

Maestro CV / CX



VERSATILE AND PRECISE SINGLE GRAIN SEED DRILL
IN THE 6 M SECTOR



Maestro CV / CX

THE COMPACT MID-SIZE PLANTER

- Versatile single grain technology for: maize, sunflowers, sugar beet, sorghum, rape, soybeans and other bean species
- Coulter pressures up to 350 kg for optimal sowing even in most difficult conditions or automatic soil-dependent coulter pressure adjustment AutoForce
- Rugged and reliable technology – heavy parallelogram and row unit for highest demands
- High hectare output due to high capacities for fertiliser and seed, optionally with the central seed system Main Tank Supply (MTS)



The compact Maestro CV/CX unit that consists of a high-capacity seed wagon and a coulter bar for a working width up to 7.2 m offers high efficiency while the requirements on the tractor are comparably low. An 8-row and 9-row coulter attachment of the Maestro is possible with row spacings of 70 / 75 / 80 cm and 30". When used with 12 rows, spacings of 45 and 50 cm are available. The newly developed clamping profile allows for a simple conversion from 12 to 8 rows. A 11-row coulter attachment with a row spacing of 50/55 or 60 cm is also possible.

The new row body is equipped with a wide, stable parallelogram and as standard with a hydraulic cylinder to generate coulter pressure. Coulter pressures up to 350 kg per row can be set manually at the terminal or fully automatically with the innovative coulter pressure regulation system AutoForce. The weight of the seed wagon is used to generate the coulter pressure over the whole width of the machine and guarantees for a relieve of the seed wagon wheels while sowing.



Fertiliser hopper 3 000 l and central seed hopper with a capacity of 800 l



Maestro 8 CX with row unit hopper for sowing maize

Fertiliser and seed hopper



Central fertiliser and seed hopper

To optimally meet the customer requirements, two configurations are available for the seed wagon of the Maestro CV/CX:

Single hopper for fertiliser or seed (Seed-Only)

The hopper with a capacity of 3 000 l is used for the application of fertiliser via the coulters of the underground fertilisation. In this case, the seed is provided via the large individual row boxes with a capacity of 70 l.

In the Seed-Only version a seed capacity of 3 000 l can be used for example for sowing legumes. A fertiliser application is no longer available.

Double hopper for fertiliser and seed

The new double hopper system MTS (Main Tank Supply) stores 3 000 l of fertiliser and 800 l of seed. The seed is continuously transported to the individual row units by means of the MTS technology and is then singulated by the AirVac or AirSpeed metering device. The huge advantage of MTS is the simple and quick filling of the central seed hopper. By means of the two new metering systems, the seed is singulated with the usual precision and high placement accuracy on the row.

In both versions the fertiliser tank is equipped with the well-proven HORSCH metering technology and can supply reliably and precisely the underground fertiliser system of the Maestro.



Seed-Only version with a seed capacity of 3 000 l

- Large 3 000 l central tank for fertiliser
- 70 l row tank or central 800 l seed hopper with MTS System
- Seed-Only version with 3 000 l central seed hopper (without fertiliser equipment)

Row unit

DURABLE – RELIABLE – SOLID



Robust Maestro row unit

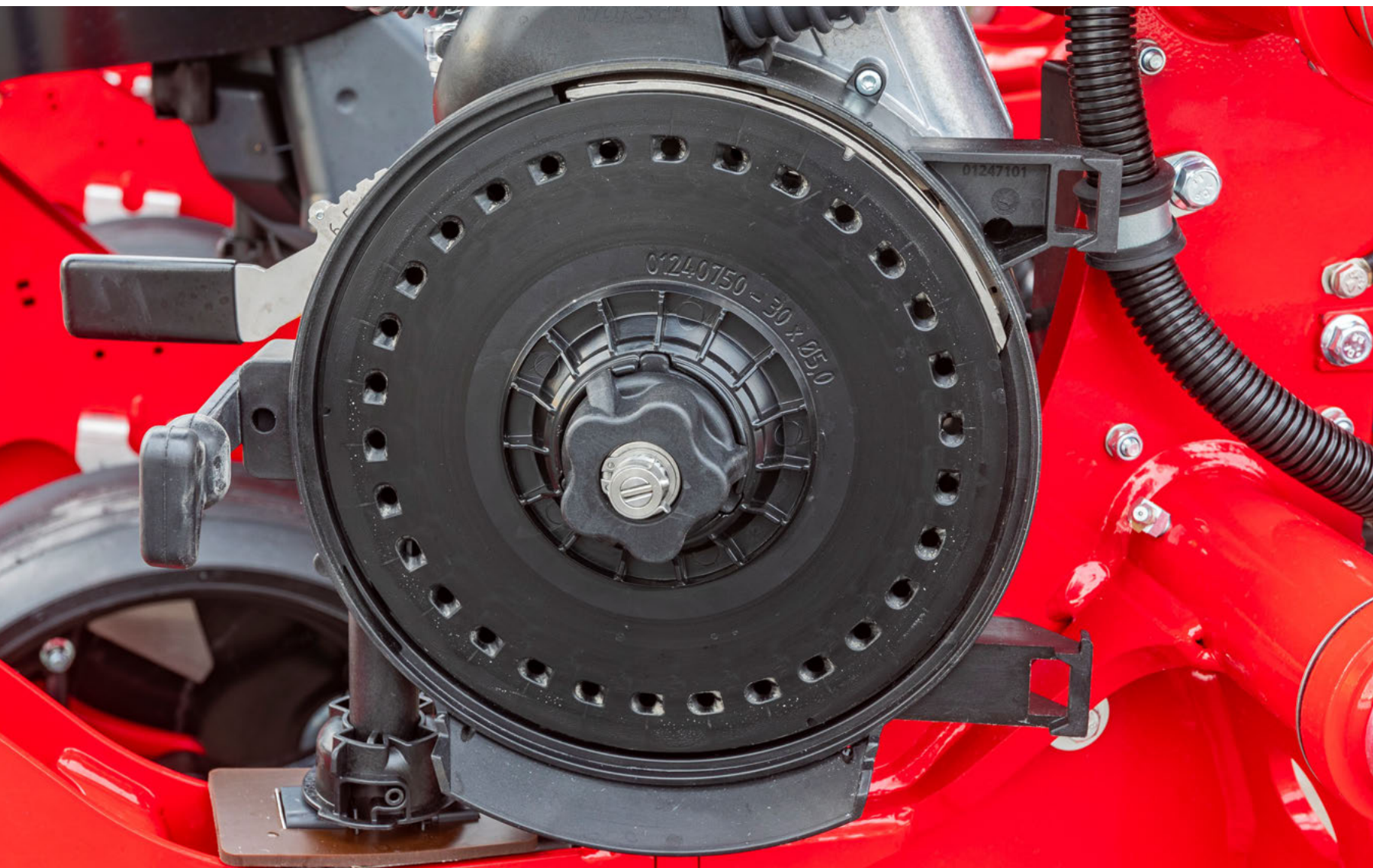
The Maestro row units mainly excel due to a long service life and a very stable design. With 35 cm the parallelogram is very wide so that especially laterally acting forces can be absorbed better. The maintenance-free bushes in the parallelogram are very large to guarantee a long service life. The row units can move by just under 40 cm to compensate for unevenness in the field. They are either clamped to the frame of the Maestros with a clamping device or for larger machine models are fixed. The coulter pressure is generated in the parallelogram of the row unit with a hydraulic cylinder. Coulter pressures up to 350 kg per row can be selected. The empty weight of the machine is used and transferred to the row unit.

The basic body of the row unit is heavy duty. The depth control system is equipped with large wear points to avoid having to comprise. The seed discs of the double disc coulter are equipped with reliable 2-row angular ball bearings. Depth control is carried out via a pin and 14 available positions. You can sow at depth from 1.5 to 9 cm. A catching roller to catch and press the grains is mounted as standard. The seed furrow is closed and consolidated by a V-shaped pair of closing wheels. Different front tools can be attached in front of the disc blade at a standardised flange plate, e.g. trash wells or a cutting disc.

- Hydraulic coulter pressure up to 350 kg
- Various front tools
- Closing wheel options for all soils
- Durable and low-wear design

AirVac and AirSpeed

VERSATILE – PRECISE – EFFICIENT



The new metering generations AirVac and AirSpeed basically have a very similar design. They work according to the same metering principle. They can be used universally for a very precise grain singulation for a lot of crops. With different metering discs maize, sunflowers, sugar beet, soyabeans and other bean crops as well as rape and sorghum are singulated reliably.

The AirSpeed system works according to the overpressure principle where the grains are pressed to the perforated disc. In both metering devices, the grains run through a singulator which sees to it that double seed is avoided. The characteristic of this special component is that it does not have to be replaced when changing crops and that the driver does not have to carry out any adjustments. The contour of the singulator was optimised in such a way that a reliable singulation for all crops is guaranteed.

The basic difference between the two new metering generations is the transfer of the seed from the metering device into the soil: with the AirVac system, after the singulation the seed is led into the bottom of the furrow by means of the drop tube and if required is pressed by the catching roller. With the AirSpeed system the singulated grains are captured by an air current, accelerated and shot with the air current through the shoot pipe into the soil. They are caught and embedded by the mounted catching roller.

In both metering devices the grains pass a grain sensor in the drop – shoot tube for an optimum monitoring of the sowing success. The measurement technology of the sensor is able to count grains, identify spacings between the grains and thus inform the driver about double spots and gaps.

Advantages at a glance:

- Can be used universally for different crops
- Easy handling: no adjustment of the singulator required
- Reliable singulation of different grain sizes
- Electric drive as a basis for: SectionControl, VariableRate, tramline control

AirVac:

- Operational speeds up to 12 km/h
- Utmost flexibility for all crops and optimum embedding of the grain

AirSpeed:

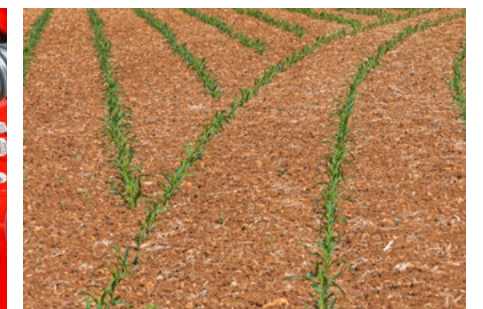
- Operational speeds up to 15 km/h
- Maximum efficiency with safe embedding of the grain



The universal singulator does not have to be adjusted



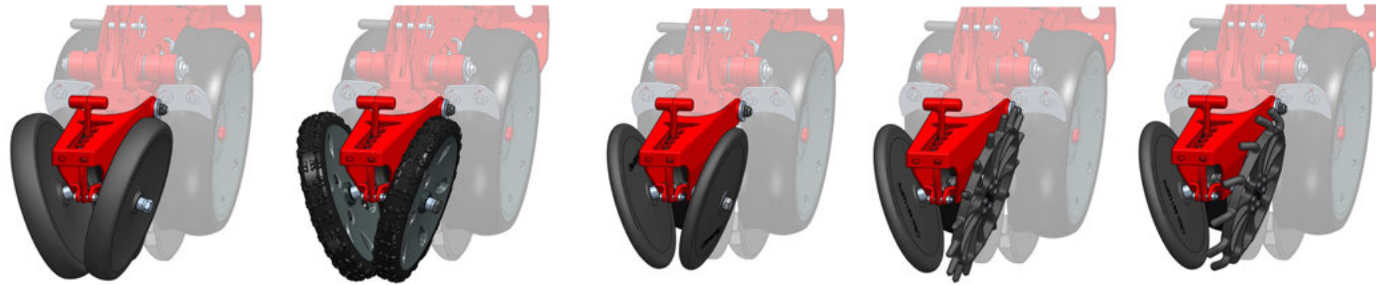
Easily accessible AirVac metering device



SectionControl allows for switching the rows off and on automatically via GPS

Press wheels

FOR A BETTER EMBEDDING OF THE GRAINS



V-pressure wheels wide: for lighter soils

V-pressure wheels wide with profile: for light soils and fine seeds (beet and rape)

V-pressure wheels narrow: for normal conditions

Spike wheel: for medium and lighter soils

Finger wheel: for medium and heavy soils

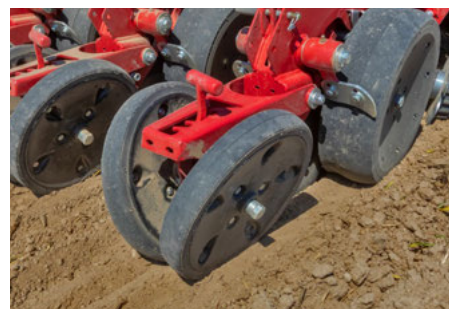
The closing of the seed furrow is the last time when you can influence emergence. Depending on the type of soil, the sowing method, sowing depth and the crop, the requirements differ. Therefore, the Maestros can be equipped with different press wheels and press wheel combinations to be able to achieve an optimum work result for all crops in all conditions.

Which press wheel is suitable for which application?

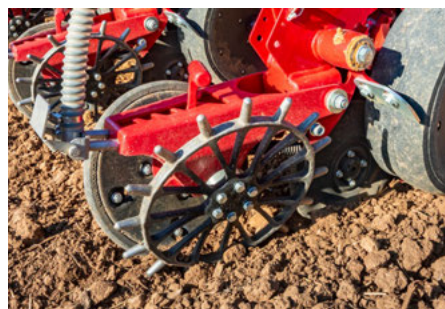
- Rubber and profiled press wheel
- Rubber closing wheels for light sandy conditions
- The profiled wheels are recommended for fine seeds.
- The profile additionally creates fine earth and can better prevent silting.

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



V-pressure wheels wide



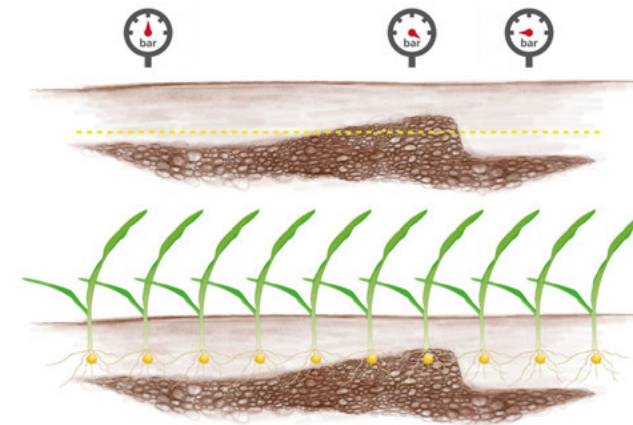
Spike wheel



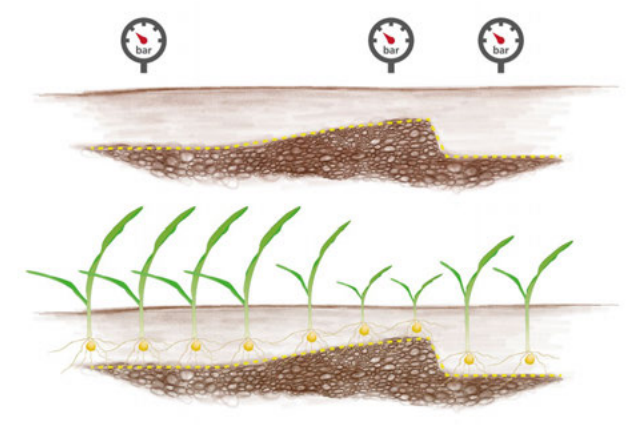
Finger wheel

AutoForce

OPTIMUM EMBEDDING DESPITE CHANGING SOIL CONDITIONS



With AutoForce: optimum pressure – optimum sowing depth



Without AutoForce: constant pressure – irregular placement

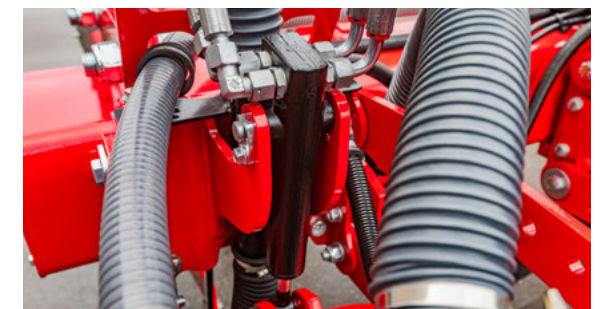
What do you need an automatic coulter pressure control for?

- 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 AutoForce has been available for the Maestro line since 2016.

AutoForce guarantees an always consistent embedding of the grains in changing conditions. Thus, more regular emergence and populations are achieved. The contact pressure of the row unit 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.



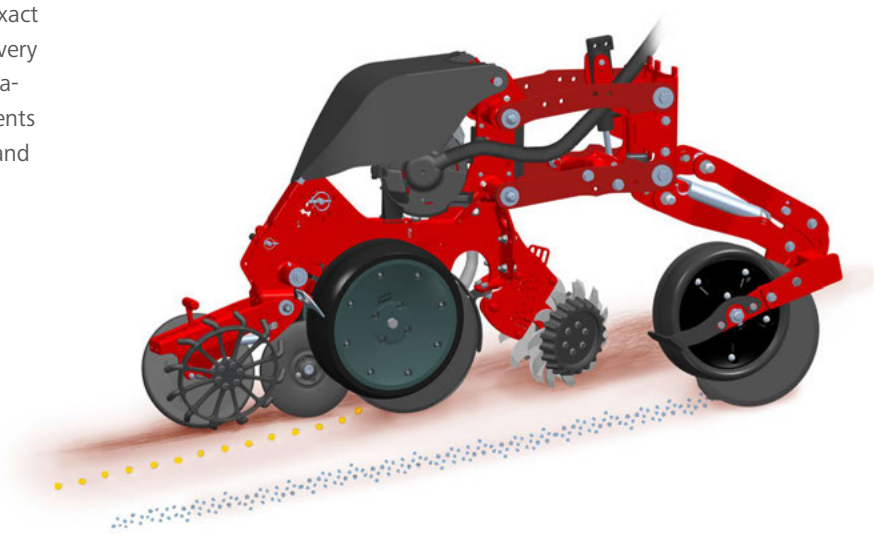
The Piezo sensor in detail



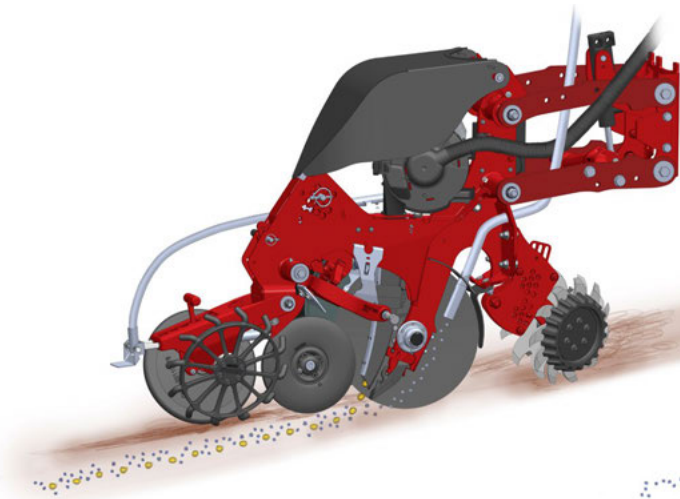
Hydraulic coulter pressure cylinder

FERTILISER AND MICRO-GRANULAR COMPOUND APPLICATIONS

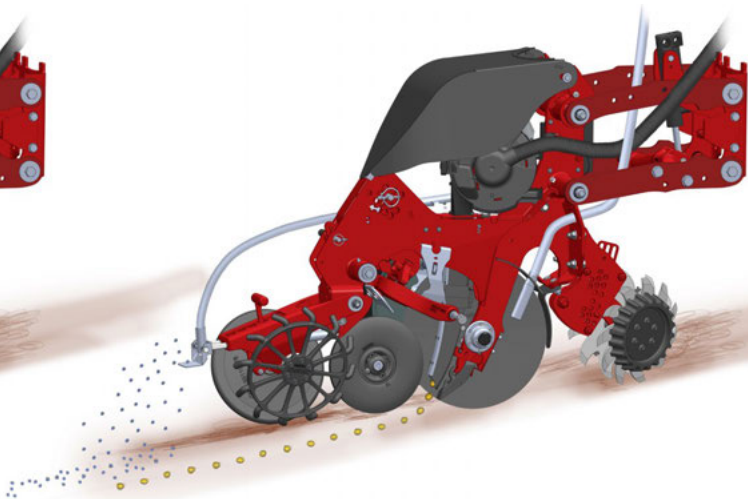
In addition to a precise placement of the grains the exact positioning of fertilisers or plant protection agents is very important for single grain sowing. The rows of the Maestros, thus, can be equipped with different components to provide an optimum solution for all requirements and demands.



Single disc fertiliser couler controlled via its own parallelogram



Pneumatic application IN the row



Pneumatic application ON the row



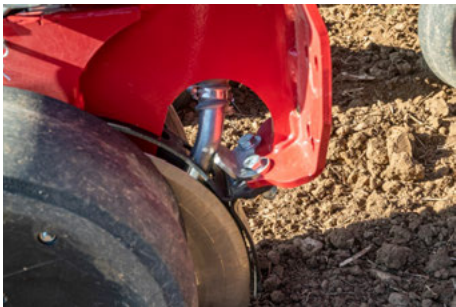
SingleDisc fertiliser couler

SingleDisc fertiliser couler

- The SingleDisc fertiliser couler is suspended independently of the seed row
- The placement depth can be set to 5 to 9 cm
- Quick adaption of the couler pressure without tools from 40 to 140 kg
- Deactivation is possible without tools by lifting the unit out of work

Application of micro-granular compound

- Two application points are possible at the row unit
- Release position in the seed furrow for fertiliser granulate and crop care agents for good contact to the seedling
- Release option behind the row via baffles, for large, shallow distribution of underseed or slug pellets



Pneumatic application IN the row



Pneumatic application ON the row

DIGITAL SERVICES

Metering disc selection

- Maximum flexibility – the use of different metering discs allows for sowing different crops with the HORSCH Maestro.
- The tool determines the appropriate metering disc for your application.
- Only enter the type of crop, operating speed, application rate and row spacing and off you go!



Rotor selection

- Facilitates the selection of the optimum rotor for any application
- Wide selection range from normal seeds to fine seeds to fertiliser and micro-granular compound
- Expert mode to carry out rotor configurations also for variable operating speeds and application rates



eosT10 (Pro)

- High-resolution 10" terminal for controlling all ISOBUS devices according to ISO 11783
- Reliable and powerful: a high-performance hardware combined with an intuitive, user-friendly operation in daytime or night mode
- Straightforward transfer of application maps with the wireless Task Data Exchange
- Various layout options allow for a simultaneous display of several applications – for an optimum overview
- eosT10 and eosT10 Pro – one hardware, completed by two licence kits. Precision is always standard for us.

AutoLine

- Automatic, GPS-based tramline control
- Optimised driving strategy near obstacles or on the headlands
- Track-to-track driving is no longer required
- Available in combination with the terminal eosT10 Pro



Due to the flexible holder, the eosT10 can be perfectly integrated in every cabin



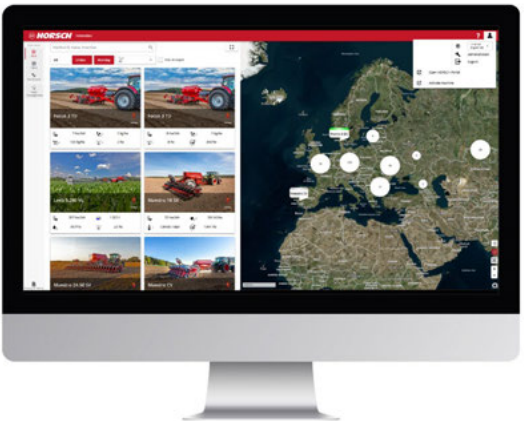
By displaying up to 3 widgets in addition to the main workin screen, the user can keep track of several applications at the same time.



Drill independent of the track rhythm with HORSCH AutoLine!

HorschConnect

Prepare today for tomorrow. Control different machine functions quite easily via the MobileControl app – your smartphone replaces the terminal! In addition, gain complete, transparent insight in all aspects of work performance and working quality with HorschConnect Telematics.

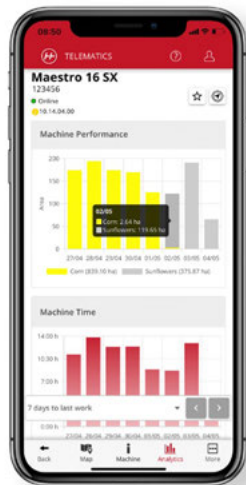


With HorschConnect telemetry solutions can be found in the sowing and plant protection sector – exactly where they make sense

- Digital solutions exactly where they make sense
- Straightforward out-of-the-box solution with integrated SIM card, WLAN modem and other interfaces
- HorschConnect Telematics to document the performance of the machine
- HorschConnect Telematics for complete transparency of the working quality, e.g the application rate of all components, and exact documentation of the singulation quality
- Targeted and proactive service due to remote access of the error messages
- Control of machine functions via the smartphone app MobileControl: e. g. the calibration of all metering units and the control of the individual rows to check the singulation quality before starting to sow or while sowing



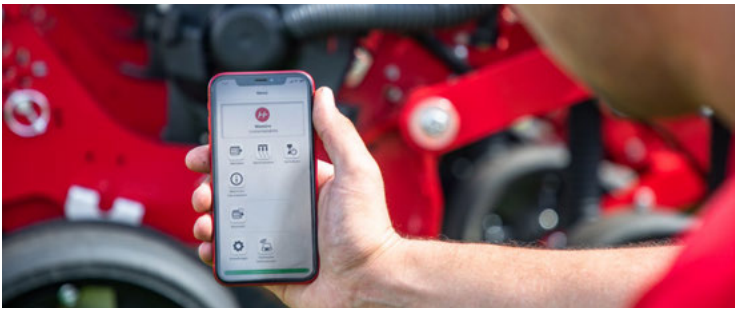
By means of the MobileControl app a test of the most important parameters of the singulation quality can be carried out any time.



Always keep an eye on machine performance and daily performance with HorschConnect Telematics



Success factor transparency: Position-specific data of all relevant information like error messages, operational speed or singulation quality



Quick and easy calibration or testing the singulation quality of the machine via smartphone with the MobileControl app

ADDITIONAL EQUIPMENT



Folded, hydraulic filling auger fertiliser tank



Row unit hopper with a capacity of 70 l



Standard depth control wheel for normal soils



MTS hopper with a capacity of 800 l



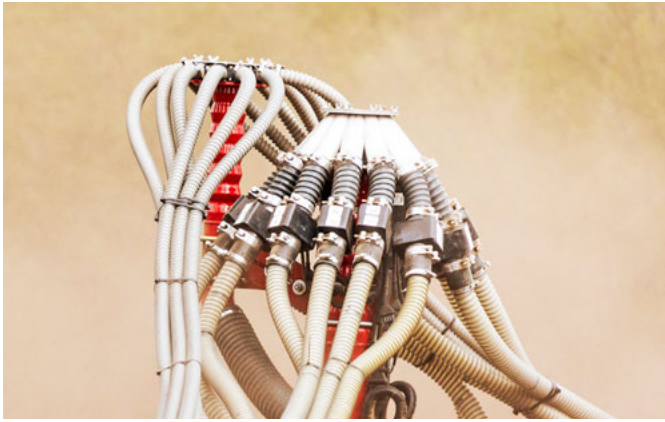
Central micro-granular unit with a capacity of 300 l



Optional trash wheels, floating with depth control



Spokes depth control wheel: better self-cleaning, thus ideal for black soils



Pneumatic distribution tower with fertiliser flow sensors



WorkLight Pro at the Maestro CV/CX

TECHNICAL DATA

Excerpt from the technical data.
You will find further options on our
website under www.horsch.com



Maestro CV / CX	8 CV	9 CV	12 CV	8 CX	9 CX	12 CX
Transport width (m)	3.00	3.00	3.00	3.00	3.00	3.00
Transport height (m)	4.00	4.00	3.90	4.00	4.00	3.90
Transport length (m)	6.30	6.60	6.30	6.30	6.60	6.30
Axle load (kg)	3800 - 5400	4000 - 5500	4500 - 6400	3800 - 5400	4000 - 5500	4500 - 6400
Vertical load (kg)	1200 - 1500	1200 - 1500	1300 - 1800	1200 - 1500	1200 - 1500	1300 - 1800
Hopper capacity seed waggon (l)	3000	3000	3000	3000	3000	3000
Feed opening seed waggon injector hopper (m)	0.80 x 2.40	0.80 x 2.40	0.80 x 2.40	---	---	---
Feed opening seed waggon pressurised hopper (m)	0.70 x 2.30	0.70 x 2.30	0.70 x 2.30	---	---	---
Feed opening seed waggon (m)	---	---	---	0.70x2.30	0.70x2.30	0.70x2.30
Capacity seed container (l)	70 / 800 / 3 000	70 / 800 / 3 000	70 / 800 / 3 000	70 / 800 / 3 000	70 / 800 / 3 000	70 / 800 / 3 000
Number of rows	8	9	12	8	9	12
Coulter pressure hydraulic (kg)	150 - 350	150 - 350	150 - 350	150 - 350	150 - 350	150 - 350
Depth control wheel Ø (cm)	40	40	40	40	40	40
Press wheels Ø (cm)	30 / 33	30 / 33	30 / 33	30 / 33	30/ 33	30 / 33
Catching roller	Standard	Standard	Standard	Standard	Standard	Standard
Row spacing (cm)	70 / 75 / 80 / 90	60 / 70 / 75	45 / 50	70 / 75 / 80	60 / 70 / 75	45 / 50
Sowing depth (cm)	1.5 - 9	1.5 - 9	1.5 - 9	1.5 - 9	1.5 - 9	1.5 - 9
Drop height seed (cm)	45	45	45	---	---	---
Operational speed (km/h)	2 - 12	2 - 12	2 - 12	6 - 15	6 - 15	6 - 15
Horsepower requirement (kW/hp)	110/150	118/160	132 / 180	125 / 170	132 / 180	147 / 200
Tyre size seed waggon	710/50 R 26.5, 500/85 R 24.0, Twin tyres 4x270/95 R 36, Twin tyres 4x320/85 R 34	710/50 R 26.5, 500/85 R 24.0, Twin tyres 4x270/95 R 36	710/50 R 26.5, Twin tyres 4x270/95 R 36	710/50 R 26.5, Twin tyres 4x270/95 R 36	710/50 R 26.5, 500/85 R 24.0, Twin tyres 4x270/95 R 36, Twin tyres 4x320/85 R 34	710/50 R 26.5, Twin tyres 4x270/95 R 36
Depressurized return flow (max. 5 bar) (PCE)	1 (0 with PTO drive without MTS)	1 (0 with PTO drive without MTS)	1 (0 with PTO drive without MTS)	1	1	1
DA control devices direct drive	1 DA hydr. functions 1 DA hydr. fan – direct drive, fert./MTS with adjustable flow rate 1 DA hydr. fan – direct drive, low pressure with adjustable flow rate 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, fert./MTS with adjustable flow rate 1 DA hydr. fan – direct drive, low pressure with adjustable flow rate 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, fert./MTS with adjustable flow rate 1 DA hydr. fan – direct drive, low pressure with adjustable flow rate 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, fertiliser with adjustable flow rate 1 DA hydr. fan – direct drive, high pressure/ MTS with adjustable flow rate 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, fertiliser with adjustable flow rate 1 DA hydr. fan – direct drive, high pressure/ MTS with adjustable flow rate 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, fertiliser with adjustable flow rate 1 DA hydr. fan – direct drive, high pressure/ MTS with adjustable flow rate 1 DA hydr. filling auger, single hopper
DA control devices pto-shaft drive	1 DA hydr. functions 1 DA hydr. fan – direct drive, low pressure with adj. flow rate (only with MTS!) 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, low pressure with adj. flow rate (only with MTS!) 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, low pressure with adj. flow rate (only with MTS!) 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, fertiliser with adjustable flow rate 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, fertiliser with adjustable flow rate 1 DA hydr. filling auger, single hopper	1 DA hydr. functions 1 DA hydr. fan – direct drive, fertiliser with adjustable flow rate 1 DA hydr. filling auger, single hopper
Oil quantity hydr. fan vacuum (l)	25	25	25	---	---	---
Oil quantity hydr. fan overpressure (l)	25	---	---	50	50	50
Oil quantity hydr. fan fertiliser (l)	---	---	---	30	30	30
Oil quantity hydr. fan fertiliser without MTS (l)	30	30	30	---	---	---
Oil quantity hydr. fan fertiliser with MTS (l)	50	50 (not with pto-shaft drive)	50	---	---	---
Power requirement in operation (AMP)	30	30	35	30	30	35
Adjustable drawbar linkage with ring hitch ball joint	Bolt Ø 32, 42 or 51 mm	Bolt Ø 32, 42 or 51 mm	Bolt Ø 32 or 42 mm	Bolt Ø 32 or 42 mm	Bolt Ø 32 or 42 mm	Bolt Ø 32 or 42 mm
Adjustable drawbar linkage hitch	Bolt Ø 40 mm	Bolt Ø 40 mm	Bolt Ø 40 mm	Bolt Ø 40 mm	Bolt Ø 40 mm	Bolt Ø 40 mm
Adjustable drawbar linkage rotatable	---	Bolt Ø 50 mm	---	---	---	---
Implement attachment ball head	K 80	K 80	K 80	K 80	K 80	K 80



Your distributor

Statements from our customers
all over the world



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All specifications and diagrams are approximate and not binding. Technical features and design are subject to change.

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