AMAZONE

Trailed cultivator drill **Cirrus**

Cirrus trailed cultivator drill

More than just sowing – flexible, efficient and precise

The Cirrus trailed cultivator drill is a pneumatic seed drill which is characterised by its superb, precise working performance; both in conventional and mulch sowing. In working widths from 3 m to 6 m and hopper sizes from 3,000 l to 4,000 l, the Cirrus range is highly efficient. Due to the flexibility and different conveying system concepts, the Cirrus offers the right solution for any farm, from compact sowing combinations to large-scale seed drills.

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INTERACTIVE DRIVER TRAINING

www.amazone.net/smartlearning

Cirrus
trailed cultivator drill

Maximum flexibility

Maximum effectiveness

Maximum precision

The advantages at a glance:

- Sowing without limits – application of seed and fertiliser in the single-, double- or triple-shoot process
- The right sowing coulter for every need – TwinTec^{+} double disc coulter or RoTeC pro single disc coulter
- Universal segmented distributor head ensures quick and reliable seed delivery
- Comfortable and precise calibration thanks to TwinTerminal or the mySeeder App
- Maximum precision thanks to AutoPoint, the automatic determination of the conveying time of different seed types from the metering unit to the sowing coulter
- Extensive selection of soil tillage tools – 4 different discs and several other soil-engaging elements
- Water-conserving operation thanks to Minimum TillDisc
- Optional Matrix tyres for 40 km/h in road transport and targeted, strip-wise reconsolidation in the field

In working widths from

3 m to **6 m**

Operating speeds up to **20 km/h**

Transport speed up to **40 km/h**

With hopper capacities from

3,000 l to **4,000 l**

MORE INFORMATION
www.amazone.net/cirrus

The Cirrus concept

① **Maximum flexibility and manoeuvrability**
- High manoeuvrability with any tractor due to the telescopic drawbar
- Low pulling power requirement makes it possible also to use smaller tractors
- Lower link cross shaft with a choice of Category 3, 4N, K700
- More cleanliness and easy hitch-up for the hydraulic and electronic connections due to the hose rail
- Standard machine operation with ISOBUS

② **Highly flexible choice of soil-engaging metal for seedbed preparation**
- Tractor wheel mark eradicators
- Crushboard before or after the disc element
- Solo drilling without the disc element
- Disc element with a coarse-serrated disc, fine-serrated disc, smooth disc or the Minimum TillDisc cutting disc
- Leading tyre packer
- Knife roller in front of the disc element

③ **Flexible hopper and conveying systems – maximum individualisation in arable farming**
- Cirrus with single-chamber hopper
- Cirrus with twin-chamber hopper and single-shoot conveying system
- Cirrus with twin-chamber hopper and double-shoot twin conveying system
- Cirrus with twin-chamber hopper, twin conveying system and GreenDrill for triple-shoot

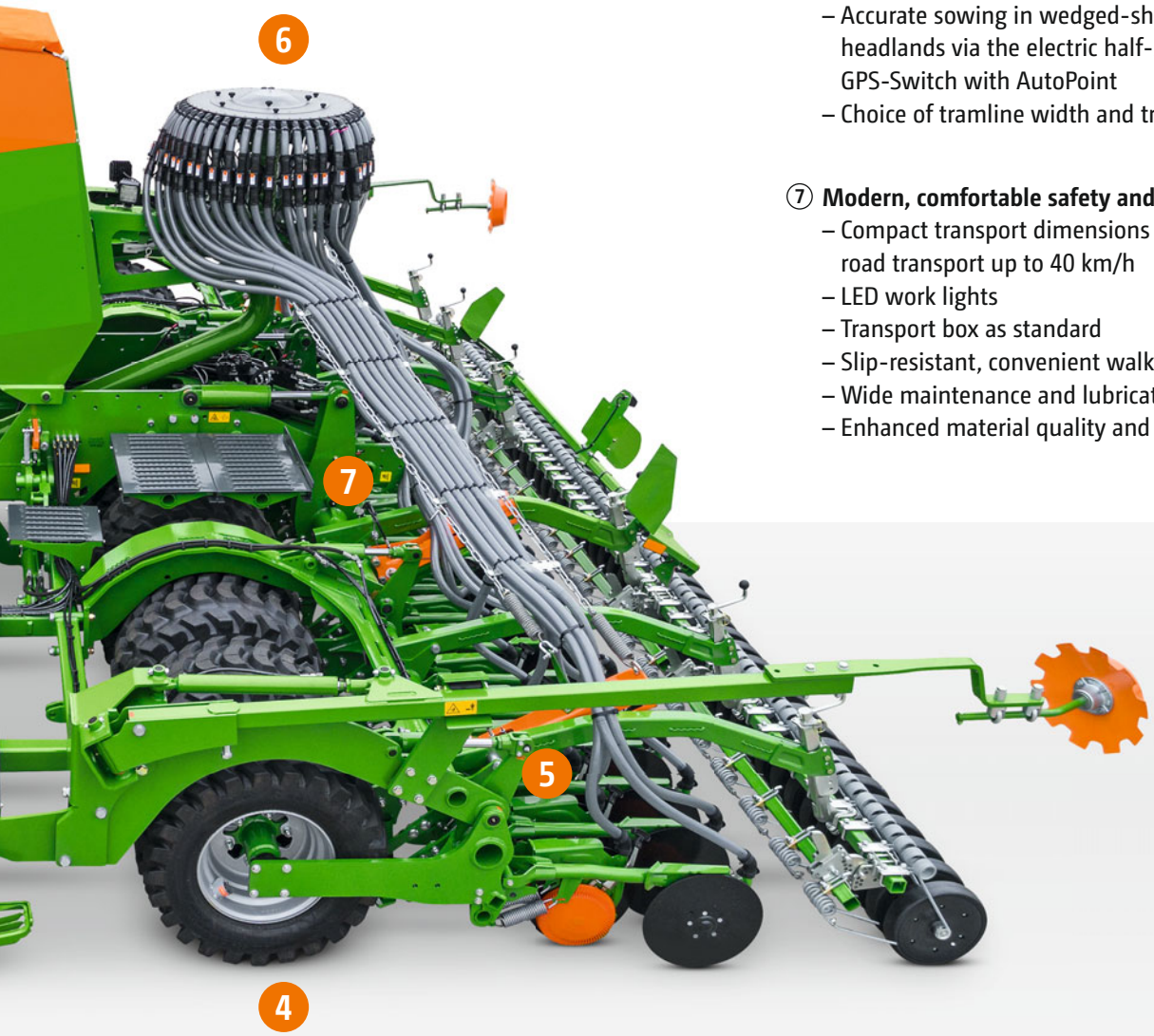
Agronomical and economic demands fulfilled to perfection!

④ **Perfect reconsolidation**
– Reconsolidation in strips using the Matrix tyres
– Cost-efficient AS tyres as an alternative

⑤ **Selection of innovative coulter systems**
– RoTeC pro coulter
The universal single disc coulter
with 12.5 and 16.6 cm row spacing
– TwinTeC^{+} double disc coulter
The high-performance double disc coulter
in 12.5 and 16.6 cm row spacing

⑥ **Precise segmented distributor head**
– Accurate sowing in wedged-shaped fields and headlands via the electric half-side shut-off and GPS-Switch with AutoPoint
– Choice of tramline width and track width

⑦ **Modern, comfortable safety and maintenance concepts**
– Compact transport dimensions allow for fast and safe road transport up to 40 km/h
– LED work lights
– Transport box as standard
– Slip-resistant, convenient walkways
– Wide maintenance and lubrication intervals
– Enhanced material quality and minimised wear



Cirrus – the models

Cirrus Compact with single-chamber hopper

Model	Working width
Cirrus 3003 Compact (rigid)	3.0 m

- With 3,000 l single-chamber hopper for seed

Cirrus with single-chamber hopper

Model	Working width
Cirrus 4003 (rigid)	4.0 m
Cirrus 4003-2 (folding)	4.0 m
Cirrus 6003-2 (folding)	6.0 m

- With 3,600 l single-chamber hopper for seed

Cirrus 6003-2

Cirrus-C with twin outlet pressurised hopper and simple conveying system for single-shoot

Model	Working width
Cirrus 4003-C (rigid)	4.0 m
Cirrus 4003-2C (folding)	4.0 m
Cirrus 6003-2C (folding)	6.0 m

- With 4,000 l twin outlet pressurised hopper – for seed and fertiliser

Cirrus-CC with twin outlet pressurised hopper and second conveying system for double-shoot

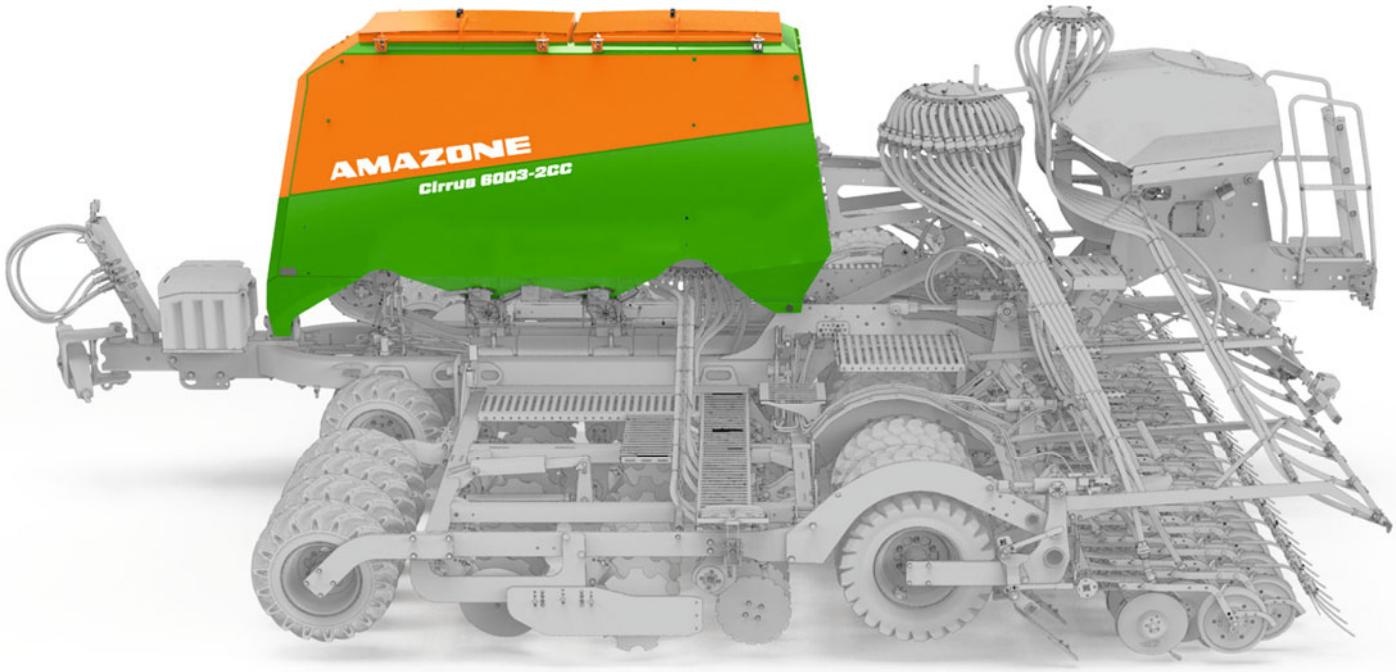
Model	Working width
Cirrus 4003-CC (rigid)	4.0 m
Cirrus 4003-2CC (folding)	4.0 m
Cirrus 6003-2CC (folding)	6.0 m

- With 4,000 l twin outlet pressurised hopper – for seed and fertiliser

GreenDrill 501 with third conveying system for triple-shoot

Hopper

Good line of sight in the field and on the road



Advantages of the Cirrus hopper

- Good accessibility via the front ladder or lateral loading board
- Favourable centre of gravity and narrow hopper for good all-round visibility
- Steep hopper walls for low residual volumes
- Quick-emptying device for fast seed changeover

Open single-chamber hopper

Twin outlet pressurised hopper

Open single-chamber hopper

The open single-chamber hopper has a capacity of 3,600 l. Thanks to the large hopper, the re-fill times are kept to a minimum. A roll-over cover provides secure and rapid closure. This variant consists of a simple set-up which is suitable for sowing one type of seed.

Twin outlet pressurised hopper

The twin outlet pressurised hopper differs due to its divided hopper. Two different materials can be metered from this hopper. The flexibly usable hopper with a capacity of 4,000 l can be used solely for seed or also in combination with fertiliser or different seed types.

Comfortable filling

Steps ease climbing up and the safe loading platform with railing eases access to the seed hopper. The hopper can be easily filled from small bags and big bags or via a filling auger on a trailer or a loading shovel.

Filling auger

The optional, hydraulically swivelable filling auger provides a convenient solution for quickly filling the Cirrus.
Easy swivelling of the filling auger allows for convenient loading from a trailer. The filling auger can be combined with all other equipment and provides a good overview during manoeuvring, due to the arrangement of the auger on the left side.

The large hopper opening allows very convenient filling of the hopper

Cirrus Compact

The easily manoeuvrable trailed cultivator drills with a single-chamber hopper

Cirrus 3003 Compact

“The machine is a joy to use due to its compactness and easy operation!”

(Michael Hantelmann, farmer · 08/2021)

Cirrus 3003 Compact
Compact, easily manoeuvrable, quick!

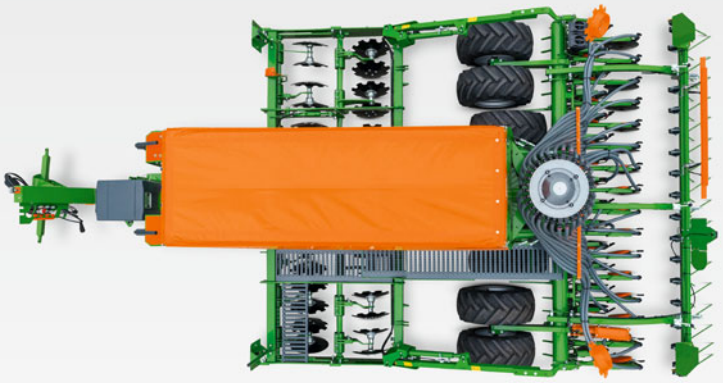
The Cirrus Compact models offer an attractive option for smaller fields. With a 550 mm shorter axle position than on the wider Cirrus drills and in conjunction with its lower link mounting, tremendous manoeuvrability is achieved. So excellent work rates are possible, even on tight headlands. With its 3,000 l hopper capacity and a maximum speed of 40 km/h, the Cirrus Compact is ideal for farms which do not have any facility for in-field filling.

Depending on the relevant national traffic road regulations, the Cirrus is available with an unbraked axle, a dual-circuit air braking or a hydraulic braking system.

Cirrus

High performance with a single-chamber hopper

Cirrus 6003-2 with TwinTeC^{+}

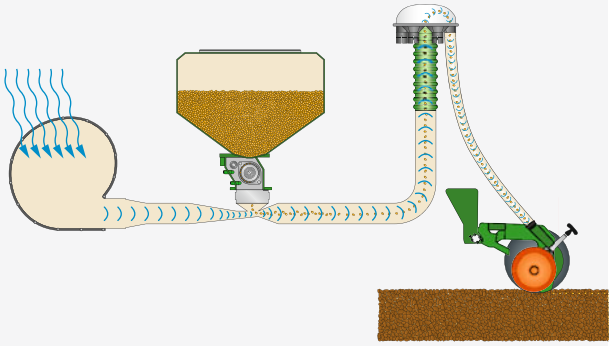


The Cirrus 4003 from above

Cirrus 4003 and 4003-2
Compact, fast, universal

The trailed Cirrus cultivator drill, in a working width of 4 m, is available in either a rigid or folding version. The folding version folds for road transport down to a transport width of 3 m.

Cirrus principle



Single-tip seed hopper for seed only

Cirrus 6003-2
for higher work rates

AMAZONE offers the folding Cirrus 6003-2 in a 6 m working width for higher work rates and larger farms.

Cirrus with a single-tip seed hopper

AMAZONE offers the Cirrus Compact and the Cirrus with a hopper capacity of 3,000 l or 3,600 l for the simple and effective sowing of just one crop.

The Cirrus 6003-2 with a single-tip seed hopper

"I'd recommend the machine to other farmers! It's very easy to pull and very easy to adjust in comparison to other machines!"
(Andreas Benke, farmer · 08/2021)

Cirrus-C

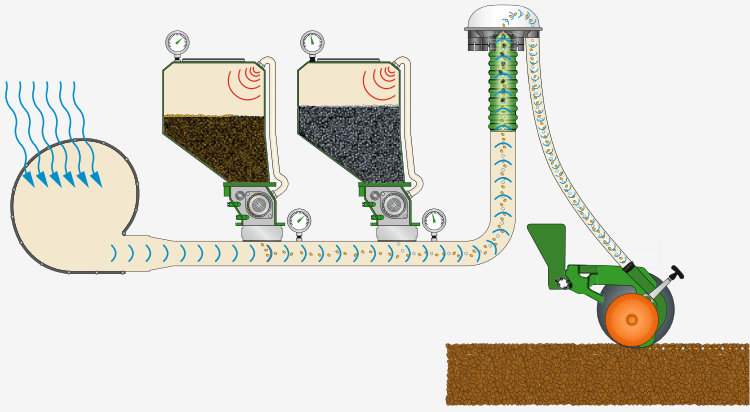
With a twin outlet pressurised hopper and one conveying system for single-shoot

The Cirrus 6003-C in operation

The Cirrus-C system

In addition to the single-tip, open hopper version of the Cirrus, the Cirrus-C also offers a divided twin outlet pressurised hopper and a conveying system. If, for instance, fertiliser is also to be applied along with the seed, the Cirrus-C with working widths of 4 m to 6 m offers the option of metering two different materials. These machines sow the second crop or fertiliser directly with the seed in a seed row using the single-shoot method. The Cirrus-C has a hopper capacity of 4,000 l with a 60:40 split.

Cirrus-C principle



Twin outlet pressurised hopper for seed and fertiliser

Cirrus-CC

With a twin outlet pressurised hopper and a second conveying system for double- or triple-shoot

Cirrus 6003-2 CC in conjunction with the GreenDrill 501

The Cirrus-CC system

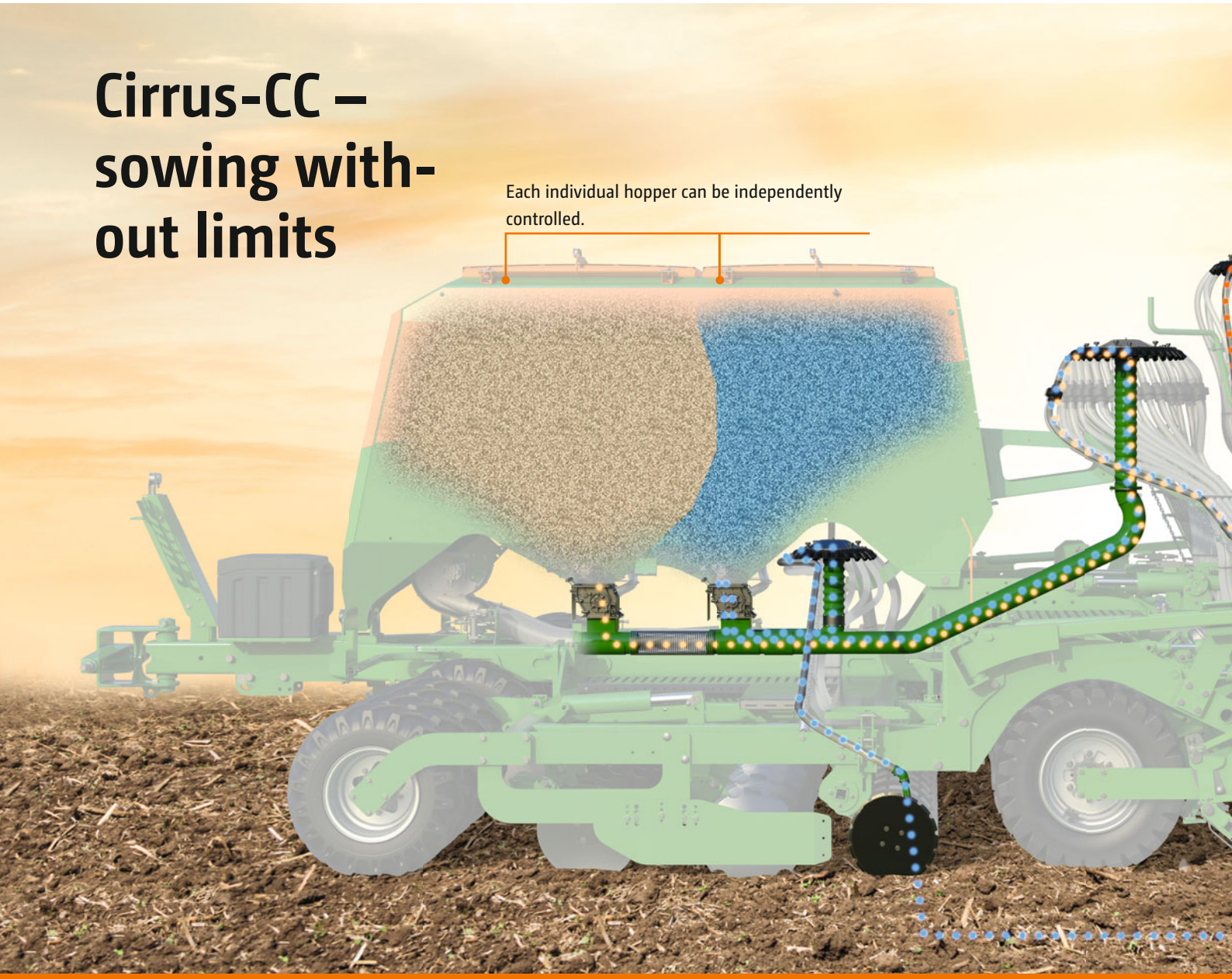
With the Cirrus-CC, AMAZONE offers an additional Cirrus model with a conveying system concept that allows for the delivery of two different materials. The various possible combinations of the conveyor system with the Cirrus-CC provide users with a wide range of options for modern arable farming methods. Both the Cirrus-CC and the Cirrus-C have a twin outlet pressurised hopper with a capacity of 4,000 l. In addition to the level of equipment found on the Cirrus-C, the Cirrus-CC has a separate metering unit and a FerTeC single disc sowing coulter. This means that a variety of sowing systems can be used, from simple sowing to double-shoot with simultaneous single-shoot. A third crop can be sown in combination when equipped with the GreenDrill 501. This is referred to as the triple-shoot method.

FerTeC coulter

Due to the additional FerTeC single disc counter, which is located in front of the tyre packer, the Cirrus-CC can sow simultaneously two materials at different rates and depths. For example, fertiliser can be applied as well. This promotes the development of the young plant.

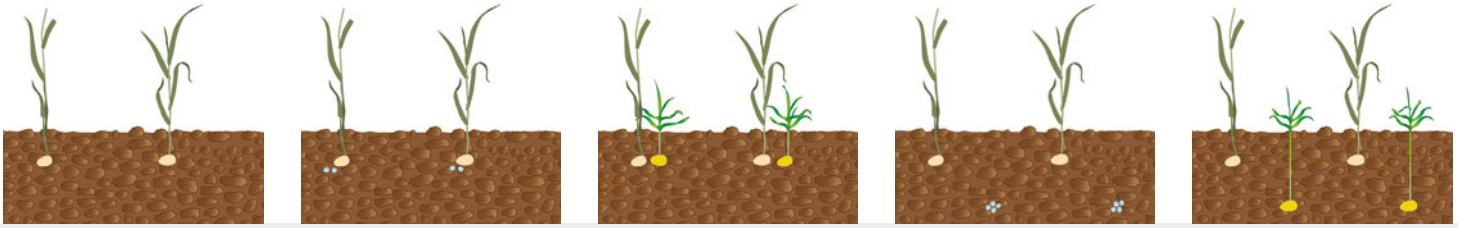
See more:
Cirrus 6003-2CC with Minimum TillDisc and GreenDrill 501 in action

Cirrus-CC – sowing without limits



A wide variety of agronomic methods are easy to implement with the Cirrus

- **Single-shoot:** via the sowing coulter
- **Double-shoot:** via the sowing coulter + fertiliser coulter or GreenDrill (for instance via baffle plates)
- **Triple-shoot:** via the sowing coulter + fertiliser coulter + GreenDrill (via baffle plates)



Seed only

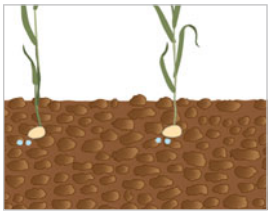
Single-shoot:
Sowing seed
with fertiliser
at one placement depth

Single-shoot:
Sowing two seed types
at one placement depth

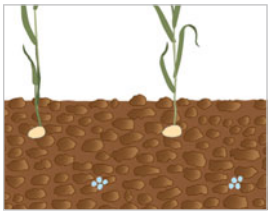
Double-shoot:
Sowing seed
with fertiliser
at different placement depths

Double-shoot:
Sowing two seed types
at different placement depths

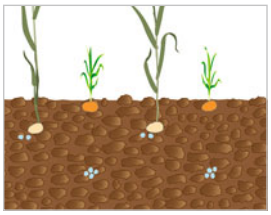
All the methods at a glance



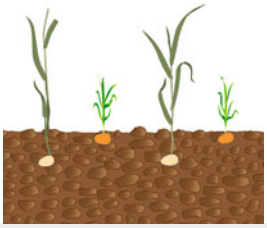
Single-Shoot
- Support of the plant at the early growth stages
- No leaching or evaporation of the fertiliser



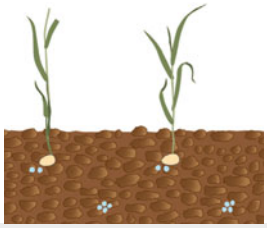
Double-Shoot
- Deep deposition of fertilisation extends the availability of the fertiliser
- Fertiliser can be placed between the rows
- Improved root development thanks to the initial dosage of the fertiliser



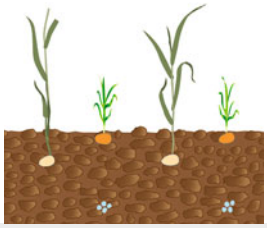
Triple-shoot
- Companion plants sown on the surface suppress weeds



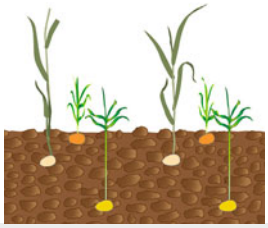
Double-shoot:
Sowing two seed types **at different placement depths** via GreenDrill



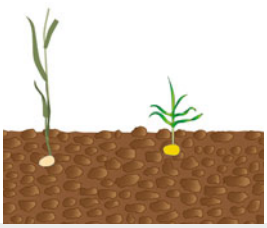
Combination of single-shoot and double-shoot:
Combined sowing of seed and fertiliser **at two different placement depths**



Triple-shoot:
Sowing two seed types with fertiliser **at different placement depths**



Triple-shoot:
Sowing three different seed types **at different placement depths**



Binary sowing:
Through variation of the placement depth – one coulter deeper/one coulter shallower - two different seed types can be placed at different depths

The metering makes the difference

Simple, central and convenient adjustment. Perfect metering

Precise electric metering drives for the Cirrus

Easy setting via the operator terminal and comfortable calibration

Metering cassettes for different seed types

The user-friendly TwinTerminal

Accurate metering drive

The metering system is suitable for all seeds and seed quantities from 1.5 to 400 kg/ha. Large metering cassettes generate low peripheral speeds and protect the seed from damage. Conversion from fine seeds to normal seeds is done in seconds by exchanging the metering cassettes. They can even be changed when the seed hopper is full. The three metering cassettes supplied as standard cover up to 95 % of all seeds. Additional cassettes are available, for instance, for maize or specialist crops.

Comfort-Pack 1 with TwinTerminal 3.0

In order to make pre-metering, calibration and emptying of residual amounts even easier, AMAZONE offers Comfort-Pack 1 with TwinTerminal 3.0 for the Cirrus in conjunction with an ISOBUS terminal. The TwinTerminal is mounted directly on the seed drill next to the metering unit. This position offers a decisive benefit: the driver can now carry out the calibration and data input directly on the machine and no longer has to repeatedly get on and off the tractor. The TwinTerminal 3.0 consists of a water and dust proof housing with a 3.2" display and four large keys for actuation.

Metering cassettes for different seed types

20 ccm

For rape, stubble turnips, lucerne[2]

210 ccm

For barley, rye, wheat[1, 2]

600 ccm

Forr spelt, oats, wheat[1, 2]

7.5 ccm

For rape, linseed and poppy seed[1, 2]

100 ccm

For catch crop mixtures

120 ccm

For green manure, maize and sunflowers

350 ccm

For fertiliser

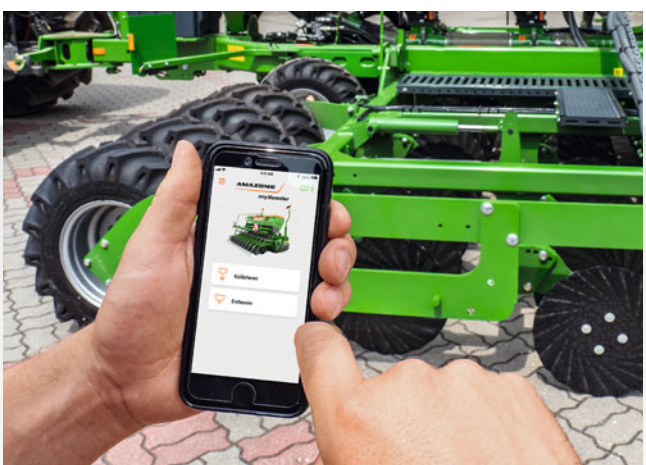
660 ccm

For peas and beans

[1] Standard on Cirrus with working widths of up to 4 m
[2] Standard on Cirrus with working widths from 4 m

mySeeder App – calibration via smartphone

AMAZONE offers the mySeeder App for even more convenience. ISOBUS-compatible seed drills can be calibrated easily and conveniently with your mobile phone and the additionally required Seeder Connect Bluetooth adapter. Going back and forwards between the metering unit and the cab is no longer necessary. The easy operation of the App is intuitive and is quickly understood once used for the first time.
The App can also be used for models with several metering units. This means that the driver can comfortably go from metering unit to metering unit via the mobile phone.



Maximum flexibility

High flexibility with the segmented distribution head

Segmented distributor head

Segmented distributor head with electric half-side shut-off

The segmented distributor head provides huge flexibility for the pneumatic seed drill. Asymmetrical tramlines can be implemented without any undesirable seed rate reduction on the other half of the machine. The segmented distribution head facilitates the electric half-side shut-off. The half-side control is located directly inside the distributor head. In combination with Section Control, or GPS-Switch automated part-width section control from AMAZONE, the use of the half-side shut-off can lead to considerable savings, as overlaps and unsown areas are avoided.

The benefits:

- Electric half-side shut-off
- Reduction in overlapping saves seed
- Minimising dust creation inside the seed hopper because no seed is rerouted

Seed pipe monitoring

Another useful system to assist the driver is the optionally available seed pipe monitoring which detects immediately any blockages down at the coulter and in the tube. Directly behind the distributor head, sensors monitor the seed flow in the seed pipes. Incorrect switch-over of the tramline rhythm is automatically detected by the system. Especially on long working days, the monitoring is an elegant solution to help keep an eye on the working performance.

Hydraulic blower fan drive

The highly-efficient blower fan is characterised by its low oil flow requirement of 21 l/min at 3,500 rpm as well as minimal noise generation.

Hydraulic blower fan drive

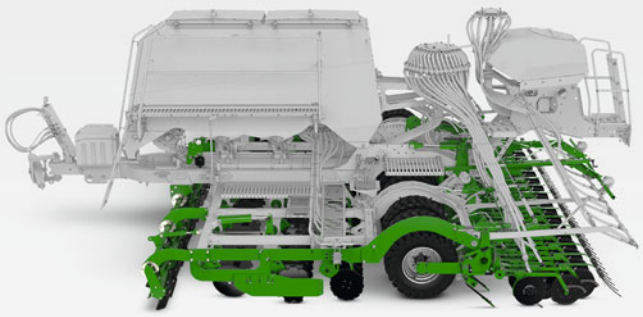
Knife roller as a front tool for the Cirrus

Cirrus 6003-2C sowing winter wheat after sunflowers

Knife roller

The Cirrus can be equipped with a knife in front of the disc segment as an option. This optional equipment improves field emergence, because additional fine soil is produced by the knife roller. This new combination means that other passes beforehand can be dispensed with.

The knife roller as an aggressive front tool for the Cirrus 6003-2



The knife roller on the Cirrus 6003-2

Wide range of applications

Preparation for cereals after sunflowers involves cutting the tall stalks at right angles and aligning them in the longitudinal direction by the Minimum TillDiscs. The seed placement accuracy is thereby considerably increased since the sowing coulter is not lifted up by the crop residues.

Even shredding and incorporation of maize stubble promotes good field hygiene after the maize harvest. The knife roller on the Cirrus 6003-2 saves an additional run with a mulcher, a roller or a disc harrow when cultivating stubbles.

The knife roller improves the flexibility by enabling direct sowing into a standing catch crop. The catch crop is cultivated intensively in a single pass and incorporated in the soil, if necessary.

Long service life

The Cirrus knife roller is characterised by its extreme robustness. The sturdy roller bearing mounts and the knives made from Boron steel are identifiable characteristics and ensure a long service life. The fixings for the knives are recessed in the round tube on the roller. The enclosed roller core is extremely insensitive to stones and dirt contamination. The knife roller is absolutely maintenance-free as a result of the spherical roller bearings and the face seals. Reversible blades, sharpened on both sides, halve the wear costs.

Perfect working profile

A unique selling point of the knife roller is the V-shaped arrangement of the knives. Lateral pull is eliminated by this special knife layout.

Use of the knife roller to produce a fine soil seedbed when sowing wheat

Soil-engaging options

For even better seedbed preparation

Cirrus 6003-2 in operation with Crushboard

Crushboard

From choice, the Cirrus can be equipped with a Crushboard in front or behind the disc segment. If it is undulations that require levelling or hard clods that have to be broken, the Crushboard is in the right position in front of the discs. Under very light conditions, the Crushboard behind the discs can also help settle the soil flow. The reconsolidation will be even more uniform. The front tyre packer can also be combined with the Cirrus with Crushboard.

Tractor wheel mark eradicators

The optional tractor wheel track eradicators are useful on compaction-sensitive soils and for reduced working depths. They loosen the packed wheel tracks behind the tractor tyres. The position of the wheel mark eradicators can be adjusted horizontally and vertically. The special kinematics of the eradicators provides a constant spring force over the entire area of deflection. The wedge shares safely loosen yet, however, do not bring stones to the surface.

Combination of Crushboard and tractor wheel track eradicators

Packers

For even better reconsolidation

Cirrus 6003-2C with T-Pack S and T-Pack U front packer

T-Pack U

The front T-Pack U intermediate axle packer rolls the area in the centre of the cultivation disc segment. This reconsolidates the soil once again in front of the machine. This is of particular benefit on light soils.

The passively-steered T-Pack U can be utilised as an intermediate axle packer in the rear of the tractor or also, in solo operation, as a front packer.

T-Pack S

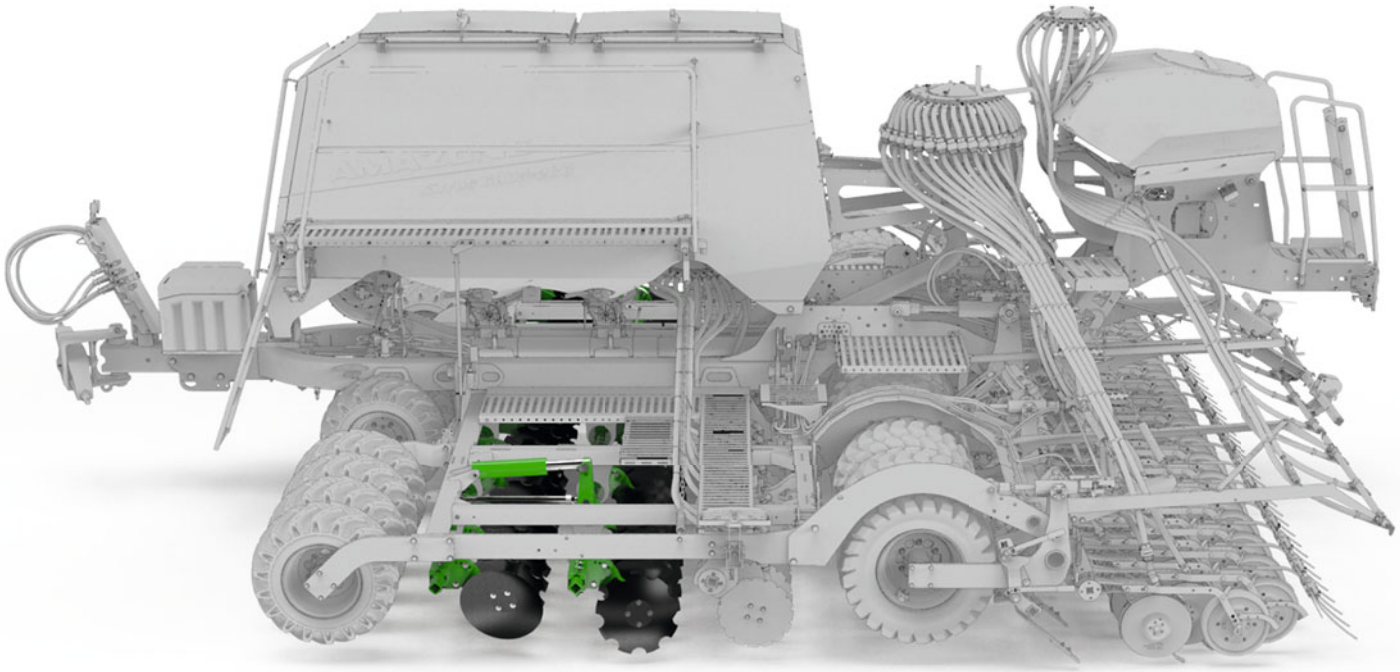
With the T-Pack S side packer, when using the Cirrus 4003-2/2C and 6003-2/2C under light to medium conditions or following the plough, the soil can be pre-rolled ahead of the disc segment, providing additional reconsolidation. The T-Pack S can be combined with the tractor wheel track eradicator on the Cirrus 6003-2.

T-Pack IN

The pre-running packer on the Cirrus 4003-2/2C and 6003-2/2C can be supplemented by the T-Pack IN.
This is mounted in the centre of the machine underneath the drawbar and consolidates the area between the tractor tracks.

Maximum effectiveness

Seedbed preparation and sowing in just one pass



Solo sowing at high work rates

With all the technical benefits of the basic seed drill, the Cirrus without disc segment is a cost-effective alternative for solo sowing but still maintains the pre-drilling reconsolidation. In this specification as well, the optional Crushboard can also be added.

Sowing combination with 2-row disc element

The Cirrus can be equipped with the 2-row disc element for up-front soil tillage. The disc element loosens, crumbs and levels the seedbed depending on the type of discs chosen immediately ahead of the seed placement. The working depth of the disc element can be adjusted on the move. Via a series of holes, the end discs can be adjusted individually to ensure a level finish between bouts.

Fine-serrated discs
460 mm

Coarse-serrated discs
460 mm

Smooth discs
460 mm

Selecting of the correct disc – coarse, fine or smooth

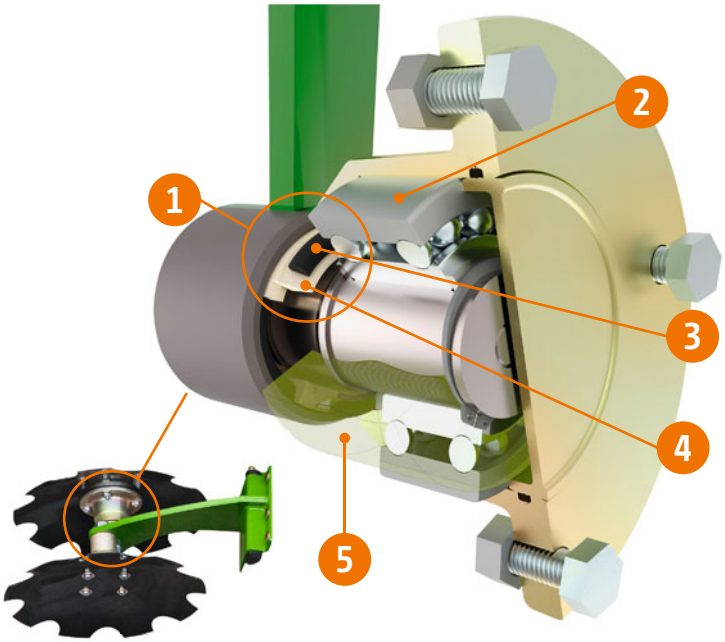
Several options can be selected for the disc element: a cutting disc, a coarse-serrated disc, a fine-serrated disc and a smooth disc.

Fine-serrated discs
The fine-serrated disc shows its strengths in shallow seedbed preparation. It provides more fine soil for optimum seed embedment.

Coarse-serrated discs
The coarse-serrated disc is ideally suited to deeper seedbed preparation. Due to its profile, extremely effective incorporation, including the mulching of harvest residues, is achieved. A steep angle of attack for the discs ensures a particularly intense mixing.

Smooth discs
The smooth disc is the specialist for shallow soil tillage and is perfect for seedbed preparation. The smooth disc is also frequently fitted to the outer disc carriers, because it only throws up a small amount of soil.

Cirrus slide seal

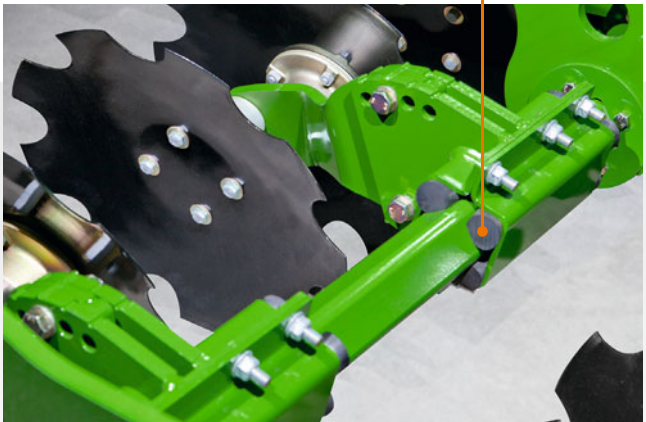


① Face seal built into conical seats
② 2-row angular contact ball bearing
③ 2 x seal ring (O-Ring)
④ 2 x cast rings with face seal
⑤ SAE 90 gear oil filled (40 cm³)

Rubber suspension elements – reliable and maintenance-free

The disc system combines two discs mounted on one arm which is suspended via sprung rubber blocks and which optimally follows the ground contours. In addition, the rubber sprung buffers act as an overload safety device on stony soils. In this way, a safe, maintenance-free operation of the compact disc harrow system is ensured – and at a constant, even working depth.

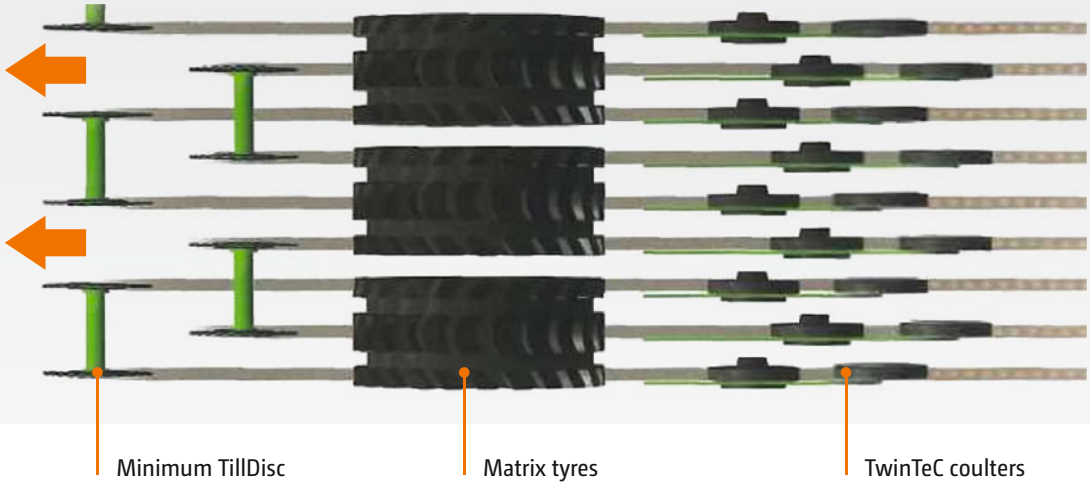
Rubber suspension elements



Minimum TillDisc

Water-conserving strip till with cutting disc

Minimal, water-conserving soil tillage in strips with the Minimum TillDisc cutting disc



Minimum TillDisc cutting disc

The Minimum TillDisc is particularly ideal for water-conserving and weed-reducing soil tillage. The amount of soil moved is minimised by using the discs in strips. It only loosens and cuts the area where the following sowing coulter runs to prevent any renewed germination of weeds.
A further application is provided by adopting the disc setup in areas with higher resistance.

Water-conserving strip till

The use of the Minimum TillDisc in dry locations allows for water-conserving strip till, as only the strip immediately in front of the sowing coulters is worked. Under moist, sticky soil conditions, the cutting disc element pulls up fewer clods to the surface than a normal disc element. Using the Minimum TillDisc also makes the Cirrus easier to pull, which has a positive effect on fuel consumption.

Advantages of the Minimum TillDisc:

- Water-conserving strip till
- Least possible soil movement
- Less clod formation
- Discs are very easy to pull

Chassis and reconsolidation

Matrix principle – the patented recipe for success

Matrix tyres are at the heart of the machine, guaranteeing quick and even field emergence. With dimensions of 400/55R17.5, these tyres feature a diameter of 880 mm and a width of 410 mm (wide enough for 4 seed rows at 12.5 cm spacing or 3 seed rows at 16.6 cm).

A large diameter combined with the tyre profile ensures a highly efficient self-driving effect – and thus low traction forces. This is a characteristic which is, above all, very important for trailed seed drills that are equipped with passive soil tillage tools and driven at fast forward speeds.

Matrix tyres

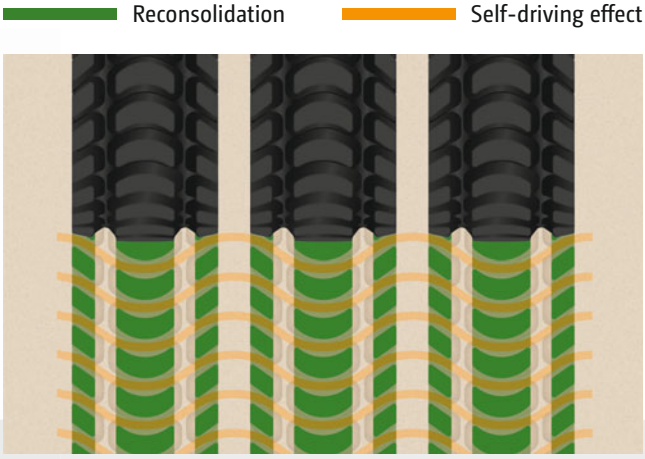
Reconsolidation in strips – for optimal growth conditions

The core purpose of the Matrix tyres is reconsolidation in strips. The heterogeneous soil conditions created by the tyres provide optimal growth conditions for all plants under all conditions.

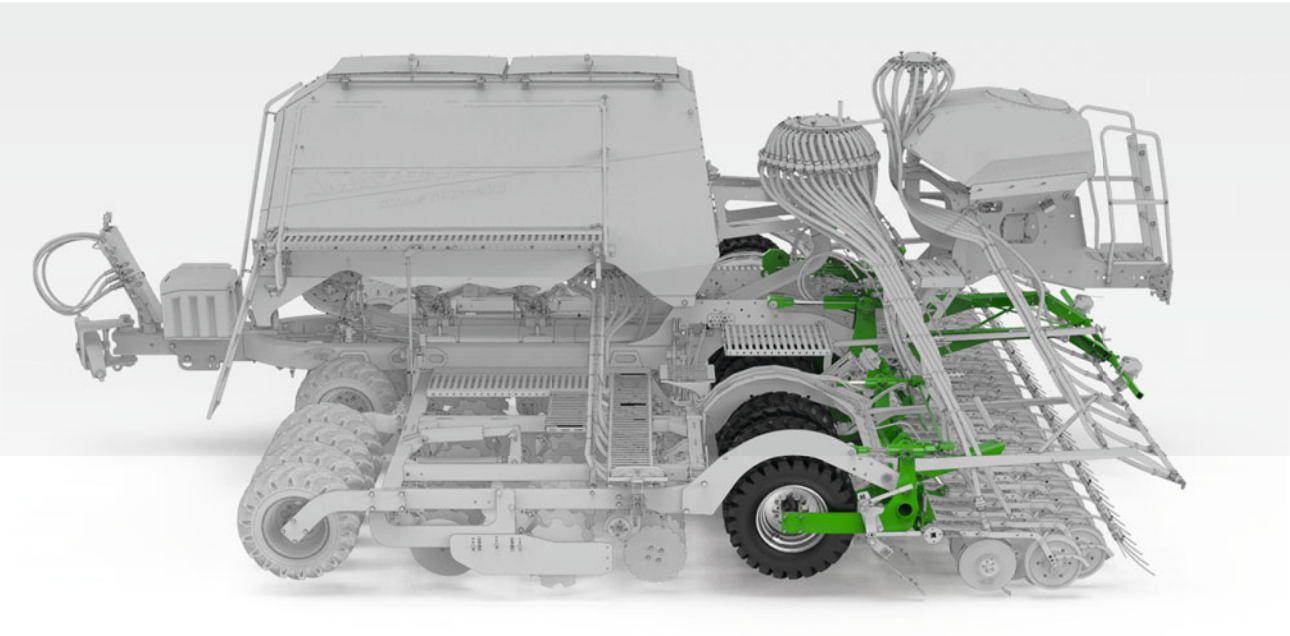
Due to the radial design, with its higher deflection ability, the profile has a true soil contact across all the rows creating perfectly even growing conditions. Ridge levellers in between the rows, which are available as an option, provide an even operational performance and make sense especially on light soils.

Advantages of the Matrix tyres:

- Positive drive and an even turning effect
- Reconsolidation in strips
- Creation of a heterogeneous soil structure for optimal growth conditions
- More fine soil for covering the seed
- Very good self-cleaning of the tyres
- Optimised for fast road transport



Reconsolidation with Matrix tyres: Reconsolidation in strips using the Matrix tyre creates optimal soil conditions that adapt to the current weather conditions and therefore provide the basis for fast and even plant emergence. The tyres create a heterogeneous soil structure.



Cirrus 6003-2 CC with Matrix tyres for optimum reconsolidation

AS cross-ply tyre – with minor compromises

As an alternative for regions which are less sensitive to germination conditions, the Cirrus can also be equipped with a simple AS cross-ply tyre of a similar dimension (15.0/55-17). The self-driving effect from its short cleats is very good and thus the machine is also easy to pull. However, this compromises the targeted reconsolidation: the AS tyres do not create the same seed/soil contact compared with the Matrix tyres, especially in dry years.

Advantages of the AS cross-ply tyre:

- Positive drive and an even turning effect
- Cost-effective alternative

Reconsolidation Self-driving effect

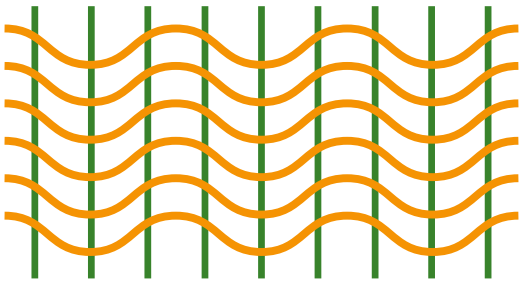
Reconsolidation with AS tyres: Direct comparison with the Matrix tyres shows that the AS tyre has a clearly simpler working profile. It provides a simple alternative for less sensitive regions.

AS tyres

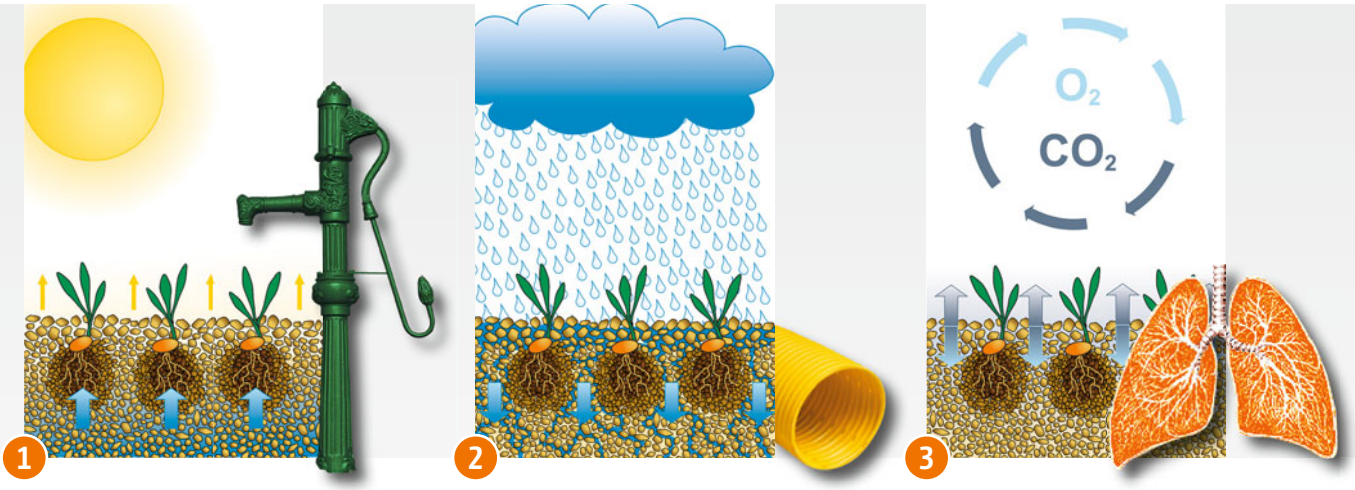
For the best results

Focused reconsolidation in strips

Positive drive and an even turning effect due to the big cross-sectional area



Targeted reconsolidation in strips via the longitudinal profile



Sowing insurance!

1) **In very dry conditions – the water pump principle:**
The reconsolidated strips provide soil contact directly under the seed furrow. In this way, capillary water reaches the seedling even in dry weather. Reconsolidation in strips ensures that your soil works as a water pump. Every drop counts!

2) **In very wet conditions – the drainage principle:**
Loose soil easily absorbs any rain and stores it. Rain from heavy downpours simply soaks into the unrolled, loose areas. Soil erosion is thereby prevented. In this case, the soil works like a drain. Even on heavy wet ground, there is enough unconsolidated soil available between the rows to cover the seed with loose soil.

3) **Gaseous exchange – the lungs principle:**
The loose soil also enables gases to be exchanged, so that the roots can breathe.

✔ Reconsolidation in strips

Reconsolidation in strips enables optimum soil conditions to be created which adapt to the current weather conditions and therefore provide the basis for fast and even plant emergence. In addition, the homogeneous and well reconsolidated strip has no cleat marks. This is a decisive advantage compared to rollers with full-surface profiles, as this has an effect on the smooth running of the sowing coulters in particular.

Row spacing 12.5 cm

Row spacing 16.6 cm

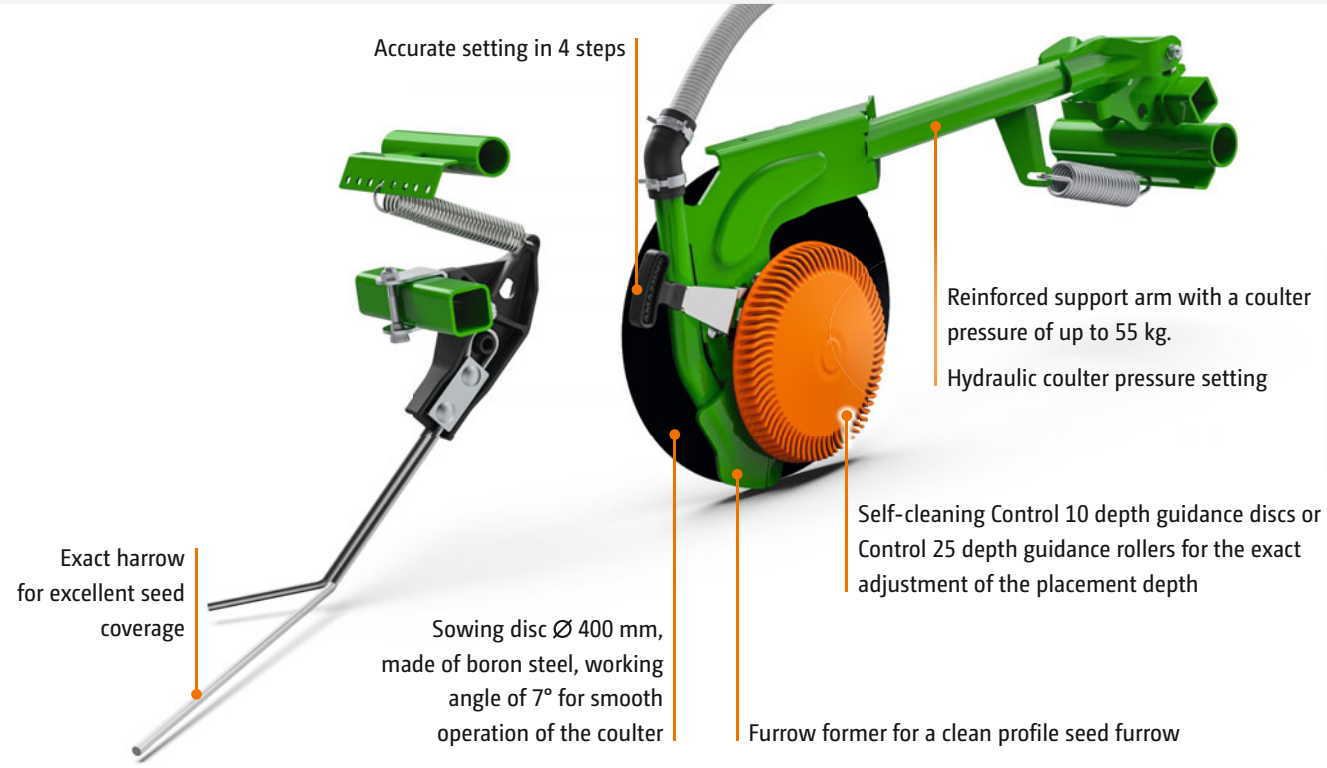
Plants at a row spacing of 12.5 cm

Plants at a row spacing of 16.6 cm

RoTeC pro coulter

The universal single disc coulter

The RoTeC coulter system is tried and tested 1,500,000 times over!



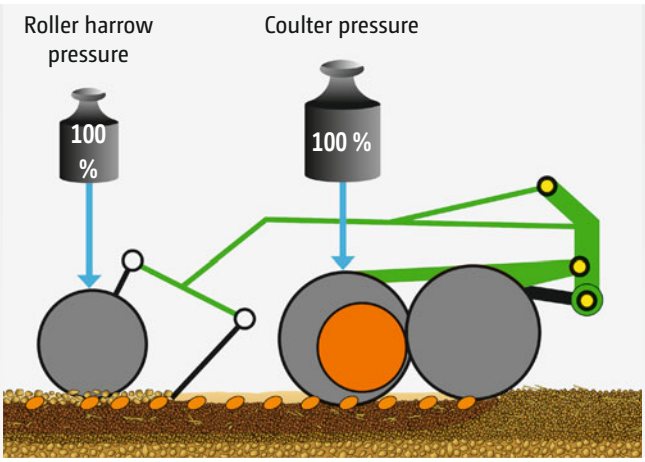
Goes right to the limit of practical operation and placement

With the RoTeC pro single disc coulter, the Cirrus shows its strength especially on sticky soils, no matter whether early or late in the year. Thanks to the depth guidance directly on the sowing disc, the coulter depth guidance and the reconsolidation via the harrow are completely decoupled from each other. The depth guidance disc and the depth guidance roller achieve in addition an excellent self-cleaning of the coulter. Thanks to these two benefits, a very flexible and precise application in virtually all weather conditions is possible.

Row spacings of 12.5 and 16.6 cm can be chosen.

Quality and reliability throughout:

- Coulter discs made from high grade Boron steel for an even extended service life
- Wear-resistant and self-cleaning Control 10 depth guidance discs and Control 25 depth guidance rollers for exact adjustment of the placement depth
- Decoupling coulter guidance and reconsolidation for a smoother coulter run and a universal response to the weather conditions



Splitting the coulter and harrow pressures

Sowing disc

The sowing disc is made from highly wear-resistant Boron steel and features a diameter of 400 mm. Thanks to the robust design, the wear is reduced to a minimum. Due to the large diameter of the sowing disc, the coulter runs very smoothly resulting in an excellent placement accuracy of the coulter system.

Coulter pressure adjustment

The coulter pressure is infinitely-variable with the adjustment being carried out hydraulically from the tractor cab and this serves to maintain an easy matching of the sowing depth and allows the quick adaptation to the prevailing soil conditions. RoTeC pro coulters can be operated with a coulter pressure of up to 55 kg.

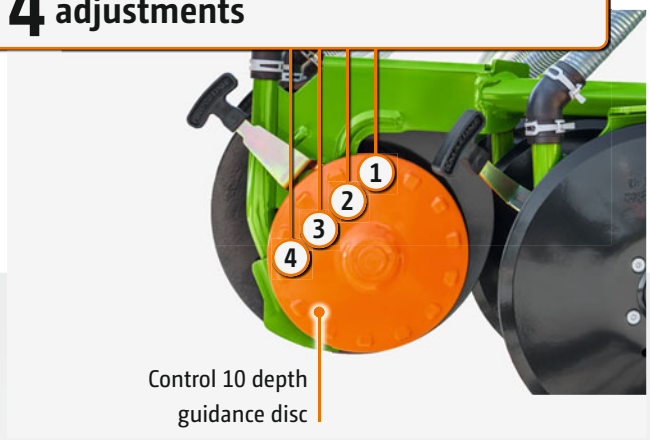
Furrow former

With the aid of the furrow former, the seed furrow is kept cleared out ensuring an optimum soil contact for the seed. Due to its flexible mounting, the furrow former rids itself of earth and trapped harvest residues.

Depth guidance

One of the unbeatable advantages of the RoTeC pro single disc coulter is that the reconsolidation is decoupled from the coulter depth control. This means that the coulter is raised only once when passing a stone. Furthermore, the coulter and roller pressure can be adjusted independently of each other. This very even and accurately controlled way of guiding the RoTeC pro single disc coulter is ensured by the Control 10 depth guidance roller, with its 10 mm wide contact area, or the Control 25 depth guidance roller, with its 25 mm wide contact area, directly on the coulter.
The basic setting of the sowing depth takes place without tools and in 4 levels directly on the coulter.

4 adjustments



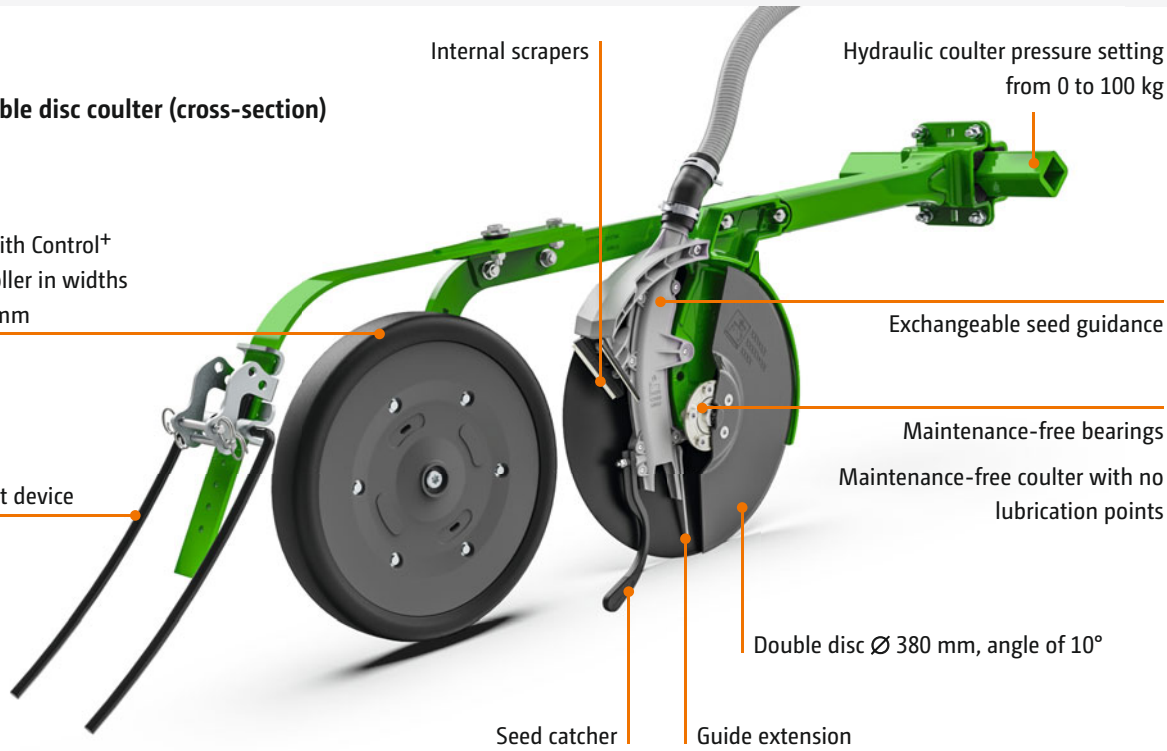
RoTeC pro coulter with Control 10 depth guidance disc

RoTeC pro coulter with Control 25 depth guidance roller
The cleats, which are open at the rear, provide a very good self-cleaning effect.

TwinTeC+ coulter

The high-output double disc coulter

TwinTeC+ double disc coulter (cross-section)



Smooth running, rugged and maintenance free

Using the high output TwinTeC+ coulter, AMAZONE equips the Cirrus with one of the most robust and most precise double disc coulters around. Thanks to its coulter pressure of up to 100 kg and its very good cutting performance, the TwinTeC+ double disc coulter also manages very well in hard and cloddy seedbed conditions. The basic body and the coulter bearing shell made of forged steel are equipped with sufficient reserves, even under the toughest operating conditions. Due to the high coulter pressure of the TwinTeC+ double disc coulter, the sowing performance is very precise even under mulch sowing conditions with a very high proportion of organic matter in the seedbed. Thanks to the innovative coulter pressure adjustment via an oil circuit, the coulter pressure is maintained even in very hilly terrain so that the pre-set sowing depth is safely maintained.

The TwinTeC+ double disc coulter is completely maintenance-free and thus fulfils highest demands from use.

Cirrus 3003 Compact with TwinTeC+ double disc coulter

TwinTeC+ double disc coulter

The double discs

The sharp pre-tensioned discs with a 10° angle of attack ensure a good cutting performance of the coulter. The large 380 mm diameter discs ensure a smooth run. Thanks to the large coulter clearance of 190 mm and the connection to the depth guidance roller via the top-mounted coulter carrier, sufficient space remains, so that blockage-free operation is possible.

Seed guidance

The guide extension and the seed catcher safely deliver the seed to the bottom of the furrow and prevent any bouncing out of the individual grains. The standard inner scraper, as an option also with hard metal wear plates, ensures the accurate operation even on sticky soils and noticeably increases the operational reliability.

Depth guidance

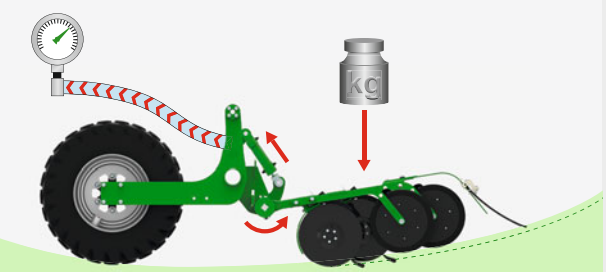
The parallel-guided depth control rollers provide the safe maintenance of the sowing depth on each individual coulter. The Control+ depth control rollers are available in widths of 50 mm, 65 mm and 75 mm. This means that the working performance of the machine is ensured on any soils from the lightest sand with poor carrying ability to the heaviest clay. Optional scrapers on the depth guidance roller ensure the even guidance of the coulter even under moist conditions.

Coulter pressure on the basis of application maps

The pressure of the TwinTeC+ coulter can be precisely controlled by means of application maps. As a result, the seed rate can be increased e.g. on part areas with heavy and wet soils, and the coulter pressure adjusted at the same time.

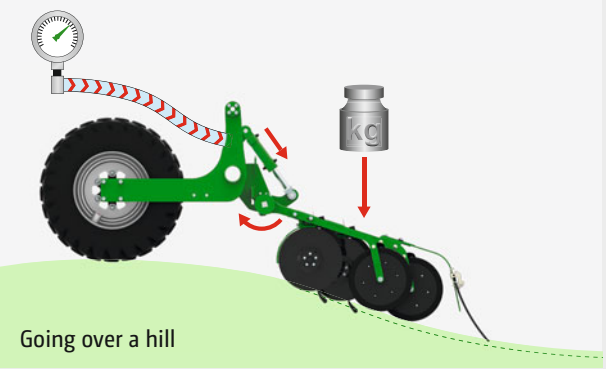
TwinTeC+ coulter pressure

Setting the coulter pressure via the ISOBUS terminal is standard. The coulter reliably maintains the pressure selected. This is of special benefit when sowing shallow in very hilly terrain.



Passing through a hollow

Hollow: When passing through a hollow, the coulters are pressed against the ground. This creates an overpressure in the coulter pressure cylinder which is transferred directly to the oil circuit. The coulter pressure remains constant.



Going over a hill

Hilltop: The coulters are lowered when going over a hilltop. This results in an under-pressure in the coulter pressure cylinder which is immediately compensated for with additional oil from the circuit. The coulter pressure remains constant.

The following harrow

Seed coverage, seed embedment

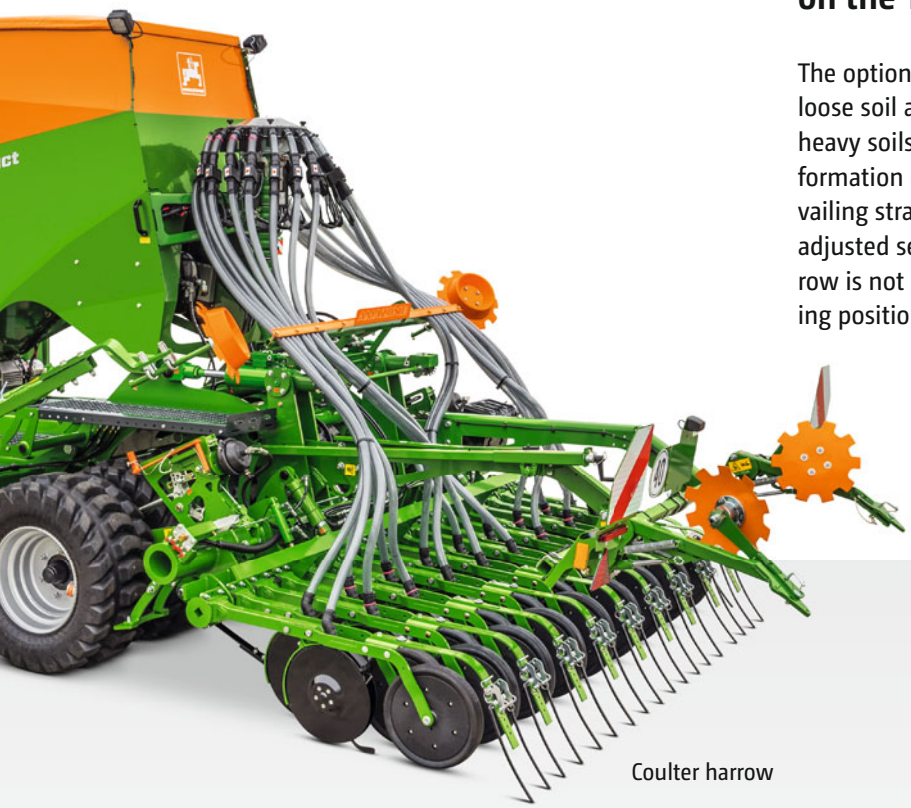
HD Roller harrow in combination with RoTeC pro

After the seed row has been closed by the HD Roller harrow, the soil above the seed furrow is additionally pressed resulting in optimum germination conditions. This is recommended especially for light, dry soils when sowing spring crops or rape. An undulating surface profile that reduces erosion is the result. Thanks to the hardening process of the harrow tines, these feature a particularly high longevity. This means that the special advantage is that the pressure per roller can be set between 0 and 35 kg per roller, completely independently of the coulter pressure.

Roller harrow

Coulter harrow on the TwinTeC+ coulter

The optionally available coulter harrow provides additional loose soil above the furrow. This is especially helpful on heavy soils in sloping terrain to prevent capping and the formation of water run-off channels. In addition, any prevailing straw is distributed. The depth of the harrow can be adjusted seven times against wear. In cases where the harrow is not required, then it can be swung up into its parking position.



Coulter harrow

Exact S following harrow

Exact S following harrow in combination with RoTeC pro

The Exact S following harrow works blockage-free, even with large amounts of straw. Individual, swivel-mounted harrow elements allow it to adapt to uneven ground and achieve even seed coverage. The Exact harrow is particularly useful when sowing under less than optimal conditions, e.g. on moist or heavy ground. The Exact harrow, with its 15 mm thick tines, is particularly low-wearing and ensures reliable seed coverage even under the most difficult of operating conditions.

The harrow pressure is adjusted mechanically by pre-tensioning the harrow springs. During hydraulic harrow pressure adjustment, a minimum and maximum value is predefined by inserting pins. As a result, the harrow pressure and the coulter pressure can be simultaneously matched to changing soil types via just one tractor spool valve whilst on the move.

Exact S following harrow

GreenDrill 501

Universal catch crop seeder box with 500 l hopper capacity

Baffle plates

GreenDrill 501 on Cirrus 6003-2C: suitable for companion crops or slug pellets

Comfortable, flexible and precise

The GreenDrill seeder box is the ideal solution for sowing catch crops or the under-sowing of a secondary crop in just one operational pass. The GreenDrill seed hopper is safely accessed via steps and has a capacity of 500 l. The distribution of the seed across the entire area is achieved by baffle plates in front of the harrow or by seed pipes between the coulters.

Benefits of GreenDrill:

- Various metering cassettes available
- Wide-area distribution using baffle plates or seed pipes between the coulters
- Easily filling via access steps
- Machine control via ISOBUS interface
- Application of a third medium – triple-shoot

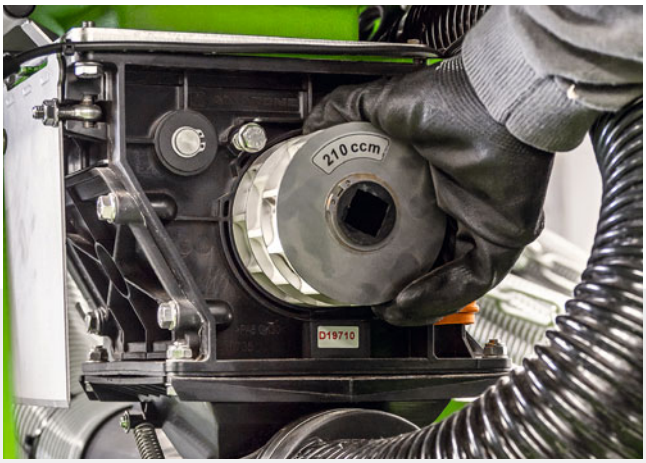
Machine control via ISOBUS

Control of the GreenDrill can be achieved in various ways, depending on the machine onto which the GreenDrill has been mounted. For example, if the GreenDrill 501 is mounted on a Cirrus, it is an “ISOBUS participant” and, as such, is fully integrated into the electronic system of the Cirrus. The GreenDrill is shown in the controls of the machine operating section of the terminal as a second or third seed hopper with metering unit.

Accurate electrical metering

The metering of the seed is carried out by an electrically-driven metering unit. The electric drive facilitates easy setting of the seed rate using the ISOBUS terminal in the tractor cab. Alternatively, the electric drive can also be controlled fully automatically using application maps. It is furthermore possible to calibrate the system at the push of a button and to do pre-metering in field corners.

Fully integrated operation of the GreenDrill 501 using the AmaTron 4 ISOBUS terminal



Easy exchange of the metering rollers

MEMBER OF AEF

ISOBUS as the basis for intelligent communication

One language, many benefits!

Each ISOBUS-enabled machine from AMAZONE comes with the latest technology and almost unlimited possibilities. It makes no difference whether you use an operator terminal from AMAZONE or an ISOBUS terminal fitted directly in the tractor. ISOBUS is an internationally recognised standard for communication between the operator terminal, tractors and connected implements on the one hand and Farm Management Information Systems on the other.

Operation via a wide-range of ISOBUS terminals

This means that ISOBUS enables you to take control of all your ISOBUS compatible equipment. You only have to connect the machine to the respective ISOBUS terminal and the usual operator interface appears on the monitor in your tractor cab.

Benefits of ISOBUS at a glance:

- This worldwide standard provides a uniform interface and data exchange format that ensures compatibility even with third party manufacturers
- Plug and Play between machine, tractor and additional ISOBUS implements

AMAZONE ISOBUS terminals
AmaPad 2 and AmaTron 4

AEF Certified ISOBUS
www.aef-isobus-database.org

Perfectly developed machine operation from AMAZONE

AMAZONE machines and operator terminals offer a range of functions which are very easy and safe to operate:

- Highest compatibility and function flexibility of your ISOBUS equipment
- No additional modules on the machine side. All ISOBUS machines from AMAZONE come ready equipped with the necessary ISOBUS functions as standard
- Practice-oriented machine software and logical menu structure
- MiniView display with all AMAZONE terminals and additional ISOBUS terminals. See e.g. the machine data in the map view
- Possibility of operating the machine via the tractor terminal or a twin terminal solution
- Flexible assignment of the map and machine view between the tractor terminal and the operator terminal
- Unique operation concept. Freely-configurable displays and individual user interfaces for each driver
- Useful additional functions such as automatic boom lowering on AMAZONE crop protection sprayers
- Integrated TaskController data logger function

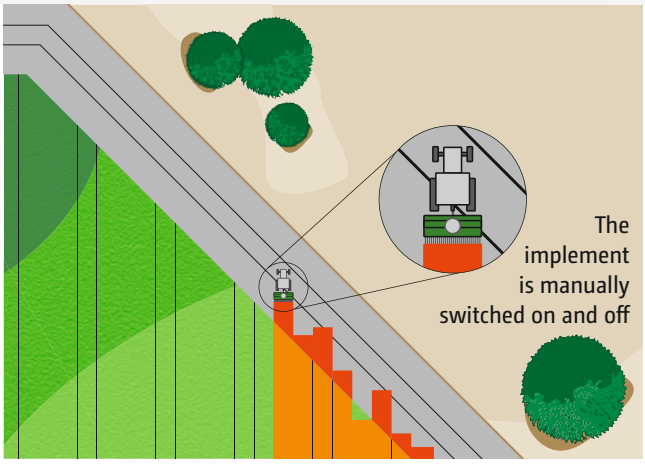
Clearly structured AMAZONE machine operation

Advantages of the AMAZONE machine software:

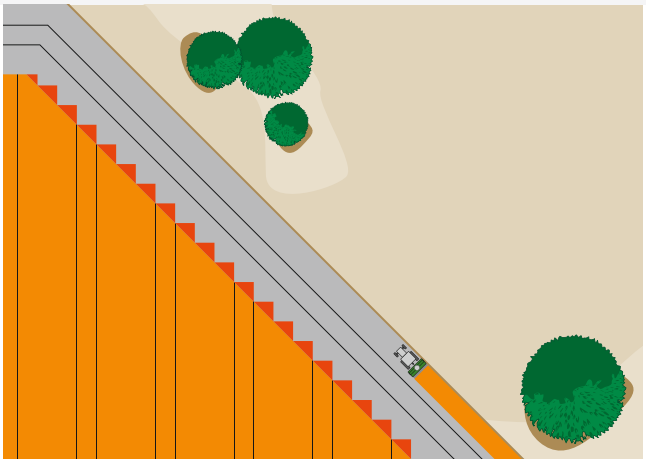
- User-oriented and intuitive
- Tailored to the machine
- Functional range above and beyond the ISOBUS standard

Clear display of the work menu in the AMAZONE machine operation

GPS-Switch automatic part-width section control



Over or under sowing with manual on/off control without GPS-Switch



Position dependent, automatic control, both on and off, of the electric metering unit via GPS-Switch

GPS-Switch for all ISOBUS machinery

With GPS-Switch, AMAZONE offers GPS-based, fully automatic, part-width section control for all AMAZONE operator terminals and ISOBUS-compatible fertiliser spreaders, crop protection sprayers or seed drills.

GPS-Switch basic
- Automatic part-width section control for up to 16 part-width sections
- Creation of a virtual headland
- Automated boom lowering with an AMAZONE crop protection sprayer
- Standard with AmaPad 2
- Optional with AmaTron 4

GPS-Switch pro (as an extension of GPS-Switch basic)
- Automatic part-width section control with up to 128 part-width sections, particularly for crop protection sprayers with individual nozzle control
- Marking of obstacles (e.g. water holes, pylons)
- Auto-zoom when approaching the headland
- Standard with AmaPad 2
- Optional with AmaTron 4

Automatic switching on and off of the Cirrus

If the operating terminal has Section Control, e.g. GPS-Switch part-width section control from AMAZONE, the part-width sections can be automatically switched on and off in relation to the GPS position.

MultiBoom – even more precise

For the Cirrus-CC, the seed and the fertiliser are metered by two different metering units and applied at two different delivery points using the Double-Shoot method. Since the FerTeC coulter runs in front of the roller and the sowing coulter behind the roller on the Cirrus-CC, GPS-Switch must switch the two metering units with a time offset, so that the fertiliser is placed at exactly the same point on the headland as the seed. This time-shifted control of several metering units can be achieved using the new MultiBoom control.

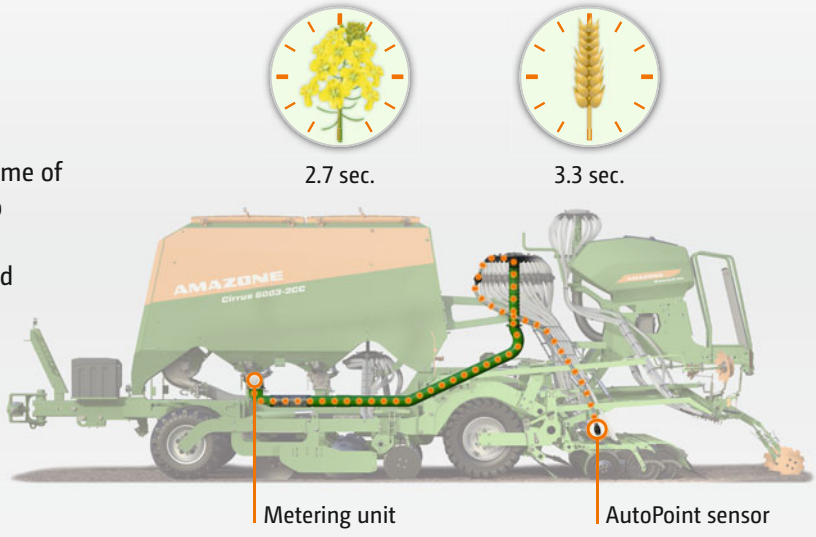
- Virtual headland
- Field application maps for different seed rates are also possible
- Worked area

Automatic half-side shut-off with GPS-Switch – for the Cirrus

Accurate placement of the seed
To avoid the over and under sowing in critical areas that often occurs in practice, precise sowing is very important. The remedy for the accurate placement is offered by the half-side control which reduces the relevant working width to half so that, especially in short-work and on the headland, a significant saving is achieved. The two halves of the drill each correspond to one controllable part-width section.

Switch time optimisation – GPS-Switch with AutoPoint

- Automatic determination of the conveying time of various seed types from the metering unit to the sowing coulter
- Minimisation of misses and overlaps for good field hygiene
- Minimisation of the disease pressure results in fewer plant protection measures and simultaneous cost reduction



Workday made easy –

Make the most of the possibilities!

GPS-Maps&Doc *

All standard ISOBUS terminals from AMAZONE can collect and save machine and site-specific data using Task Controller. Part-area, site-specific operation via application maps in either Shape file or ISO-XML formats is also possible.

- Easy creation, loading and processing of jobs
- Start a new task straight away and decide later whether the data is saved or not
- Import and export jobs in ISO-XML format
- Job summary via PDF export
- Intuitive system for processing application maps in either Shape file format and ISO-XML format
- Automatic part-area, site specific regulation of the application rate
- Indication of inactive field boundaries and automatic field detection when approaching the vicinity
- Optimum crop management via needs-based application
- Standard on both AmaTron 4 and AmaPad 2

GPS-Track

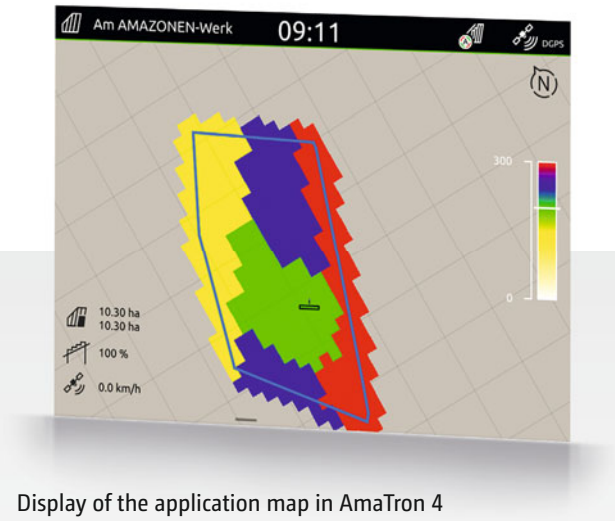
The GPS-Track parallel guidance greatly helps with orientation in the field, especially on grassland or in areas without tramlines.

- With a virtual light bar in the status bar
- Automatic tramline control via GPS for seed drills
- Various track modes such as A-B lines or contour following
- Standard with AmaPad 2
- Optional with AmaTron 4

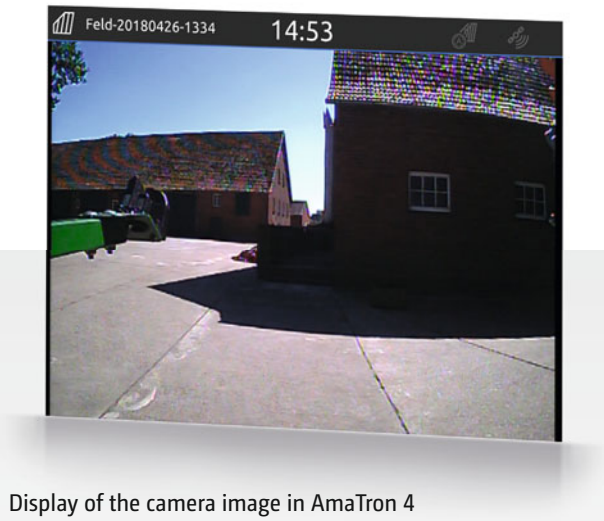
AmaCam

Software licence for the display of one camera image on AmaTron 4 and up to two camera images on AmaPad 2.

- Automatic display of the camera image on AmaTron 4 when reversing



Display of the application map in AmaTron 4



Display of the camera image in AmaTron 4

AmaTron 4

Manager 4 all

Simple and convenient operation as intuitive as your tablet

Why not handle a terminal as intuitively as a tablet or a smartphone? With this in mind, AMAZONE has developed the operator-friendly AmaTron 4, which offers a noticeably smoother operational process, especially when it comes to job management. AmaTron 4, with its 8" multi-touch colour display, meets the highest demands and offers you maximum user-friendliness. A swipe of the finger or use of the App carousel allows quick changes between applications and the simple and clearly structured operating menu. The practical MiniView, a freely configurable status bar and an integrated light bar make the AmaTron 4 exceptionally easy and convenient to use.

- Machine operation (UT, Universal Terminal) in day and night mode

Benefits of AmaTron 4:

- Automatic full screen mode when not in use
- Automatic control button display via a proximity sensor
- Practical MiniView concept
- Actuation via the multi-touch colour display or soft keys
- Particularly intuitive and user-friendly
- Field-related documentation
- Practice-oriented and intelligent menu navigation
- Practical quick-start menu with import and export of job data, help windows, day/night mode and the AUX-N assignment
- One camera input and automatic reversing detection
- Free trial period for all chargeable licences
- AmaTron Connect – for optional entry into the digital age

Equipped as standard with:

***GPS-Maps&Doc* ***

AmaTron Connect

New ways of comfortable networked operation

With AmaTron Connect, AMAZONE provides a digital interface to a smartphone or tablet. The mobile device and AmaTron 4 are simply connected as a hotspot. AmaTron Connect enables use of the AmaTron Twin App as well as data exchange via agrirouter and the myAmaRouter App.

- Everything in view at all times with the AmaTron Twin App

AmaTron Twin App

Clear display enhancement

The AmaTron Twin App offers the driver even more comfort during work, as any GPS functions in the map view can also be operated via a mobile device, e.g. a tablet, in parallel with machine operation on the AmaTron 4.

Advantages of the AmaTron Twin display enhancement:

- Use of an existing mobile device
- Greater clarity – all applications in sight
- Comfortable control of the GPS functions in the map view, in parallel, via the mobile device
- Clear, authentic representation of the working machine and its part-width sections

Now download the free App and try the DEMO in the App.

Alternative map views with AmaTron Twin – clear display of the machine and its part-width sections, as well as buttons on the right hand side of the mobile device.

agrirouter –

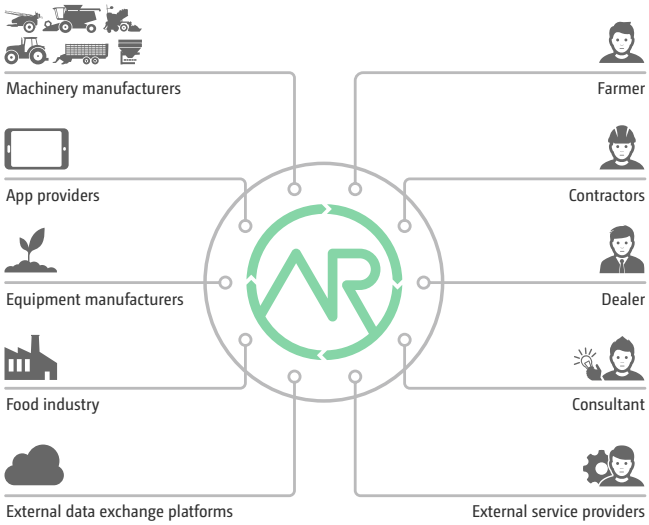
the independent data exchange platform for agriculture

ready for agrirouter

- Watch the video for more details

Secure data exchange

agrirouter is an independent data exchange platform for farmers and contractors. It enables simple and cross-manufacturer data exchange between machines and agricultural software applications, thereby reducing administration. The user retains full control over the data at all times.



- The manufacturer-independent agrirouter enables secure and uncomplicated data exchange.

myAmaRouter App

For the on-line transfer of data between AmaTron 4 and agrirouter

The myAmaRouter App enables data to be exchanged between the AmaTron 4 ISOBUS operator terminal and the agrirouter manufacturer-independent data exchange platform. If an AMAZONE machine is to be used to carry out a task with job data (e.g. application maps), the data can be easily transmitted from a Farm Management Information System (FMIS) to AmaTron 4 via agrirouter and the myAmaRouter App. After the work has been completed, the job can be sent back and is available for documentation in an agricultural software application.

Benefits of agrirouter:

- Simple data exchange between the AmaTron 4 ISOBUS operator terminal and the manufacturer-independent agrirouter data exchange platform
- Easy and rapid transfer of job and task data without the need for a USB stick
- More flexibility in data exchange and documentation

Uncomplicated data transfer. Transparent and secure!

Cirrus 4003

AmaPad 2

An especially comfortable method of controlling agricultural machinery

The most important information at a glance – in full screen mode or in the MiniView

The new dimension in control and monitoring

With AmaPad 2, AMAZONE offers a particularly high-quality operator terminal. The 12.1" multi-touch colour display is particularly convenient and fulfils the highest demands from Precision Farming. AmaPad 2 is operated solely via touch.

With the practical "MiniView concept", applications which aren't being actively operated at that moment, but need to be monitored, are clearly displayed at the side. When needed, these can be enlarged using "a finger swipe". The possibility of individualising the "dashboard panel" with a choice of display rounds off the user ergonomics.

Benefits of AmaPad 2:

- High-end ISOBUS operator terminal with a large touch display
- Extended MiniView concept enables the parallel display of up to a maximum of four menus
- Quick-start button and integrated light bar
- Two camera inputs
- Day-night mode

Equipped as standard with:

GPS-Maps&Doc
GPS-Switch basic
GPS-Switch pro
GPS-Track

Two cameras enable continuous monitoring of the surrounding areas during field work or on the road

AmaPilot^{+} – Everything to one hand!

Thanks to the AUX-N feature, you can operate multiple functions of the machine via AmaPilot^{+} or any other ISOBUS multi-function joysticks.

The benefits of AmaPilot^{+}:

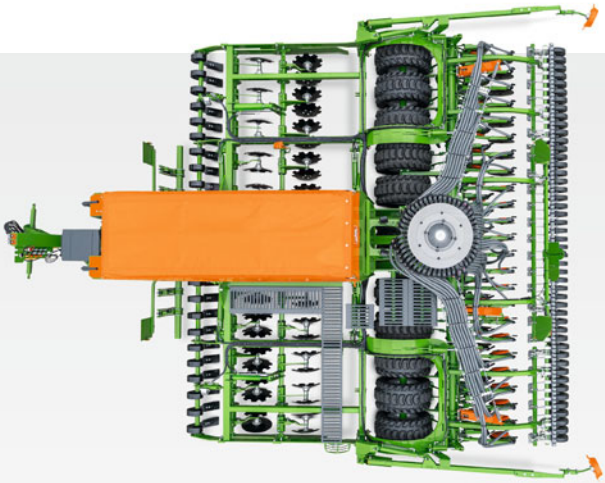
- Almost every function directly controlled across 3 levels
- Adjustable palm rest
- Freely-available key assignment

Overview of ISOBUS terminals	AmaTron 4 	AmaPad 2 
Display	Large 8" multi-touch colour display	Large 12.1" multi-touch colour display
Mode of operation	Touch and 12 soft keys	Touch
Interfaces	Serial interface for GPS Two USB ports	
Sensor connection, e.g. nitrogen sensor	via SCU-L adapter	via SCU-L adapter or PeerControl
Job management and processing of application maps (ISO-XML or Shape file formats)	GPS-Maps&Doc *	
Automatic part-width section control (SectionControl**)	GPS-Switch basic * with up to 16 part-width sections or GPS-Switch pro * with up to 128 part-width sections	GPS-Switch basic + pro with up to 128 part-width sections
Parallel guidance aid	GPS-Track * with virtual light bar	GPS-Track with virtual light bar
Automatic track guidance	–	Steer-Ready Set * for the Pantera self-propelled sprayer
Camera connection/licence *	Single camera connection / AmaCam * with automatic reversing detection	Twin camera connections / AmaCam *

* = optional / ** = Note the max. no. of machine part-width sections

Technical data

Cirrus trailed cultivator drill



Cirrus 6003-2

	Cirrus 3003 Compact	Cirrus 4003	Cirrus 4003-C	Cirrus 4003-CC	Cirrus 4003-2	Cirrus 4003-2C	Cirrus 4003-2CC	Cirrus 6003-2	Cirrus 6003-2C	Cirrus 6003-2CC
Coulter system	RoTeC pro/ TwinTeC+	RoTeC pro			RoTeC pro/TwinTeC+					
Row spacing (cm)	RoTeC pro 12,5/16,6/TwinTeC+ 12,5/16,6									
Operational speed (km/h)	RoTeC pro 8 – 16/TwinTeC+ 10 – 20									
Working width (m)	3.00	4.00						6.00		
Transport width (m)	3.00	4.00			3.00					
Transport length (m) *	6.96/ 7.10**	7.78			8.10/8.20**					
Transport height (m)	3.16		3.25		3.16	3.55		3.84		
Execution	rigid				folding					
Power requirement (kW/hp)	90/120	120/160						164/220		
Seed hopper capacity (l) ¹ Twin outlet pressurised hopper seed/fertiliser hopper (l)	3,000	3,600	4,000¹		3,600	4,000¹		3,600	4,000¹	
Fill height (m)	2.90		2.80		2.90	2.80		2.90	3.00	
Filling width (m)	1.90	2.60	2 x 1.25		2.60	2 x 1.25		2.60	2 x 1.25	
Filling depth (m)	0.80		0.70		0.80	0.70		0.80	0.70	
Linkage	Lower link cross shaft Cat. 3/4N/K700									
Basic weight from (kg)	3,600	4,200		4,700	6,300		6,900	7,500		8,300
Transport running gear	integrated									
Number of Matrix/AS tyres	6	8						12		

* by the extension of the telescopic drawbar the transport length can vary.

**TwinTeC+

Illustrations, content and technical data are not binding and may differ depending on the level of equipment. Country-specific road traffic regulations apply and must be complied with, meaning that special approval may be required. The permissible axle loads and total weights of the tractor have to be checked. Not all the listed combination options are possible with all tractor manufacturers.

AMAZONE

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