AEROSEM

PÖTTINGER Pneumatic seed drills

powered by innovation









For grain crops and maize

AEROSEM



The new generation of pneumatic seed drills for cereals and maize (single-seed placement)

The unique AEROSEM seed drill concept from PÖTTINGER unites the drilling of cereals and maize. Precision universal metering and perfect coulter systems guarantee exact placement of the seed.

The new INTELLIGENT DISTRIBUTION SYSTEM (IDS) opens up completely new capabilities in seed row switching and saving on seed material.

With PRECISION COMBI SEEDING (PCS) we have integrated singleseed planting technology into a pneumatic seed drill.

Contents

	Page
Metering and distribution	4
IDS Intelligent Distribution System	8
Coulters	10
Harrow tines	13
PCS Precision Combi Seeding	14
Mounting configuration	18
Setup / Operation	20
Technical data / Equipment	23

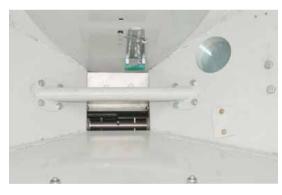
All information on technical data, dimensions, weights, output, etc. is approximate and is not binding.

Metering & Distribution

Precision for every seed material









High-volume seed tank

The AEROSEM seed tank features a large opening for filling. This enables rapid and trouble-free filling using Big-Bags or a front loader bucket. A wide sack support with handrail on top of the tank makes it easier to fill by hand. The rugged roller-tarpaulin serves as a dust-proof and rainproof cover that is convenient to open and close.

Fully equipped:

- Large tank volume of 275 gal / 1250 l
- Tank extension for additional 132 gal / 600 I (optional)
- Agitator for optimum seed material flow
- Exit flap for emptying residual seeds

Safe and convenient access

The wide operator platform enables safe access and easy supervision of the filling process. Access is gained using the fold-away steps on the left fitted with a stable handrail. A railing provides protection to the rear.





Output rates of 1,34 to 303 lbs per acre / 1.5 kg to 340 kg per ha

The AEROSEM metering system is designed for the highest precision to ensure accurate drilling.

The metering wheels for the different seed types can be changed quickly and easily using a quick-release.

Convenient calibration

The calibration system is fitted with a practical catch pan that is easy to use and saves time. The calibration flap is monitored by a sensor.

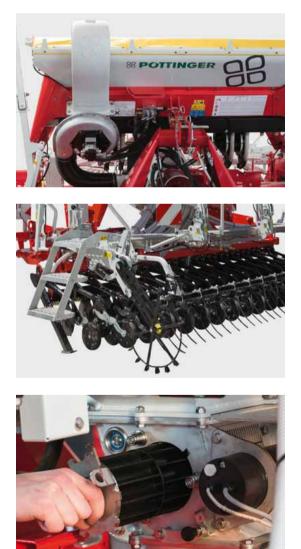
- Calibration using hand crank for mechanical metering drive.
- Calibration using control terminal for electrical metering drive.



Easy to empty

An exit shutter allows the tank to be completely emptied of seed.





High air volume protects the seed

The hydraulically-driven blower fitted as standard produces a high air output at an oil-flow rate of just 5.50 gal/min / 25 l/min. The high air volume guarantees consistently high drilling accuracy. The air stream protects the seed and its dressing. With a rugged casing made of thick aluminium plate, the blower is also suitable for planting maize.

Land wheel - accurate and reliable

On the mechanical metering system a land wheel ensures consistent and smooth drive of the infinitely-variable transmission submerged in oil. The land wheel runs within the width of the machine and does not need to be removed for road transport.

Electric metering drive for convenience

As an option, the electric metering drive system can be controlled using a DGPS speed signal. Seed flow rate can easily be adjusted from the tractor seat.

- Start and stop metering automatically with priming as standard for window-free output.
- Calibration at the push of a button with practical catch pan.





Unique distributor head

The seed is fed uniformly to the distributor in an air stream that passes up the riser tube. The design of the distributor guarantees exact division of the seed into each of the seed tubes.

- Standard row spacing is 4.92" / 125 mm.
- Non-controlled outlets can be blocked mechanically for wider row spacing.

Mechanical metering drive (standard)

Tramline switching can be selected between two and four rows per track.

A funnel-shaped sleeve around the riser tube feeds the seed back into the air stream.

The tramlines are engaged automatically using the COMPASS control system.

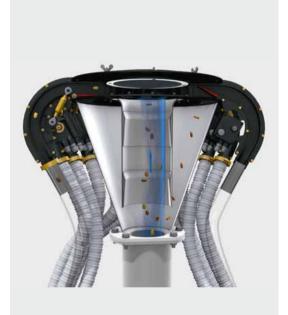
Electric metering drive and IDS distributor optional

When tramlines are engaged the seed falls into the funnel and is fed back into the air stream.

- Tramline engagement is controlled by POWER CONTROL or ISOBUS.
- The seed flow rate is reduced in proportion to the tramline rows by the electric metering drive system.







Flexibility that pays dividends

The newly-developed IDS system controls all outlets via the BUS system. This opens up completely new capabilities in seed row and tramline switching. In conjunction with POWER CONTROL or ISOBUS on the tractor and the electric metering drive, there are now no limits to flexible working in the field. The solution for seeding professionals.

IDS – Intelligent Distribution System

Awarded the DLG Silver medal at Agritechnica 2013.

Choose any of the following:

- Row spacing
- Tramline widths
- Track widths
- Special tramline switching
- Dual tramline systems
- Half rail switching left and right

6% lower seed consumption

IDS controls automatic seed flow reduction in the metering system during tramlining and half rail drilling. The excess seed is returned to the riser tube via the funnel system.

- Consistent number of seeds in each row
- Uniform crop development
- Seed savings of up to 6%.





Coulters

We ensure more content for higher output



Disc coulters

These dished single-disc coulters are mounted on twin-race tapered bearings with special seals. The adjustable, rotating scrapers are located behind to provide plenty of clearance to the side – easily handles large clods.

- Same coulter pressure on front and rear up to 55 lbs / 25 kg
- Precise depth tracking for perfect seed furrow
- Ideal seed placement for perfect growth
- Clog-free drilling thanks to 11.81" / 300 mm coulter spacing
- Wear-resistant cast coulter points

Suffolk coulters

Suitable for light soil with low levels of organic matter. A spring-loaded protective flap automatically covers the coulter if the machine moves backwards. The cast coulter points are wear-resistant.

- Coulter configuration 3-row, coulter spacing 9.84" / 250 mm
- Coulter pressure up to 55 lbs / 25 kg

Coulter pressure rollers

- For depth limitation and re-packing
- Quick-closure using interlock hook
- Straightforward pin-in-hole depth adjustment





Central coulter pressure adjustment

A coulter pressure of up to 55 lbs / 25 kg can be applied to Suffolk coulters and single-disc coulters. Coulter pressure is adjusted on the left and right using an orientation scale. Precise tension spring matching ensures the same pressure is applied to the front and rear coulters.

Ratchet wrench as standard.

DUAL DISC coulters

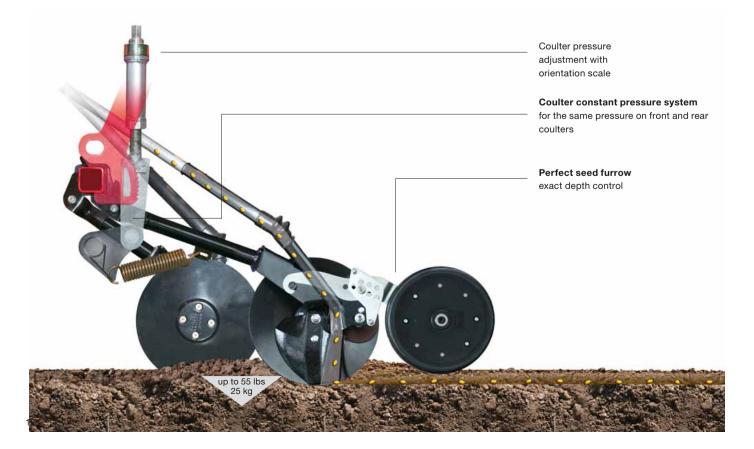
The large DUAL DISC coulters cut right through surface trash to form a uniform, tidy furrow. Harvest residues are not pressed into the ground. The coulter elements on the inside ensure uniform seed placement even at higher driving speeds.

- All coulters are guided by pressure rollers.
- The coulter spacing of 9.84" / 250 mm provides a large clearance and smooth material flow even with large amounts of organic matter.
- Maintenance-free coulter system with same-length arms to ensure the same pressure front and rear.
- Coulter pressure up to 110 lbs / 50 kg
- Coulter pressure adjusted from rear central point on AEROSEM ADD





Coulter types	Suffolk coulters	Single-disc coulters	DUAL DISC DUAL DISC coulters
Coulter configuration	3-row	2-row	2-row
Coulter spacing	9.84" / 250 mm	11.81" / 300 mm	11.81" / 300 mm
Coulters AEROSEM 3002	24 / 20	24 / 20	24 / 20
Coulters AEROSEM 3502	28	28	28
Coulters AEROSEM 4002	32 / 26	32 / 26	32 / 26
Row spacing	4.92 or 5.91" / 125 or 150 mm	4.92 or 5.91" / 125 or 150 mm	4.92 or 5.91" / 125 or 150 mm
Disc diameter	_	12.60" / 320 mm	13.78" / 350 mm
Depth roller diameter	9.84 x 1.57" / 250 x 40 mm	9.84 x 1.57" / 250 x 40 mm	12.99 x 1.96" / 330 x 50 mm
Pressure per coulter	up to 55 lbs / 25 kg	up to 55 lbs / 25 kg	up to 110 lbs / 50 kg









Harrow tines

The strong harrow tines feature spiral springs for perfect results. Shocks are absorbed using maintenance-free rubber mountings. Damage is prevented if reversed inadvertently.

- Central tine-angle adjustment.
- Easy to use adjustment functions for depth and pressure.
- Outer tines can be retracted for 9.84' / 3.0 m or 13.12' / 4.0 m transport width.
- Can be used together with pressure rollers without additional adapters.

Standard single-row harrow tine

The tines are located between the seed rows. These tines are archshaped to prevent clogging even in heavy organic material. The edging tine pairs are slanted inwards for a seamless pass-on-pass finish.

"Perfekt" single-row harrow tine

"Perfekt" harrow tines are designed for an especially intensive levelling effect. Offset tine lengths smooth the surface over completely to ensure that seeds are definitely covered even when shallow-drilling. The result is uniform germination of every seed.



Precision Combi Seeding (PCS) individual seed drilling technology







All-in-one for pure flexibility

PCS integrates individual seed drilling technology into a pneumatic seed drill, making you independent from single seed drills. This means more flexibility and more economically operation. Awarded the DLG Silver medal at Agritechnica 2013.

A seed drill for 4 applications

- Cereal
- Maize, sunflower seed without fertiliser
- Maize with fertiliser
- Maize with grass
- Reduction in investment costs by combining pneumatic seed drill with single seed drill
- Multiple uses for machine combination
- Saves running a separate single-seed drill
- Independence from contractor
- Reduction in fixed operating costs per hectare
- Expansion to range of applications high flexibility

Exact seed separation

Several single-seed metering elements are located beneath the add-on funnel. This hydraulically-driven system ensures exact seed separation. After they have been separated mechanically, the seeds are transported to the specially-developed injector. The air stream conveys the seed to the coulter.

- Easy adjustment of seeds per sq ft / m²
- Precise monitoring of seed distribution in furrow





Pneumatic seed transport

An air flap divides the air stream between the standard metering system and the PCS. Under pressure, the air system injector takes the individual seeds from the seed elevator and transports them at precise intervals to the coulter.

A seed flow sensor monitors reliable seed transport and indicates to the driver the accuracy of seed distribution in the furrow.





Perfectly placed

The DUAL DISC coulter with its integrated seed furrow former ensures a perfect seed furrow. A stopper roller presses the seed into the furrow. A pressure roller controls re-packing and working depth. The seed placement depth can be adjusted centrally.

- No vertical drop
- Exact seed placement
- Seed does not roll along furrow
- Optimum cover
- Uniform germination

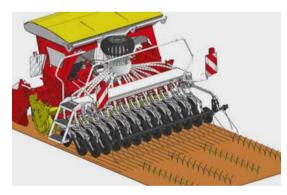
Fertilizer included

If required, fertilizer can also be applied using the standard metering system in a strip on either side of each seed row.

Alternatively, instead of fertilizer, grass seed can be deposited to protect against erosion.









One tank for all jobs

The seed tank is simply divided for single-seed drilling using PCS and demand-specific fertilization. The partition walls are repositioned quickly and easily using wing-nuts; no tools required. The tank then offers space for 87 gal / 400 litres of seed $(2 \times 43 \text{ gal})$ /

(2 x 200 l) and 175 gal / 800 litres of fertilizer.

Number of rows AEROSEM 3002 ADD

- Four rows, row spacing 29.52" / 750 mm
- Eight rows, row spacing 14.76" / 375 mm

Number of rows AEROSEM 3502 ADD

- Five rows, row spacing 29.52" / 750 mm
- Nine rows, row spacing 14.76" / 375 mm

Number of rows AEROSEM 4002 ADD

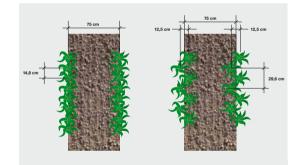
- Five rows, row spacing 29.52" / 750 mm
- Ten rows, row spacing 14.76" / 375 mm

Improving the environment and energy situation

- Minimises erosion by leaving behind a surface without marks
- Grass seed erosion protection drilled simultaneously in a single pass
- Fewer passes
- One-pass maize planting
- More efficient and saves more fuel
- Higher productivity
- Dressing dust goes directly into the furrow and is covered immediately







AEROSEM PCS DUPLEX SEED

Maize planted in double rows

Double rows with 4.92" / 125 mm and double the spacing in the row – row spacing 29.52" / 750 mm.

- Increases output during sowing thanks to higher
- driving speed.

Planting maize in a double row creates the perfect distribution density conditions

- 30% more space between seeds more light more nutrients increased photosynthesis.
- 70% more space available per plant more water no competition in root development.



DUPLEX SEED cost effectiveness

- Less risk of erosion.
- Improved ground shade rapid row integration.
- Increase in yield for silage maize up to 11%.
- Increase in yield for corn maize up to 8%.



Mounting configuration

A perfect connection







Ideal centre of gravity

The compact design is possible thanks to the smallest gap between the coulter rail and power harrow roller. Mounted on the power harrow or short combo, the centre of gravity is placed far forward.

Seed drill and rear rollers are a unit

As a result the power harrow can move upwards on stony ground. The weight of the seed drill is borne by the rear roller to ensure optimum re-packing of the seedbed.

Easy to fit and remove

Parking standards are provided for convenient handling. Simply drive the power harrow under the AEROSEM to attach. This is then piggybacked when lifted and just needs to be secured in place. Two lugs on each side ensure secure attachment.

Power harrow easy to adjust

The AEROSEM is mounted on the rear roller and is guided by a top link. As a result the packer roller and seed drill form a compact unit and enable parallel guidance of the machine.

- The working depth of the power harrow to be adjusted without correcting the top link.
- Ground tracking at its best.



Easy setup and operation

Easy to set up ready for operation







Operated from left-hand side

From filling the seed tank and calibration through to emptying residual seed from the tank, all adjustments can be made on the left-hand side or rear of the machine. The adjustment controls are easily accessible and positioned ergonomically. Easy adjustment with everything close at hand saves time.

- Calibration system with output adjustment
- Calibration system with integrated freewheel for stationary calibration
- Access ladder for seed tank
- Transmission speed adjustment for mechanical metering

Metering on demand

The step-less gear mechanism is submerged in high viscosity oil for smooth, uniform seed flow, even at low speed.

- Quick and precise adjustment of drive speed
- Gear lever with finely-calibrated scale
- Crank rotations reduced during calibration (-50%)
- Hydraulic lifting optional

PÖTSEM

Metering wheel configuration

Find the right metering wheels for your special needs quickly and easily.







Marker disc

The 15.74" / 400 mm diameter scalloped marker disc provides a highly-visible marking centreline.

- Hydraulic control
- Mechanical transport interlock
- Shear bolt overload protection

Tracking marker

The marker can be mounted on the operator platform as an option, controlled by the tramline system.

COMPASS CONTROL

AEROSEM seed drills are fitted with mechanical metering drive systems as standard. The COMPASS CONTROL operator terminal controls and monitors the functions.

This robust terminal features an illuminated display and back-lit keys. All function keys are therefore clearly visible in the dark.

Functions:

- Electronic tramline system
- Calibration
- Speed indicator
- On-the-move and total hectare counter
- Metering wheel and tank level monitoring







Electrical metering drive and PCS

Take control of seed row switching and save seed material. POWER CONTROL and ISOBUS provide the full range of capabilities during drilling.

Control terminals

- POWER CONTROL
- PÖTTINGER CCI ISOBUS terminal
- Tractor ISOBUS terminal

Functions

- Priming
- Electrical calibration sequence
- Infinitely adjustable seed flow rate adjustment
- Seed flow adjusted from tractor seat
- Tank level measurement
- Blower and metering shaft monitoring
- Seed library

IDS functions

Unrestricted choice of all tramline settings

PCS functions

- Enter row spacing and seed/ha or gap between each seed in furrow
- Individual seed rows monitored by optical sensors
- Permanent display of average value and deviation of distribution in the furrow



Technical data AEROSEM	3002 A / 3002 ADD	3502 A / 3502 ADD	4002 A / 4002 ADD
Working width	9.84' / 3,0 m	11.48' / 3,50 m	13.12' / 4.0 m
Seed coulters	20 / 24	28	26 / 32
Row spacing	5.90 or 4.92" / 150 or 125 mm	4.92" / 125 mm	5.90 or 4.92" / 150 or 125 mm
Disc coulter diameter	12.59"/13.77" / 320/350 mm	12.59"/13.77" / 320/350 mm	12.59"/13.77" / 320/350 mm
Pressure per coulter	up to 55/110 lbs / 25/50 kg	up to 55/110 lbs / 25/50 kg	up to 55/110 lbs / 25/50 kg
Pressure wheel diameter	9.84/12.99" / 250/330 mm	9.84/12.99" / 250/330 mm	9.84/12.99" / 250/330 mm
Seed hopper volume	274 gal / 1250 l	274 gal / 1250 l	274 gal / 1250 l
Volume with tank expansion	406 gal / 1850 l	406 gal / 1850 l	406 gal / 1850 l
Transport width	9.84' / 3.0 m	11.48' / 3,50 m	13.12' / 4.0 m
Filling height	6.4' / 1.96 m	6.4' / 1.96 m	6.4' / 1.96 m
Filling opening	7.38 x 4' / 2.25 x 1.22 m	7.38 x 4' / 2.25 x 1.22 m	7.38 x 4' / 2.25 x 1.22 m
Power requirement	81 / 103 kW	92 / 121 kW	103 / 140 kW
Power requirement	110 / 140 hp	125 / 165 hp	140 / 190 hp
Weight AEROSEM A suffolk coulters	2193/2260 lbs / 995/1025 kg	2491 lbs / 1156 kg	2705/2798 lbs / 1227/1269 kg
Weight AEROSEM A single-disc coulters	2299/2385 lbs / 1043/1082 kg	2731 lbs / 1239 kg	2815/2936 lbs / 1277/1332 kg
Weight AEROSEM ADD double-disc coulters	2656/2811 lbs / 1205/1275 kg	3153 lbs / 1430 kg	3472/3554 lbs / 1575/1612 kg

Equipment

POWER CONTROL			
ISOBUS			
IDS			
Asymmetric tramline switching			
Half-rail and tramline switching			
PCS	-/□	-/□	-/□
Tramline markers			
Seed tank expansion			
Press rollers			
Metering wheel and tank level monitoring			

 \blacksquare = Standard, \square = optional





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