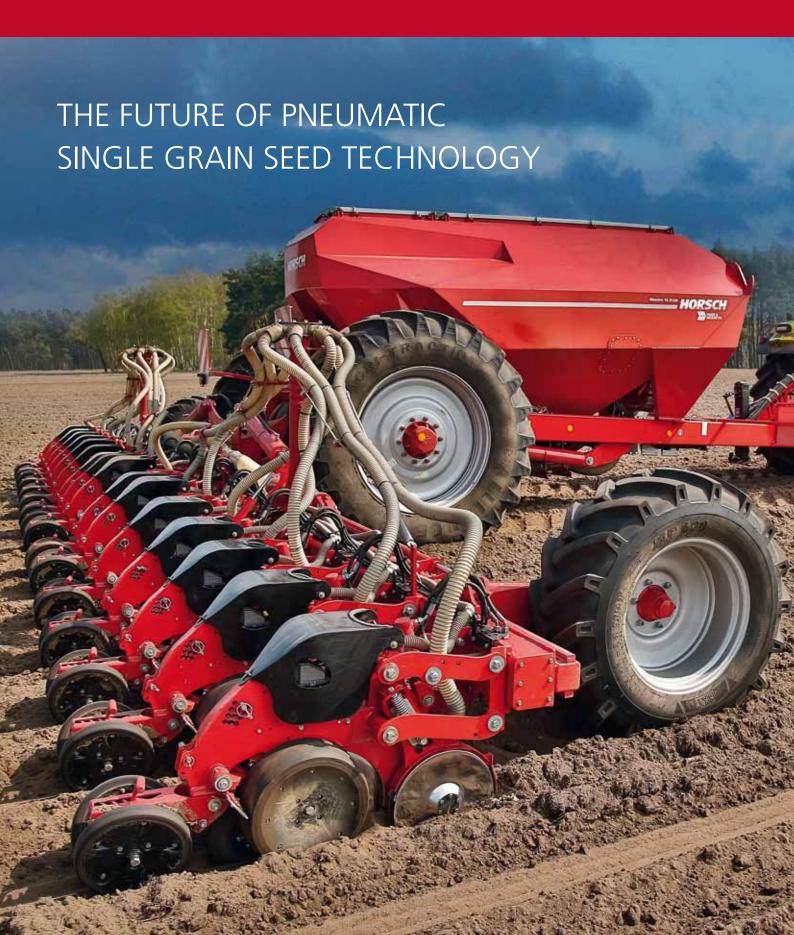
## Maestro



Maestro CC Maestro SW Farming with passion



# THE FUTURE OF PNEUMATIC SINGLE GRAIN SEED TECHNOLOGY. **FAST – PRECISE – VERSATILE**.

#### The Maestro – a master of singling:

Due to its exact grain singling it is universally suitable for maize, soy, sunflowers and sugarbeet. The patented **Maestro** single grain technology particularly excels due to three features:

- the unique metering system
- the extremely small single grain metering unit
- the placement quality control.

The metering system is based on a completely new metering disc. It does not have the usual holes, but grooves that open up to the outside. Thus, together with the new scraper, the singling results achieved in a large frequency range from 0 to 30 Hz are excellent. 30 Hz correspond to a working speed of 12 km/h for the usual 90,000 grains of maize per hectare.

The crucial factor for these results is the smooth transition of the grains from a circular to a linear movement in the placement area. There are no disturbing centrifugal forces in the fall sluice. This extraordinary accuracy is undependend from the rotational frequency of the metering disc and is exactly controlled by sensors. As the grains are not shot into the soil pneumatically, it is possible to work without a catching roller at the seed unit, e. g. under wet conditions.

The software in the Isobus terminal is set up in such a way that the driver can clearly see the exact missing and double spots as well as the variation coefficient for every single row. Thus, the driver can respond any time to the most different conditions like seed or seedbed quality and use the machine to its full capacity. The working speed can thus be adapted to the individual requirements for placement accuracy.

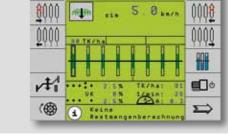




Compact and robust – the Maestro single grain metering device









The **new metering disc** of the Maestro with open grooves.

The ISOBUS Terminal shows the placement quality of each individual row on a real-time basis.

The new **pneumatic singling** is absolutely precise.



#### What are the excelling features of the Maestro CC?

- 2 to 12 km/h working speed
- compact machine with a hopper capacity of 2,800 litre for fertilizer
- large 70-litre seed containers on every seed unit
- as 6-, 8- or 12-row version
- row spacings between 45 and 80 cm
- robust HORSCH seed units
- coulter pressure between 125 and 300 kg hydraulically adjustable
- low power demand: 100 PS are sufficient for the 8-row Maestro CC

#### And of course:

- the unique **Maestro** metering system
- the extremely small single grain metering unit
- the exact control of the placement quality
- precise sowing with 12 km/h working speed
- universally suitable for maize, soy, sunflowers and sugarbeet

#### Double use:

as Maestro RC also avail in combination with a seed waggon of the Pronto AS.



High working speed of 12 km/h









Maestro CC road transport

12-row **Maestro 12.45 CC** 

# Maestro SW MAXIMUM EFFICIENCY WITH LARGE SEED WAGGON

#### What are the excelling features of the Maestro SW?

- 2 to 12 km/h working speed
- Maximum efficiency for single grain seed
- Seed waggon with a capacity of 2,000 litre for seed and of 7,000 litre for fertilizer
- Seed on Demand system for a permanent seed provision at each seed unit
- As 12-, 16-, 18-, 24- or 36-row version
- Row spacing from 45 to 90 cm
- Robust HORSCH seed units
- Coulter pressure between 125 and 300 kg hydraulically adjustable

#### And of course:

- The unique Maestro metering system
- The extremely small single grain metering unit
- The exact control of the placement quality
- Precise sowing with 12 km/h working speed
- Universally suitable for maize, soy, sunflowers and sugarbeet

#### Maestro World Record – High-speed precision sowing of maize

- Date: 28th of April 2012
- Location: Chaplygin/Russia
- Total cultivated area: 448.29 ha
- Timeframe: 24 hours
- Area output: 18.6 ha/h
- Sowing density: 88,000 grains/ha
- Specified spot ratio: 94 %
- Total amount of seed used: 10 t
- Total amount of fertiliser used: 47 t
- Fuel consumption CLAAS Xerion 5000: 3.17 l/ha
- Speed: 14.7 km/h





Extremely robust single grain seed units with precise grain singling and Seed on Demand system







**Seed waggon** for 2,000 litre seed and 7,000 litre fertilizer for maximum efficiency

### **EQUIPMENT**



Hopper micro-granular unit **Maestro CC** (200 litre), 12/18 **SW** (350 litre) and 16/24/36 **SW** (500 litre) with placement in the seed furrow



Optional: twin tyres 230/95 R 32 Maestro CC. The seed furrow is exactly between the tyres



Optional single disc fertiliser coulter



Seed container of the Maestro CC



The patented metering system is unique (date 09.2011) and combines singling, engine and control unit in one casing.



The metering disc of the Maestro



The adjustable scraper transports the grain into the fall sluice without any disturbing centrifugal forces.



Fertilizer discs



Depth control wheels with scraper, adjustable press wheels and the catching roller which can be removed in extremely wet conditions as the seed grain is not placed into the soil with pressure.



Open **Seed on Demand system** at the Maestro SW



Optional **trash wheels** in front of the fertilizer coulters



Single disc fertiliser coulter as an option for Maestro 24/36 SW







Focus TD with three-point linkage and a Maestro RC seed unit bar

Distribution tower and 3-point linkage (Maestro RC)



Maestro RC:
Maestro seed bar (8- or 12-row) combined with seed waggon SW 3500 of the Pronto AS.
The Pronto seedbar can be replaced with the Maestro seedbar and vice versa via a three-point.



Metering unit in the Seed on Demand version



Hydraulic coulter pressure adjustment



View into the **divided seed waggon** of the Maestro SW



**ISOBUS Terminal** for checking and controlling the functions of the machine.

### **TECHNICAL DETAILS**



HORSCH Maestro CC	6.70 - 75 - 80 CC	8.70 - 75 - 80 CC	12.45 - 50 CC	9.60 CC
Transport width (m)	3.00	3.00	3.00	3.00
Transport height (m)	3.55	3.85	3.85	3.85
Transport length (m)	7.50	8.20	8.20	8.20
Weight (kg)*	3,600	3,940	4,575	4,100
Hopper capacity seed waggon	2,800	2,800	2,800	2,800
Feed opening seed waggon (m)	1.00x2.40	1.00x2.40	1.00x2.40	1.00x2.40
Capacity seed container (I)	70	70	70	70
Number of rows	6	8	12	9
Coulter pressure hydr. (kg)	125-300	125-300	125-300	125-300
Depth control wheel ø (cm)	40	40	40	40
Press wheel ø (cm)	30/33	30/33	30/33	30/33
Catching roller	standard	standard	standard	standard
Row spacing (cm)	70/75/80	70/75/80	45/50	60
Sowing depth (cm)	1.5-9	1.5-9	1.5-9	1.5-9
Drop height seed (cm)	45	45	45	45
Tyre size seed waggon (standard)	700/50- 22.5	700/50-22.5	700/50-22.5	700/50- 22.5
Tyre size seed waggon (optional)	Twin tyres 230/95 R 32 Twin tyres 270/95 R 32	Twin tyres 230/95 R 32 Twin tyres 270/95 R 32	Twin tyres 230/95 R 32 Twin tyres 270/95 R 32	Twin tyres 230/95 R 32 Twin tyres 270/95 R 32
Working speed (km/h)	2-12	2-12	2-12	2-12
Power demand (KW/PS)	75/100	88/120	103/140	96/130
Double-acting control devices	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate, 1 DA hydr. fan direct drive underpressure 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 underpressure 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 underpressure 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 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	1 for hydr. fan direct drive fertiliser and underpressure	1 for hydr. fan direct drive fertiliser and underpressure
Oil quantity hydr. fan underpressure (I/min)	25 (not with pto-shaft drive)			
Oil quantity hydr. fan fertilizer (I/min)	25 (not with pto-shaft drive)			
Current demand (A)	40	40	45	40
Adj. drawbar linkage	Bolt Ø 40 mm			
Ball-type linkage	K 80	K 80	K 80	K 80

<sup>\*</sup> Weights of the machines with minimum equipment

HORSCH Maestro RC	8,70 - 75 - 80 RC	12,45 - 50 RC
Transport width (m)	3,00	3,00
Transport height (m)	3,85	3,85
Length without seed waggon (m)	3,42	3,12
Transport length with seed waggon (m)	10,39	10,39
Weight without seed waggon approx, (kg)*	1,800	2,500
Weight with seed waggon approx, (kg)*	6,500	7,200
Capacity seed container (I)	70	70
Number of rows	8	12
Coulter pressure hydr, (kg)	125-300	125-300
Depth control wheel ø (cm)	40	40
Press wheel ø (cm)	30/33	30/33
Catching roller	standard	standard
Row spacing (cm, inch)	70/75/80	45/50
Sowing depth (cm)	1.5-9	1.5-9
Drop height seed (cm)	45	45
Working speed (km/h)	2-12	2-12
Power demand (KW/PS)	75/100	90/120
Power demand (KW/PS) incl. DiscSystem as of	132/180	147/200
3-point linkage	3-point cat, II/III	3-point cat, II/III

3-point linkage	3-point cat, II/III
* Weights of the machines with (without bout marker and skin	minimum equipment nmers for Maestro RC without SW)

<b>HORSCH Pronto</b>	6 AS		
Double-acting control devices	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate, 1 DA hydr. fan direct drive underpressure 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 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	
Oil quantity hydr. fan underpressure (l/min)	25	25	
Oil quantity hydr. fan fertilizer (l/min)	25	25	
Current demand (A)	40	45	
Lower link linkage	Cat. II/III - III - III/IV	Cat. II/III - III - III/IV	
Adj. drawbar linkage	Bolt Ø 40 - 50 mm	Bolt Ø 40 - 50 mm	
Ball-type linkage	K 80	K 80	





HORSCH Maestro SW	12.70-90/ 30"-36" SW	16.70-75-80/ 30" SW	16.90-95/ 36"-38" SW	18.45 - 50 SW	24.70-75/ 30" SW	36.45-50 SW
Transport width (m)	3.00	3.00	3.61 (Maestro 16.90/36") 3.84 (Maestro 16.95/38")	3.00	3.00	3.00
Transport height (m)	4.00	4.00	4.00	4.00	4.00	4.00
Transport length (m)	9.51	8.06	9.39	9.51	9.50	9.62
Weight (incl.seed waggon) as of (kg)*	7,175	9,857	10,700	8,300	11,830	13,900
Axle load (kg)						10,200
Support weight (kl)						3,700
Hopper capacity seed waggon (seed/fertiliser) (I)	2,000/7,000	2,000/7,000	2,000/7,000	2,000/7,000	2,000/7,000	2,000/7,000
Hopper capacity seed wagon only seed (I)	8,500	8,500		8,500	8,500	8,500
Feed opening seed waggon seed (mm)	800x660	800x660	800x660	800x660	800x660	800x660
Feed opening seed waggon fertiliser (mm)	2,450x660	2,450x660	2,450x660	2,450x660	2,450x660	2,450x660
Hopper opening seed wagon only seed (mm)	1,700x660 (2x)	1,700x660 (2x)		1,700x660 (2x)	1,700x660 (2x)	1,700x660 (2x)
Number of rows	12	16	16	18	24	36
Electr. Coulter pressure adjustment terminal (kg)	125-300	125-300	125-300	125-300	125-300	125-300
Depth control wheel ø (cm)	40	40	40	40	40	40
Press wheel 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)	70/75/90/30"/36"	70/75/80/30"	90/95/36"/38"	45 oder 50	70/75/30"	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	45	45	45
Tyre size seed waggon	520/85 R 38	520/85 R 42	520/85 R 42	520/85 R 42	520/85 R 42	520/85 R 42
Telescopic axle	standard	standard	standard	standard	standard	standard
Working speed (km/h)	2-12	2-12	2-12	2-12	2-12	2-12
Power demand as of (kW/PS)	130/180	160/220	160/220	160/220	200/270	243/330
Depressurized return flow (max. 5 bar)	1	1	1	1	1	1
DA control devices direct drive	1 DA hydr. functions, 1 DA hydr. fan direct drive underpressure with adjustable flow rate, 1 DA hydr. fan direct drive fertiliser and seed with adjustable flow rate, 1 DA hydr. filling auger fertiliser system	1 DA hydr. functions, 1 DA hydr. fan direct drive underpressure with adjustable flow rate, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate, 1 DA hydr. fan direct drive seed with adjustable flow rate, 1 DA hydr. filling auger fertiliser system	1 DA hydr. functions, 1 DA hydr. fan direct drive underpressure with adjustable flow rate, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate, 1 DA hydr. fan direct drive seed with adjustable flow rate, 1 DA hydr. filling auger fertiliser system	1 DA hydr. functions, 1 DA hydr. fan direct drive underpressure with adjustable flow rate, 1 DA hydr. fan direct drive fertiliser and seed with adjustable flow rate, 1 DA hydr. filling auger fertiliser system	1 DA hydr. functions, 1 DA hydr. fan direct drive underpressure with adjustable flow rate, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate, 1 DA hydr. fan direct drive seed with adjustable flow rate, 1 DA hydr. filling auger fertiliser system	1 DA hydr. functions, 1 DA hydr. fan direct driv underpressure with adju table flow rate (55 l/min) 1 DA hydr. fan direct driv fertiliser with adjustable flow rate (45 l/min), 1 DA hydr. fan direct drive see with adjustable flow rate (20 l/min), 1 DA hydr. fan direct drive with Power- pack with adjustable flov rate (25 l/min), 1 DA hyd filling auger fertiliser system
DA control devices pto-shaft drive			1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate, 1 DA hydr. filling auger fertiliser system		1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate, 1 DA hydr. filling auger fertiliser system	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser with adjustable flow rate (20 l/min), 1 DA hydr. filling auger fertiliser system
Oil quantity hydr. fan fertiliser (l/min)	40	40	45	40	45	45
Oil quantity hydr. fan seed (l/min)	40	20		40	20	20
Oil quantity hydr. fan underpressure (l/min)		25	50	25	55	55
Power demand during operation (A)	45	50	70	50	60	80 (Powerpack)
Adj. drawbar linkage	Ring drawbar eye Ø 55-73 mm	Ring drawbar eye Ø 55-73 mm	Bolzen Ø 50-70 mm	Ring drawbar eye Ø 55-73 mm	Ring drawbar eye Ø 55-73 mm	Ring drawbar eye Ø 55-73 mm
Ball-type linkage	K 80	K 80	K 80	K 80	K 80	K 80

<sup>\*</sup> Weights of the machines with minimum equipment



Your distributor:

## HORSCH

**HORSCH Maschinen GmbH**Sitzenhof 1
92421 Schwandorf

Phone: +4994317143-0 Fax: +49943141364 info@horsch.com