

# SEED DRILLS **SAPHIR AND SOLITAIR**



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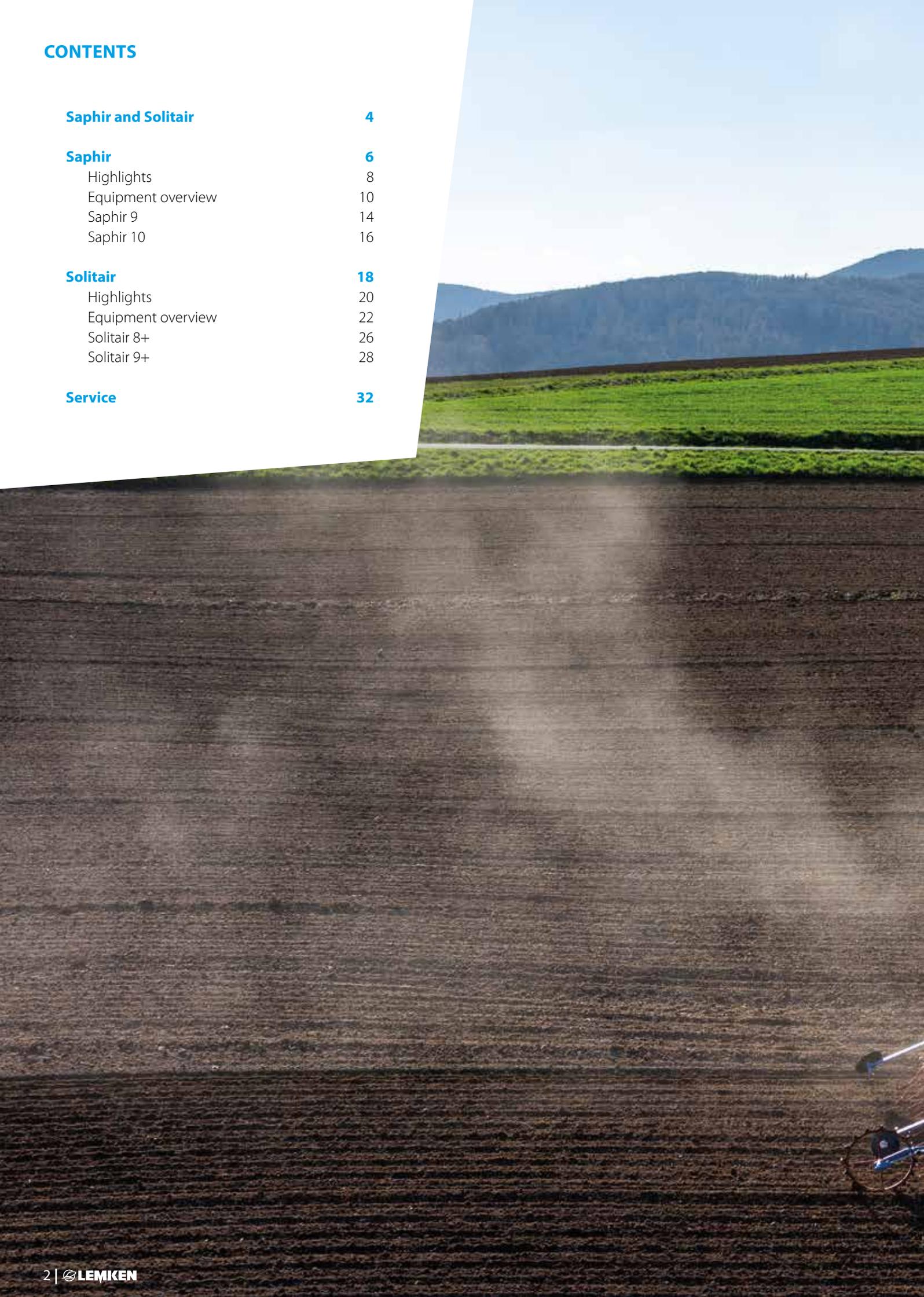
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A green tractor with a blue seed drill is shown in a field, moving from left to right. The tractor is pulling the drill, which is creating rows in the dark brown soil. The background shows a green field and a clear sky. The text is overlaid on a blue geometric shape in the upper left and right.

OUR DRIVING FORCE:  
**YOUR SUCCESS!**

## GROUNDBREAKING SEED DRILL TECHNOLOGY

Sowing is the starting point for good germination rates in your plants. And the right seed drill technology can play a decisive role in determining the success and quality of your crop.

With LEMKEN's **Saphir** and **Solitair** mounted seed drills, you'll have powerful seed drilling technology at your fingertips, even during peak times. As a result, you'll be able to make optimal use of the short time frames available for sowing.

Discover the numerous benefits of our **Saphir** and **Solitair** mounted seed drills for yourself and ensure an optimal start for your field crops.

# PERFECTLY COVERED



## Single harrow

The new single harrow with tool-free adjustment and harrow tines are also optionally available. Both additions reliably cover two seed rows and can be adapted to a wide range of conditions.



## Pre-emergence marker

All LEMKEN seed drills can be equipped with a pre-emergence marker.

The two marker discs are controlled via the on-board computer in

synchronisation with the tramline. The discs are operated hydraulically and driven powerfully into the soil. They leave clearly visible marks even in heavy soils or during mulch sowing.



### Double disc coulters

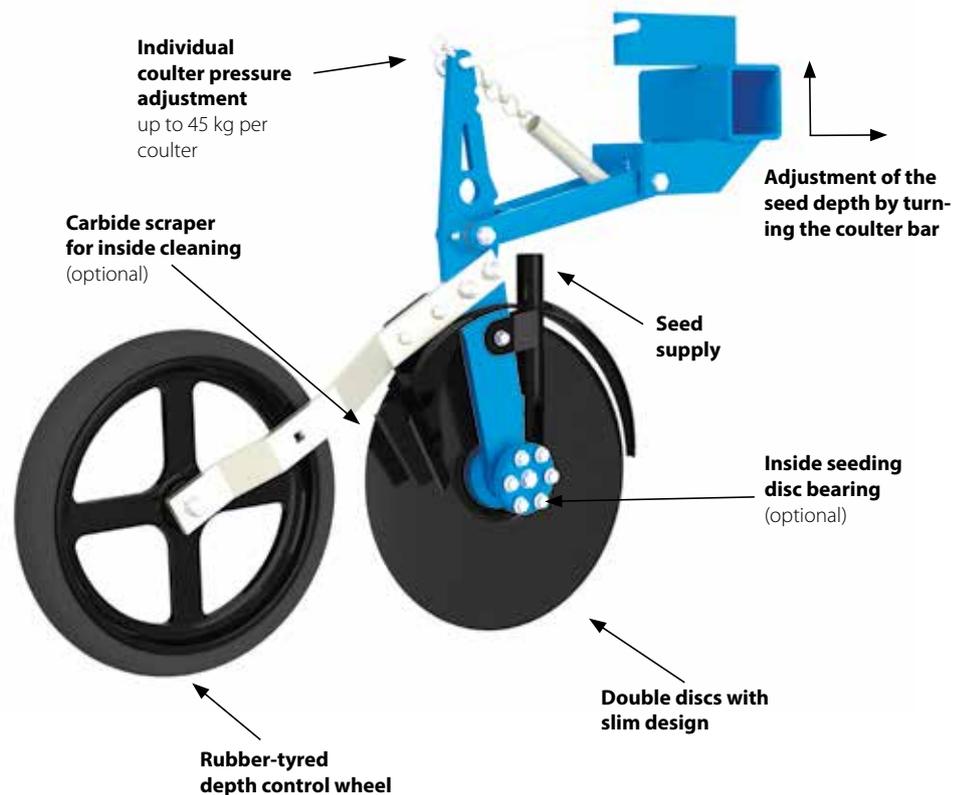
The double disc coulters with a rubber-tyred depth control wheel places seeds consistently and precisely at the same depth even in changing soil conditions and at high ground speeds. Seeds are then pressed into the soil by the depth control wheel to ensure optimum soil contact and to support

rapid germination as a result of the optimum water discharge. The uncompacted areas between crop rows reduce puddling and erosion. If the tillage implement is fitted with a leading trapeze roller, seeds are embedded with even greater perfection.



### Coulters adjustment

The parallelogram-controlled double disc coulters allows the coulters pressure and seed depth to be adjusted separately. The discs feature wear-resistant, maintenance-free four-point bearings, and a bearing seal reliably keeps dirt out of the bearing. The slim design of the straight discs ensures that work is not disrupted by blockages.

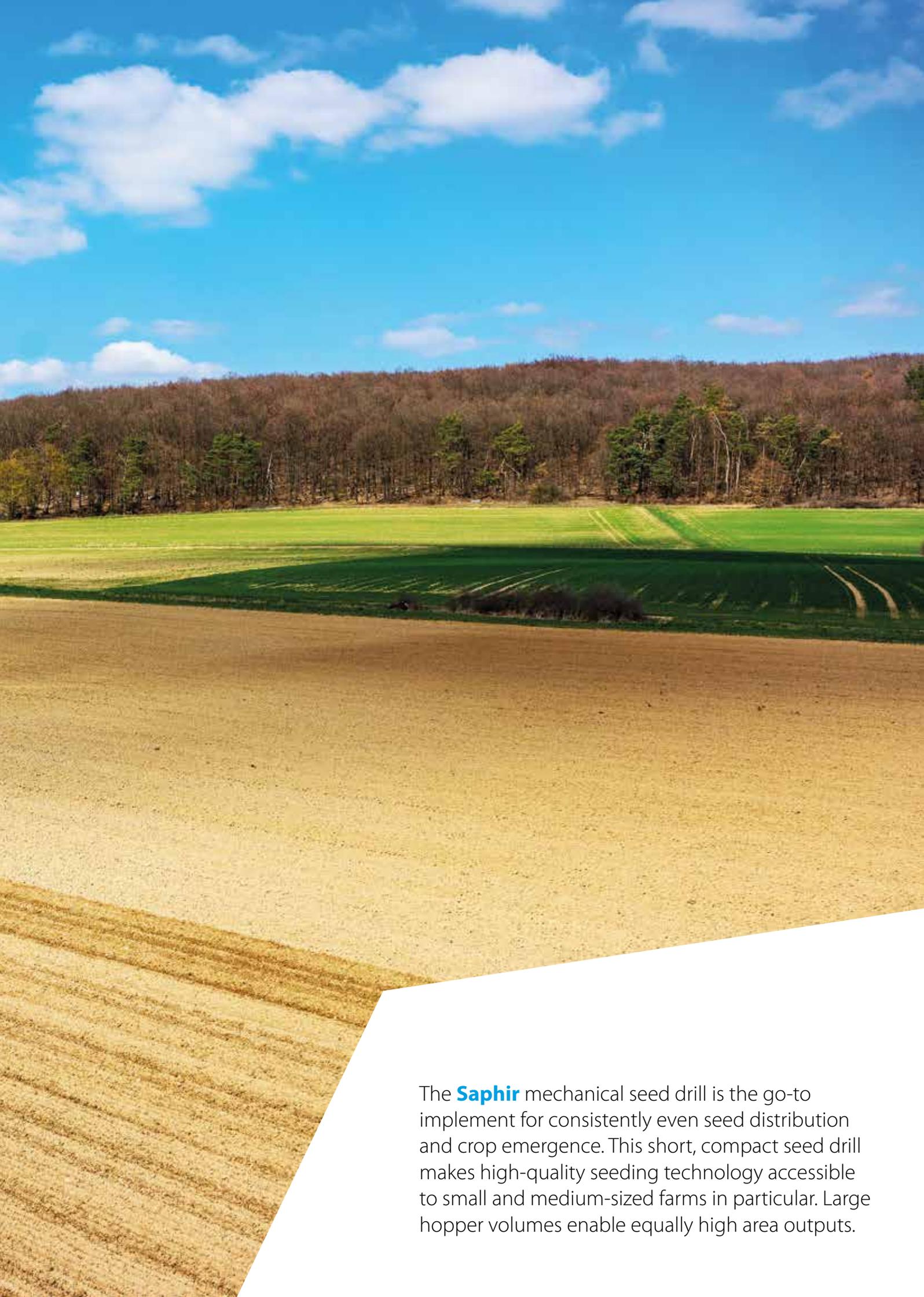


SEED DRILLS | SAPHIR

# SAPHIR

## PERFECT SOWING IN ALL SOILS





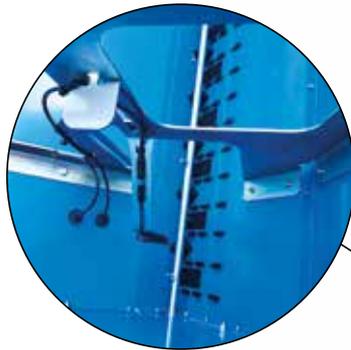
The **Saphir** mechanical seed drill is the go-to implement for consistently even seed distribution and crop emergence. This short, compact seed drill makes high-quality seeding technology accessible to small and medium-sized farms in particular. Large hopper volumes enable equally high area outputs.

# HIGHLIGHTS

## SAPHIR

### Hopper interior

Ensures good trailing behaviour, provides greater clearance and is easily height-adjustable via a sensor



### Easy sowing depth adjustment



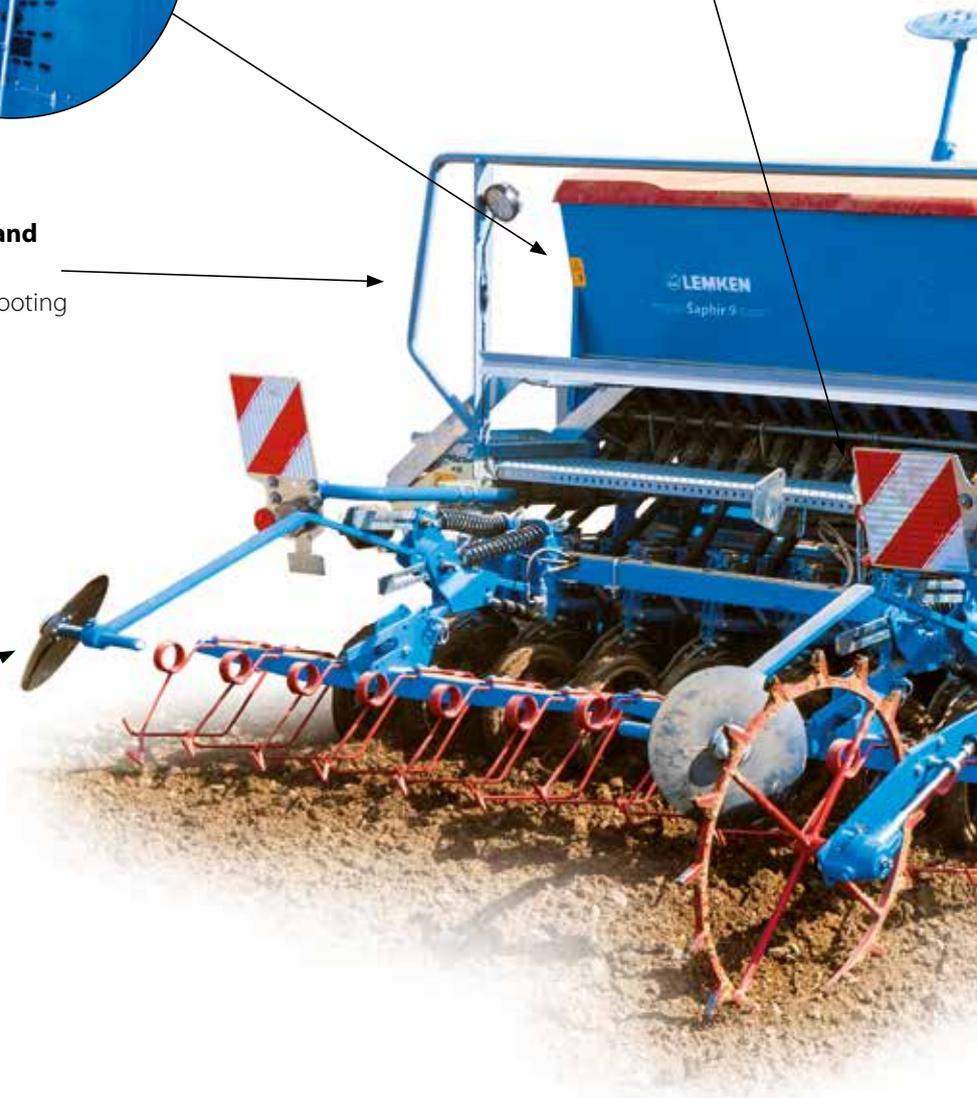
### Handrail and platform

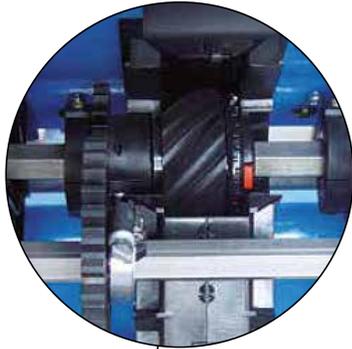
For a firm footing



### Optional pre-emergence marker

For better marking quality thanks to a higher spring pre-load





**Conti Plus combination seed wheel**



**Intuitive operation**



**Work lights**  
With (optional) inside hopper lights



**Double disc couler**  
For an even germination rate



# SEED HOPPER EASY FILLING

The plastic hopper cover fits tightly, but is easy to open thanks to the gas pressure shock absorber. The large opening angle of the cover makes it easy to fill the hopper, even with big bags.



### Sturdy access grille

The wide access grille is sturdy and easily reached via the steps. The filling height is less than 70 cm above the access grille. The handrail provides safety when standing.

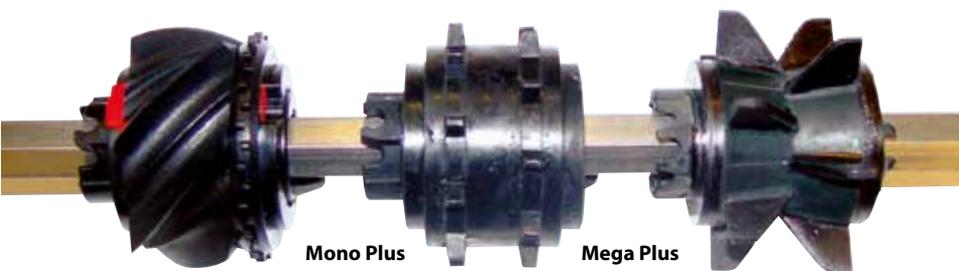
# PRECISION **METERING**



## **Conti Plus combination seed wheel**

The large seed wheel component is designed as a fluted cellular rotor of the two-part Conti Plus combination seed wheel. It continuously feeds the seeds into the seed pipes. Large seeds are metered out precisely and consistently. The cam wheel on the side meters out very small seeds such as rapeseed precisely and consistently.

The separately driven seed wheels can be easily activated and deactivated.



The **Saphir** features a hexagonal seeding shaft with quick-change system. Changing the seed wheels is very easy. There are two single-part seed wheels available:

- **Mono Plus** for small peas up to 150 kg/ha
- **Mega Plus** for peas and beans above 150 kg/ha.



## **The seed wheel housing**

The functionally designed seed wheel housing is made out of robust, low-wear plastic. The shut-off gate and bottom gates can be adjusted quickly and easily without the need for tools. The discharge flap integrated into the seed wheel housing can be easily converted from seeding to calibration mode.

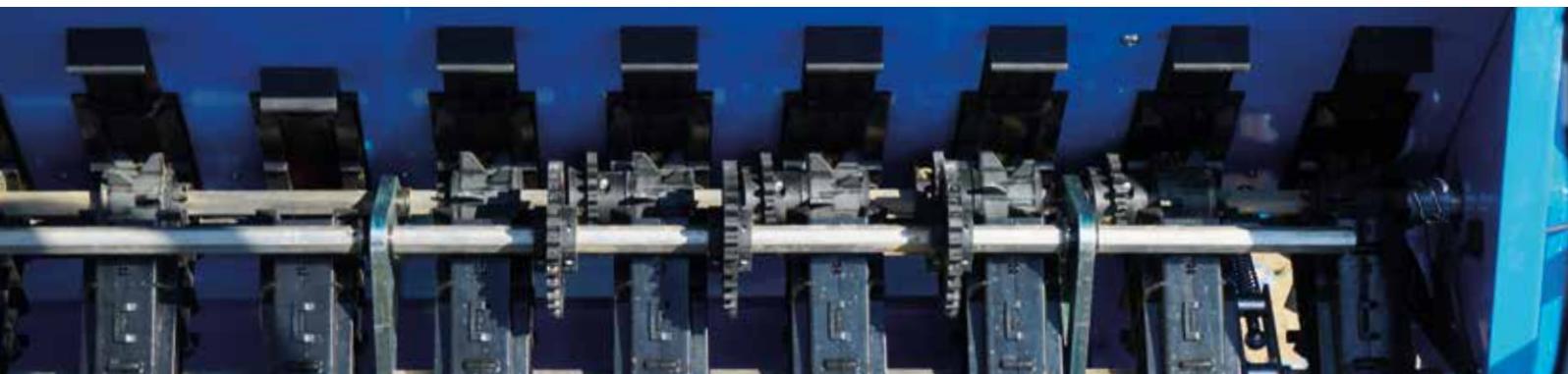
# FLEXIBLE ADJUSTMENT



Thanks to the optional **semi-mounting concept**, the **Saphir** can be both lifted and swung towards the front via a hydraulic cylinder. This alleviates the load reduction on the front axle. The hydraulic cylinders can additionally be used to individually adjust the position of the basic frame relative to the coulter bar by means of Hydro-Clips.



The **seed depth** of the double disc coulter can be adjusted continuously via a screw in the centre of the seed drill. Turning the robust coulter frame changes the position of the pressure roller relative to the double disc coulter – and with it the seed depth. Separately adjusting the **seed depth** and **coulter pressure** ensures precise seed placement, especially on changeable soils.



## On the right track

The **tramline mechanism** allows tramlines to be created at various intervals. To do this, the respective seed wheels are activated and deactivated via gear wheels and a clutch.

The gear wheels on the intermediate shaft can be moved as required, making it very easy to set the various track widths. The tramline width can also be adjusted to the tyre width via additional gear wheels.



### Precise seed level detection

The on-board computer can be fitted with an optical and acoustic seed level alert upon request.

The **sensor** in the **hopper** is easy to adjust and reliably detects the seed quantity currently remaining in the hopper.



### Optimal, continuous flow of seeds

The inside of the seed hopper is designed to ensure an optimal, continuous flow of seeds.



**Calibration testing** is done quickly and easily, as seeds are collected in two calibration trays. These are inserted into and removed from the machine via convenient pull-outs on the side. Seeds flow directly into the container for weighing through flaps on the side.

# SAPHIR 9

## PERFECT SEED PLACEMENT



### **EcoDrill control with LET-40 terminal**

The EcoDrill control makes it very easy to set up the **Saphir 9** and operate it while working. Its clear layout ensures that you have all the key parameters within view at all times.

### **Easy calibration testing**

Detailed calibration aids in the EcoDrill control render other devices surplus to requirements. The LET-40 terminal can be connected to the rear of the **Saphir 9** for calibration, making calibration testing considerably easier.



### Continuously variable oil bath transmission

The continuously variable oil bath transmission allows seeding rates to be set precisely between 0.5 and 500 kg/ha. The seeding shaft operates smoothly to ensure accurate longitudinal distribution of the seeds. This is particularly important when working with small seeding rates and a slowly rotating seeding shaft.



### Maintenance-free cardan drive

The maintenance-free cardan drive works reliably without disruption even in dusty and dirty conditions.



### Optimal star wheel position

The star wheel runs in between two seed rows within the width of the seed drill. As a result, the drive remains constant whether it is working uphill or downhill. The large diameter ensures slip-free rolling movement and good power transmission. When the work is done, the star wheel folds in easily in a single manual move, without the need for tools.

MORE  
ABOUT THE  
SAPHIR 9:



## SAPHIR 9 TECHNICAL DATA

Row spacing	125 mm	150 mm
Working width (approx.)	300 cm	300 cm
Number of seeding coulter rows	24	20
Tank volume (approx.)	860 l (optional 1,160 l)	860 l (optional 1,160 l)
Weight (approx.)	927 kg	867 kg

# SAPHIR 10

## CONVENIENT SET-UP AND OPERATION



### Electric drive

The **Saphir 10** with electric drive can easily manage seed rates anywhere between 0.5 and 500 kg/ha. The seed rate is conveniently adjusted from the tractor cab.

### ISOBUS functions

The combination of ISOBUS and Tramline Control allows tramlines to be freely created in fields. Sowing maps can be easily loaded onto the terminal via the agrirouter. This enables seeding rates to be metered location-specifically based on GPS data. As a result, the correct seeding rate is always applied in the right place.

### Automatic section control

With the optional automatic section control, the **Saphir 10** switches on and off automatically at the headland. This saves on seed and ensures that the entire field is sown without any gaps.



# EASY AND VERSATILE



## Pulse wheel

The pulse wheel with a diameter of 340 mm runs in between two rows of seeds within the seed drill width, therefore always on pre-treated surfaces. As a result, the drive behaviour remains consistent. When the work is done, the pulse wheel folds in easily in a single manual move, without the need for tools.



## Optional radar sensor

The optional radar sensor provides highly precise speed detection without any slippage.

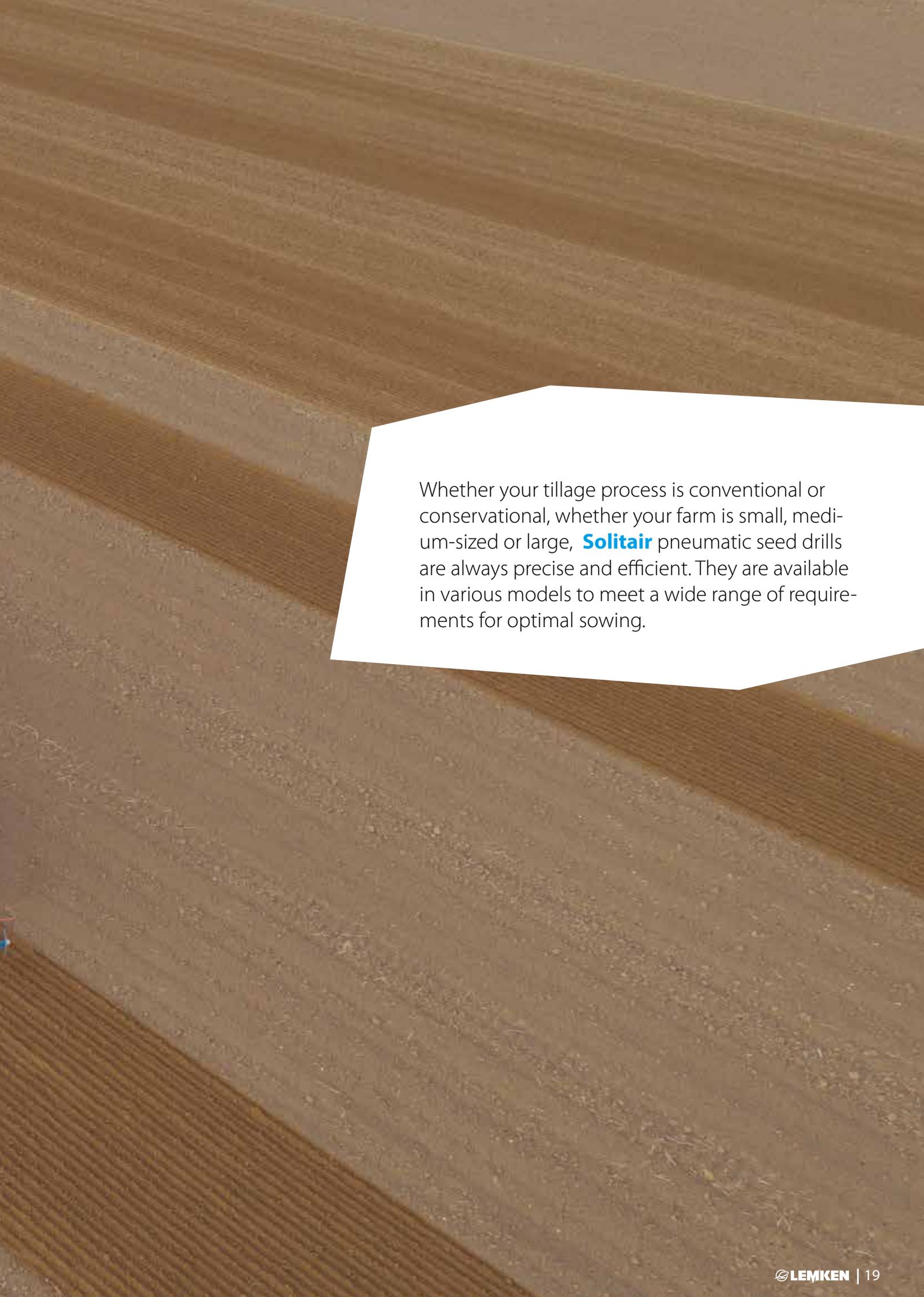
## SAPHIR 10 TECHNICAL DATA

Row spacing	125 mm	150 mm
Working width (approx.)	300 cm	300 cm
Number of seeding coulter rows	24	20
Tank volume (approx.)	860 l (optional 1,160 l)	860 l (optional 1,160 l)
Weight (approx.)	927 kg	867 kg

# SOLITAIR

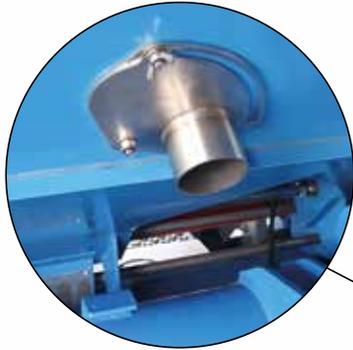
## SUCCESSFUL TILLAGE FOR YOUR FIELDS





Whether your tillage process is conventional or conservation, whether your farm is small, medium-sized or large, **Solitair** pneumatic seed drills are always precise and efficient. They are available in various models to meet a wide range of requirements for optimal sowing.

# THE SOLITAIR IN DETAIL



**Drainage valve**



**New blower fan**

Increases efficiency and reduces noise levels



**Double disc coulters**  
For an even germination rate

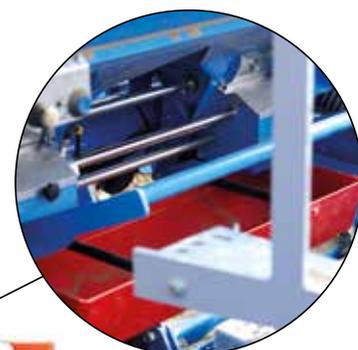
**Calibration sensor at the rear of the machine**

On the Solitair 9+



**Outside distributors**

For precise transverse distribution



**Metering**

Easy accessibility



**Speed detection via radar**

On the Solitair 9+ (optional)



# PRECISE PLACEMENT

## DS sowing depth adjustment

The independent adjustment of the seed depth and coulters pressure ensures precise seed placement, especially with changeable soils. The position of the pressure roller relative to the double disc coulters, and with it the seed depth, can be changed very easily by turning the coulters bar via two screws.



## Multi-part metering

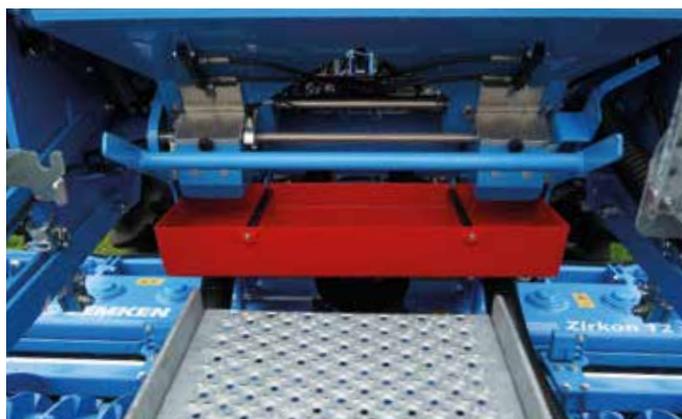
The 6-part cellular rotors can be activated and deactivated as required for sowing different types of seeds. As a result, the seeding shaft does not need to be replaced when switching between seeds. The adjustment of the volume and speed always ensures a uniform flow of seed.

The **Solitair** is equipped with two or four metering units as standard, depending on the working width.



## Access for calibration testing

The step folds up and provides easy access to the calibration tray.



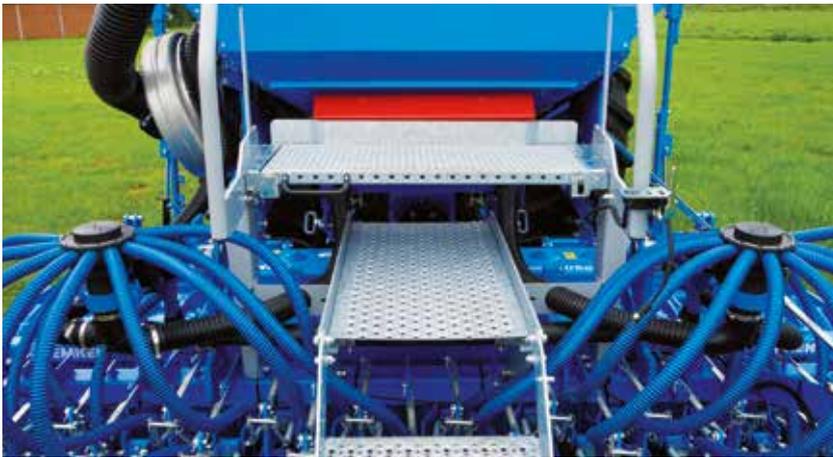
# INNOVATIVE TECHNOLOGY



## Hydraulically driven fan

The fan is driven hydraulically, and the fan speed is continuously variable. The oil requirement is only 20.4 l/min.

The required speed is reached even at low tractor engine speeds. Fluctuations in the tractor engine speed do not affect the speed of the fan. An even seed flow is ensured at all times.



## Outside distributors

The seed distributors are located outside the seed hopper, directly above the coulter bar. The seeding hoses running from the distributor to the coulter are of equal length to ensure precise seed distribution.

The continuous angle of the seeding hoses prevents blockages. The distributor can be easily opened for inspection. Spelt distributors are optionally available for sowing spelt.



## Flexible seedbed preparation

The Solitair can be used with both the Heliodor compact disc harrow and the Zirkon power harrow. This means that the seedbed preparation can always be perfectly matched to the primary soil cultivation.

# PRECISE WORK



### Width section control

Each metering unit can be individually switched on and off mechanically. This function can be optionally controlled from the tractor seat via the **Solitair** control. This ensures that remaining areas can be drilled without major overlaps.



### Tramline mechanism

On the **Solitair**, up to 2 x 5 seed pipes can be equipped with tramline mechanisms to lay individual tramlines. The automatic swivelling of the tramline flaps maintains constant air pressure in the system. Uniform seed distribution is also ensured with switched tramlines. When laying tramlines, seeds are returned to the seed hopper.



### Seed emptying function

The seed hopper can be emptied easily via the drainage valve on the hopper. Smaller seed residues can simply be drained out via the calibration tray.

# ACCESSORIES



## **Reliable seed checks**

The seed level sensor alerts the Solitronic that the level has fallen below the minimum and issues an optical and acoustic alarm. The seed level sensor is height-adjustable and can be optimally adjusted for any type of seed. The sieve in the seed hopper protects the seeding wheels from clogging by foreign objects contained in the seeds.



## **Seed pipe or distributor monitoring**

The sensors for monitoring the tramlines or width sections are integrated into the seeding hoses right behind the distributors. If the seed flow is irregular or interrupted, the driver is alerted by a buzzing noise.

SEED DRILLS | SOLITAIR 8

# SOLITAIR 8+

## ROBUST TECHNOLOGY





### Mechanical drive

The **Solitair 8+** pneumatic seed drill is equipped with a mechanical drive. The metering system is driven by a maintenance-free cardan shaft and an continuously variable gearbox. This provides a smooth drive of the cellular rotors in the metering unit. The star wheel runs inside the implement's working width thus ensuring a consistent, even drive.



### Easy calibration testing

Detailed calibration aids in the EcoDrill control render other devices surplus to requirements. The LET-40 terminal can be connected to the rear of the **Solitair 8+ for calibration**, making calibration testing considerably easier.



### Continuously variable oil bath transmission

The continuously variable oil bath transmission allows seeding rates to be set precisely between 0.5 and 500 kg/ha. It covers the full working width – without any further adjustments in the drive section. The finely graded scale from 0 to 150 guarantees the necessary precision. The seeding shaft operates smoothly to ensure accurate longitudinal distribution of the seeds. This is particularly important when working with small seeding rates and a slowly rotating seeding shaft.

## SOLITAIR 8+ TECHNICAL DATA

<b>Row spacing</b>	125 mm	125 mm	125 mm	150 mm	150 mm	150 mm
<b>Working width (approx.)</b>	300 cm	350 cm	400 cm	300 cm	350 cm	400 cm
<b>Number of seeding coulters rows</b>	24	28	32	20	23	27
<b>Tank volume (approx.)</b>	1,450 l (optional 1,850 l)	1,450 l (optional 1,850 l)	1,850 l	1,450 l (optional 1,850 l)	1,450 l (optional 1,850 l)	1,850 l
<b>Weight (approx.)</b>	910 kg	964 kg	1,018 kg	850 kg	896 kg	943 kg

# SOLITAIR 9+

## AN IMPRESSIVE LOOK

Both the seed hopper and the cover on the **Solitaïr 9+** boast a shiny new design. The plastic hopper cover fits tightly, but is easy to open thanks to the gas pressure shock absorber. The large opening angle of the cover makes it easy to

fill, even with big bags. The seed hopper is optionally available with a volume of up to 1,850 litres. This reduces set-up times and increases performance.





# PROVEN TECHNOLOGY SMARTLY MODERNISED



MORE ABOUT  
THE SOLITAIR 9+



## Electric drive

The **Solitaire 9+** with electric drive easily manages seed rates of between 0.5 and 500 kg/ha. The seed rate is conveniently adjusted from the tractor cab.

## ISOBUS functions

The combination of ISOBUS and Tramline Control allows tramlines to be freely created in fields. Sowing maps can be easily loaded onto the terminal via the agrirouter. This enables seeding rates to be metered specifically based on GPS location data. This ensures that the right seeding rate is always applied in the right place.

## Automatic section control

With the optional automatic section control, the **Solitaire 9+** can switch up to four width sections at the headland. This saves on seed and ensures that the entire field is sown without any gaps.



# EASY AND VERSATILE



**Optional radar sensor** for highly precise speed detection without any slippage.

## Pulse wheel

The pulse wheel runs in between two rows of seeds within the seed drill width, therefore always on pre-treated surfaces. As a result, the drive behaviour remains consistent. When the work is done, the pulse wheel folds in easily in a single manual move, without the need for tools.



## SOLITAIR 9+ TECHNICAL DATA

Row spacing	125 mm	125 mm	125 mm	150 mm	150 mm	150 mm
Working width (approx.)	300 cm	350 cm	400 cm	300 cm	350 cm	400 cm
Number of seeding coulters rows	24	28	32	20	23	27
Tank volume (approx.)	1.450 l (optional 1.850 l)	1.450 l (optional 1.850 l)	1.850 l	1.450 l (optional 1.850 l)	1.450 l (optional 1.850 l)	1.850 l
Weight (approx.)	1,041 kg	1,104 kg	1,158 kg	981 kg	1,035 kg	1,083 kg

SEED DRILLS | SOLITAIR 9+ DUO

# SOLITAIR 9+ DUO



# VERSATILE



## Hopper design

The 1,850-litre capacity of the hopper can be divided at either a 50:50 or a 60:40 ratio. Each side features its own fill level monitor as standard.

## Metering

Each side of the hopper is equipped with two metering rollers, which are driven independently of each other by their own electric motor.

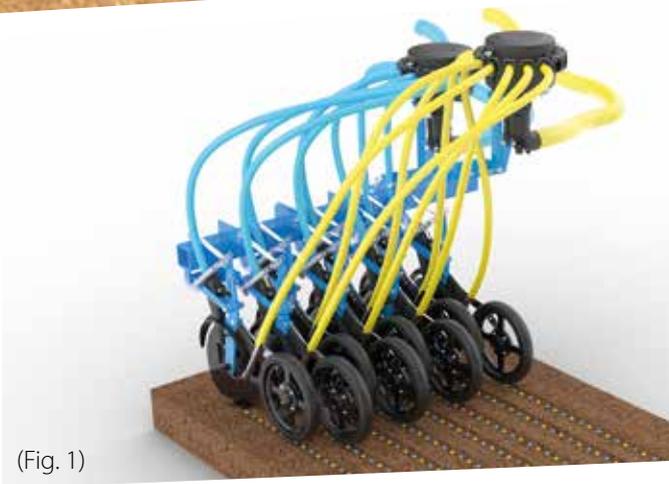


## Operation

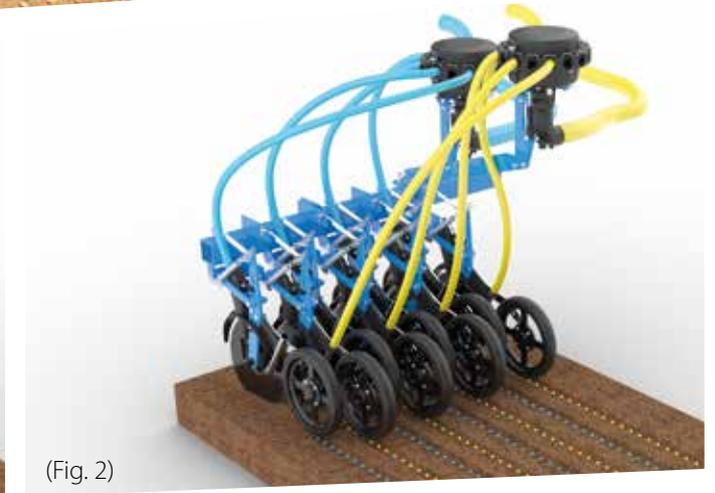
Operation is just as easy using a CCI terminal or via the tractor terminal – either shows all key information at a glance.



# DOUBLE-SHOT



(Fig. 1)



(Fig. 2)

## Double-Shot

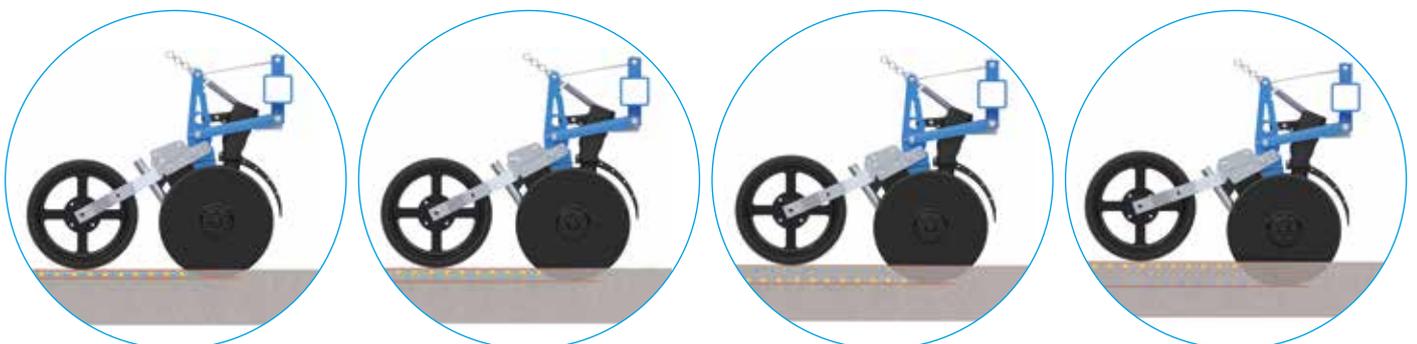
The double-shot version offers great flexibility in placing seeds. It allows two components to be applied either via a single seeding coulters (Fig. 1) or via separate seeding coulters (Fig. 2).

To be able to sow as shown in Fig. 2, only the distributor cartridges need to be exchanged. With this set-up, only every other row is supplied with the relevant component.



## Working depth coulters adjustments

With the double-shot version, the deposition depth of every other seed row can be adjusted up to 5 cm deeper. This ensures that seeds or fertiliser are always placed at the optimal depth.

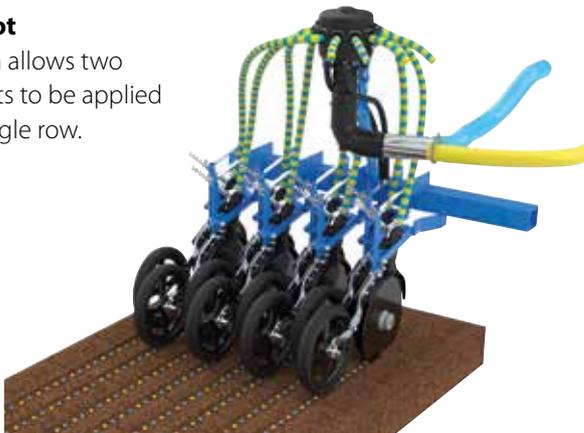


# SINGLE-SHOT



## Single-Shot

This version allows two components to be applied within a single row.



The two components are merged and mixed just upstream from the distributor.

## TECHNICAL SPECIFICATIONS

Row spacing	125 mm	125 mm	150 mm	167 mm
Working width (approx.)	300 cm	400 cm	300 cm	400 cm
Number of seeding coulters rows	24	32	20	24
Tank volume (approx.)	1,850	1,850	1,850	1,850

# WE'RE **HERE FOR YOU**

## **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:

18 convenient branches and external warehouses in Germany, our own sales companies and importers in over 50 countries, and of course, a great many well-educated sales advisers and service technicians at specialist agricultural machinery dealers.



### For high-quality original wear parts

Our LEMKEN original wear parts enable your LEMKEN implement to stay as it is: an original. Whichever machine you need a spare part for, we ensure that the original parts are always available for all LEMKEN implements. Not only in the short term, but for years to come.



### For a speedy supply of spare parts

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.

# SOWING SUCCESS!

SAPHIR 9





SOLITAIR 9+

**“Your eyes glance over the level seedbed. A new crop. Row after row. The end goal in sight. Foundations for a rich harvest. Success sown in record time.”**

When it comes to sowing, and therefore your harvest, pull out all the stops. LEMKEN drilling technology enables you to use both conventional and conservative tillage methods and rest assured that our seed drills will always meet your requirements. Why? Because: Our driving force: Your success!



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