

Cirrus





Cirrus trailed cultivator drill

Sow successfully – harvest successfully



The Cirrus trailed cultivator drill is a pneumatic seed drill which is characterised by its superb working performance; both in conventional and mulch sowing.

With its working widths of 3 to 6 m and hopper sizes from 3,000 to 3,600 l, the Cirrus stands for maximum work rates and as an alternative, the Cirrus-C comes also with a 4,000 l twin outlet pressurised hopper.



Cirrus

Faster, economical, better!

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In 3 m, 3.43 m, 3.5 m, 4 m and 6 m working widths

Up to 20 km/h working speed





- Precise metering and pneumatic seed distribution for maximum effectiveness
- ◆ Two different sowing coulters from choice: RoTeC pro single disc coulters or the TwinTeC+ double disc coulter
- Large, central and slender seed hopper that offers good all-round vision
- ◆ 2-row cultivation disc segment seedbed preparation and seeding all in one pass
- Optional Matrix tyres for 40 km/h im road transport and targeted, strip-wise reconsolidation
- Wide range of available specifications, for instance, such as different packer variants, single-shoot fertiliser option, seed pipe monitoring or filling auger for any farm the right solution
- Up-to-date ISOBUS technology for even more flexibility and comfort, such as, for example, maximising any GPS applications
- Optional TwinTerminal for a more comfortable calibration procedure

The top benefits 4 | 5



The benefits of ISOBUS

- The Cirrus is certified according to the UT 2.0 AEF compliance test. In this way these AMAZONE seed drills can be operated via any terminal on the market that has been UT 2.0 certified. Needless to say, the Cirrus can also be controlled via an ISOBUS compatible Section Control licence from another ISOBUS terminal.
- AMAZONE AMATRON 3, CCI 100 and AMAPAD terminals alongside all AMAZONE ISOBUS equipped machinery support the AEF functionality AUX-N. This means, that, for example, the keys of an existing AUX-N compatible multi-function joystick can be individually assigned to a specific function. So, every function on the joystick is located exactly there, where the customer wants it to be.



The Cirrus concept

Agronomical and ecological demands fulfilled to perfection:

- ① Hopper position: The optimised positioning of the seed hopper ensures better tractor traction and more room left for tight turns on the headland. Also the fill level of the hopper does not have any effect on the placement depth of the seed.
- ② Metering: Quickly exchangeable metering cassettes together with a very quiet running, yet high performance blower fan, ensure an even seed delivery to the distributor head, even when sowing at maximum speeds. The forward speed impulses are provided via radar and a tramline system is fitted as standard. If necessary, the hopper can be isolated from the metering via a slide which enables the metering cassette to be changed even when the hopper is full.
- ③ Operational comfort: Access gangways above the disc segment ensure comfortable access to the metering unit and the distributor head.
- **4 Loosening:** Two tractor track eradicators per side provide an effective loosening of the soil behind the tractor.



- 5 **Levelling:** Mounted ahead of, or behind the disc segment, a hydraulically-adjustable Crushboard for levelling the soil can be attached (optional).
- **6 Seedbed preparation:** The optional disc segment, with maintenance-free, specificly angled discs, provides an outstandingly worked and levelled seedbed. The working depth can be hydraulically adjusted during operation.
- **7 Reconsolidation:** The specially developed Matrix tyres reconsolidate the seedbed in strips. The sowing coulters smoothly follow exactly in these defined strips even at high forward speeds.
- **8 Levelling:** Ridge clearers between the tyres ensure a level, even, operational performance. In addition, scrapers (as illustrated) are available to avoid any clogging of the tyres under extreme soil conditions.
- **9 Seed placement:** Thanks to the choice of two different coulter systems, RoTeC pro and TwinTeC+, an optimised seed placement, depending on the demand, is achieved. Due to the universally-usable RoTeC pro single disc coulter system, the Cirrus proves itself even in extremely moist weather. The high-output TwinTeC+ double disc coulter is extremely robust and precise.
- 10 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.



Cirrus - the models

Cirrus Compact

Model	Working width			
Cirrus 3003 Compact (rigid)	3.0 m			
Cirrus 3503 Compact (rigid)	3.43 m/3.5 m			

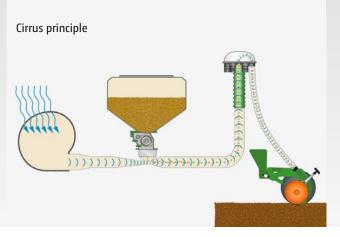


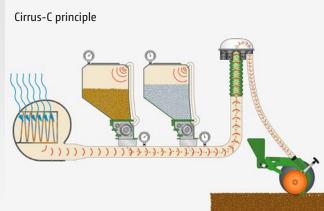
Cirrus

• With 3,000 I seed hopper – so very quick and manoeuvrable

Working width	
4.0 m	
4.0 m	AMAZDNE
6.0 m	Circus 4003
	4.0 m 4.0 m

The models 8





Single-tip seed hopper for seed

Twin outlet pressurised hopper for seed and fertiliser

Cirrus-C for seed and fertiliser

In addition to the single-tip, open hopper version of the Cirrus, the Cirrus-C version is available with a divided, twin-tip pressurised hopper. The sealed twin outlet pressurised hopper ensures accurate metering yet at a low power requirement of the blower fan.

The twin outlet pressurised hopper is divided in a ratio of 60:40. The Single-Shoot system of seed and fertiliser or seed only can be applied via the coulters according to the application or need. Thanks to the two metering units, which can also be individually calibrated with two different materials, the highest accuracy of application without any demixing effects is achieved.

Cirrus-C

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





The metering makes the difference



Comfort Pack 1 with TwinTerminal 3.0

To further simplify the pre-metering, calibration and residue emptying, AMAZONE offers for the Cirrus, in conjunction with AMATRON 3, CCI 100 or AMAPAD operator terminals, Comfort Pack 1 with TwinTerminal 3.0. The TwinTerminal is mounted directly on the seed drill next to the metering unit. This position offers a decisive benefit: The driver now can carry out the actuation and data input for the calibration

procedure direcly at the machine and thus the repeated climbing up and down into the tractor is no longer necessary. The TwinTerminal 3.0 consists of a water and dust-proof housing with a 3.2 inch display and four large operation keys.

"A good idea also is the new secondary terminal which once again significantly simplifies and make safer the calibration procedure."

(Traction magazine – working test AMAZONE Cirrus 6003-2 · 03/2015)



The technology | Metering





Precise, full electric metering drive for Cirrus

Easy setting via the operator terminal and comfortable calibration

Reliable metering drive

The metering system is suitable for all seeds and sowing rates from 1.5 to 400 kg/ha. Over-sized metering cassettes produce a low peripheral speed protecting 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 Cirrus is supplied as standard with three metering cassettes that are suitable for up to 95% of all seeds. Other metering cassettes, for instance for maize or specialist crops, are also available.

Segmented distributor head

The segmented distributor head provides huge flexibility for the pneumatic seed drill. With immediate effect, asymmetrical tramlines can be carried out without an undesirable seed rate reduction on the other half of the machine. The segmented distributor head provides electric half-side shut-off and Section Control. The half-side control is located directly inside the distributor head.



E.g. for rape, stubble turnips, lucerne²

E.g. for barley, rye, wheat^{1, 2}

E.g. for spelt, oats, wheat^{1, 2}



Metering cassette 7.5 ccm E.g. for linseed, poppies and



Metering cassette 120 ccm for catch crops, maize and sunflowers



Metering cassette 350 ccm for fertiliser



Metering cassette 660 ccm for peas and beans

The benefits:

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



Segmented distributor head

"For situations other than fine and normal seeds, such as grass seed, beans, peas and maize, different metering cassettes are available. Their exchange is simple as AMAZONE provides a tool for accessing the metering unit."

(Traction magazine - working test AMAZONE Cirrus 6003-2 · 03/2015)

¹Standard on Cirrus with working widths of up to 4 m

² Standard on Cirrus with working widths from 4 m



Soil tillage

Seedbed preparation and sowing in just one pass

Twin-row compact disc harrow

The twin-row compact disc harrow loosens, crumbles and levels the seedbed prior to sowing. In this way two operating passes can be combined. For conservation farming, additionally any surface straw is again distributed and incorporated. Plentiful clearance, even at high forward speeds, identifies the twin-row compact disc harrow element. No blockage from straw or crop residues. The increased angle of attack of the discs ensures an especially intensive mixing. The working depth of the disc section can be individually matched whilst driving. The setting possibilities of the outer discs via a series of holes ensures a neat transition between passes. The large distance between the second disc row and the Matrix tyres provides an easy pull and smooth running as the soil flow in front of the Matrix tyres has already settled.

Solo drilling at high work rates

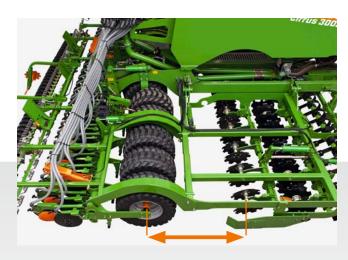
As a particularly high work rate option, the Cirrus is available also without the cultivation discs. With all the technical benefits of the basic seed drill, the Cirrus without disc segment is a cost-effective alternative for solo sowing but still maintains the pre-drilling reconsolidation. In this specification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

Rough serrations or fine serrated – the choice of the right disc

For the front cultivation discs, two disc options are available with a choice of rough serrated or fine serrated discs.

The rough serrated disc is ideally suited to deeper seedbed preparation. Due to its profile, an especially aggressive incorporation, including the mulching of harvest residues, is achieved.

On the other hand, the fine serrated disc shows its strength rather in the shallow seedbed preparation. It provides more fine soil for an optimum seed embedment.



Large clearance for less draft and a smooth run



Rough serrated disc 460 mm

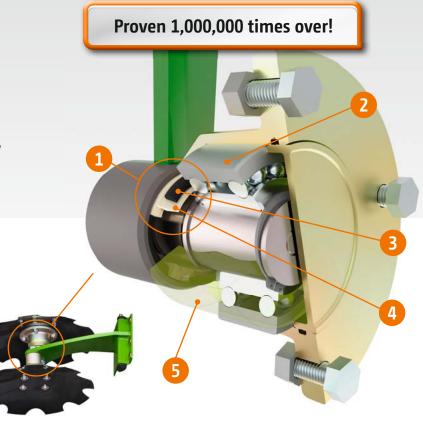


Fine serrated disc 460 mm

Cirrus slide seal

Reliability and comfort are the key

- 1 Face seal built in conical seats
- 2 2-row angular contact ball bearing
- 3 2 x 0-rings
- 4 2 x cast rings with face seal
- (5) SAE 90 gear oil filled (40 cm³)



Perfect bearing sealing

The combination of felt ring and extremely high quality face seals perfectly protect the 2-row angular contact ball bearing races. So, with one oil fill as lifelong lubrication, grease nipples are avoided. Thus, the maintenance time of the compact disc harrow element is substantially reduced. Face seals have been used in the construction industry for decades for sealing rollers and the running gear of track-laying vehicles and they are proven to work reliably under the hardest of operational conditions.

Rubber suspension elements – reliable and maintenance-free

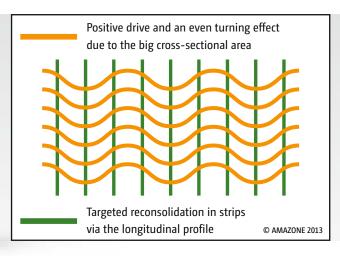
The disc system combines two discs mounted on one arm which is suspended via sprung rubber blocks and which optimally follows the ground contours. In addition, the rubber sprung buffers act as an overload safety device on stony soils. In this way, a safe, maintenance-free operation of the compact disc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





Rubber suspension elements





Matrix principle

Matrix principle

At the heart of the machine, and the guarantee of a uniform, quick field emergence, are the new Matrix tyres. 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). The combination of the big diameter, together with the new profile, provides an easy rolling effect — and thus a reduced pulling power. 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.

Keeping to the principle that has been established for many years at AMAZONE, the Matrix tyres provide the reconsolidation in strips. The reconsolidated strips with small ridges of loose earth provide more than enough fine soil for the coverage of the seed. The heterogeneous soil structure, created by the tyres, provides the optimum plant growth under all conditions.

With the Matrix tyre, AMAZONE, for the first time, makes use of radial design tyres with steel inserts in the tread. 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. In addition, radial tyres, thanks to their design, have the benefit that they offer very good self-cleaning, even at the standard 3.5 bar pressure. Ridge levellers in between the rows, which are available as an option, provide an even operational performance and make sense especially on light soils.

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. This compromises however, the targeted reconsolidation, especially in dry years, as the AS tyres do not create the same seed/soil contact in comparison to the Matrix tyres.





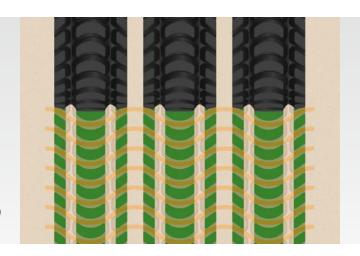


Higher turning effect from the AS tyres

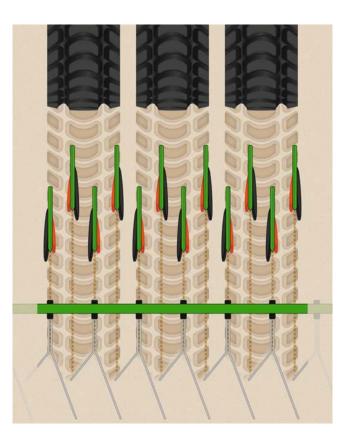
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"At 88 cm high and 41 cm wide, the Matrix tyres, compared with the 'old' wedge ring tyres are approximately 10% higher which results, due to less sticking in clayey soils, in a reduced pulling power – great."

(profi – Practical test Cirrus 3003 Compact \cdot 04/2015)



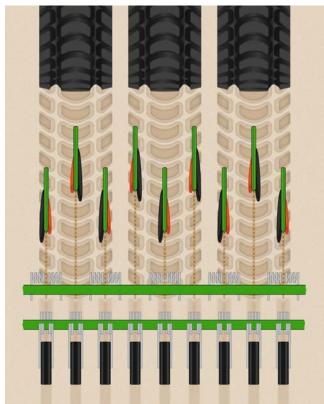
Reconsolidation in strips due to the Matrix tyres



Row spacing 12.5 cm



Plants at a row spacing of 12.5 cm



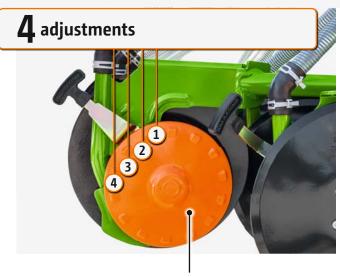
Row spacing 16.6 cm



Plants at a row spacing of 16.6 cm

RoTeC pro coulter

The universally-usable single disc coulter







guidance roller

RoTeC pro coulter (Ø 400 mm) with Control 10 depth guidance disc

RoTeC pro coulter (Ø 400 mm) with Control 25 depth guidance roller The cleats, open at the rear, provide a very good self-cleaning effect.

Goes up 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.

The slender design of concave disc, furrow former and cleaning disc ensures a good passage of harvest residues and soil even on narrow row spacings.

Row spacings of 12.5 and 16.6 cm can be chosen.

- "The coulter pressure is adjusted between two fixed positions via a double acting valve - this same spool valve is also used to alter the working depth of the compact disc harrow. The choice of functions is done via the operator terminal which saves in the number of spool valves required."
- (1) "At high forward speeds the coulter runs very smoothly in the soil: the sowing depth was very even."

(profi – Practical test Cirrus 3003 Compact · 04/2015)

(profi - Practical test Cirrus 3003 Compact · 04/2015)



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.

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. The hard metal coating of the furrow former also ensures a long service life.

Quality and reliability throughout:

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

Decoupling of coulter and Roller harrow pressure

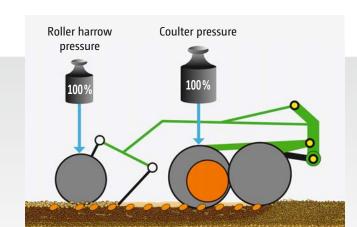
Depth guidance

One of the unbeatable benefits of the RoTeC pro single disc coulter is the decoupling of the coulter depth guidance and the reconsolidation. In this way, when a stone is passed, the coulter is raised only once. Furthermore, the coulter and roller pressure can be adjusted independently to each other. Under dry conditions, less coulter pressure and much more roller pressure can be applied whereas, under moist conditions, the reverse is achievable.

This very even and exactly-controlled coulter guidance of the RoTeC pro single disc coulter is ensured by the Control 10 depth guidance disc with its 10 mm surface contact or the Control 25 depth guidance roller with its 25 mm contact surface which are directly on the coulter. The plastic discs, fixed on the coulter, keep the placement zone behind the furrow former clear from blockages and ensure an accurate seed placement. The basic adjustment of the sowing depth range is done without tools and in 4 steps directly on the coulter.

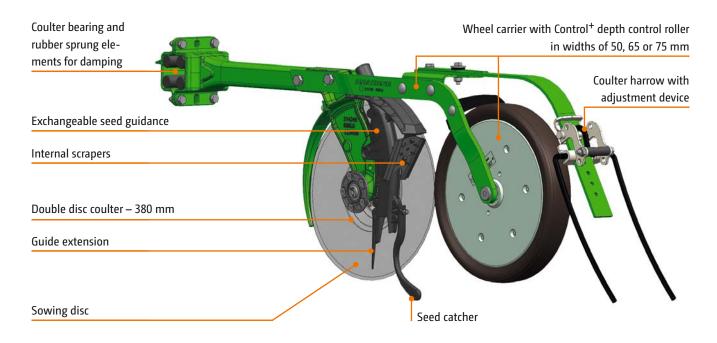
Coulter pressure adjustment

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. Here the coulter pressure is applied 100% to the sowing disc though.



TwinTeC+ coulter

The high output double disc coulter



TwinTeC⁺ double disc coulter (cross-section)

Smooth-running and robust

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 from forged steel, are equipped with sufficient reserves even under the most

arduous of 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.



Cirrus 3003 Compact with TwinTeC+ double disc coulter



The sharpened, 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, there remains sufficient space so that a 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 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. 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 up to heaviest clay. Optional scrapers on the depth guidance roller ensure the even guidance of the coulter even under moist conditions.

15 to 100 kg [coulter pressure] per row is possible. And even this is dynamic."

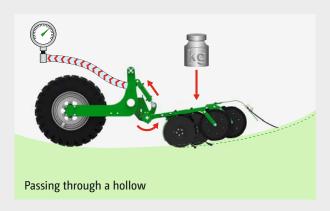
(profi – Test report Cirrus 6003-2 with TwinTeC+ · 08/2016)



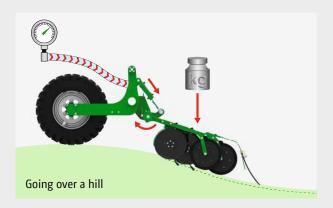
TwinTeC+ double disc coulter

TwinTeC⁺ coulter pressure

The coulter pressure is set via a pressure relief valve which is integrated into the oil circuit of the hydraulic blower fan. In this way, the coulter safely maintains the pre-set pressure. This is of special benefit when sowing shallow in very hilly terrain.



Hollow: When passing through a hollow, the coulters are additionally pushed against the ground. This causes an overpressure in the coulter pressure cylinder which is directly returned to the oil circuit. The coulter pressure is maintained.



Hill: When passing a hilltop the coulters are lowered resulting in an underpressure in the coulter pressure cylinder which is immediately compensated with additional oil from the circuit. The coulter pressure remains constant.

The following harrows

Seed coverage, seed embedment



Exact S following harrow

Exact S following harrow in combination with RoTeC pro

The 15 mm thick Exact S following harrow is used in conjunction with the RoTeC pro coulter system. It features little wear and provides good seed coverage, even under the most arduous of operating conditions.

The Exact S following harrow covers and levels the open seed furrows without blockage, even with large amounts of straw present. With its individually pivoting harrow elements, it adapts to the prevailing soil undulations and provides an even seed coverage both on fields without straw and also on areas where plenty of straw prevails. When sowing under less than the optimum conditions, e.g. on moist and heavy soils, the Exact following harrow pays off.

The harrow pressure is adjusted mechanically by pre-tensioning the harrow springs. When equipped with the optional hydraulic harrow pressure adjustment, locating pins predetermine the minimum and maximum settings. So, the harrow pressure and the coulter pressure can be simultaneously matched to changing soils via just one tractor control valve whilst on the move.







Coulter harrow

The 12 mm individual harrows can be adjusted to three different angles without tools."

(profi – Test report Cirrus 6003-2 with TwinTeC+ · 08/2016)

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. The special advantage on offer is that the adjustment of the Roller harrow pressure, from nothing up to 35 kg per roller, is completely independent from the coulter pressure.

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 aggressiveness of the coulter harrow can be set in three different positions without tools. In cases where the harrow is not required, then it can be swung up into its parking position.



Cirrus 3003 Compact with RoTeC pro coulters and Roller harrow

Cirrus 3003 and 3503 Compact

The highly-manoeuvrable, trailed cultivator drills



Cirrus 3003 Compact

"The AMAZONE Cirrus 3003 Compact universal seed drill leaves a good impression. The handling of this compact machine was convincing. Many details, such as, for example the TwinTerminal, the large tool box, access to the distributor head or the working depth indicator for the front cultivations discs ease the work load. However, even the fundaments, such as the quality of work, the paintwork and the 40 km/h permissible road speed need to be emphasised."



"As standard, the Cirrus is equipped with a very efficient air braking system – exemplary! However better still: equipped with this the machine is allowed, even with a full hopper tank, to travel at 40 km/h on the road."

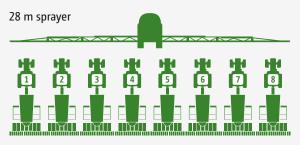
(profi – Practical test Cirrus 3003 Compact · 04/2015)

Compact, easily manoeuvrable, quick!

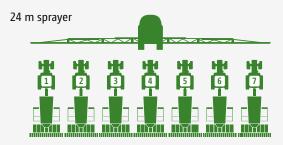
For smaller fields the Cirrus Compact models offer an atttractive option. With a 550 mm shorter axle position than on the wider Cirrus drills and in conjunction with its lower link mounting, tremendous manoeuvrability is achieved. So, even on tight headlands excellent work rates are possible. With its 3,000 I tank capacity and the maximum speed of 40 km/h, the Cirrus Compact is ideal for farms which do not have any facility for in-field filling. In accordance with the relevant national traffic road regulations, the Cirrus is available with an unbraked axle, with dual-circuit air braking or with a hydraulic braking system.

Working widths of 3.43 m and 3.5 m

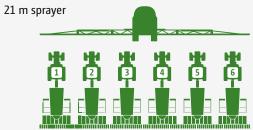
This seed drill, with a working width of 3.5 m, has been developed for countries or regions where a transport width of 3.5 m on the road is permissible. Of course, this machine also is a very interesting alternative for farms in a ring because this trailed sowing combination matches very well with 21 m and 28 m tramline systems. In addition, a working width of 3.43 m is available, so that, for example, a 7-bout tramline rhythm for 24 m can be achieved.



3.50 m seed drill: example of 28 m tramline system



3.43 m seed drill: example of 24 m tramline system



3.50 m seed drill: example of 21 m tramline system



Cirrus 3503 Compact for farms that appreciate its efficiency and low pulling power

Cirrus 4003 and 4003-2

The 4 m trailed sowing combinations – for higher workrates



The rigid Cirrus 4003-C





Compact, quick, universal

The trailed Cirrus sowing combination, with a working width of 4 m, is available in both a rigid or a folding version. The folding version folds for road transport down to a transport width of 3 m.

These 4 m versions are particularly suitable for medium-sized farms that require a large seed capacity and thus high work rates, and who already have on the fam as standard, tractors with a power rating of between 170 and 200 HP. This size of tractor is optimally suited for the Cirrus 4003 and 4003-2.

Comfortable filling

Steps ease climbing up and the safe loading platform with railing eases access to the seed hopper. The tank can be simply filled from small bags, big bags, via a filling auger on a trailer or a loading shovel. The simple to handle folding lid ensures the airtight closing of the hopper.



Cirrus 4003-C with twin outlet pressurised hopper for seed and fertiliser

Cirrus 6003-2

The 6 m trailed cultivator drill – for the highest of workrates



• "The shape of the seed tube in the coulter was changed to place the seed even more precisely in the bottom of the furrow. This also functions very well – when the seeds were uncovered we did not find anything left on top. Almost all the seeds were left on the water-bearing seed furrow bottom."

(Traction magazine – working test AMAZONE Cirrus 6003-2 · 03/2015)

Cirrus 6003-2 with TwinTeC+

Cirrus 6003-2 26 | 27





■ "Especially for agricultural contractors
the 40 km/h permit for road transport
with a full hopper is very interesting."

(Traction magazine – working test AMAZONE Cirrus 6003-2 · 03/2015)

Fast, universal, efficient

For higher field outputs and on larger farms, AMAZONE offers the folding Cirrus 6003-2 in 6 m working width and with a hopper capacity of 3,600 l.

Apart from the single outlet tank version of the Cirrus 6003-2, the Cirrus 6003-2C is available with a twin outlet 4,000 l pressurised tank for the simultaneous application of fertilliser and seed.

Quick emptying

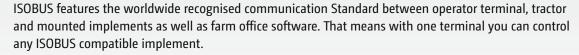
The emptying of the seed and fertiliser tanks is done quickly and easily via the optionally available quick emptying device which is attached to the tank and is easily acessible.

As an extension, HT or drainage pipes can be fitted.



Cirrus 6003-2 with TwinTeC+

ISOBUS terminals





The Cirrus trailed cultivator drills can be operated via different AMAZONE ISOBUS terminals:



AMAZONE AMATRON 3 5.6" screen



AMAZONE CCI 100 8.4" touchcreen



AMAZONE AMAPAD 12.1" touchcreen

Further ISOBUS terminals



e.g. Fendt Vario terminal



e.g. Müller COMFORT terminal







◆ AmaPilot⁺ multi-function joystick

The AmaPilot multi-function joystick makes operation even more convenient. All the functions in the operating menu can be actuated via AmaPilot or other ISOBUS joysticks (AUX-N).



The benefits of ISOBUS:

- ◆ AMAZONE ISOBUS machines are UT 2.0 certified and thus can be operated with any ISOBUS terminal with UT 2.0.
- All AMAZONE ISOBUS terminals and machine job computers comply with the AUX-N standard and can assign the soft key coverage to an AUX-N compatible multi-function joystick.
- AMAZONE ISOBUS machines can be actuated via any ISOBUS compatible Section Control licence.

Special features of AMAZONE ISOBUS machinery:

- Up to three user profiles and individual user interfaces can be set up for different drivers.
- ▼ The operator menu can be optimally matched with ISOBUS terminals that have differing numbers of soft keys.
- Each machine function can be freely allocated in the menu layout.
- Complete documentation via Task Controller (ISO-XML). As an alternative to documentation via Task Controller, a simple job record of total values (worked area, required time, applied rate) is possible. The recorded total values can then be exported as a screenshot to an USB stick.

Important information

Please note that when working with other ISOBUS terminals, additional section control software, for example, from the tractor manufacturer, is normally necessary. This is not usually included in the standard version of other ISOBUS terminals.

2-terminal solution

A twin-terminal solution with the simultaneous use of a tractor ISOBUS terminal and AMATRON 3 or CCI 100 is recommended if the tractor terminal does not support the section control function or if you intend to use the Cirrus drill via AMATRON 3 or CCI 100 and a separate screen.



AMATRON 3 operator terminal



Machine overlapping operation

Control of all the important functions on the Cirrus can be achieved via the AMATRON 3 ISOBUS terminal, including both operational functions and functions for the adjustment of the machine, such as calibration.

AMATRON 3 is an ISOBUS terminal that can be used from seed drills to fertiliser spreaders and crop protection sprayers enabling the optimum application rate control and operation.



One for ALL!

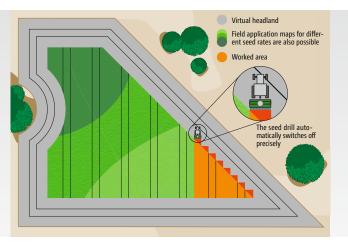
AMATRON 3

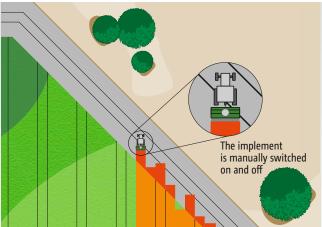
As standard, the Cirrus is equipped with full electric metering drive. This simplifies the calibration routine and any in-cab changes in seed rate. The comprehensive electro-hydraulic operation via the AMATRON 3 allows the control of all functions such as headland management or working depth of the disc harrow segment from the tractor cab.

The operator terminal controls the drill as well as monitoring the tramline functions. This also includes a sensible obstacle solution for the track markers. With the new Task Controller, the jobs can be prepared comfortably on the farm PC and then transferred via a USB stick to the terminal in an ISO-XML format and then loaded. By means of the AMATRON 3 and the Cirrus, via ISO-XML or Shape files, part-area, site specific maps can be processed.

"The exceptional operation via the AMATRON 3 computer with its 5.7 inch display is no mystery."

(Traction magazine - working test AMAZONE Cirrus 6003-2 · 03/2015)





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

GPS-Switch – accurate placement of the seed

GPS-Switch controls, dependent on the position of the seed drill and the adjustments by the driver, the switch-on and off points of the electric metering unit. For the Cirrus 4003-2 and Cirrus 6003-2, control of each 2 m or 3 m half-side section is possible. In this way, during practical operation, the often found over or under sown areas in critical spots, such as on the headland or in wedges can be minimised.

In addition, application maps are becoming more and more popular where the seed rates can be matched to the small-scale situations in the field – such as hills and hollows or changes in soil type. Task Controller (via ISO-XML) or GPS-Maps makes for the simple utilisation of application maps. Standardised file formats can be imported into the system, which are then implemented fully automatically. A graphic display of the map in the background offers a good overview.

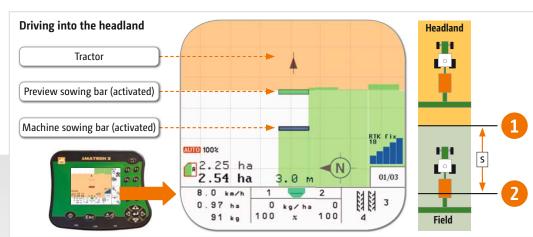
GPS-Switch with AutoPoint

GPS-Switch with AutoPoint for seed drills is the logical supplement to help relieve the stress on the driver and to optimise the results in the field. The new AutoPoint system determines automatically the delay time: that means the time between metering start and end and the delivery behaviour of the seed to the coulter. Via a sensor in the coulter, the seed flow at the coulter is recognised and so the system is able, in relation to the switching times of the metering device, to determine the conveying time of the seed through the machine.

This is monitored constantly at every headland turn and this value is taken as the basis for the automatic calculation of the switching points. So a response, even to changes in the conveying behaviour of the seed and to changes in driving behaviour, is possible. The automatic switching is rounded off with the driver assistance system in AMATRON 3, which indicates to the operator the optimum forward speed when driving into and out of the headlands.



Sensor for registering seed flow at the sowing coulter



AutoPoint driver assistance system

- 1 Stop seed placement
- 2 Stop metering motor
- The distance "s" depends on

 the conveying time "t" and
- the speed "v"



CCI 100 operator terminal

With ISOBUS technology

The universal terminal

The CCI ISOBUS terminal from AMAZONE is the result of the cooperation with several other manufacturers of agricultural machinery who are joint participants in the Competence Centre ISOBUS e.V (CCI). With CCI, AMAZONE and its partners have laid the foundation to introduce ISOBUS into practice. The CCI 100 is the basis to convert all AMAZONE machinery and implements successively to the ISOBUS standard.

The benefits:

- ◆ The bright 8.4" colour display with its high screen resolution and ambient light sensor matches the brightness automatically to the light conditions. This avoids the driver in twilight or at night being blinded by too bright a display.
- The input is carried out from choice via the operatorfriendly touch screen or via the soft keys.
- Fatigue-free operation at night is assisted by the back-lighting of the keys which are also connected with the light sensor.
- The proven AMAZONE one-handed operation is still possible because the function of the soft keys can be simply mirrored.
- For intuitive menu guidance and the convenient input of values and text, the terminal is provided with a high-quality touch screen.
- For the direct quick, input and adjustment of the input values, a scroll wheel with actuating function is ergonomically integrated in the housing.



The terminal includes the following functions:

- ISOBUS implement operation
- ▼ Tractor ECU function (interface for speed, PTO shaft and lower link position)
- CCI.Control job management for documentation
- CCI.Command (optional):
 Automatic part-width section shut-off CCI.Command.SC
 Parallel guidance aid CCI.Command.PT
- Application maps supported in ISO-XML format
- USB interface for data exchange
- **▼** Interface for the connection of a GSM modem
- ASD and LH5000 interfaces via RS232 (nominal rate transfer), e.g. for N sensors
- Camera function CCI.Cam
- In conjunction with seed drills, the CCI terminal features the automatic tramline function. Here the tramline position is controlled via GPS with the aid of the parallel driving module of the CCI terminal.



External light bar for CCI.Command.PT parallel driving aid As a possible addition, an external light bar is available which can comfortably be coupled with CCI.Command PT. The external light bar Can be positioned freely in the tractor cab. The only precondition for its utilisation is the activation of the Parallel Tracking module in CCI.Command.

AMAPAD operator terminal

With ISOBUS technology

An especially comfortable method of controlling agricultural machinery

With the AMAPAD operator terminal, AMAZONE offers an entirely new and high-class solution for GPS application such as automated GPS based part-width section control and Precision Farming applications.

AMAPAD features a large, especially ergonomic, 12.1" touch-screen. With the unique "Mini View" concept, applications that do not need to be actuated but which, however, need to be monitored, are clearly shown at the side. If needs be, these can be enlarged by "fingertip" widening. The possibility also exists to customise the display, a feature which rounds off the exceptional layout of this operator terminal.



In addition to GPS-Switch pro part-width section control, a high-quality professional manual light bar guidance system is also installed as standard. GPS-Track pro can also be upgraded to an automated steering system.

The terminal includes the following functions:

- **▼** ISOBUS implement operation
- ▼ Task Controller job management for documentation
- Automated GPS-Switch pro part-width section control
- Integrated light bar for GPS-Track pro parallel guidance system
- As an option: upgradable to automatic steering
- GPS-Maps pro application map module
- RS232 interface via SCU adapter (for data exchange)
- ▼ Twin USB ports for data exchange
- WLAN module (via USB adapter)
- GPS output

The characteristics of AMAPAD:

- Screen made from toughened glass
- **❸** Housing made from impact-proof plastic
- **▼** Extra-narrow rim for maximum visibility
- Flush finish, no penetration of dust/humidity









Equipment for any task

Make use of all the strengths of the Cirrus!



T-Pack U

The front T-Pack U intermediate axle packer rolls the area in the centre of the cultivation disc segment. In this way, the soil in front of the machine is again additionally reconsolidated which is of 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.

T-Pack IN

The pre-running packer concept 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 in this way presses the area between the tractor wheels.









LED work lights

On the Cirrus, the optional LED work lights light up the working area and thus provide a clear view of the working environment to ensure the safe operation, even in the evening and during the night. Also the area around the sowing coulters is excellently lit. The work lights are controlled via the operator terminal.

Speed signal

For the regulation and drive of the metering unit, the forward speed of the Cirrus can be registered via a radar sensor or via a GPS sensor signal. As an alternative, the tractor speed can also serve as a speed source via a signal cable.

Catch crop sowing with GreenDrill 500

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, which is safely accessed via steps has a capacity of 500 l. The full width distribution of the seed is carried out via baffle plates in front of the following harrow.

For the control of the machine, AMAZONE offers in addition to the basic equipment, an on-board computer for the GreenDrill which controls the metering unit. In addition, this optional Comfort specification offers the possibility of indicating the forward speed, the worked area, the worked hours and also assists during the calibration procedure.

Filling auger

With the hydraulically swivelable filling auger, a comfortable solution for the quick filling of Cirrus is available. In addition to the single-tip hopper, also the twin outlet pressurised hopper can also be comfortably loaded from a trailer via the simple swivelling round of the filling auger.

The filling auger can be combined with all other optional equipment and offers a good view when manoeuvring due to the mounting arrangement to the left hand side of the auger and is supported on the side frame.





GreenDrill 500 on Cirrus 6003-2C: suitable for companion crops or slug pellets



So much more potential

For even better seedbed preparation



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, positioned behind the discs, can, in addition, help settle the earth flow. The reconsolidation will be even more uniform. For the Cirrus with Crushboard, the front tyre packer can also be specified.

Tractor wheel mark eradicators

When operating on compaction sensitive soils, and at a reduced working depth, the optional tractor wheel mark eradicators make sense. These loosen the compacted tracks behind the tractor tyres. The position of the wheel mark eradicators can be set horizontally and vertically. The special kinematics of the eradicator provides a constant spring force across the entire area of deflection. The wedge shares safely loosen yet, however, do not bring stones to the surface.



 Crushboard in front of the tyres – for distributing and settling the soil



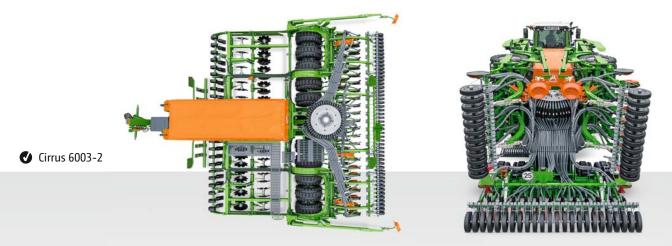
Tractor wheel mark eradicators for loosening the compacted tracks

Technical data:

Cirrus trailed cultivator drill

	Cirrus 3003 Compact	Cirrus 3503 Compact	Cirrus 4003	Cirrus 4003-C	Cirrus 4003-2	Cirrus 4003-2C	Cirrus 6003-2	Cirrus 6003-2C	
Coulter system	RoTeC pro/TwinTeC+	RoTeC pro			RoTeC pro/TwinTeC ⁺				
Row spacing (cm)	RoTeC pro 12.5/16.6/TwinTeC ⁺ 16.6								
Operational speed (km/h)	RoTeC pro 8 – 16/TwinTeC ⁺ 10 – 20								
Working width (m)	3.00	3.50/3.43	4.00 6.00			00			
Transport width (m)	3.00	3.50	4.00		4.00 3.00				
Transport length (m) *	6.96		7.78 7.93			93	7.85		
Transport height (m)	3.06	3.11 3.18		3.18	3.08	3.16	3.84		
Execution		rigid folding							
Power requirement (kW/HP)	90/120	105/140		120/160			164/220		
Hopper capacity (I) Twin outlet pressurised hopper seed/fertiliser hopper(I)	3,000		3,600	4,0001	3,600	4,0001	3,600	4,0001	
Filling 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	
Drawbar	Lower links Cat. II/III/IV								
Nett weight from (kg)	3,600	4,000	4,500 4,700 6,400		7,0	7,000			
Transport running gear	integrated								
Number of Matrix/AS tyres	6	7	8 12				.2		

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



Illustrations, content and technical data are not binding! Technical data may deviate according to the level of equipment. Machine illustrations can vary due to country-specific traffic legislation.



Catalogue pièces d'usure

AMAZONE service – always in your vicinity



of real time communication with service specialists from AMAZONE along with the creation and provision of learning contents by utilising

Augmented Reality (AR).







The satisfaction of our customers is the most important objective

For this we rely on our competent sales partners. Also for service queries they are the reliable contact partner for farmers and contractors. Due to continuous training, our sales partners and service technicians are always up to date when it comes to looking after the state of the art technology.

We provide you with a first class spare parts service

The basis for our worldwide spare parts logistics is the central spare parts depot at our headquarters in Hasbergen-Gaste. This ensures the maximum availability of spare parts, even for older machines.

Parts which are available in our central spare parts depot in Hasbergen-Gaste, ordered up until 17.00 hours, are dispatched the same day. 34,000 different line items of spare parts and wearing metal are located in our highly modern store and daily, up to 800 orders are sent to our customers.

Better to choose the original right from the start

Your equipment is exposed to extreme demands. The quality of AMAZONE spare parts and wearing metal offers you the reliability and safety you need for efficient soil tillage, precise sowing, professional fertilisation and successful crop protection.

Only original spare parts and wearing metal are perfectly matched to AMAZONE machinery in their functionality and durability. This ensures the optimum operational performance. Original parts at a fair price pay off in the end.

Therefore, make your decision the original!

The advantages of original spare parts and wearing metal

- Quality and reliability
- Innovation and efficiency
- **▼** Immediate availability
- ✔ Higher resale value of the used machine

AMAZONE "E-Learning" – the new way of driver training via a PC

With the "E-Learning" internet portal, AMAZONE expanded its service offer on its home page at www.amazone.de/e-learning with this additional very useful function. "E-Learning" offers interactive driver training, which enables the operator to practice the operation of complex machinery on his own on-line as well as off-line via a PC or tablet. The new service offers drivers the possibility to get acquainted with a new machine prior to its initial operation. However, experienced drivers can also refresh their knowledge enabling them to utilise better still the full potential of their machinery.







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