



AMAZONE

Large area seed drill ***Primera DMC***

Fertiliser Delivery Cart ***FDC***



Primera DMC large area seed drill

Precision and speed when **D**irect sowing, **M**ulch sowing and **C**onventional sowing



Primera DMC

AMAZONE is offering an outstanding machine for cost-effective crop establishment over large areas in the shape of the Primera DMC in working widths of 3 m, 4.5 m, 6 m, 9 m or 12 m. This versatile large area seed drill, in combination with the chisel openers which have been tried and tested 100,000 times over, is used with great success for conventional, mulch and direct sowing.



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✓ 40 years of world-wide experience in mulch and direct sowing across dry regions

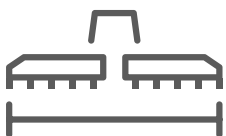
Sowing technology from AMAZONE
water-conserving and resource-saving



Every drop counts!
Save water - secure yields

Primera DMC large area seed drill

Direct sowing – Mulch sowing – Conventional sowing



3 to 12 m



18.75 or 25 cm



4,200 to 13000 l



Up to 18 km/h

The advantages at a glance:

- ⊕ Universal seed drill for conventional, mulch and direct sowing
- ⊕ Intelligent hopper and seed conveying concept for the flexible application of seed and fertiliser
- ⊕ Large hopper capacity of up to 13,000 l for high outputs
- ⊕ Easy filling thanks to the large hopper opening – high performance filling augers are available as an option
- ⊕ Optimum field emergence due to the exact depth control and clean furrow clearance by the chisel openers
- ⊕ Little soil movement due to the narrow chisel opener – reducing the evaporation losses and making the machine easy to pull
- ⊕ Easy operation and control also via ISOBUS
- ⊕ Easy adjustment of the seed rate, also automatically during operation, in conjunction with the electric metering drive
- ⊕ Thanks to the TwinTerminal, easy calibration down at the machine is possible

MORE INFORMATION

www.amazone.net/primera



PRODUCT FILM
Find out more

The versatile large area seed drill

Primera DMC



Primera DMC 12000-2C, 12 m working width

For flexible arable farming:

Primera DMC in working widths of 3 m, 4.5 m, 6 m, 9 m and 12 m

No matter which arable farming system is utilised, the Primera DMC performs excellently under all conditions. With its unique chisel opener, it performs with outstanding ability when it comes to placement accuracy and seed embedding on ploughed land, on stubble cultivated areas or when direct sowing. This applies even to fields cultivated through non-inversion tillage such as following a green manure crop, or where large amounts of organic matter from the previous crop lie, which can normally cause trouble when sowing. Also inadequate soil tillage, poor incorporation of organic material and bad levelling of the fields can have a negative effect on the performance of the seed

placement and the embedding of the seed. The Primera DMC manages all these challenges perfectly. The chisel opener reliably clears the seed furrow of organic matter, excellently follows uneven soils and always provides the right coulter pressure, making for the best performance in seed placement and seed embedding. The simultaneous application of fertiliser is available on the Primera DMC as an option. The targeted placement of mineral fertiliser directly into the seed furrow helps the young crop to develop quickly and healthily to reach deeper soil water resources and, in this way, makes them more robust to face heavy drought.





Even germination

Direct sown winter wheat
following sugar beetConventionally established
crop

The high performance seed drill – especially for low rainfall regions and large acreages

The parallelogram guided sowing openers of the AMAZONE Primera DMC with their 'on-grip' DURA chisel tips ensure a clean seed furrow for better soil contact and the most accurate maintenance of the placement depth. The following double roller provides good re-coverage of the seed furrow. Optimum seed/soil contact and accurate placement depth are preconditions for uniform crop establishment. The REVOMAT overload safety protection ensures a damage-free sowing operation even in stony soils.

The seed is covered up by the hoop ring rollers, the Exact harrow and the Roller harrow. The combined application of seed and fertiliser is available as an option.

The plough cannot be dispensed with in some cases. The Primera DMC can also be used in this conventional method following some seedbed preparation.

Advantages of the Primera DMC:

- ✔ Profitable crop production in times of increasing production costs and changing farm sizes
- ✔ Fulfils all environmental considerations and reduces nitrate leaching
- ✔ Reduces machinery and operating costs
- ✔ Conservation and soil saving cultivation system
- ✔ Reduces soil erosion
- ✔ Reduces soil water losses
- ✔ Stabilises soil structure
- ✔ Higher straw degradation and infiltration capacity



Primera DMC 12000-2C, 12 m working width

System procedure for areas of low rainfall

With the Primera DMC, a large farm is able to carry out all these systems at will.

At harvest

1.



Direct sowing

Stubble cultivation

No soil tillage

2.



Mulch sowing

Catros compact disc harrows



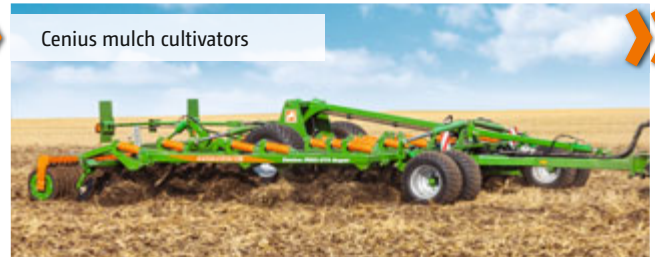
1st pass: working depth approx. 5 cm

3.



Mulch sowing

Cenius mulch cultivators



1st pass: working depth approx. 10 cm

Harvesting the previous crop

Targets for the combine harvester:

- Ideally, the chopped straw should be distributed across the entire cutting width of the combine (e.g. use of a chaff spreader)
- Even stubble length
- Avoidance of wheel marks, soil structural damage and compaction

1st pass:

(shallow stubble cultivation up to 5 cm)

Targets for stubble cultivation:

- Interruption of the capillary water draw in the surface soil
- Creation of the optimum conditions for a quick and even germination of volunteer grains and weed residues
- Hasten the straw rotting process

Operational speeds 8 – 15 km/h

- Catros compact disc harrow
- Cenius mulch cultivator or Ceus disc & tine combination cultivator

Advantages of direct and mulch sowing

- ✓ Savings in operational time
- ✓ Savings in fuel costs
- ✓ Better traffic carrying
- ✓ Reduced water evaporation
- ✓ Improved soil structure
- ✓ Reduced soil erosion
- ✓ Reduction in operating costs

Weed control (chemical/mechanical)

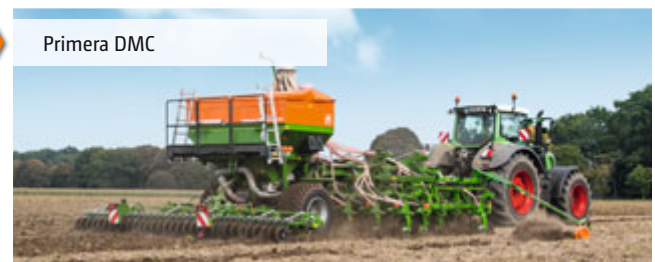
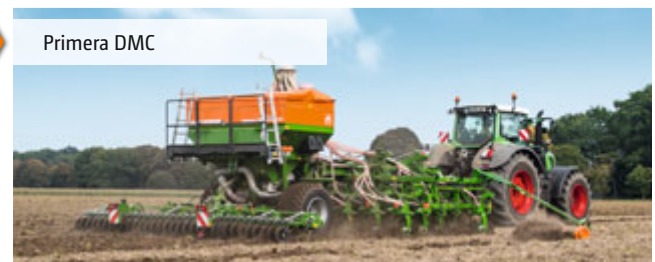
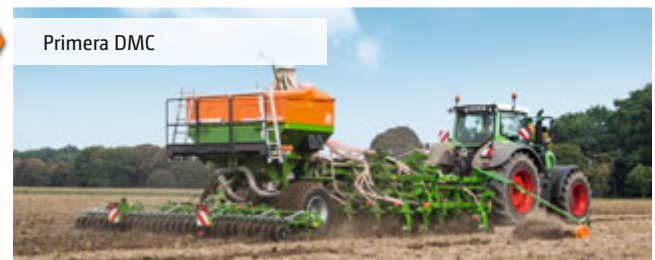


2nd pass: working depth approx. 5 cm



2nd pass: working depth approx. 15 cm

Seeding



Seed placement depth approx. 3 – 7 cm

2nd pass:

(weed control)

Targets for soil tillage

- Intensive and even incorporation of straw residues
- Hasten the straw rotting process
- Mechanical weed control

Operational speeds 8 – 15 km/h

- Catros compact disc harrow
- Cenius mulch cultivator or Ceus disc & tine combination cultivator

3rd pass: seeding

(Primera DMC)

Targets for sowing:

- Even longitudinal distribution and a precise placement depth of the seed
- Placement of the seed into a clean, straw-free furrow with sufficient water draw
- Reliable closing of the seed furrow and sufficient coverage of the seed with fine soil particles
- Combined application of seed/fertiliser if requested

Operational speeds Primera DMC 10 – 18 km/h

Other techniques: sowing catch crops directly into stubble.

Water-conserving techniques



The soil is protected from drying out due to the reduction in soil tillage

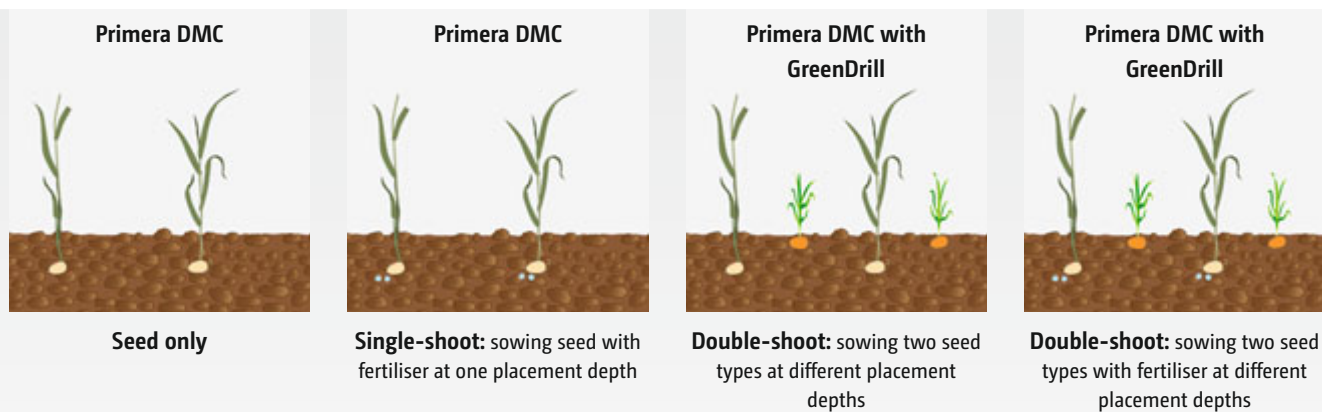
Sowing catch crops directly into the stubble in **autumn** means:

- ✓ Stubble and straw protect the soil from drying out
- ✓ Reduced soil erosion
- ✓ Cost reduction due to less soil tillage
- ✓ Exploitation of the dormancy of the volunteer grains

In this respect, it makes no difference whether it concerns a winter or summer catch crop. These positive effects also become apparent in a summer catch crop, i.e. from harvest until the sowing of the main crop in the autumn.

The Primera DMC can then be used to sow a spring crop directly into the winter-killed catch crop with the chisel openers in the **spring**. The catch crop can be left on the field as protection for the following main crop after being chopped up and/or sprayed. The catch crop not only serves as erosion and evaporation protection but also as a nitrogen fixer and a source of organic matter.





The options

High level of flexibility

In addition to sowing cereals, up to three different materials can be applied in one pass with the Primera DMC depending on the model, e.g. seed and fertiliser in the single-shoot process. Different seed types can also be combined.

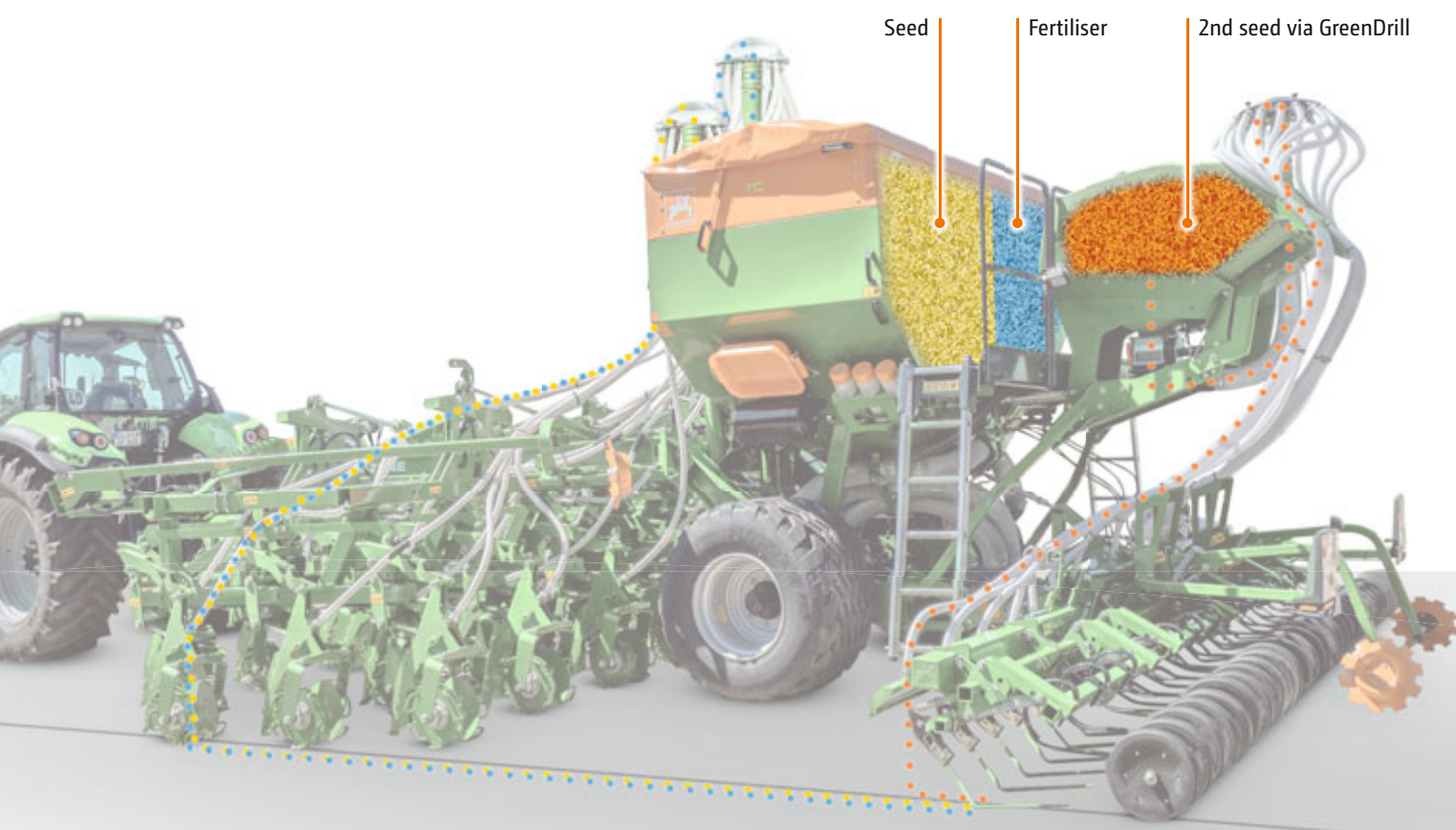
This means that different combinations of catch crops, e.g. legumes and grass seed, can be applied simultaneously. The legumes can be sown deeper as a nitrogen fixer. Fine seeds, such as grass, can be broadcast on the surface via the baffle plates on the GreenDrill. This principle also applies to sowing undersown crops! However, two different seed types plus fertiliser can also be applied in this way.

Extremely beneficial

Advantages of the use of undersown crops/companion plants/catch crops:

- ✔ Greater biodiversity
- ✔ Less soil erosion
- ✔ Better protection against moisture loss
- ✔ Improved soil structure
- ✔ Improved nutrient availability
- ✔ Fewer crop protection measures
- ✔ CO₂ fixing and humus formation
- ✔ Increased photosynthesis

Principle of the conveying system of the Primera DMC with GreenDrill



Judgement from practice ...



Björn Förster (general manager) and Paul Nogatz (responsible for sowing).

! Agrarbetriebe Schliebener Land

The Agrarbetriebe Schliebener Land agri-business is located in southern Brandenburg between Berlin and Dresden. In addition to the 1,700 dairy cows kept there, 2,150 ha is under cultivation. Highly heterogeneous soils and low rainfall of around 400 l per year are the challenges. Direct sowing has been practised here for 6 years. Sowing has been carried out with the Primera DMC for 4 years. The goals of general manager Björn Förster are as follows:

- ✓ Permanent coverage of the soil with catch crops to protect the soil against evaporation
- ✓ Humus formation
- ✓ Minimal soil tillage
- ✓ Conservation of resources

For Björn Förster, the catch crop is a major crop rotation component. A catch crop is sown directly after combining before almost any other crop. Depending on the crop rotation, the main crop is sown directly or into the sprayed off crop via the chisel opener of the Primera DMC. The tines mean that the catch crop stays on the field and protects the soil against drying out and evaporation. Furthermore, the catch crop serves as a nitrogen source and ensures the continuous formation of humus. This not only saves valuable soil moisture but also time and resources!



Primera DMC 6000-2C with GreenDrill 501

Why Primera DMC?

- ✓ Extremely high work rates
- ✓ Speeds of 18 km/h are no problem
- ✓ 70 ha/day at a working width of 6 m
- ✓ Placement is very precise at high speeds
- ✓ Direct seeding → water-conserving
- ✓ Tines do not destroy soil life or the soil structure.
- ✓ No blockages. The Primera DMC easily copes with a large amount of organic matter thanks to a row width of 18.75 cm.
- ✓ Liquid fertiliser application directly at the opener
- ✓ Chisel opener clears the seed channel and places the seed precisely
- ✓ No hair-pinning effect – crop residues completely removed from the seed furrow

Paul Nogatz (responsible for sowing) is a qualified farmer and sees the advantages of the Primera DMC:

- ✓ Very large seed hopper divided into 2 sections
- ✓ No need for stubble breaking or primary soil tillage
- ✓ Reduced work time
- ✓ Extremely simple operation as a result of easy calibration via the TwinTerminal
- ✓ High work rates
- ✓ Very precise placement depth due to individual depth control of the coulters
- ✓ Optimum use of water – because water is a scarce commodity

“Especially in view of climate change, the Primera DMC supports us with water-conserving sowing. The catch crops mean that we save valuable water and can still achieve a good and uniform placement depth, field emergence and yields through the chisel opener!”



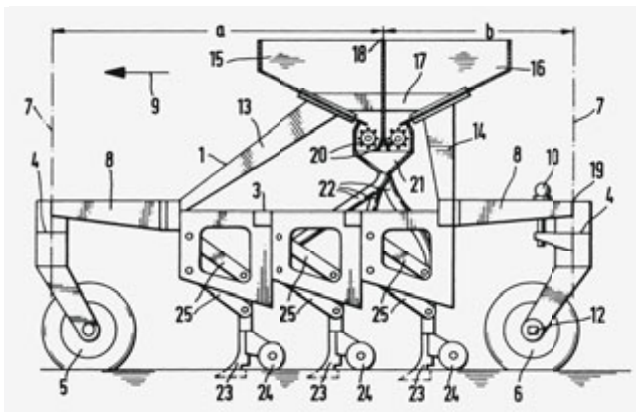


AMAZONE chisel opener®

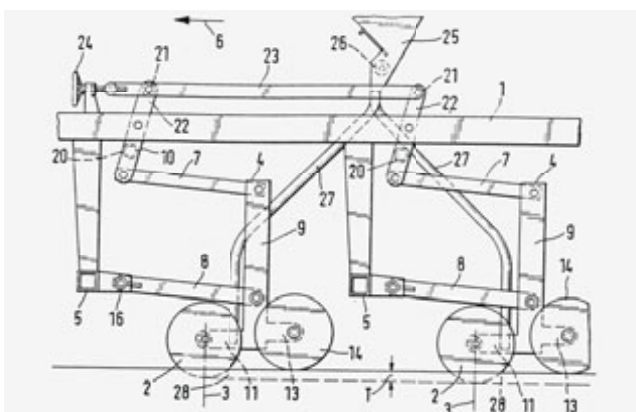
The history of development

The beginnings of a good idea

Parallelogram-guided openers with v-shaped tools and a depth guidance roller ensure an accurate seed placement into the soil.



Patent drawings from 1975; duck foot couler



Patent drawings from 1978; disc coulters



The seed drill coulters are not only probably the most important and also the most difficult to design, but are also the component of a seed drill on which there is the most emphasis – especially in the case of a “versatile seed drill”, such as the Primera DMC. The first impressions of working

with the prototypes in 1975/76: a disc coulters had already been developed while validating the new seeding method. This unit was also guided for depth via a following press roller.



- ✓ The results with the disc coulters unit were not good enough to meet the AMAZONE standards. The further development of the Amazone chisel opener was stepped up.

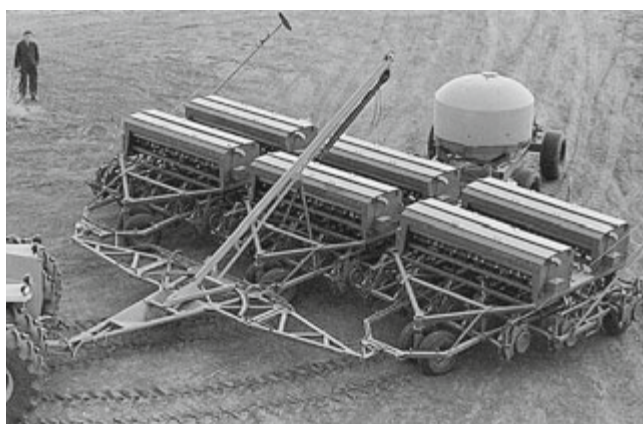
Disadvantages of disc coulters vs. chisel openers

However, these initial trials already underlined the disadvantages of using disc coulters in a direct sowing operation and these points are still valid today:

- ➖ Necessary coulters pressure of approx. 200 kg per disc = high machine weight.
- ➖ Straw will be pressed uncut into the sowing furrow forming pockets of straw and an increased risk of disease.
- ➖ Shape of the seed furrow: smooth cut edges, sometimes no seed coverage.
- ➖ Dry soil from the soil surface drops into the seed furrow – lower emergence.

The direct sowing system as a new rational system for crop production was introduced to large farms across Europe.

Many farmers have quickly recognised the advantage of the AMAZONE chisel opener system and achieve outstanding yields. The uniform placement depth as well as a clean and closed seed furrow after seed placement are important prerequisites for successful direct sowing and are optimally fulfilled under virtually all operational conditions.



- ✓ The combination of the AMAZONE chisel opener with the proven metering units from the conventional seed drills led to the AMAZONE NT. This direct seed drill, after several years of hard use in Canada and the USA, was adapted to meet European conditions.



- ✓ The AMAZONE NT 250 and 300 met the requirements of many farmers, especially in southern Europe and the Middle East. Machines with large working widths were in demand after the opening up of the "Eastern markets".

The AMAZONE chisel opener[®] system

Proven 100,000 times over!



Parallelogram suspension of the chisel openers









Principle of the open "tunnel"

The benefits

1. All the chisel openers are suspended on a parallelogram linkage. Although this is relatively complex, it ensures that the desired sowing depth is maintained at different or changing forward speeds (uphill – downhill, on the headland, with different soil consolidations, etc.) as well as in any soil undulations.
2. The coulters are arranged in four rows with a tine spacing of 18.75 cm or in three rows with a tine spacing of 25 cm and in such a way that continuous open "tunnels" of approx. 75 cm are provided between them. This principle allows a relatively narrow coulter spacing (18.75 cm or 25 cm) for quick blanket coverage of the crop (a full canopy) and yet reduces the danger of blockage by any large volumes of straw at the same time.

The highest field emergence – it all depends on the coulter

- ✓ Uniform depth placement
- ✓ Optimum furrow clearance
- ✓ Highest forward speeds
- ✓ Maximum operational reliability

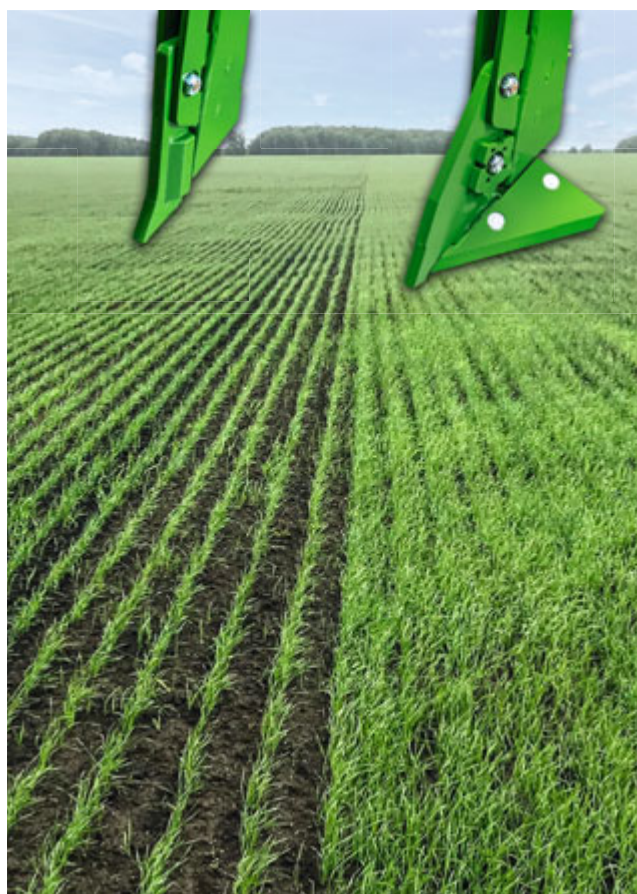
Primera DMC chisel variants					
	Point with one hard metal plate	Point with two hard metal plates	Point for band sowing	Duckfoot chisel with one hard metal plate 150 mm wide	Duckfoot chisel with one hard metal plate 200 mm wide
Direct sowing	Yes	Yes	Conditionally	No	No
Pulling power requirement					
Sowing width	1.5 cm	1.5 cm	5.5 cm	10 cm	10 cm
Effective width	1.5–3.5 cm	1.5–3.5 cm	5.5 cm	15 cm/almost full-surface	20 cm/full-surface

3. The point or “chisel” is protected against wear by a hard metal plate (tungsten carbide cobalt plate) at the front - this means that this point has an especially long life. This is yet another AMAZONE invention which is often “imitated”. It is easily recognisable: The AMAZONE chisel opener is the result of years of experience and is simply very good.

A coulter chisel opener with 2 hard-facing plates for a longer service life, e.g. for sandy soils, is available as an option.

AMAZONE also offers a chisel opener set for band sowing across a width of approx. 55 mm for conventional and mulch sowing. This set allows a wider distribution e.g. for increased tillering.

The duckfoot chisel opener set, in widths of 150 mm or 200 mm, is ideal for the band sowing at a shallow placement of, for example, flax. With a coulter spacing of 18.75 cm, the 150 mm wide duckfoot coulter achieves almost full-surface weed control, whereas the 200 mm wide duckfoot coulter achieves complete mechanical weed control like a shallow cultivator. In this respect, the pulling power required for the narrow duckfoot coulter is less than for the 200 mm wide duckfoot coulter.



Quick canopy closure – band sowing of 10 cm with the duckfoot chisel

Precise depth control of the chisel opener





The coulters units are arranged on longitudinal cross members in four rows, which results in a large distance from one to the other. This ensures good straw passage.



The AMAZONE chisel opener in the transport position (more than 400 mm clearance to the ground)

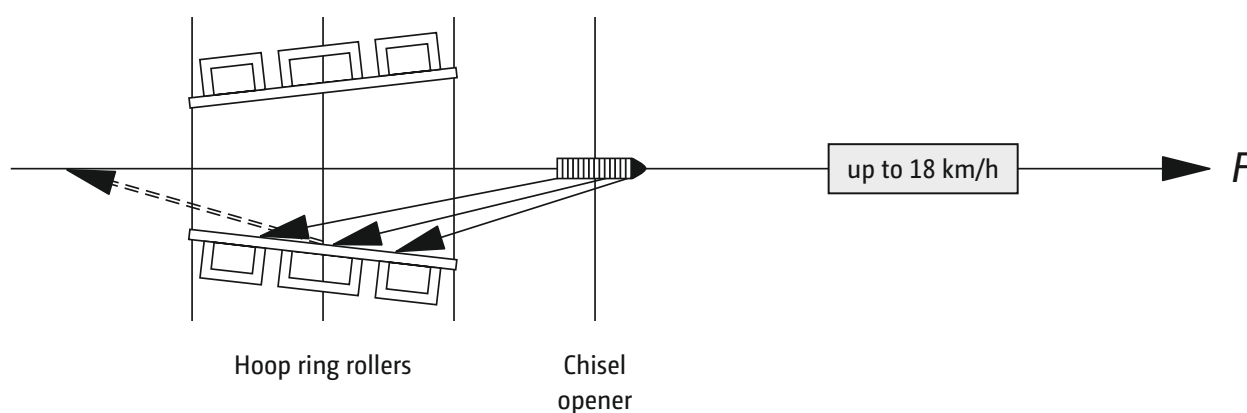
4. AMAZONE moved a huge step forward with the so-called hoop ring rollers on each coulter to the left and right of the seed furrow. These provide individual and reliable control of the depth of each coulter. In addition, the seed furrow is uniformly closed with loose and finely crumbled soil, even in very wet soils or wet patches. And all this even at forward speeds of up to 18 km/h.

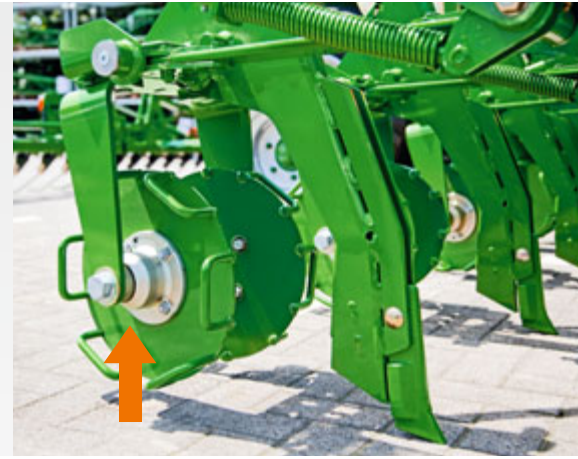
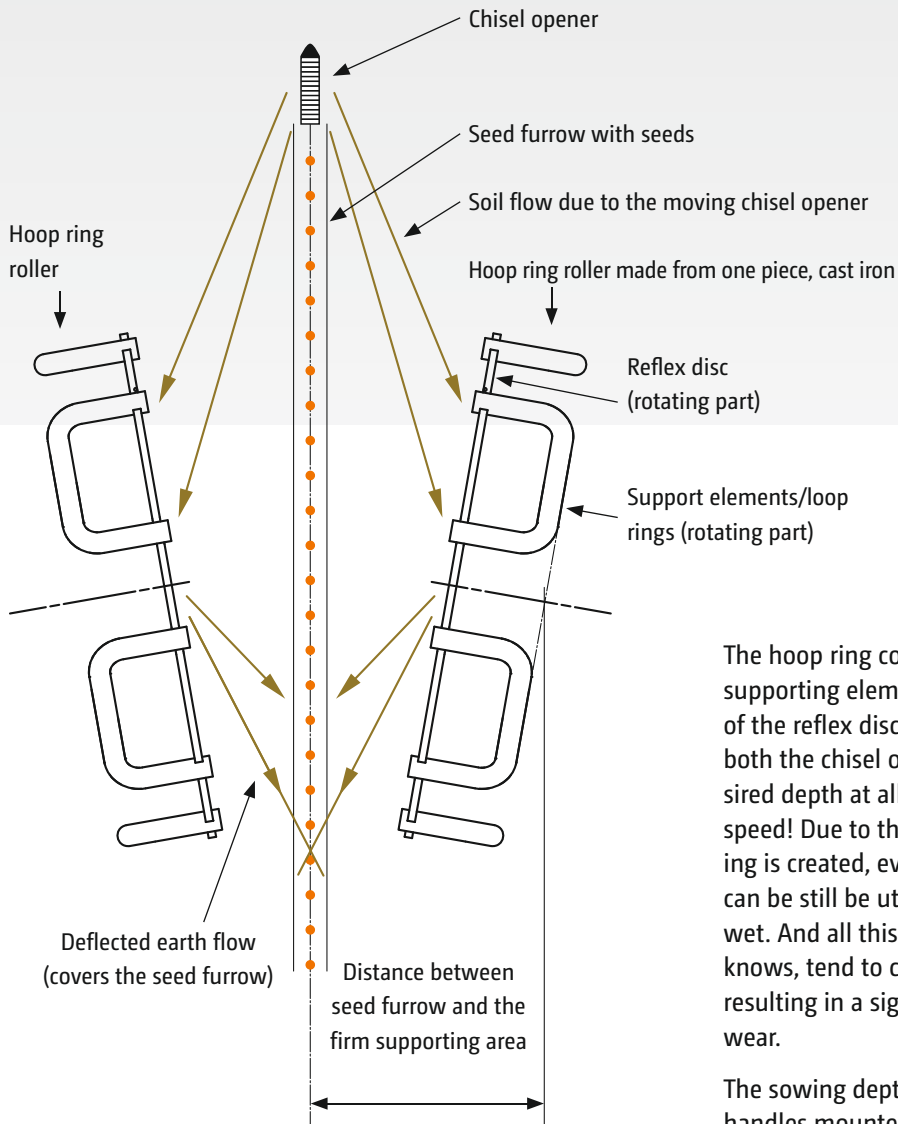
That means: no matter how much soil is thrown to the side by the chisel opener, the two round discs deflect most of it back over the seed furrow. The angular adjustment of the discs adds a slight pressure from both sides.

What the rollers do not manage to bring back in is finished off by the Exact harrow. This also ensures a level field. The Roller harrow brings up the rear and can consolidate the loose soil above the seed furrow if necessary.

- Good seed/soil contact as a result of the chisel opener clearing the seed furrow.
- A large amount of fine-crumbled soil in the seed furrow which leads to quick warming of the soil in the seed area.

► **Perfect germination conditions**





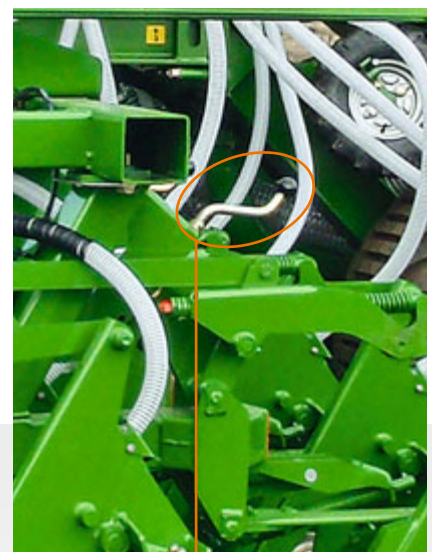
The hoop ring rollers are equipped with extremely durable and maintenance-free bearings, which are also utilised on the Catros.

The hoop ring consists of Reflex discs and the hoops as supporting elements. The hoops fitted to the outer side of the reflex discs are made of **thin** material and guide both the chisel opener and the Reflex discs at the desired depth at all times – irrespective of the forward speed! Due to their especially narrow shape no bulldozing is created, even in **moist soil** – so that the machine can be still be utilised even when the soil is still very wet. And all this **without** scrapers, which, as everyone knows, tend to carry along a mixture of straw and soil, resulting in a significant braking effect and the relevant wear.

The sowing depth is easily adjusted in groups via crank handles mounted centrally on each coulter module – very simple and quick.



Hoop ring roller for mulch and direct sowing



Crank for easy adjustment of the sowing depth with an anti-turn lock



Roller for stony ground



Inflated semi-pneumatic wheel

AMAZONE offers a roller for stony ground with maintenance-free bearings and lifetime lubrication as an alternative to the hoop ring roller. This is extremely resistant to stone trapping.

A robust semi-pneumatic wheel can also be used as an option for many operational conditions. This creates a profile for collecting water in very dry conditions. It stands out because of its excellent self-cleaning effect when used on wet soils. It is also insensitive to stones and has a low tendency to block up. Since a harrow can be dispensed with when using the semi-pneumatic wheel, it is a low-cost alternative to the hoop ring, or stony ground, roller with a following harrow.

5. The REVOMAT overload safety protection: if the chisel opener hits an obstacle, e.g. heavy stones or compacted headlands, the upper link abruptly gives way at a defined force. The coulter jumps upwards and immediately returns to the work position. Automatically, super! With obstacles that are hit on the angle in the direction of travel, the coulter just moves to the side – because the entire lower link is not rigid but a long, one-piece spring plate. Also again automatic, super.
6. After the pass, the Primera DMC openers leave an even finish (no grooves or ridges), resulting in, apart from an even field emergence, also practical driving advantages – e.g. for a smooth ride of the combine, the crop protection sprayer (no boom bounce!) and the fertiliser spreader. This applies in particular also to both field ends of the headland.



Direction of travel



REVOMAT overload safety protection: Top link straight ① Chisel opener in operational position
Top link cranked ② Chisel opener “deflected” after hitting an obstacle in the soil

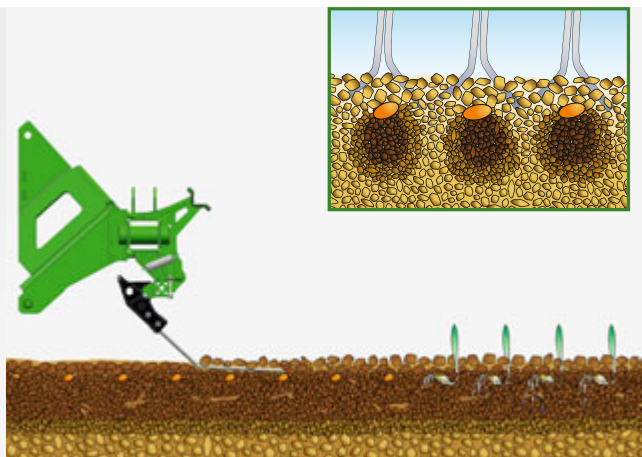
Exact harrow and Roller harrow



Exact harrow and Roller harrow on the Primera DMC



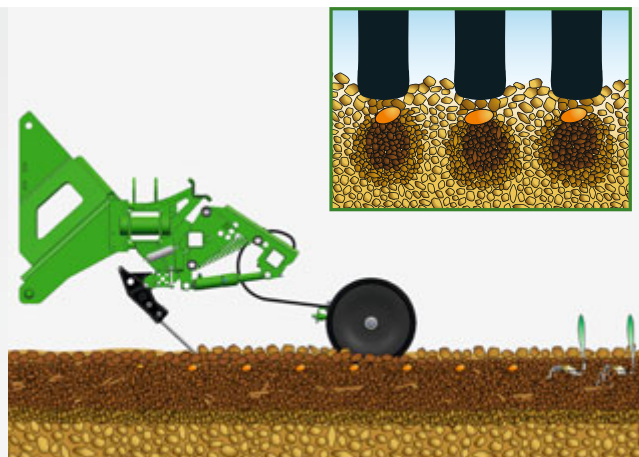
Pre-emergence markers for the
Primera DMC 6000-2C



Exact harrow

Seed coverage with the Exact harrow

The Exact harrow levels the surface. It works without blockage even with large amounts of straw. With its individually pivoting harrow elements, the Exact harrow follows the undulations of the soil perfectly, ensuring an even seed coverage on soils either with or without straw.



Roller and Exact harrow

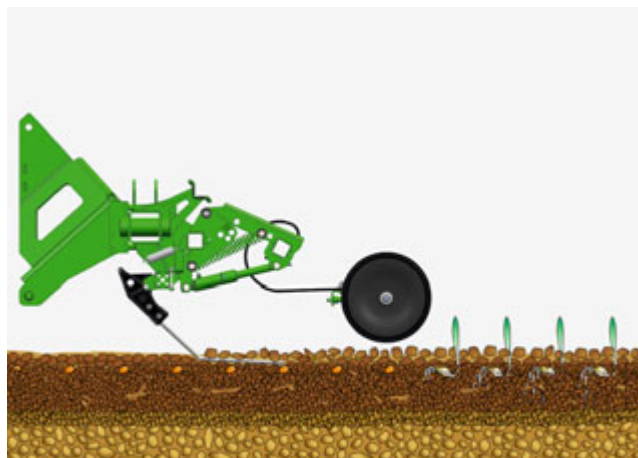
Additional consolidation with the optional Roller harrow

The press rollers on the Roller harrow additionally consolidate the ground directly above the seed furrow. This is recommended especially for light, dry soils when sowing spring crops or rape. The AMAZONE Roller bar can be quickly raised out of work and locked.

Press rollers in damp, sticky conditions

Attention: in moist & sticky soil conditions, practitioners recommend for today's seed drills that use pressure or guide rollers, to isolate these rollers, to dismount them or to lock them in raised condition (out of work) when sowing. This is only possible, however, if it is not also providing the depth control. The key disadvantage of other systems.

This is the crucial disadvantage of other systems, but with AMAZONE this problem is well solved!



Track markers, braking system, mudguards, frame, drawbar and front trolley



40 km/h approval for the Primera DMC 3000-C and 6000-2C

40 km/h

Track markers

Fully-hydraulic actuation of the track markers.

The braking system

Depending on the application, hydraulic braking or twin-circuit air braking systems are available.

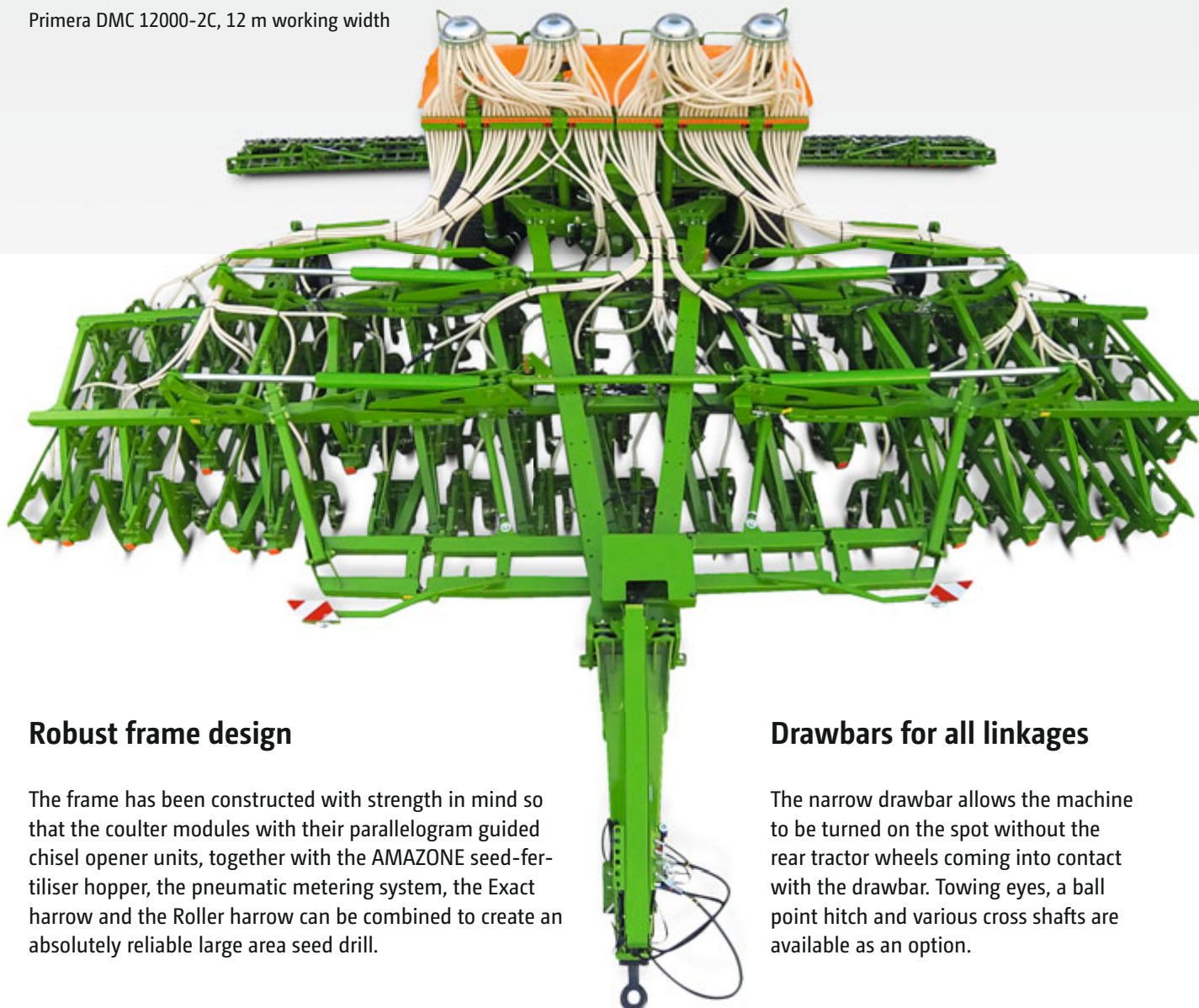
Primera DMC 3000-C and 6000-2C: A 40 km/h approval for quick road transport is possible, depending on the individual country traffic regulations.

Mudguards

Mudguards are available for the Primera DMC as an option. This protects the hopper and the calibration unit against dirt.



Primera DMC 12000-2C, 12 m working width



Robust frame design

The frame has been constructed with strength in mind so that the coulter modules with their parallelogram guided chisel opener units, together with the AMAZONE seed-fertiliser hopper, the pneumatic metering system, the Exact harrow and the Roller harrow can be combined to create an absolutely reliable large area seed drill.

Drawbars for all linkages

The narrow drawbar allows the machine to be turned on the spot without the rear tractor wheels coming into contact with the drawbar. Towing eyes, a ball point hitch and various cross shafts are available as an option.

Dual wheels

The optional dual wheels of the Primera DMC provide a significant increase in the contact area, thereby reducing the pressure on the soil. The driving stability on the headland is also improved. The transport width is increased to 4.30 m as a result of the wider tyre surface.

Front trolley

A front trolley can be used as an extension for the Primera DMC. This reduces the drawbar load on the tractor by half and is coupled between the tractor and the seed drill.



Hoppers for all farm sizes



Primera DMC 6000-2C with GreenDrill 501



Wide hopper opening for filling by front end loaders and filling augers.

The hopper system – 3 hoppers for all widths

- ✔ **Hopper size from 4,200 l:** Primera DMC 3000-C, 4500-C, 6000-2C and 9000-2C

Hopper size from 6,000 l: Primera DMC 9000-2C Super and 12000-2C

Possible division of the hoppers via a partition wall for seed and fertiliser at a ratio of 3:1.

- ✔ **Hopper size 13,000 l:** Primera DMC 9001-2C and 12001-2C

Pressurised hopper system with four hopper compartments for simultaneous use with seed and fertiliser, with the choice of a ratio of 3:1 or 1:1. The application of two fertiliser types and/or seed types at different rates is possible.

- ✔ **Optional extensions:**

- Primera DMC 3000-C, 4500-C, 6000-2C and 9000-2C: 800 l and 1,600 l (max. capacity 5,800 l)
- Primera DMC 9000-2C Super and 12000-2C: 1,200 l and 2,400 l (max. capacity 8,400 l)

- ✔ Quick change over from seed to seed/fertiliser application and vice versa.
- ✔ Large surface area, accessible protective sieve against foreign objects.
- ✔ The hopper cover protects against dust and moisture.

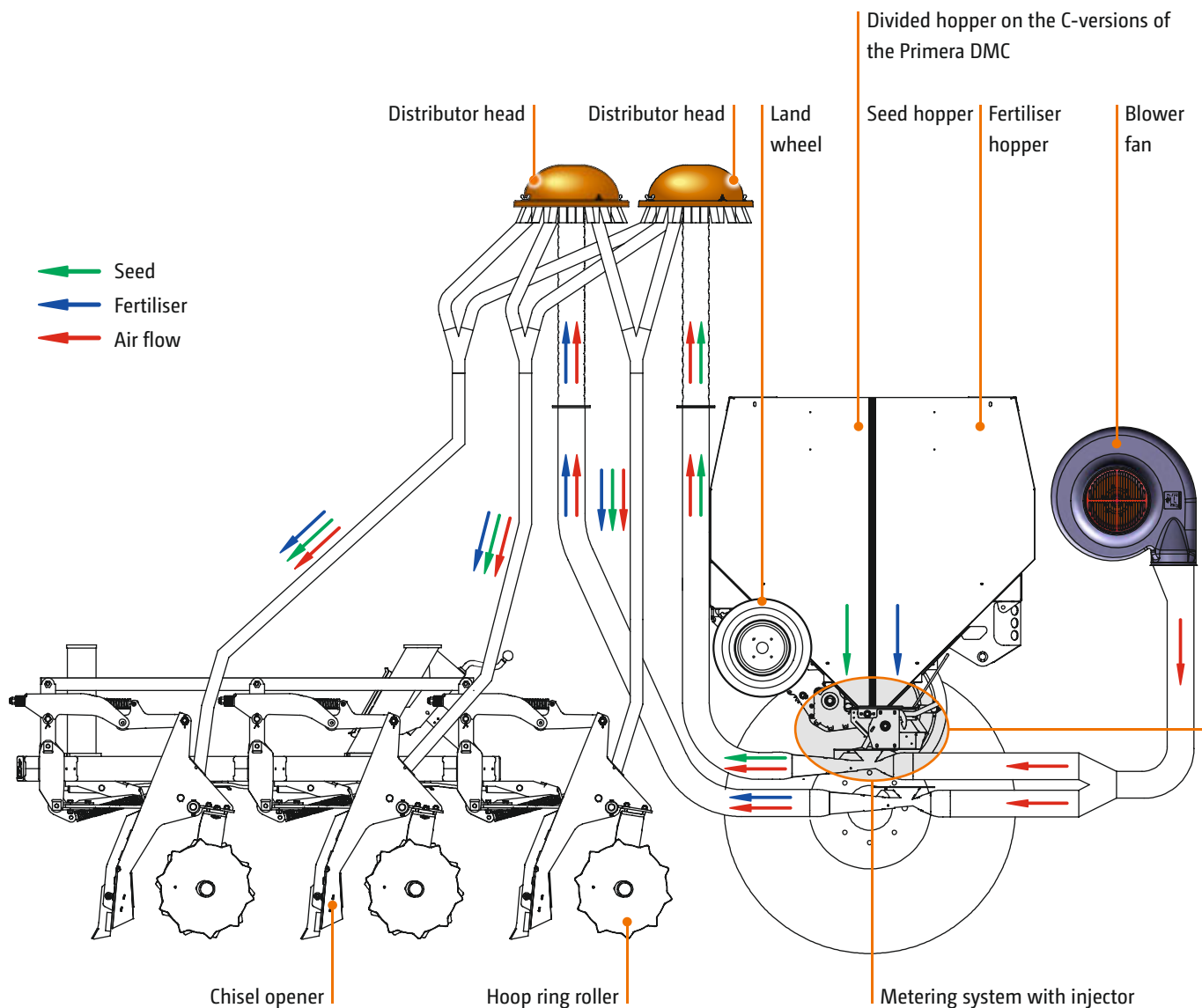


Quick and easy filling via big bags

The pneumatic metering system

for Primera DMC 3000-C, 4500-C, 6000-2C, 9000-2C, 9000-2C Super and 12000-2C with open hopper

Principle of function



Overview the available metering cassettes:

7.5 ccm



for rape, linseed and poppies

120 ccm



e.g. for millet, maize, mustard, sunflowers

210 ccm



e.g. for barley, rye, wheat

660 ccm

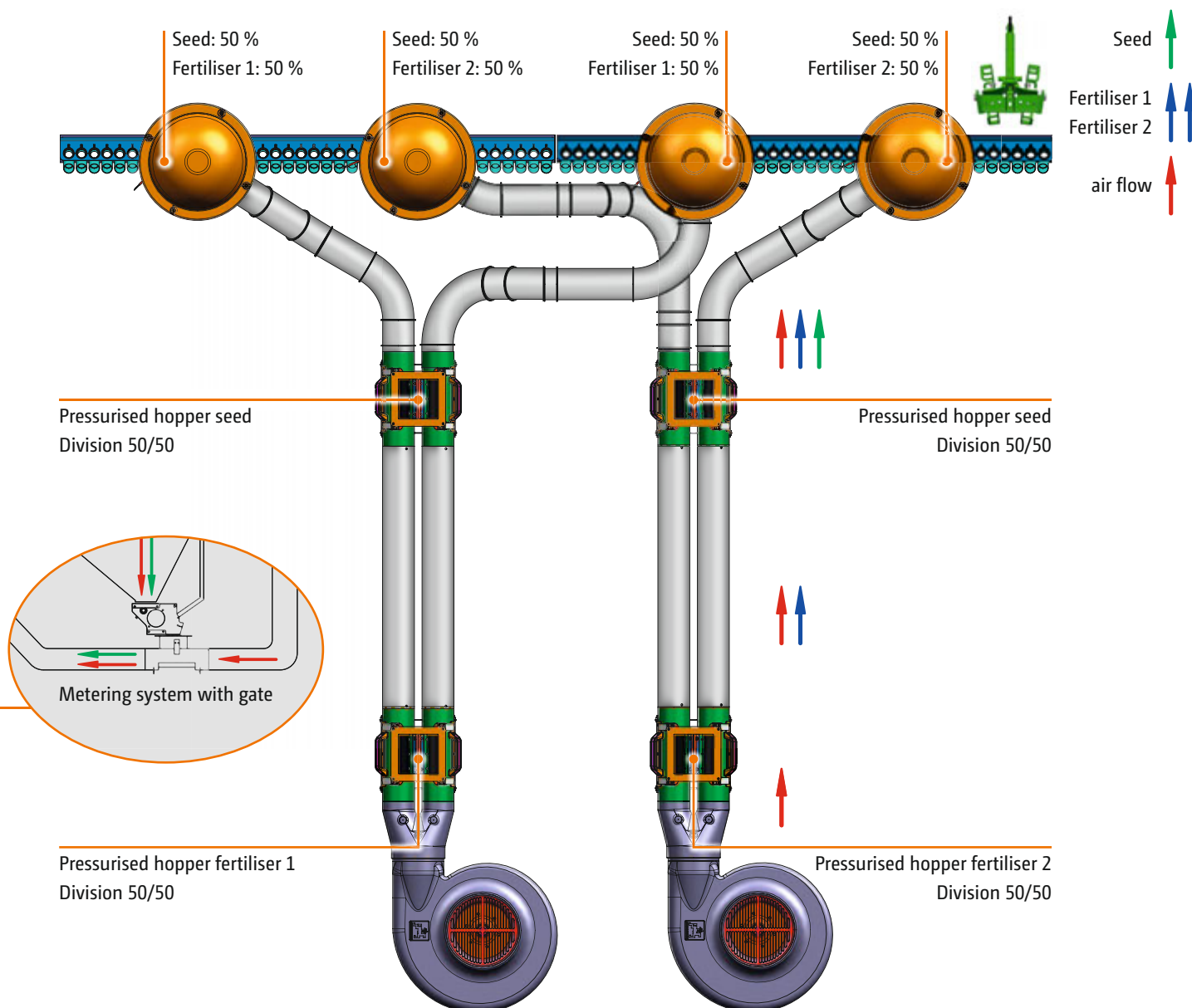


e.g. for peas and beans

The flexible pressurised hopper metering system

for Primera DMC 9001-2C and 12001-2C with pressurised hopper

Example: seed and two different fertiliser types – single-shoot process



Further metering cassettes

- 3.75 ccm: e.g. for very low quantities of fine seeds
- 20 ccm: e.g. for rape, stubble turnips, lucerne
- 40 ccm: e.g. for flax, lucerne, oil radish, red clover
- 100 ccm: e.g. for catch crop mixtures
- 350 ccm: e.g. for grass seed, wheat
- 600 ccm: e.g. for spelt, oats, wheat
- 800 ccm: e.g. for high seed rates

Precise mechanical metering drive

for all Primera DMC

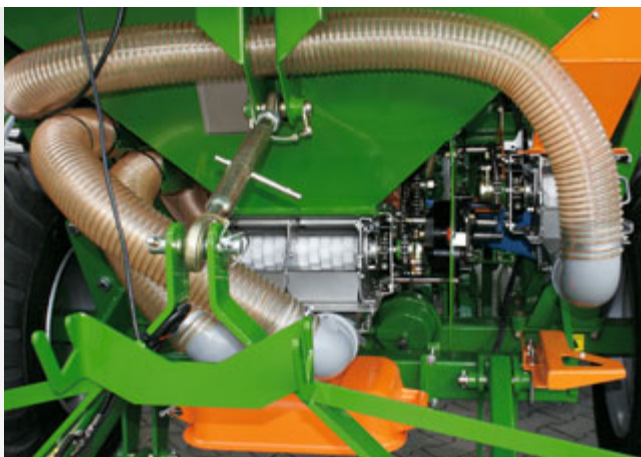


Primera DMC 9000-2C

✓ AmaLog⁺ in-cab terminal

Reasonably priced in-cab terminal in conjunction with the mechanical metering drive. The AmaLog⁺ in-cab terminal offers an electronic control and regulating system with electric tramline control, electronic fill level sensor, hectare meter and monitoring of the seed shaft.





Seed metering



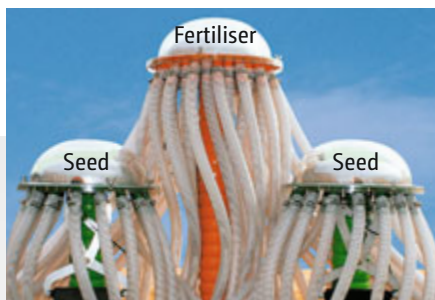
Fertiliser metering

The mechanical metering system for all Primera DMC

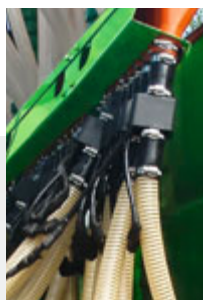
- ✔ Various metering cassettes ensure the precise volumetric metering of the different seed and fertiliser types as standard.
- ✔ Quick exchange of the metering cassettes without tools.
- ✔ Precise sealing of the metering housing by a slide.
- ✔ Easy to check, as the metering cassettes are arranged in a clearly visible position.
- ✔ The seed rate setting is done on the infinitely variable Vario gearbox (maintenance-free) – proven by more than 150,000 – seed rates possible from 2 to 400 kg/ha.
- ✔ Tool-less set up of the metering units for calibration.
- ✔ Complete emptying of the hopper residues by the opening of a spring loaded flap.
- ✔ Sowing of all seeds – including vegetables – without any cumbersome conversion possible.
- ✔ All components are maintenance-friendly and laid out for maximum accessibility.
- ✔ Optionally available: additional mounting kit for maize and sunflower seeds for other row spacings (37.5 cm and 75 cm).
- ✔ Primera DMC 3000-C, 4500-C, 6000-2C and 9000-2C: Optional on-board hydraulic system with integrated oil cooler to drive the blower fan.
- ✔ Primera DMC 9000-2C Super, 9001-2C, 12000-2C and 12001-2C: Only with direct drive of the blower fan from the tractor.

Distributor heads with the option of seed pipe monitoring

Advantages of the distributor heads: outside of the seed hopper in view of the tractor driver: seed hopper is clutter-free and easily accessible. Monitoring the seed-fertiliser flow via the transparent distributor head cover. Optional with seed pipe monitoring.



Distributor heads



Optional seed pipe monitoring

Dust collector

The dust collector reduces the level of dust in the conveying system. This increases the reliability of the tramline control system in the event of heavy dust accumulation and reduces wear in the conveying system.



Electric metering drive and ISOBUS control

for Primera DMC 3000-C, 4500-C, 6000-2C, 9000-2C, 9001-2C and 12001-2C



Primera DMC 6000-2C

✔ AmaPilot⁺ multi-function joystick

Operation via the AmaPilot⁺ multi-function joystick is especially comfortable. All functions in the work menu can be actuated via the AmaPilot⁺ or other ISOBUS multi-function joysticks.





AMAZONE ISOBUS terminal AmaTron 4 with 8” touch screen

AMAZONE offers the Primera DMC 3000-C, 4500-C, 2C, 6000-2C, 9000-2C, 9001-2C and 12001-2C chisel opener seed drill with fully electric metering and state-of-the-art ISOBUS control.


When equipped with the TwinTerminal 3.0, the Primera DMC is calibrated in no time and any cumbersome climbing up and down from the tractor cab is no longer necessary. Automatic headland control via Section Control (GPS-Switch) or automatic seed rate adjustment are just as much part of the optional equipment as is the automatic track marker control, tramline control and a water hole function for sowing with lifted coulters in wet hollows.

The basic documentation of the work done is stored directly on the machine. For further use in a farm management information system, the job data can be made available in an ISO-XML format. The Primera DMC, with a working width from 3 m to 12 m, can be operated via the AMAZONE AmaTron 4 ISOBUS terminal. However, any other ISOBUS compatible ISOBUS terminal can be utilised for machine operation.



Primera DMC with electric metering drive and TwinTerminal 3.0

Overview metering drives

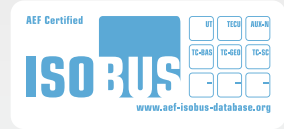
Drive of the metering system	Mechanical drive	Electric drive	Electric drive with on-board electric power supply
	 Machine-specific in-cab terminal	ISOBUS terminal	ISOBUS terminal
Primera DMC 3000-C, 4500-C, 6000-2C 9000-2C	✓	✓	–
Primera DMC 9000-2C Super 12000-2C	✓	–	–
Primera DMC 9001-2C 12001-2C	✓	–	✓



✓ Optional camera system

The optional camera system (only in conjunction with the AmaTron 4 ISOBUS terminal and the AmaCam licence – or an external monitor) provides more safety at the rear in congested driving situations. The high resolution, antiglare monitor is backlit and can also display two cameras at once.

MEMBER OF



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 with a wide variety of ISOBUS terminals

Which 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





Perfectly developed machine operation from AMAZONE

AMAZONE machinery 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, for instance, 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 operating 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

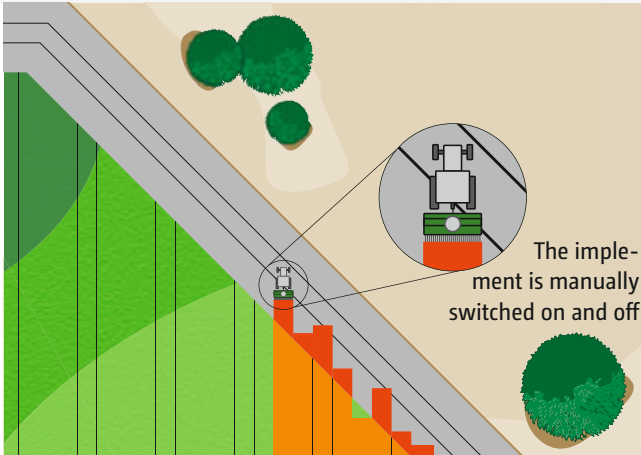
Advantages of the AMAZONE machine software:

- ✓ User-oriented and intuitive
- ✓ Tailored to the machine
- ✓ Function scope above and beyond the ISOBUS standard

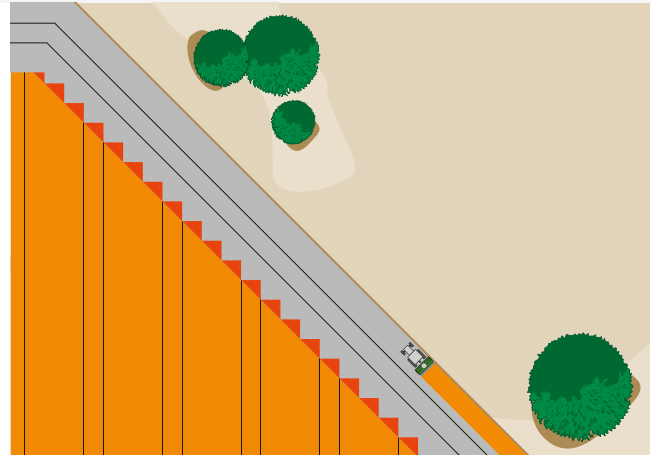
Clear display of the work menu in the AMAZONE machine operation



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

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 with up to 16 part-width sections
- ✓ Creation of a virtual headland
- ✓ Automated boom lowering with an AMAZONE crop protection sprayer
- ✓ 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
- ✓ Optional with AmaTron 4

Automatic switching on and off of the Primera DMC

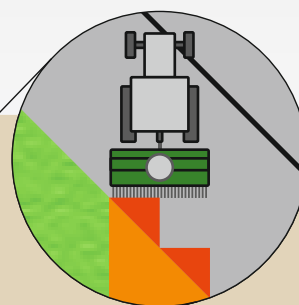
If the operating terminal has Section Control, e.g. GPS-Switch part-width section control from AMAZONE, the part-width sections can be automatically switched on and off in relation to the GPS position. Once a field has been created, the driver can concentrate fully on operating the vehicle in automatic mode, since the part-width sections are automatically switched on and off in wedge shaped fields and on headlands.

Benefits of automatic control:

- ✓ Stress relief for the driver
- ✓ Increase in precision, especially at night or at higher speeds
- ✓ Less overlaps and gaps
- ✓ Saving inputs
- ✓ Less crop damage and environmental impact

- ❗ “With Section Control, the ISOBUS terminal takes a lot of pressure away from the driver.”

(“dlz agrar magazine” – test report ZA-TS fertiliser spreader · 02/2017)



With half-side shut-off

The seed drill automatically switches off precisely

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

Automatic half-side shut-off with GPS-Switch – for the Primera DMC 9001-2C and 12001-2C

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 seed flow from the metering unit to the sowing coulter
- ✓ Minimisation of misses and overlaps for good field hygiene
- ✓ Reduction in the disease pressure results in fewer plant protection measures and a simultaneous reduction in cost



2.7 sec.



3.3 sec.



Metering unit

AutoPoint sensor

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 to be 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
- ✔ Available as standard with AmaTron 4

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
- ✔ Optional with AmaTron 4

AmaCam

Software licence for displaying a camera image on AmaTron 4.

- ✔ 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.

Benefits of AmaTron 4:

- ✔ Automatic full screen mode when not being touched
- ✔ Automatic display of the touch buttons 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



AmaPilot⁺ – everything in the one hand!

Thanks to the AUX-N feature, you can operate multiple functions on the machine via AmaPilot⁺ or any other ISO-BUS multi-function joysticks.

Advantages of AmaPilot⁺:

- ✔ Almost all the functions directly to hand via the 3 levels
- ✔ Adjustable palm rest
- ✔ Freely-available key assignment

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.

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.

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



Everything in view at all times with the AmaTron Twin App and the holder for a tablet for rigid mounting 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

agrirouter –

the independent data exchange platform for agriculture



Watch the video for more details

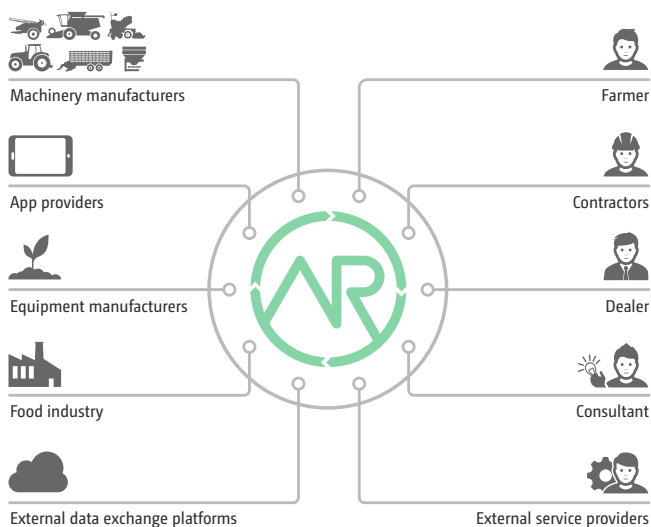
Secure data exchange

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.

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.



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

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!



Primera DMC 9001-2C

The filling auger

Quick and comfortable filling





Primera DMC 9001-2C with filling auger



In order to be able to fill the Primera DMC with both seed and fertiliser, AMAZONE offers a hydraulically-driven filling auger. Using this system the filling time is kept down to just 15 minutes meaning that the output of the drill is even further extended.

The two-piece filling auger is mounted on the back of the machine. The bottom section of the auger, which includes the filling hopper, can be quickly and easily folded up for work and transport. Thanks to the swivelling chute at the top end of the auger, the seed corn can be optimally distributed over the full width of the seed hopper.

With a top lip height of only 70 cm on the filling funnel, the filling auger can be easily filled from a tipping trailer. The trailer just needs to be equipped with a slide and a chute so that the filling operation can be optimally regulated. As an option, AMAZONE also offers lorry trailer outlets.

Drive and operation of the filling auger is carried out via the hydraulic system on the tractor. The tractor should have a hydraulic output of at least 50 l/min and requires a pressure-free return.



Technical data of the filling auger

	Primera DMC 3000-C 4500-C 6000-2C 9000-2C 9000-2C Super 12000-2C	Primera DMC 9001-2C 12001-2C
Length (mm)	5,100	6,400
Filling height of the filling auger (mm)	700	700
Hopper dimensions (mm)	L x W x H: 800 x 1,000 x 500	L x W x H: 800 x 1,000 x 500
Filling height of the seed hopper (mm)	max. 3,000	max. 3,000
Weight (kg)	450	450
Capacity (t/h)	30	50

More than just a seed drill!

GreenDrill 501 universal catch crop seeder box and Micro plus micro-granular applicator for Primera DMC 3000-C and 6000-2C



Baffle plates

GreenDrill 501 on the Primera DMC 6000-2C:
suitable for undersown crops, catch crops or slug pellets



Easy change of the metering cassettes for different seed rates and types

GreenDrill 501 – 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, which is safely accessed via steps has a capacity of 500 l. The seed is distributed over the entire area via distribution baffles in front of the harrow.

Benefits of GreenDrill:

- ✔ Sowing catch crops and fine seeds simultaneously during stubble cultivation or soil tillage
- ✔ Metering cassettes available for different seed rates and types
- ✔ Full-width broadcasting via the baffle plates in front of the harrow
- ✔ Easily filling via access steps
- ✔ Machine control via ISOBUS interface

Micro plus micro-granular applicator

The Micro plus micro-granular applicator can be used to place even small quantities of products directly alongside the seed during sowing. The product metered into the conveying system via the micro-granular applicator is placed in the seed furrow together with the seed in the single-shoot process.

Micro plus is equipped with a central electric metering system under the easily accessible 110 l hopper. The generously dimensioned filling opening with a diameter of 195 mm enables quick and easy hopper filling. The micro-granular applicator is controlled via the ISOBUS software of the seed drill.



- ✔ Fully integrated operation of the GreenDrill 501 using the AmaTron 4 ISOBUS terminal or any ISOBUS terminal

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 Primera DMC with an ISOBUS electronic system, it is fully integrated in the electronic system of the Primera DMC as an "ISOBUS participant". 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.

Precise electric metering of the GreenDrill

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.



FT-P 1502 autonomous front tank

The versatile partner in modern crop production!



The FT-P autonomous front tank combined with a Primera 6000-2C for the additional application of liquid fertiliser in the seeding operation



Testimonial from Lars Eikelboom
QR-Code for the video

FT-P 1502 autonomous front tank

The FT-P 1502 front tank is the ideal partner for any simultaneous machine operation with liquid products. These include hoes with band sprayers, seed drills with liquid fertiliser equipment and many others.

Simple, intelligent operation with the SmartCenter

The operator station of the FT-P 1502 front tank is positioned on the left-hand side and is easily accessible. The operator station can be equipped with the Comfort-Pack as an option. This includes the TwinTerminal 3.0 for operating the suction side, automatic fill stop for suction filling, fill level dependent, auto-dynamic agitation regulation and

Large spray agent tank and high-capacity pump

The FT-P 1502 front tank with a nominal volume of 1,500 l (actual volume 1,660 l) is equipped with a hydraulically-driven 180 l/min piston diaphragm pump designed to be self-contained. The oil requirement for operating the pump is 35 l/min.

remotely controlled, automatic cleaning programmes for quick and thorough cleaning. The FT-P 1502 front tank is equipped with a 180 l fresh water tank that enables efficient cleaning.

The FT-P autonomous front tank can be combined with these machines:

Precea precision air seeder



Primera DMC direct seed drill



SCHMOTZER hoe Venterra-2K



FT-P 1502 autonomous front tank



Fill opening in the tank dome with extra-long canister rinse nozzle for optimum cleaning results

Precise metering

Safe and precise metering of plant protection agents and other additives is guaranteed by the large induction system under the wide, easy-to-open dome cover. The additional step on the large folding platform in front of the spray agent tank makes the induction device very easy to reach. The induction device includes a cleaning pistol, a canister rinse nozzle with a dead man's handle and a removable stainless steel sieve as standard. The taps for operating the cleaning pistol and the canister rinse nozzle are located directly by the dome cover and are easily accessible. In addition, a storage facility is integrated in the operator station on the tank dome.

Part-width valve chest interface

A part-width valve chest with 2 to 6 part-width sections can be fixed on to any connected implement. The attached implement can be disconnected via a joining socket on the front of the valve chest leaving the part-width valve chest fixed to the machine. This always remains with the implement when the implement is changed. This means that any attached implements can be changed quickly and easily. The working spectrum of the FT-P 1502 front tank covers an application rate of 5 to 100 l/min at a working pressure of 2.0 to 8.0 bar.



Removable sieve for an unobstructed view into the tank

Precise, easy to operate and flexible in use with ISOBUS control

The application rate is controlled and regulated via independent ISOBUS control of the FT-P 1502 front tank. The ISOBUS control regulates the metering depending on the forward speed. Other functions such as automatic part-width section control or part-area, site-specific application can also be implemented. The ISOBUS terminal can also be used for the complete job management and documentation.



Part-width valve chest on the SCHMOTZER Venterra-2K hoe



Neat routing of the fertiliser hoses to the outlet on the chisel openers of the Primera DMC

Precise application

The liquid fertiliser is pumped through hoses to the coulters on the seed drill. The fertiliser hoses are carefully routed and they are protected by protective cladding from stone impacts and damage. The liquid fertiliser is applied through a special outlet at the sowing coulters. In order to prevent dripping at the headland, each outlet is equipped with its anti-drip diaphragm. Each outlet also has an appropriately-sized metering disc, depending on the application rate.

Applications for the self-contained front tank:

- ✓ Band spraying in conjunction with a SCHMOTZER hoe
- ✓ Liquid fertilisation during seeding with the Precea or Primera DMC
- ✓ Application of bio-stimulants during sowing
- ✓ Other individual applications

The advantages at a glance:

- ✓ Simple intuitive operation and cleaning as well as maximum comfort
- ✓ Compact design for optimum visibility
- ✓ Comfortable induction of supplementary products via the tank dome
- ✓ Precise metering via independent ISOBUS control with forward speed-related rate regulation and part-width section control, with automatic part-width section control and part-area, site-specific metering as an option
- ✓ Maximum flexibility enables a large number of uses
- ✓ Year-round, universal and flexible use in combination with various implements thanks to the autonomous control system
- ✓ Optimised functionality for special applications:
 - Application of plant protection agents in combination with a hoe or
 - liquid fertilisation when sowing with a Primera DMC, precision sowing with a Precea



Apart from the Primera DMC, the FT-P can also be combined with many other machines. In this case, the FT-P autonomous front tank is being used with a SCHMOTZER hoe

FDC 6000 Fertiliser Delivery Cart

Accurate and reliable application of liquid fertiliser directly when seeding



FDC 6000 with Primera DMC 12000-2C seed drill

AMAZONE developed the FDC Fertiliser Delivery Cart especially for dry farming locations. It can be used in combination with the Primera DMC seed drill, the Condor seed drill seed drill or the EDX precision air seeder. The Cart is hitched between the tractor and the towed seed drill. A pump with friction wheel drive transports the liquid fertiliser to the sowing coulters, which apply it to the soil. This combination is used to carry out sowing and starter fertilisation in a single pass. Liquid fertilisation in direct combination with sowing promotes early growth and saves an additional pass. The application of granular fertiliser is approaching its

limits in these dry areas. Liquid fertiliser is immediately and fully available to the young plants at the start of their growth phase.

A combination of the FDC and a seed drill with its own granular fertiliser tank, even allows for the simultaneous application of liquid fertiliser and mineral fertiliser in a single pass. Each plant can therefore be provided with nutrients, according to the environmental conditions, in an optimum way.



FDC 6000 with Condor 15001-C seed drill



- ✓ FDC 6000 with 6,000 l tank capacity and two 300 l fresh water tanks – excellent manoeuvrability on the headland, in order to drive track-to-track

Chassis and drawbar

The weight is distributed on the ground in an optimum manner by the large contact area of the two over-dimensioned 800/45/26.5 tyres, so that the soil is protected. The tractor is attached to the fertiliser tank via a Cat. 3, 4 or K700 lower link cross shaft using a drawbar eye or a ball point coupling as required. The drawbar has additional ballast weights as standard equipment to achieve optimal weight distribution and to improve the traction of the tractor. The drawbar has a hydraulic cylinder fitted as standard for connecting and disconnecting the seed drill and for the horizontal levelling of the machine. The drawbar has a hose rail fitted as standard, where the hydraulic hoses and electrical power connections can be neatly stowed after disconnecting the cart.

The rear of the FDC sports a lower link cross shaft to which the trailed seed drill can be quickly connected.

The entire combination, consisting of the FDC and the seed drill, is an easily-maneuvrable unit that allows driving pass on pass, despite its length on the headland.

Large-capacity liquid fertiliser tank for high output levels

The FDC Fertiliser Delivery Cart consists of two liquid fertiliser tanks, each having a 3,000 l capacity, i.e. a total tank capacity of 6,000 l. At an application rate of 60 l/ha, one tank is sufficient for 100 ha, which corresponds to one day-shift on large farms. The two liquid fertiliser tanks have as standard fill level indicators so that the driver can always monitor the fill level. In addition to the fertiliser tanks, the FDC Fertiliser Delivery Cart is equipped with two 300 l fresh water tanks, so that the entire Cart, including the pump and hoses, can be cleaned intermittently by flushing with water. All the tanks can be safely accessed from a working platform and have a large tank opening.

The FDC Fertiliser Delivery Cart can be combined with these seed drills:



FDC 6000
Additional pulling power
requirement of 50 hp



EDX 9000-TC precision air seeder



Primera DMC direct seed drill



Condor 12001-C/15001-C
direct seed drill



Neat routing of the fertiliser hoses to the outlet on the chisel openers of the Primera DMC



Easy-to-use control panel on the FDC 6000 for reliable application

Accurate metering and simple operation

The FDC Fertiliser Delivery Cart is equipped with a speed-related spray fluid pump which allows for very accurate metering of application rates between 40 and 300 l/ha. Accurate control is provided via the AmaSpray⁺ in-cab terminal. Working speeds up to 20 km/h can be achieved. The Fertiliser Delivery Cart is filled by a separate, motor-driven filling pump with a filling rate of 500 l/min.

The liquid fertiliser is pumped through hoses to the coulters on the seed drill. The fertiliser hoses are carefully routed and they are protected by protective cladding from stone impacts and damage. The liquid fertiliser is applied through a special outlet at the sowing coulters. In order to prevent

dripping at the headland, each outlet is equipped with its anti-drip diaphragm. Each outlet also has an appropriately-sized metering disc, depending on the application rate.

The liquid circuit is very easily operated using the control panel on the left-hand side of the machine, which is already familiar from the AMAZONE crop protection sprayers. Suction and pressure filters in the liquid circuit remove impurities in the liquid fertiliser and ensure high application reliability.



Technical data:

	FDC 6000
Transport width (mm)	3,270 (with tyres 800/45 26.5) 3,000 (with tyres 700/50 26.5)
Transport height (mm)	2,990
Transport length (mm)	6,150
Tank capacity (l)	6,000
Tank capacity (l) fresh water	600
Additional power requirement (kW/PS)	37/50



FDC 6000 with Primera DMC 9001-2C seed drill in the transport position

Applications

The primary areas of application for the FDC Fertiliser Delivery Cart are in arid farming areas. Starter fertilisation via liquid does not draw as much residual moisture out of the soil, since the fertiliser does not first have to be dissolved to be available to the plants.

The rapid availability and better usability of liquid fertiliser, even at low temperatures, is another point that recommends liquid fertilising. The application of liquid fertiliser with the seeding operation promotes plant growth and quickly provides dense plant coverage. This reduces the weed pressure and thus reduces plant protection agent consumption. Rapid development at an early stage also has a positive influence on the yield.

Application results

We applied AHL liquid fertiliser when sowing rape, malting barley, peas and soya beans. The seed drill combination consisted of the Primera DMC 9000 linked to an FDC 6000 Fertiliser Delivery Cart. The application rates were in the order of 60 l/ha, so that we were able to treat an area of 100 ha. The tractor in the combination was rated at 320 hp. The driving speed was between 13 and 15 km/h.

The plant development with the support of AHL liquid fertiliser was clearly better than in the areas without AHL. The bright green colour of the plant is an indicator of good nutrient supply. The plants with AHL fertilisation also show much more advanced plant growth.



With AHL fertilisation



Without AHL fertilisation

Left with AHL fertilisation, right without AHL fertilisation

The realisation of a good idea

Mulch and direct sowing

Continuously dropping profits result in many farmers thinking seriously about costs, especially those relating to crop establishment. Cost favourable production systems now require even more radical thinking in view of the extremely efficient techniques already implemented. Quite often the necessary profits from farming can only be maintained or increased by means of continuing or increasing rationalisation measures.

In modern crop establishment mulch and direct sowing systems can no longer be disregarded as it creates the most cost favourable crop production.

The state of preparation to introduce either a mulch or direct sowing system depends mainly on the following factors:

- ✓ Soil conditions
- ✓ Crop rotation
- ✓ Management
- ✓ Economic situation of agriculture

At least one third of all arable land in Europe can be sowed directly. The majority could be established using mulch or direct sowing in good arable areas with traditional crop rotations.



Primer DMC 12000-2C



Dr. Heinz Dreyer

Dr. Heinz Dreyer (1932 – 2023)

Dipl. Eng. Technical University of Munich (1956)

Dr. agr. of the Justus Liebig University Gießen

Dipl. Eng. Univ. Technical University Munich (1985)

Dr. h.c. of the University of Hohenheim

May 2008: Awarded silver order of merit from the Russian ministry of agriculture

May 2009: Awarded the (golden) VDI medal of honour (Association of German Engineers)

Research worldwide

AMAZONE has been carrying out research and development throughout the world for several years now. Extensive trials with regard to procedures and the maximum performance and reliability of machines and machine parts have been carried out and analysed, especially in cooperation with large-scale farms. These trials results have now been incorporated, for example, into the technical development of the new Primera DMC and have made a considerable contribution towards its huge productivity and excellent reliability. Machines made by AMAZONE continue to be tested and evaluated on large-scale farms.

Science confirms our practical experience that mulch or direct sowing should start within the crop rotation following a root crop or pulses. Many practical comparisons have also led to this conclusion as the optimum time to introduce direct sowing.

Mulch and direct sowing of winter wheat following sugar beet, rape or maize is one of the best examples of the success that can be achieved in these early years. Without any change to fertiliser and crop protection measures in the first year, repeatedly higher yields are noticeable with this sowing system. The emergence of grass weeds in addition to other weeds can sometimes be observed in the following years. If necessary, these must be controlled by means of good crop rotation or with specific plant protection agents.

Mulch and direct sowing – not an ideology, but a consequence of an economic and ecological decision process which can be influenced by you yourself.

Technical director:	Dr. Justus Dreyer
Responsible for the product line:	Johannes Hottenbacher
Product specialist:	Sven Paulsen
Product management:	Bernd Lummer
Product marketing:	Mathis Pohlmann
Design:	Michael Tröbner (TL) Ilja Lebedev Viktor Schwamm Olaf Schröder Petra Brünen
Trials:	Hubert Vollmer Fabian Windhorn Johann Kipp

AMAZONE – always in your vicinity

Your satisfaction is our challenge




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für Landtechnik und Kommunaltechnik

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Wearing parts catalogue
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Каталог изнашиваемых деталей
для сельскохозяйственной и коммунальной техники

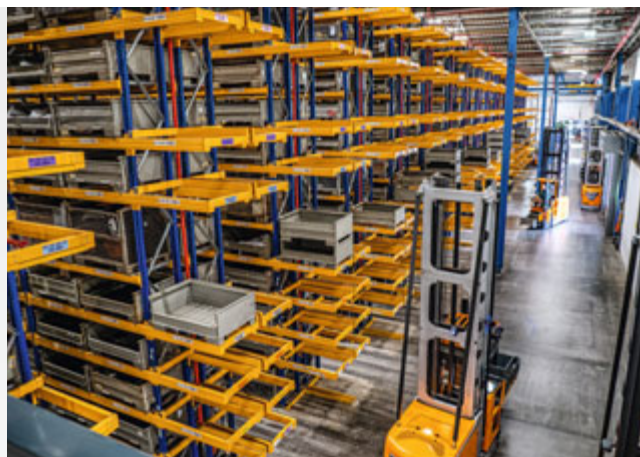
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AMAZONE SmartService 4.0

Due to the increasing use of evermore complex machine technology, AMAZONE utilises, with the SmartService 4.0, both virtual and augmented reality as well as digital media for service, training and maintenance advice.

- 1 **SmartTraining:** Training and instruction in the use of complex machinery by using Virtual Reality Technology (VR).
- 2 **SmartLearning:** Interactive driver training for the user for complex machinery operation (www.amazone.net).
- 3 **SmartInstruction:** Repair or maintenance instructions using Augmented Reality (AR) and mobile terminal equipment.
- 4 **SmartSupport:** Direct local support from the service technician via Augmented Reality (AR) and mobile devices.



The satisfaction of our customers is the most important objective

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

We provide you with a first class spare parts service

The spare parts centre in Tecklenburg-Leeden is the base for our worldwide spare parts logistics system. This ensures optimum availability of spare parts, even for older machines.

Orders for parts in stock at the Tecklenburg-Leeden spare parts centre which, if placed by 5 p.m., leave our premises the same day. 42,000 different spare parts and wearing metal parts are handled and stored via our modern warehousing system. Up to 1,000 orders are sent out to customers every day.

Better to choose the original right from the start

Your machines are subjected to extreme use! The quality of AMAZONE spare parts and wearing metal offers you the reliability and security you need for efficient soil tillage, precise sowing, professional fertilisation and successful crop protection.

Only original spare parts and wearing metal parts provide the durability and functionality expected from AMAZONE machinery. This guarantees an optimum quality of work. Original parts at fair prices pay for themselves in the end.

So opt for the original!

The advantages of original spare parts and wearing metal parts

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

Technical data:

Primer DMC large area seed drill

Primer DMC 3000-C, 4500-C, 6000-2C, 9000-2C, 9000-2C Super and 12000-2C

Model		Primer DMC 3000-C	Primer DMC 4500-C	Primer DMC 6000-2C	Primer DMC 9000-2C	Primer DMC 9000-2C Super	Primer DMC 12000-2C
Working width (m)		3.00	4.50	6.00	9.00	9.00	12.00
Transport width (mm); with transport kit as an option		3,225 3,000	4,725 4,500	3,225 3,000	4,725 4,500	4,725 4,500	4,725 4,500
Transport height (mm)	– without filling auger	3,600	3,600	3,800	3,800	3,800	3,800
	– with filling auger	4,000	4,000	4,000	4,000	4,000	4,000
Seed and fertiliser hopper capacities (l) (3/4 seed – 1/4 fertiliser)		4,200	4,200	4,200	4,200	6,000	6,000
Seed and fertiliser hopper (l)	– with extension 800 l	5,000	5,000	5,000	5,000	–	–
	– with extension 1,200 l	–	–	–	–	7,200	7,200
	– with extension 1,600 l	5,800	5,800	5,800	5,800	–	–
	– with extension 2,400 l	–	–	–	–	8,400	8,400
Total weight (empty) (kg)		4,800	5,600	6,400	10,600	11,000	15,000
Weight (full) (kg)	– without extension	8,200	9,000	9,800	14,300	19,000	20,100
	– with extension 800 l	8,800	9,600	10,400	14,900	–	–
	– with extension 1,200 l	–	–	–	–	19,900	21,000
	– with extension 1,600 l	9,400	10,200	11,000	15,500	–	–
	– with extension 2,400 l	–	–	–	–	20,800	21,900
Linkage		trailed	trailed	trailed	trailed	trailed	trailed
Number of openers		16	24	32/24	48/36	48/36	64/48
Number of opener modules		4	6	8	12	12	16
Spacing between the coulter (mm)		840	840	840/1,120	840/1,120	840/1,120	840/1,120
Row spacing (cm)		18.75	18.75	18.75/25.00	18.75/25.00	18.75/25.00	18.75/25.00
Spacing of openers in one row (cm)		75	75	75	75	75	75
Ground clearance at the openers (mm)		500	500	500	500	500	500
Central depth control for each coulter module		yes	yes	yes	yes	yes	yes
Coulter pressure (constant) (kg/coulter)		52	52	52	52	52	52
Operational speed (km/h)		15–18	15–18	10–18	10–18	10–18	10–18
Tractor power requirement from (kW/hp)	Row spacing (cm) 18.75	60/80	95/130	133/180	200/270	215/290	280/380
	Row spacing (cm) 25.00	–	–	118/160	185/250	200/270	260/350
Recommended tyre size		700/45-22,5 PR	700/45-22,5 PR	700/45-22,5 PR	700/45-22,5 PR	800/45-26,5 PR	800/45-26,5 PR



Primera DMC 12001-2C

Primera DMC 9001-2C and 12001-2C

Model	Primera DMC 9001-2C	Primera DMC 12001-2C
Working width (m)	9.00	12.00
Transport width (mm); with conversion kit as an option	4,725 4,500	4,725 4,500
Transport height (mm)	– without filling auger	4,000
	– with filling auger	4,000
Seed and fertiliser hopper capacities (l) – Variant 1: Seed without fertiliser – Variant 2: 3/4 seed – 1/4 fertiliser – Variant 3: 1/2 seed – 1/2 fertiliser	13,000	13,000
Total weight (empty) (kg)	15,000	19,000
Weight (full) (kg)	27,000	30,000
Linkage	trailed	trailed
Number of openers	48/36	64/48
Number of opener modules	12	16
Spacing between the coulter units (mm)	840/1,120	840/1,120
Row spacing (cm)	18.75/25.00	18.75/25.00
Spacing of openers in one row (cm)	75	75
Ground clearance at the openers (mm)	500	500
Central depth control for each coulter module	yes	yes
Coulter pressure constant (kg/coulter)	52	52
Operational speed (km/h)	10–18	10–18
Tractor power requirement from (kW/hp)	Row spacing (cm) 18.75	235/320
	Row spacing (cm) 25.00	320/430
Recommended tyre size	850/50-30,5 PR	295/400
		850/50-30,5 PR

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 should be checked. Not all the listed combination options are possible with all tractor manufacturers.



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