

ORSCH

Maestro DV

PRECISE SINGLE GRAIN SEED DRILL – WIDE RANGE OF APPLICATIONS

Maestro DV

PRECISE SINGLE GRAIN SEED DRILL – WIDE RANGE OF APPLICATIONS

- Versatile single grain technology for: maize, sunflowers, soybeans, rape
- Simple handling of the metering device no adjustment of the scraper required
- Solid and reliable technology heavy parallelogram and row unit for highest strain
- Coulter pressures up to 300 kg for safe sowing even in difficult conditions
- Automatic, soil-dependent coulter pressure adjustment AutoForce with coulter pressures up to 350 kg per row
- High hectare output due to long range for fertiliser and seed
- Compact unit with low demands on the tractor

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Maestro DV WITH AIRVAC SYSTEM -**PRECISE – VERSATILE**

AirVac - the new generation of vacuum singulation

The AirVac metering device can be used universally for an exact grain singulation. Due to different metering discs, maize, sunflowers, sugarbeet, soybeans and rape can be singulated reliably.

The AirVac system is based on the principle of vacuum singulation where the seed is sucked to a perforated disc. During the metering process the accepted grains pass through a scraper that sees to it that duplicates are removed. The special feature of the AirVac scraper is that the user does not have to carry out any adjustment works. The contour of the scraper has been optimised in such a way that a reliable singulation for all crops is guaranteed.

Via a fall tube the AirVac metering device leads the seed to the bottom of the furrow. A grain sensor is integrated into the fall tube to guarantee an optimum monitoring of the seeding success. The measuring technology of the sensor is able to count the grains, to determine the spacings between the grains and thus also to transmit an information to the driver with regard to double spots or gaps.

The transmitted values of the singulation accuracy are displayed clearly at the terminal of the machine and additionally increase safety while sowing.

The AirVac singulator is driven electrically as a standard and each row can be controlled individually. This technology cooperates with the well-proven functions single row switch-off, SectionControl, VariableRate and tramline control.

For VariableRate the AirVac system is designed in such a way that the seed rate can be modified for every single row. With the tramline control it is possible to individually adapt the seed rate in the row at the left and the right side of the tramline. With these advanced functions all measures to increase precising while sowing can be used to full capacity.





Easily accessible metering device with different metering discs according to the type of crop

The universal singulator does not have to be adjusted

AirVac

- Can be used universally for different crops
- High precision for sowing speed up to 12 km/h
- Simple handling: no adjustment of the scraper required
- Electric drive as a basis for:
- SectionControl
- VariableRate
- Tramline control

Star-shaped cleaning wheel

SectionControl allows for switching the row off and on automatically via GPS position signal.

Maestro DV

CAN BE USED UNIVERSALLY FOR MANY CROPS

The very compact unit of the **Maestro DV** consisting of a large seed wagon, a seed bar with a working width of up to 6 m and a single grain seed bar with 6 or 8 rows guarantees high efficiency with comparably low requirements on the tractor. As the seed bar is attached via a 4-point linkage, it is possible to mount a Pronto NT or Pronto TD CoulterBar with a working width of 4, 5 or 6 m for broadcast sowing systems. Thus, the Maestro DV can be used even more universally and becomes an all-rounder among the seed drills.

To meet all customer requirements in an optimum way, two configurations of the seed wagon of the Maestro DV are available.

Single hopper for fertiliser

The 2 800 litre hopper is used to apply fertiliser via the coulters of the underground fertilisation. In this case, the seed is supplied in the large individual row boxes with a capacity of 70 litre.

Pressurised double hopper for two components

When using the Maestro DV in combination with a Pronto NT or Pronto TD CoulterBar, the large double hopper with a capacity of 3 500 litres can be used to apply seed and fertiliser simultaneously as a Grain & Fertiliser system into the seed slot. As an alternative the double hopper combined with the single grain seed bar can be used to apply two different fertiliser components via the underground fertilisation unit.

For both versions the hopper is equipped with the well-proven HORSCH metering technology and can supply the underground fertilisation system respectively the seed bar of the Maestro reliably and precisely. The row body of the Maestro DV is equipped with a wide, sturdy parallelogram and, as a standard, with springs to create the coulter pressure. Thus, coulter pressures up to 300 kg per row can be generated mechanically. As an option, it is possible to equip the machine with hydraulic cylinders to generate the coulter pressure. Thus, the innovative coulter pressure regulation system AutoForce carries out the coulter pressure adjustments up to max. 350 kg per row. The weight of the seed wagon is used to generate the coulter pressure over the whole width of the machine and relieves the seed wagon tyres while sowing.

Maestro DV - in brief

- Precise and simple singulation with HORSCH AirVac
- Clear and simple design of the machine
- Very low horsepower requirement: as of 100 hp
- Seed wagon with single hopper or pressurised double hopper
- Combines two seed drills in one:
- 8-row single grain seed bar
- Pronto NT CoulterBar 4, 5 or 6 m working width
- Pronto TD CoulterBar with RollFlex packer with 6 m working width
- Coulter pressures can be adjusted mechanically up to 300 kg per row or fully automatically with AutoForce up to 350 kg per row
- Weight of the seed wagon is used to generate coulter pressure
- Underground fertilisation with SingleDisc fertiliser coulter
- Central micro-granular unit for placement in the furrow or on the row
- ISOBUS control



New seed row container with a capacity of 70 litres





Maestro DV with NT CoulterBar

Maestro DV road transport

8-row Maestro DV



AutoForce AUTOMATIC COULTER PRESSURE CONTROL

WITH coulter pressure control system AutoForce



Optimum pressure – optimum sowing depth

WITHOUT coulter pressure control system AutoForce



Optimum pressure – Too little pressure – optimum sowing depth too shallow sowing

Too much pressure – too much compaction

AutoForce -

What do you need an automatic coulter pressure control for?

- Stony soils require more coulter pressure to place the seed at a consistent depth. If the coulter pressure is too low the coulter body would not move smoothly and the seed would germinate irregularly and with different speed.
- Light conditions or pressure-sensitive soils need less coulter pressure so that the soil is not compacted. Too much coulter pressure compacts the soil and slows down the development of the roots although all seed was placed at the same depth.
- There rarely are fields that are completely even. The coulter pressure has to be adapted to each section of the field.
- This is why HORSCH developed an automatic coulter pressure control system.

How does AutoForce work on the soil?

- The contact pressure of the row is measured with a sensor at the two support wheels. This pressure (= nominal value) is previously set in the terminal. You can choose between three pressure levels 25 kg-50 kg and 80 kg (the values can also be adapted individually).
- With changing soil conditions, the row needs more or less power to be able to keep up the set placement depth. The contact pressure would change. The sensor detects this, and the system regulates the contact pressure in such a way that it always corresponds to the nominal value that has been set. This is possible due to the design of the machine which allows for transferring weight to the seed bar.
- The coulter pressure automatically varies between 150 kg and 350 kg. Thus, the grain is always embedded at the same level. A too shallow placement as well as soil compaction can thus be avoided.

Press wheels FOR A BETTER EMBEDDING OF THE GRAINS

Finger wheel





Spike press wheel

Medium to heavy conditions

Medium to light conditions

Which press wheel is suitable for which use? Finger and spike press wheel

- The finger press wheel is ideal for heavy and medium soils
- Spike press wheel for medium to light sites
- There is one finger/spike wheel and one standard wheel per row to control the depth and to avoid moving the grains.
- However, the wheels are not suitable for shallow sowing.
- If the furrow wall gets compacted because of the DoubleDisc seed coulters, it is broken by the finger/spike wheel – the furrow is removed.
- Seed furrow is not opened after sowing under dry conditions, especially on heavy clayey sites
- Development of the maize root is encouraged



AutoForce pressure sensor: Weight recording is carried out via Piezo (pressure sensor) technology.

Details of the Piezo sensor

Finger wheel

Rubber closing wheel

Profiled roll



For light conditions



For light conditions or fine seeds (beet and rape)

Rubber and profiled press wheel

- The rubber closing wheels are ideal for light sandy sites
- The profiled rolls are recommended for fine seeds
- The profile creates additional fine earth and can better prevent silting.

HorschConnect DIGITALISATION MADE EASY

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Saves time and nerves: HorschConnect Telematics

From controlling the machine via smartphone to recording and processing telemetry data. Use **HorschConnect** to benefit from the advantages of digitalisation.

Via the **HorschConnect Telematics Portal** you can always keep track of your machine. In addition to the current position, speed and application rate you can, of course, review data of past orders. Smart dashboards as well as remote diagnostics complete the concept, reduce idle times and increase efficiency. An additional benefit: your documentation is automated – transparent, simple and safe. To make sure you can concentrate on the essential at any time.



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For more comfort and flexibility: the new MobileControl app

- Operation of selected machine functions, i. e. calibration, via the smartphone
- Monitoring of the function of each row via the row test
- Reading out certain machine information as well as messages in the app
- Available for iOS and Android







No more multiple maintenance and redundant information – a solution is only as good as its interfaces: carry out your data exchange between the platforms of different manufacturers in a simple and automated way. With the agrirouter you can manage this in an uncomplicated and safe way. And what is most important: you keep complete control of your data.



Intelligence INTELLIGENT SOLUTIONS FOR EVEN MORE PRECISION

The machines of the future communicate actively and **HORSCH Intelligence** allows for it. With intelligent software and electronic solutions HORSCH machines work even more efficiently and help you to save money and nerves.

Saving of operating resources, constant work quality, relieving the workload of the driver – you, too, can benefit from our ISOBUS licenses.

SectionControl

Automatic section control

VariableRate Site-specific application of seed and fertiliser

MultiControl

Independent regulation of the application rate of seed and fertiliser

AutoLine

Independent drilling of the track rhythm due to GPS-based tramline control





Touch 800 Terminal



Touch 1200 Terminal

ROW EQUIPMENT AIRVAC AND AIRSPEED



In addition to a precise placement of the grains the exact positioning of fertilisers or plant protection agents is very important for single grain sowing.

The rows of the Maestros, thus, can be equipped with different components to provide an optimum solution for all requirements and demands.

SingleDisc fertiliser coulter

The SingleDisc fertiliser coulter is suspended independently of the seed row. The placement depth can be set to 5 to 9 m. The coulter pressure can be adapted quickly and without any tools to the prevailing soil conditions to guarantee a smooth running and a constant depth placement of the fertiliser. The fertiliser coulter can be deactivated by lifting.



DoubleDisc fertiliser coulter

The depth of the DoubleDisc coulter is controlled via the flange plate of the seed row. The fertiliser is placed at the same depth as the grains resp. 3 to 5 cm below the sowing depth. The coulter pressure for fertiliser coulter and row can comfortably be controlled via the hydraulic cylinder in the parallelogram. The DoubleDisc fertiliser coulter is only available for machines with AirVac metering.



floating with depth control

seed slot in very hard or no-till conditions.



Heavy DoubleDisc coulter with low-wear, stable depth control





Hole pattern for depth adjustment with 14 steps

Stable connection of the rows and an optional hydraulic cylinder for coulter pressure generation with AutoForce

Maestro DV



Application of micro-granular compound

With the Maestros micro-granular components can be applied at two different positions. Fertiliser granulate as well as plant protection agents are normally applied via the first release position into the seed furrow. There is a direct contact to the grain, the agents can be absorbed immediately by the seedling and the young plant in an optimum way. The second placement option is the little baffle behind the closing wheels. This way, undersown crops or slug pellets can be distributed widely.



TECHNICAL SPECIFICATIONS

IORSCH Maestro DV	Maestro 6.70-75-30" DV	Maestro 8.70-75-30" DV
ransport width with 2.45 m track (m)	3.00	3.00
ransport width with 2.80 m track (m)	3.35	3.35
ransport width with 3.00 m track (m)	3.55	3.55
ransport height (m)	3.10	3.90
ransport length (m)	7.50	7.50
Veight (kg)*	3 400	3 750
lopper capacity seed waggon single hopper version (l)	2 800	2 800
lopper capacity seed waggon double hopper version (I)	3 500	3 500
eed opening seed waggon single hopper version (m)	1.00x2.40	1.00x2.40
eed opening seed waggon double hopper version (m)	per 0.60 x 0.90	per 0.60 x 0.90
Capacity seed container (I)	70	70
lumber of rows	6	8
Coulter pressure mechanical (kg)	150-300	150-300
Coulter pressure hydraulic (kg)	150-350	150-350
Depth control wheel Ø (cm)	40	40
ress wheel Ø (cm)	30/33	30/33
atching roller	Standard	Standard
low spacing (cm, inch)	70/75/30"	70/75/30"
owing depth (cm)	1.5-9	1,5-9
Prop height seed (cm)	45	45
yre size seed waggon (optional)	550/60-22.5 / Twin tyres 270/95 R 32	550/60-22.5 / Twin tyres. 270/95 R 32
Vorking speed (km/h)	2-12	2-12
lorsepower requirement from (kW/hp)	59/80	75/100
DA control devices	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser and underpressure with adjustable flow rate, 1 DA hydr. filling auger single hopper	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser and underpressure with adjustable flow rate, 1 DA hydr. filling auger single hopper
Depressurized return flow (max. 5 bar)	1 for hydr. fan direct drive fertiliser and underpressure	1 for hydr. fan direct drive fertiliser and underpressure
)il quantity hydr. fan fertiliser and underpressure (l)	50	50
di. drawbar linkage	Bolt Ø 40 mm	Bolt Ø 40 mm

HORSCH Maestro DV	4 NT seed bar	5 NT seed bar	6 NT seed bar
Working width (m)	4.00	5.00	6.00
Transport width (m)	4.00	5.00	3.00
Transport width with 2.45 m track (m)			3.00
Transport width with 2.80 m track (m)			3.35
Transport width with 3.00 m track (m)			3.55
Transport height (m)	2.70	2.70	3.90
Transport length incl. Maestro DV (m)	7.40	7.80	7.80
Weight incl. Maestro DV (kg)*	3 800	4 200	5 200
Hopper capacity seed waggon single hopper version (I)	2 800	2 800	2 800
Hopper capacity seed waggon double hopper version (I)	3 500	3 500	3 500
Feed opening seed waggon single hopper version (m)	1.00x2.40	1.00x2.40	1.00x2.40
Feed opening seed waggon double hopper version (m)	per 0.60 x 0.90	per 0.60 x 0.90	per 0.60 x 0.90
Number of seed coulters	20	25	30
Coulter pressure (kg)	5-120	5-120	5-120
Seed coulters/press wheels Ø (cm)	34/32	34/32	34/32
Row spacing seed coulters (cm)	20	20	20
Cutting disc system Ø (inch)	17 or 18	17 or 18	17 or 18
Tyre size seed waggon (optional)	550/60-22.5 Twin tyres 270/95 R 32	550/60-22.5 Twin tyres 270/95 R 32	550/60-22.5 Twin tyres 270/95 R 32
Working speed (km/h)	10-20	10-20	10-20
Horsepower requirement from (kW/hp)	74/100	88/120	103/140
DA control devices	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate, 1 DA hydr. filling auger		
Depressurized return flow (max. 5 bar)	1 for hydr. fan direct drive		
Oil quantity hydr. fan fertiliser and underpressure (l)	50	50	50
Adj. drawbar linkage	Bolt Ø 40 mm	Bolt Ø 40 mm	Bolt Ø 40 mm

* Weights of the machines with minimum equipment

* Weights of the machines with minimum equipment



HORSCH Maestro DV	RollFlex seed bar
Working width (m)	6.00
Transport width with 2.45 m track (m)	3.00
Transport width with 2.80 m track (m)	3.35
Transport width with 3.00 m track (m)	3.55
Transport height (m)	3.90
Transport length incl. Maestro DV (m)	7.80
Weight incl. Maestro DV (kg)*	4 950
Hopper capacity seed waggon single hopper version (l)	2 800
Hopper capacity seed waggon double hopper version (l)	3 500
Feed opening seed waggon single hopper version (m)	1.00 x 2.40
Feed opening seed waggon double hopper version (m)	per 0.60 x 0.90
Number of seed coulters	40
Coulter pressure (kg)	5-120
Seed coulters/press wheels Ø (cm)	34/32
Row spacing seed coulters (cm)	15
Tyre size seed waggon (optional)	550/60-22.5 Twin tyres 270/95 R 32
Working speed (km/h)	10-20
Horsepower requirement from (kW/hp)	75/100
DA control devices	1 DA hydr. functions, 1 DA hydr. fa direct drive fertiliser with adjustable flow rate, 1 DA hydr. filling auger
Depressurized return flow (max. 5 bar)	1 for hydr. fan direct drive
Oil quantity hydr. fan fertiliser and underpressure (l)	50
Adj. drawbar linkage	Bolt Ø 40 mm

* Weights of the machines with minimum equipment



Your distributor:



HORSCH Maschinen GmbH Sitzenhof 1 · 92421 Schwandorf Phone: +49 9431 7143-0 Fax: +49 9431 7143-9200 E-Mail: info@horsch.com



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