow opener, clears any large clods or trash that might still be on the surface that could potentially interrupt the seed placement accuracy. Optional Coulter Disc: Depth adjustable mounted in front of the DOUBLE DISC furrow opener, increases the furrow opening capability. Optional Trash Wheels: attached in front of the double disc opener and removes crop residues away from the planting row. Seed Press Wheel: Seed to soil contact maximised by eliminating the possibility of air pockets in the seed furrow using the optional Seed Press Wheel. The wheel pressure can be adjusted and a Tungsten carbide coated scraper keeps the wheel clean

(14) Shaft Drive Reliable quick disengaging shaft drive transmission is used to drive the metering unit, comes with a mechanical alarm and is totally maintenance free! The electronic disengagement system is available as an option to allow the operator to stop the seeding of each planter unit from within the tractor cab.



(15) Self-lubricating Bushes Maintenance free self-lubricating, oil impregnated steel bushings slowly release oil whilst they being used, this makes them extremely hard wearing and they should out last most other similar forms of bushing on precision drills.

(16) Optical Seed counter Extremely accurate dual optical sensors count every seed then relay the readings back to the control box inside the tractor cab for the operator. The sensors are enclosed under the metering unit and above the seed tube to prevent dust and soil particles being counted as seed and potentially causing an inaccurate seed count readings.

17 Seed Depth Adjuster The working depth is controlled by a manual adjuster that raises and lowers the disc.

(8) Break-Back Regulator The Break-Back depth regulator keeps a constant seeding depth by allowing each rubber depth wheel to move independently as a single unit. This is achieved by using a cast rocker that enables one rubber depth wheel to raise over large clods and stones without effecting the disc and other depth wheel, the rocker system also makes sure each planting unit follows the contours of the soil, so for instance if you hit a sudden rise in the soil level both rubber depth wheels raise up at the same time. This limits the range of movement to ensure the planting depth is accurate.

(19) Mechanical Gear Shift The mechanical gear shift allows quick and easy changes to the precision drill. Various configurations are available to adapt the units to different soils and crops.



#### MTR Planter Unit specifications MANTA(R) Base Drill with MTR Units 75 110 2260 MANTA(R) with MTR Units and Microgranulator 75 110 2340 MANTA(R) with MTR Units and Fert/Suffolk 75 110 4x160 2600 Suffolk Coulter MANTA(R) with MTR Units and Fert/Suffolk & Micro 75 110 4x160 2700 Suffolk Coulter MANTA(R) with MTR Units and Fert/Disc 75 110 4x160 2720 Double Disc MANTA(R) with MTR Units and Fert/Disc & Micro 75 6 110 4x160 Double Disc 2820 Yes MANTA(R) Base Drill with MTR Units 12 45 130 2690 MANTA(R) with MTR Units and Microgranulator 12 45 130 2820 Yes MANTA XL(R) Base Drill with MTR Units 12 75 140 2460 3.3 MANTA XL(R) with MTR Units and Microgranulator 140 75 Yes

### OPTIONS (standard on some models - not available on all models)

#### Disc Seeding Openers/Row



Centre Line Marking



**Double Disc Fertiliser** Hydraulic Fan Upgrade Coulter Upgrade/Row



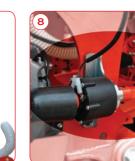
**Upgrade Transmission** Wheels to 7.50 x 16



Fertiliser Inspection Steps



GASPARDO



**Seed Covering Arms** 



60L Seed Hopper Upgrade Electric Row Shut-Off Kit

**GPS Control Kit** 



Hydraulic Unit Lifting



**Tractor Wheel Eradicators** 





#### **Options**

	1
SARA	•
STELLA	•
MTE	•
MARTA	•
MONICA	•
MTE(R)	•
MARTA(R)	•
MONICA(R)	•
MANTA(R)	•
MANTA XL(R)	•
MARISA(R)	•
MIRKA(R)	•

1	2	3	4	5	6	7	8	9	10	11	12
		3	4	5	0	7	0	9	10	- 11	12
•	•	•	•							•	
•	•	•	•	•						•	
•	•	•		•	•	•			•	•	
•	•	•				•				•	
•	•									•	
•	•	•		•	•	1	•		•	•	
•	•	•				•	•			•	
•	•						•			•	
•						•	•	•		•	•
•						•	•	•		•	•
•						/	•			•	•
•					•	/	•	•	•	•	•

( \square as standard)

## FRONT MOUNTED FERTILISER TANKS **PA1 & PA2**

In-row fertiliser distribution reduces wastage and greatly improves operation efficiency; this gives the crop the much needed boost in its early stages of growth.

The Gaspardo precision drill range offers three different variations of fertiliser distribution units with hopper size to suit all requirements.



The PA1 & PA2 Front Fertiliser Tanks are feature packed systems, they utilise the FLEXEED metering system with either mechanical or full electronic control with a landwheel or radar landspeed sensor respectively. The PA2 Front Tank has a twin metering system. The front tank has an option of Disc or Suffolk coulters to mount on the rear drill.

(1) Cyclone Distributors The cyclone units expel the air from the hydraulic fan to prevent the fertiliser being blown at pressure onto the soil surface which could potentially cause bouncing and uneven distribution.



(2) Fertiliser Openers The planter can be supplied with a Suffolk Coulter opener or Double Disc opener to distribute the fertiliser separately from the main seed trench. A special kit is available if it needs to be distributed into the seed furrow.



## DRILL MOUNTED **FERTILISER TANKS**

## MINIMAX - Option

The MINIMAX distribution system is mounted on-board the precision drill unit and can distribute at rates from 50 - 700kg/ha.



1 Speedy Set Quick and easy centralised rate adjustment.



(2) Patented Soft Feeder A Silicone metering roller and corrosion resistant plastic body prevents milling or grinding of the fertiliser inside the metering units.



(3) Fertiliser Openers The planter can be supplied with a Suffolk Coulter opener or Double Disc opener to distribute the fertiliser separately from the main seed trench. A special kit is available if the fertiliser needs to be distributed into the seed





### MICROGRANULAR - Option

The MICROGRANULATOR unit can be fitted to distribute micro-doses of soil fertilisers, pesticides, insecticides or weeds killers. EASY to set thanks to the precise and accurate MINIMAX metering system

1 Patented Soft Feeder A Silicone metering roller and corrosion resistant plastic body prevents milling or grinding of the fertiliser inside the metering units.



## SEEDING DISC - TECHNICAL

No. of Holes	Diameter Ø (mm)	Seeds	Seeding Distance	
20	2.5	Sunflower	Ţ	
20	3.5	Cotton - Sweetcorn - Maize (small)	Min. 10.4cm	
20	5.5	Maize (large) - Pulses - Beans - Peanut	Max. 41.7cm	
20	7.0	Peanut - Lupin	<b>^</b>	
26	2.5	Sunflower	Min Com	
26	3.5	Cotton - Sweetcorn - Maize (small)	Min. 8cm	
26	4.5	Maize	Max. 32.1cm <b>♠</b>	
36	1.0	Tomato		
36	1.5	Lentil - Cucumber - Tomato Pilled Ø 2.5mm - 3.5mm	<b>↓</b>	
36	2.1	2.1 Beet - Squash - Melon - Watermelon - Sorghum - Sesame - Oilseed Rape		
36	2.5	Tomato Pilled Ø 3.5mm - 4.5mm - Ginseng		
36	3.5	Beans (small) - Peas - Soyabeans	Max. 23.2cm	
36	4.5	Beans - Peas - Field Bean - Maize	<b>↑</b>	
36	5.5	Beans		
52	4.25	Soyabeans	Min. 3cm Max. 11.5cm	
72	1.1	Oilseed Rape	Min 2 Oom	
72	2.1	Swiss Chard - Sorghum	Min. 2.9cm	
72	3.5	Beans (small) - Soyabeans	Max. 11.6cm <b>↑</b>	









#### **GASPARDO DISTRIBUTED** BY OPICO LTD,

Cherry Holt Road, Bourne, Lincolnshire PE10 9LA. Telephone: 01778 421111

Fax: 01778 425080 E-mail: ask@opico.co.uk Website: www.gaspardo.co.uk

YOUR LOCAL GASPARDO DEALER