

# PRECISION SEED DRILL AZURIT 10

 **LEMKEN** THE AGROVISION COMPANY



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# GREATER YIELDS THANKS TO MORE LIGHT, AIR AND NUTRIENTS

This is what innovative precision seeding with the **LEMKEN Azurit** with DeltaRow concept makes possible. Improved plant distribution on the field ensures better utilisation of resources and therefore leads to higher yields.

The **Azurit 10** precision seed drill is available with 4 to 12 rows and various row spacings.

The sophisticated array of tools in the **Azurit 10** is the central prerequisite for your harvesting success.

Once the seed furrow has been cleared, mineral fertiliser is applied centrally underneath the DeltaRow via a double disc coulter. This under-root fertilisation supports optimal plant growth. Next, furrows are pre-consolidated using trapezoid furrow packer segments before seeds are placed in the soil using **LEMKEN's** proven double disc coulter technology.

In addition to this innovative technology, another strength of the **Azurit** lies in its versatility, as it can be combined with

various other implements (see pages 16 and 17 for more information) to create the right concept for any conditions.

The tramline mechanism of the **Azurit 10** provides an option for applying farm manure to the crop using tyres that are gentle to the soil. This is particularly useful in regions with high livestock numbers. Crop density is maintained when the tramline is created.



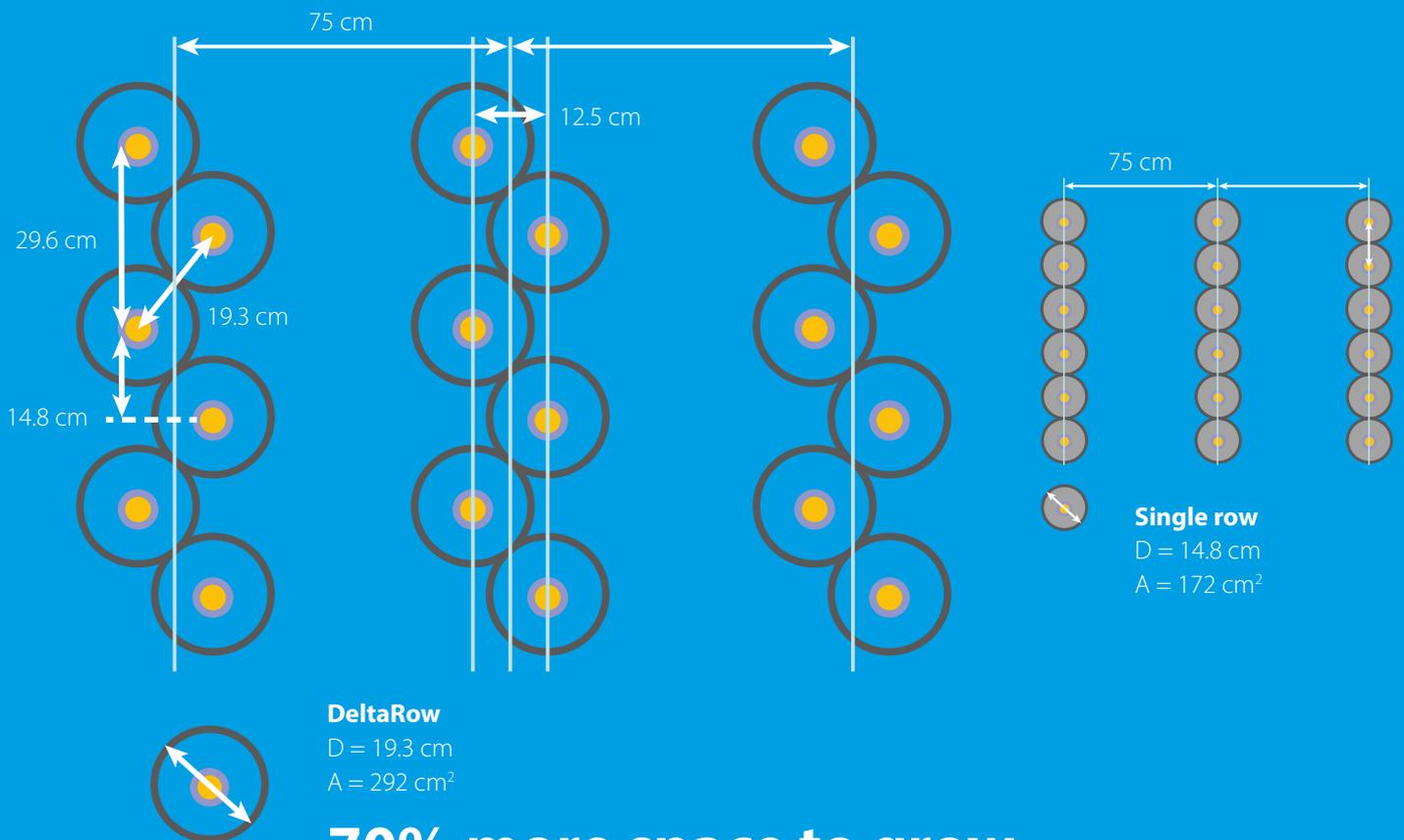
# THE CONCEPT



## LEMKEN DeltaRow

The DeltaRow comprises two staggered twin rows arranged at a distance of 12.5 cm.

Precise placement in a triangular seeding pattern is ensured by synchronising the twin rows. Compared to single rows, DeltaRows offer 70% more surface area and therefore more water, nutrients and light for each plant. The fertiliser band is placed in the sub-root area inside the DeltaRow. This allows a symmetrical design of the seeding unit. At erosion-prone sites, the DeltaRow offers another clear advantage, as soil is rooted more intensively compared to single rows.



**70% more space to grow**  
 at 9 grains/m<sup>2</sup>



#### No difference in the harvest

Crops can be harvested using conventional technology. The harvest can be easily brought in with a forage harvester or combine harvester. This applies to both row-dependent and row-independent combine headers. As a result, full harvesting flexibility is maintained.

## ONE CONCEPT – NUMEROUS **BENEFITS**

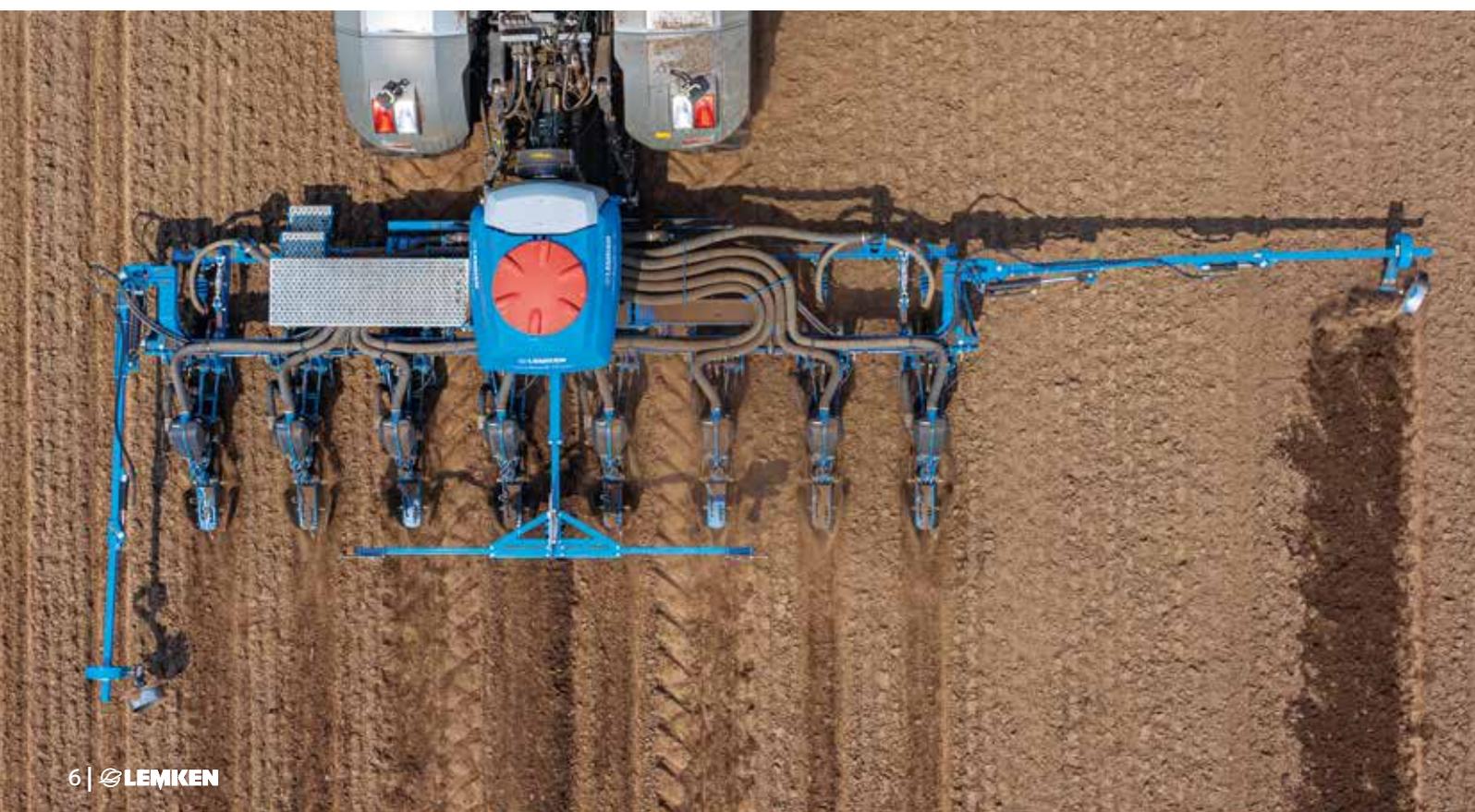
The optimised **distribution** achieved by the **DeltaRow concept** ensures:

- optimal utilisation of under-root fertiliser
- more nutrients, water and light for each individual plant
- rapid row closure during juvenile development
- better weed suppression during juvenile development
- a plant distribution that helps prevent erosion
- better root growth and better biomass development

#### Suitable for seeding:

- Sunflowers
- Soy beans
- Maize
- Sorghum

# WORKPROCESSES





## 1 | CLEARING

Row cleaners remove stones, clods and harvest residue from the seed furrows. Their height can be adjusted quickly via a perforated grid, or they can be removed altogether if required.



## 2 | FERTILISING

The fertiliser coulters (up to 250 kg coulters pressure) places a band of fertiliser underneath the DeltaRow centrally between the two twin rows.



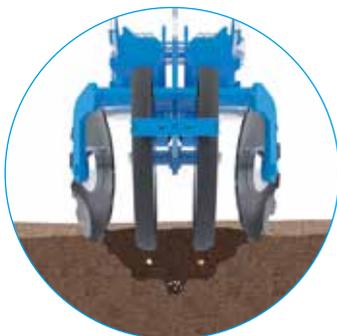
## 3 | RECONSOLIDATING

The trapezoid furrow press element covers the fertiliser band and at the same time ensures that the seed horizon is reconsolidated. This supports the rise of water through the capillaries and therefore ensures speedy, even emergence of the plants.



## 4 | DRILLING

Two double disc coulters place the seeds precisely on the reconsolidated seed horizon in a DeltaRow arrangement. Once seeds have exited the seeding shafts, guide wheels ensure that they remain precisely at the desired position in the seed horizon.



## 5 | PRESSING

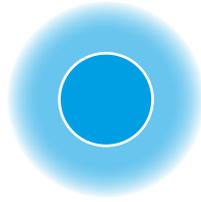
Different versions of furrow closers ensure that the seeds are covered with soil and pressed into place.

# TECHNOLOGY IN DETAIL



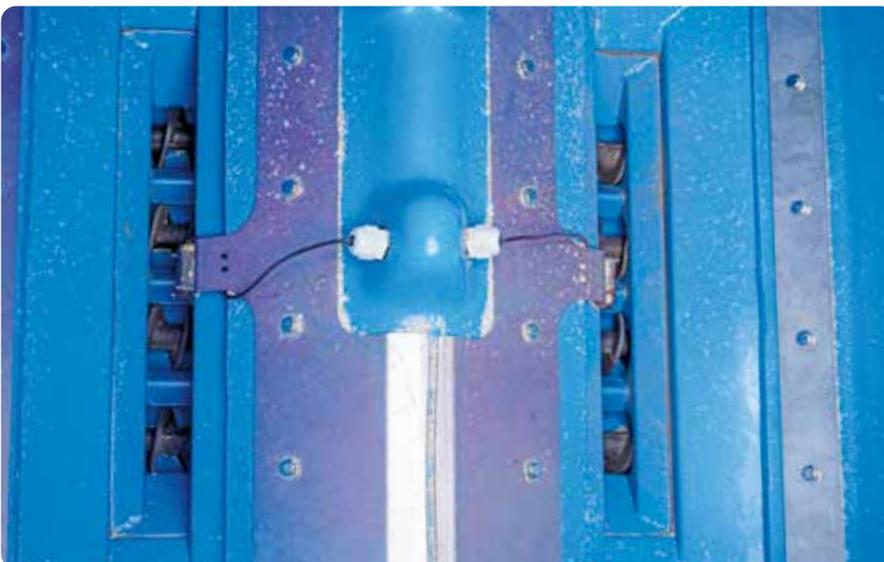
## Central seed hopper

The central 600-litre seed hopper makes for straightforward seed logistics. The hopper is easily accessible via wide, safe steps and access grilles. Seed residue can be emptied easily and centrally via a start button directly on the seed hopper.



### **Seed emptying function in the seed metering unit**

Seeds in the metering unit can be easily drained via the discharge flap. It is therefore quick and easy to switch between different types of seeds.



### **Seeds on demand**

Each metering unit only holds a small amount of seeds. The continuous, automatic supply of seeds from the central hopper is sensor-controlled. A metering auger feeds the seeds from the hopper into the air stream and then on to the seed metering units.

### Seed metering

The Azurit 10 delivers excellent seed metering quality even at high working speeds. This is made possible by the low circumferential speed of the perforated discs. The trapezoid furrow press pre-compacts the rows and therefore ensures a steady position of the seeding units.



### Controlled placement

Positive pressure in the system conveys seeds from the metering unit to the seed row via a seeding shaft. Two optical sensors monitor the accuracy of seed metering. Once seeds have exited the seeding shaft, a guide wheel ensures that they remain in place.



### Precise seed metering

Seeds are metered by two perforated discs arranged offset to each other. The fixed connection between the two seed discs ensures synchronisation within the DeltaRow. Each metering unit is driven by a separate electric motor.



## MicroHub microgranule unit

The **Azurit 10** can be equipped with an electrically driven MicroHub microgranule unit on request.

At the heart of the microgranule unit is the central tank with a volume of 200 litres, which is easily accessible via a ladder at the rear of the machine. The air flow of the **Azurit** conveys the microgranules from the tank to the distributor via a metering device. The microgranules are initially distributed across up to 8 rows. Next they are fed to the respective DeltaRows via Y-sections, and they are then placed together with the seeds.

A stainless steel metering shaft is fitted as standard and delivers application rates between 5 and 40 kg per hectare at forward speeds of up to 15 km/h. The fill level sensor shows how much granulate is still in the tank.

The microgranule unit calibration menu and controls are easily accessible from the MegaSeed control, as are all **Azurit** controls.



# iQblue

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# CONTROL CONCEPT

## MEGASEED

MegaSeed is the ISOBUS-based control concept for the **Azurit 10** precision seed drill. Thanks to the uniform LEMKEN design, drivers quickly find their way around.

### Separate MultiBoom section control

MultiBoom supports automatic, separate section control for fertiliser and seeds to prevent overlaps. It is also possible to work through two application maps in parallel, so that seeds and fertiliser are only applied where they can be used efficiently.

### Logical structure, intuitive operation

Using the layout manager, the user interfaces can be freely configured and saved in up to four driver profiles. The system is controlled either via the LEMKEN CCI-1200 terminal or any universal ISOBUS terminal.

### Rapid assistance

The information menu gives access to various diagnostic options. In the event of a fault, the new diagnostic system guides the driver directly to the source of the fault and assists them in rectifying it.



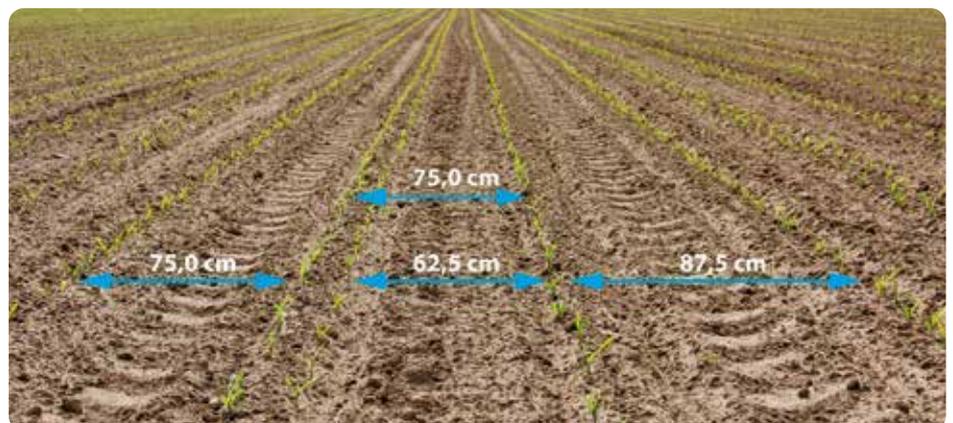
# TRAMLIN MECHANISM

## Easy and flexible

Creating tramlines is recommended to allow tractors for fertilisation and crop care to be driven across the field on tyres that are gentle to the soil. The number of plants sown per hectare does not need to be reduced for this purpose! The crop density therefore remains the same. Tramlines can be flexibly switched on all seeding units of the Azurit 10.

Tramline widths of up to 87.5 cm can be achieved by deactivating individual twin rows. The ability to deactivate half or full DeltaRows provides great flexibility in terms of tramline widths.

The **MegaSeed control** makes it a breeze to set the required tramline rhythm. All you need to do is enter the treatment width, track width and tyre width of the tractor, and the required rhythm is calculated automatically. This allows almost any tramline rhythm to be implemented.



# POSSIBLE COMBINATIONS

## AZURIT WITH SOLITAIR 23+

The tank mounted at the front of the tractor holds and meters fertiliser, which is fed to the fertiliser coulters via hoses.



## AZURIT WITH SOLITAIR 25

Fertiliser is held in the tank of the **Solitair 25** pneumatic seed drill. The fan and metering units feed the fertiliser to the fertiliser coulters.



## AZURIT WITH COMPACT-SOLITAIR 9

Fertiliser is held in the drill combination tank and released by the metering system.





## AZURIT WITH SOLITAIR 12 SW

The **Solitair 12 SW** seed trailer offers the ability to transport up to 5,800 litres of fertiliser. Two seeding shafts ensure highly precise metering.

### TECHNICAL SPECIFICATIONS

		Number of rows/ Seeding coulters	Approx. weight (kg)		Row spacing Working width (cm)					Tank volume (approx. l)	Options for combining LEMKEN machines for fertilisation
			without fertiliser version	with fertiliser version	50.0	70.0	75.0	76.2	80.0		
Azurit 10 8 K	Hydraulic folding	8 / 16	2.300	2.600		560	600	609	640	600	Solitair 25 Solitair 23+ Solitair 12 SW

# WIR SIND FÜR SIE DA

## Providing a professional all-round service

On-demand assistance. All around the world. That's LEMKEN service. The LEMKEN team provides professional advice as well as a speedy supply of machinery and parts via: 19 convenient branches and external warehouses in Germany, our own sales companies and importers in over 50 countries, and of course a great many highly qualified sales advisers and service technicians at specialist agricultural machinery dealers.



### Supplying high-quality original wear parts

Our original LEMKEN wear parts ensure that your LEMKEN machine stays what it is: the genuine product. Whichever machine you need a spare part for, we ensure that the original parts are always available for all LEMKEN machines. Not only in the short term, but for years to come.



### Delivering spare parts speedily

The right parts at the right time in the right place — this is how a reliable replacement parts service should operate. Our professional logistics handling service ensures we can supply a wide range of replacement parts at speed, whenever and wherever they are needed.



LEMKEN 09/23, 17511546/en. All data, dimensions and weights are subject to ongoing further technical development and are therefore not binding. Weights given are always based on standard features. All information given is subject to change without notice.

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