# FERTILISER SPREADERS SPICA, TAURI AND POLARIS



### **CONTENTS Technology** Filling, calibration test and drainage Adjustment of rates and working widths FERTIWAY – working width adjustment 10 Spreading pattern 12 14 **Spica** Equipment overview 16 18 Spica 8 19 Border spreading Accessories 20 21 Technical data 22 24 Equipment overview Border spreading 26 27 TRIBORD 2D border spreader 28 Tauri 8 Operation 29 30 Tauri 12 Weighing system 31 32 Width section control 33 Operation 34 Accessories 35 Technical data **Polaris** 36 38 Equipment overview **EPSILON** spreader vanes 40 42 Assistance systems 43 Weighing system **TRIBORD 3D** border spreader 44 45 Operation **ECONOV** section control 46 50 Accessories Technical data 51 **Comparison of models** Fertilisation accounts for about a third of the operating costs in arable farming. That's why the technology used is all the more important to minimise losses and increase both efficacy and precision. Our five fertiliser spreader models in three performance ranges make your work easier and support you in reaching your goals. Experience Spica, Tauri and Polaris - fertilising precision in LEMKEN Blue. 2 SLEMKEN **ELEMKEN** 3



### Filling made easy

Whether straight from a big bag or a front loader bucket – with a tank width of over 2.20 metres, filling is as straightforward as can be. Never lose even a single grain or granule again.

### **Calibration testing in no time**

The feeder chute required for calibration is quick and easy to install without any need for tools. The bucket also needed for calibration testing can simply be attached to the chute. Everything is therefore at hand for supremely comfortable calibration.

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# A QUESTION OF ADJUSTMENT

### **APPLICATION QUANTITY**

### **Manual adjustment**

In our Spica 8 and Tauri 8 models, operators set the application quantity manually on the spreader. A clear scale allows the shutter to be adjusted with great precision down to the kilo.



### Speed-dependent adjustment

In the Tauri 12, Polaris 12 and Polaris 14 a weighing cell automatically adjusts the shutter opening dependent on speed to ensure that there is neither over-fertilisation nor under-fertilisation in any section. This guarantees reliably even application.



### **WORKING WIDTH**

### **Manual adjustment**

In all models except the Polaris 14, error-free, precise manual adjustment is supported by a clear, easy-to-read scale on the spreader.



### Automatic electronic adjustment

In the Polaris 14, the working width is adjusted fully automatically thanks to highly precise GPS tracking.



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## **FERTIWAY**

## WORKING WIDTH CONTROL THAT SETS NEW BENCHMARKS

Our sophisticated **FERTIWAY system** regulates the working width by changing the fertiliser drop point. This technology has two major advantages:

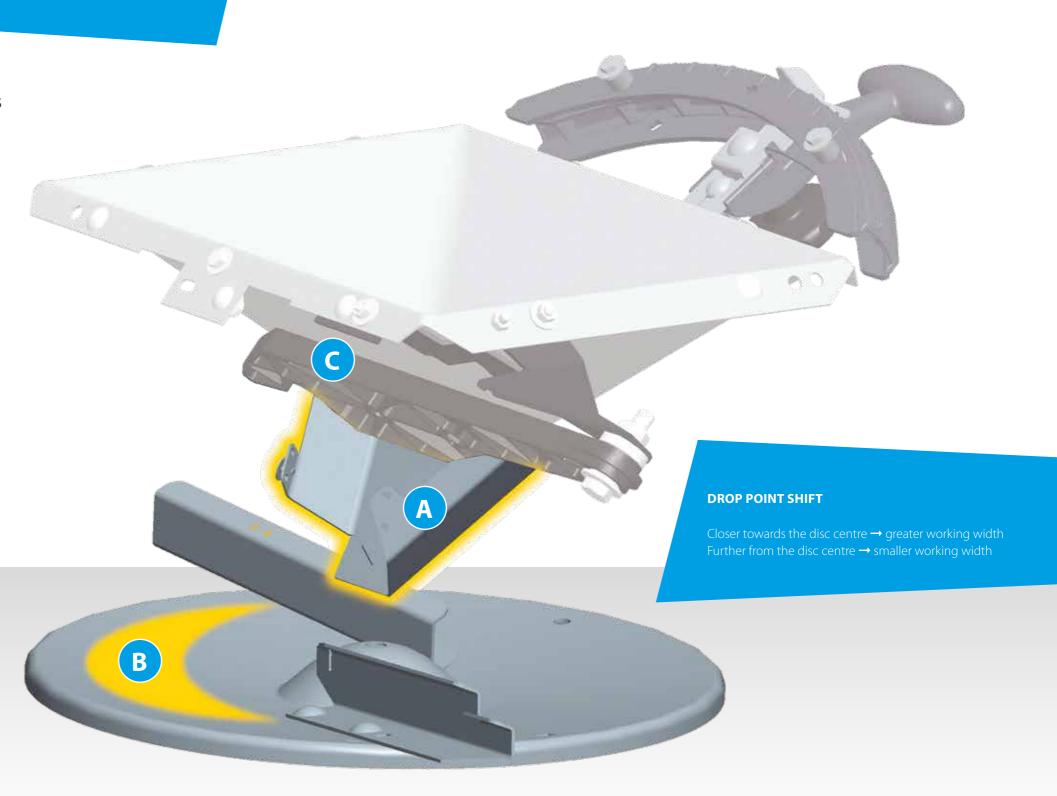
First, fertiliser granules remain intact without breakage. Second, granule abrasion is prevented.

### **A** Infinitely variable feeder

The inclined feeder supplies fertiliser precisely and directly to the spreader disc. The resulting "chute effect" slightly accelerates the fertiliser material.

### **B** Drop point

**C** The inclined shutter can be opened and closed instantaneously and ensures complete drainage, regardless of the weight still in the tank.



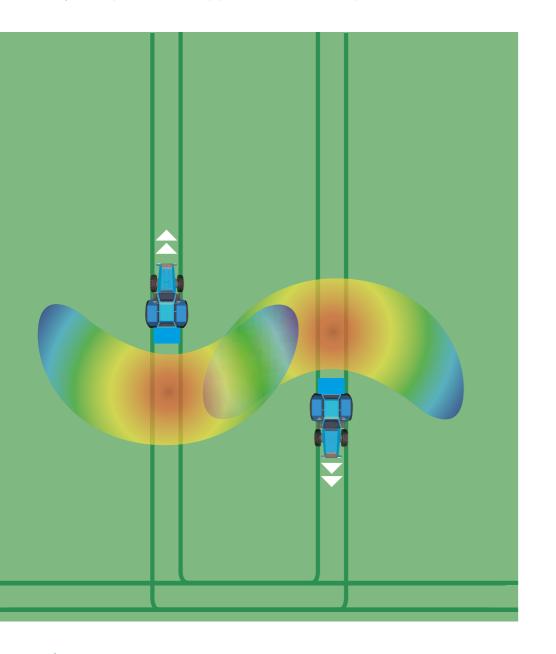
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## **SPREADING PATTERN** PERFECT DISTRIBUTION

### Overlap

Our **LEMKEN** fertiliser spreaders incorporate state-of-the-art technology to ensure optimal overlap between fertiliser layers and passes. This overlap produces a

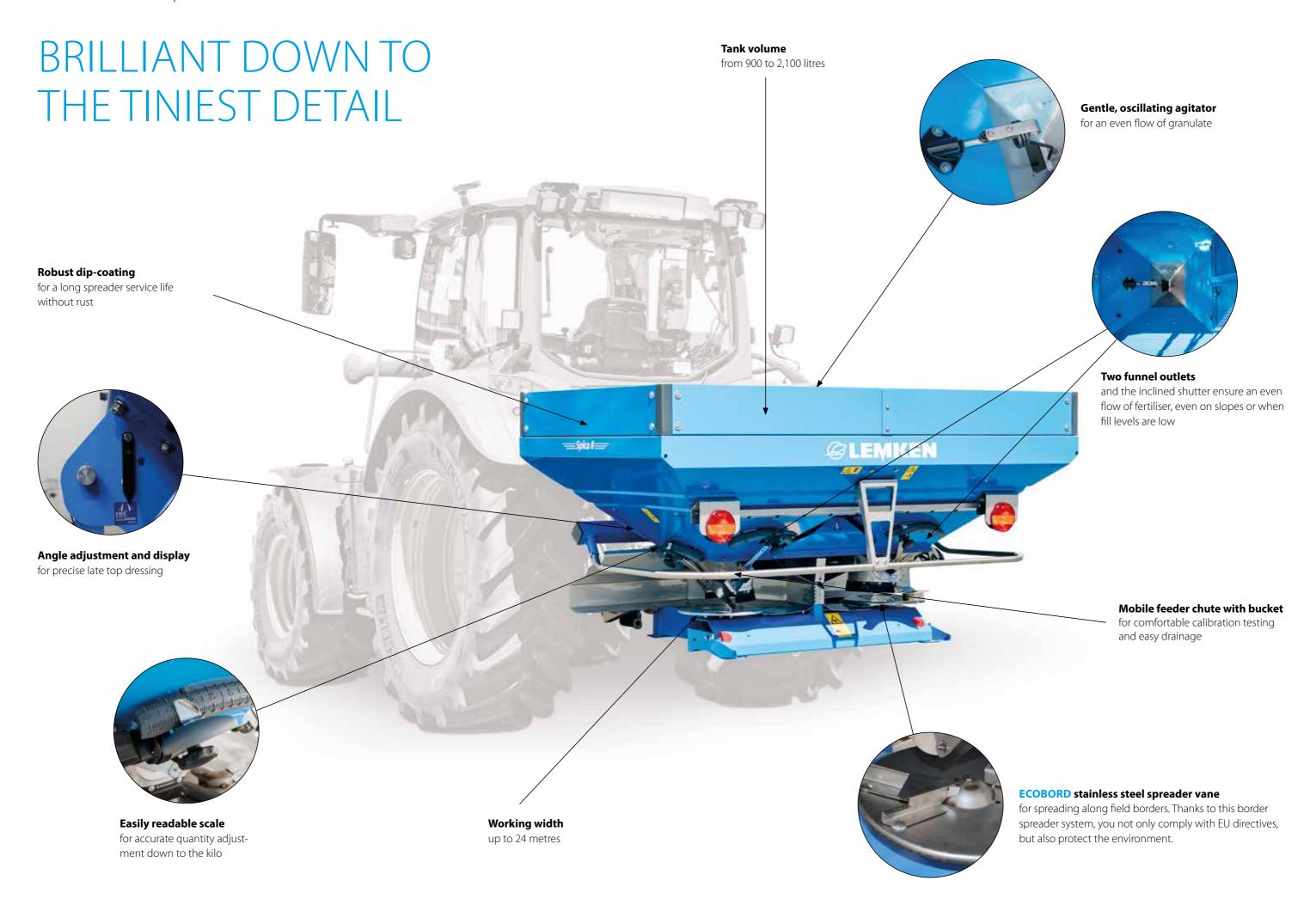
highly homogeneous spreading pattern. Thanks to sophisticated spreading technology, fertiliser is reliably and optimally distributed even with very large working widths of up to 50 metres.





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# THE SPICA 8 SPEED ON THE FIELD

With tank volumes from 900 to 2,100 litres and up to 24 metres working width, the **Spica** is ideal for smaller farming businesses, above all.

This implement was designed for making the handling of your fertiliser spreader

as easy as possible – and this goal was achieved through and through. Mounting, filling, adjusting – it only takes a few steps before you're all set to work on your fields. The operator controls the spreader remotely from the cab via intuitively assigned buttons. With a range of optional equipment from our wide range of accessories, the Spica leaves nothing to be desired in terms of operator comfort.

# **BORDER SPREADING**WITH EASE AND COMFORT



In the Spica 8, **ECOBORD** spreader vanes are used along borders to ensure that no fertiliser is applied beyond the field boundaries. These vanes are quick and easy to attach to the spreader discs without any special tools.



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# EVEN GREATER FUNCTIONALITY WITH GENUINE LEMKEN ACCESSORIES

**Calibration test kit** 

comprising a feeder chute, bucket and adjustment shutter

### Perfectly fitting tank lid

to keep your fertiliser reliably dry.





### **Application rate reduction**

to allow small volumes between three and 60 kilograms to be applied.



### Stands

for easy mounting and dismounting without any need for pallets.

### **SPICA 8 TECHNICAL DATA**

	Working width 9–18 m Working width 12–24 m				
Max. tank volume	900 litres	900 litres 1,500 litres 2,100 l			
Overall width	2.29 metres	2.29 metres			
Filling dimensions	1.23 x 2.21 metres	1.23 x 2.21 metres			
Filling height	0.91 metres	0.91 metres	1.32 metres		
Weight (approx.)	300 kg	300 kg 345 kg 385 l			
Load capacity	2,100 kg	2,100 kg			





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## **BORDER SPREADING** WITH EASE AND COMFORT

In the Tauri, **ECOBORD** spreader vanes are used along borders to ensure that no fertiliser is applied beyond the field boundaries. These form part of the standard equipment in both the Tauri 8

and Tauri 12. The spreader vanes are quick and easy to attach to the spreader discs without any special tools.

Your fertiliser spreader can optionally be equipped with the TRIBORD 2D

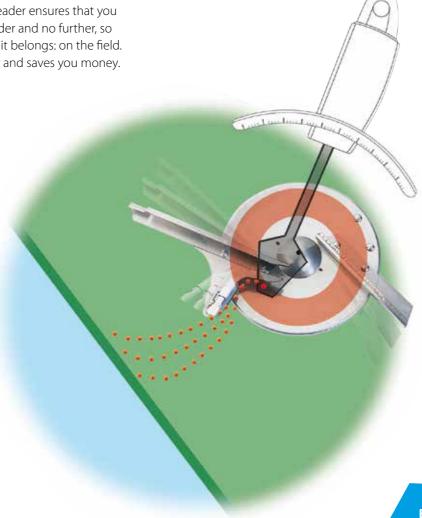
electrical border spreader system on the right-hand side, which allows you to switch between full-width spreading and border spreading from the comfort of the operator cab.



# **TRIBORD 2D** BORDER SPREADER SYSTEM

### **Precise borders**

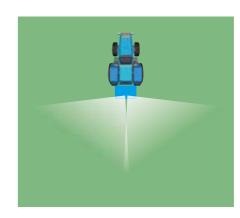
The **TRIBORD 2D** border spreader ensures that you spread exactly to the field border and no further, so that you apply fertiliser where it belongs: on the field. This protects the environment and saves you money.



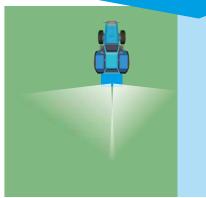
### Border spreader acc. to EN-13739-1

### **Spreading modes**

Our TRIBORD 2D border spreading system features two spreading modes: "full width" and "border spreading". The switch between full-width and border spreading is made easily from the comfort of the operator's cab. When switching from full-width to border spreading, the fertiliser drop point on the spreader disc is adjusted so that fertiliser is ejected from a special border spreading vane to shorten the spreading distance as required. This diversion is particularly gentle to granulate and effectively prevents granulate breakage.



**Full working width** 



**Border spreading** 

100% of fertiliser is supplied to the special border spreading vane.

# THE TAURI 8 GREATER EFFICACY

The **Tauri 8** impresses with a large loading volume of up to 3,000 litres. Extensions with a width of over 2.40 metres make filling the tank with granulate a breeze, as no fertiliser is lost even when

working with a wide front loader bucket. This implement delivers higher fertilising efficacy through large spreading distances of up to 36 metres in addition to a greater tank capacity.

# INTUITIVE OPERATION

The clearly designed remote control for the **Tauri 8** facilitates opening and closing the shutters and switching between fullwidth and border spreading mode.



# FERTILISER SPREADERS | TAURI 12 **THE TAURI 12** SIMPLY PRECISE With features including a weighing system, width section control and ISOBUS control, the **Tauri 12** ensures highly precise fertiliser application and makes operating this spreader extremely comfortable.

# WEIGHING SYSTEM PRECISE DOSING



### **Automatic weighing**

Continuous, automatic weighing during application ensures that fertiliser is applied consistently and evenly, even if the granulate flow properties change.



### Fertiliser savings of up to 10%

Often, farmers notice too late that they applied fertiliser at an incorrect rate, but LEMKEN's sophisticated weighing system makes such errors a thing of the past. The system prevents application losses of up to 10%, which can occur due to imprecise application technology.



# GPS-CONTROLLED SECTION CONTROL

### All good things come in sixes

In the Tauri 12, width sections are implemented automatically via the adjustment of the application quantity. The shutters can be opened and closed in four stages. The amount dispensed is then either 0% when the shutter is closed, 33% when it is in position 2, 66% when it is in position 3, or 100% of the application rate when the shutters are fully open. As a result, there are six width sections available.



# EASE OF OPERATION

### **Optimal preparation**

Whether you use one of the **LEMKEN** CCI terminals or any other **ISOBUS** terminal of your choice – **ISOBUS** preparation comes as standard. You can therefore simply connect your terminal and start driving.



# EVEN GREATER FUNCTIONALITY WITH GENUINE LEMKEN ACCESSORIES

### Perfectly fitting tank lid

to keep your fertiliser reliably dry.



### Separation plates

Stands

for crystalline fertiliser and grass seeds. These prevent compaction of material for spreading and ensure seamless application.

for easy mounting and dismounting

without any need for pallets.



### Calibration test kit

comprising a feeder chute, bucket and adjustment shutter.



### **TAURI 8 TECHNICAL DATA**

Working width	12–36 metres				
Max. tank volume	1,500 litres	2,150 litres	2,350 litres	3,000 litres	
Overall width	2.48 metres		2.98 metres		
Filling dimensions	1.23 x 2.40 metres		1.23 x 2.80 metres		
Filling height	1.06 metres 1.27 metres		1.29 metres	1.49 metres	
Weight (approx.)	305 kg	350 kg	355 kg	400 kg	
Load capacity	3,000 kg				

### **Application rate reduction**

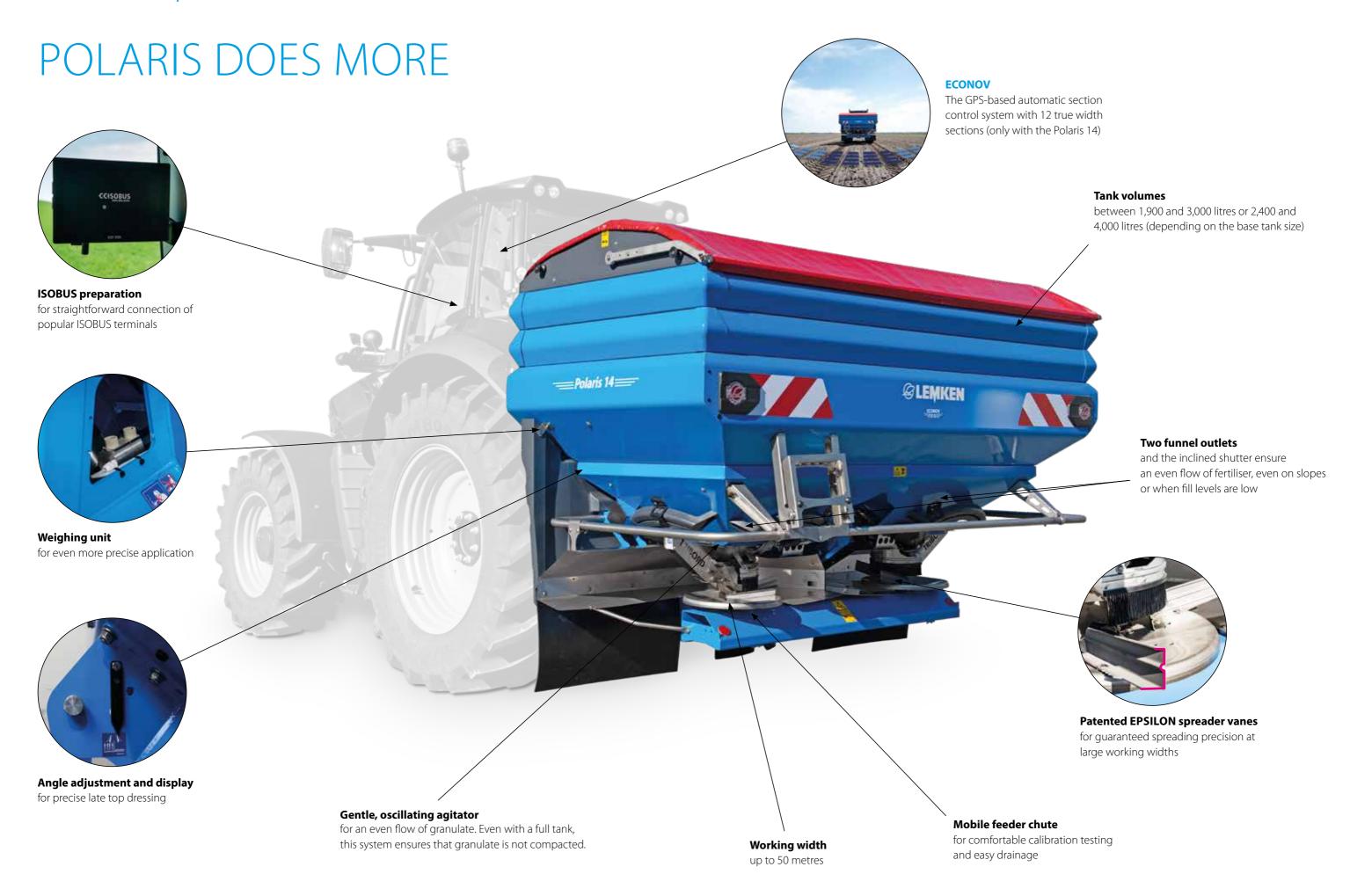
to allow small volumes between three and 60 kilograms to be applied.



### **TAURI 12 TECHNICAL DATA**

Working width	12-36 metres	12–36 metres					
Max. tank volume	1,500 litres	2,150 litres	2,350 litres	3,000 litres			
Overall width	2.48 metres		2.98 metres				
Filling dimensions	1.23 x 2.40 metres		1.23 x 2.80 metres				
Filling height	1.06 metres	1.27 metres	1.29 metres	1.49 metres			
Weight (approx.)	405 kg	450 kg	455 kg	500 kg			
Load capacity	3,000 kg						





## **EPSILON SPREADER VANES**

Where spreading precision is more than just a word.

The **EPSILON** system was developed to ensure that an even distribution is consistently maintained across very large working widths. The patented spreader vane shape delivers an even spreading

pattern, even when working across widths of up to 50 metres.

The double vanes, which are arranged in an epsilon shape, allow two fertiliser

streams to be applied one above the other. The resulting four fertiliser streams per spreader disc produce overlap and thus even distribution.





## **ASSISTANCE SYSTEMS**

"As much as necessary and as little as possible" – that's good – or even best – fertilising practice. And our smart assistance systems make this easy to implement. You drive, and the spreader does the rest. Two examples: Your Polaris features a weighing system as stan-

dard, which ensures greater application precision. The Polaris standard equipment also includes the **TRIBORD 3D** border spreader system, which allows you to finely control fertiliser application along borders from the comfort of the operator's cab. **ECONOV** width section

control, which is part of the standard equipment in the Polaris 14, automatically adjusts both application quantities and working widths based on GPS data. As a result, farming 4.0 is no longer a mere promise, but becomes solid reality on your fields.



## WEIGHING SYSTEM





### Saves time and fertiliser

The robust weighing frame with integrated pin combines maximum reliability with superior precision.

### Automatic weighing

No more endless weighing testing. Continuous, automatic weighing during application ensures that fertiliser is applied consistently and evenly, even if the granulate flow properties change.

### Fertiliser savings of up to 10%

Often, farmers notice too late that they applied fertiliser at an incorrect rate, and imprecise application technology can often cause spreading losses of up to 10%. This is where our sophisticated weighing system comes in.

### Consistent application even on slopes

The integrated inclination sensor automatically adjusts for measurement errors resulting from uneven weight shifts when working on slopes.

### How does the weighing system work?

The weighing sensor with inclination detection measures the weight reduction caused by fertiliser outflow. The job computer aggregates this parameter with the distance travelled and the set working width so that the application rate can be calculated precisely.

The current tank fill level is displayed directly in the cab to ensure you have all the information you need at a glance.

# TRIBORD 3D BORDER SPREADER SYSTEM

### Precisely to the border

Whether along waterways, paths or adjacent crops – the **TRIBORD 3D** border spreader allows you to apply fertiliser granulate with superior control. Your Polaris is optionally also available with a border spreader system on the left

side, allowing you to move around your fields in any direction while spreading precisely even with difficult field contours.

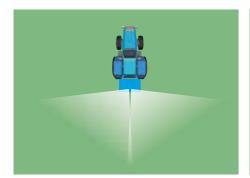
### Spreading modes

Three different spreading modes can be

set comfortably from the tractor cab.

Depending on the selected mode, the special border spreader vane is supplied with more or less fertiliser via an electric actuating cylinder, and the application angle is adjusted accordingly.



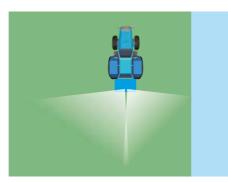


### Full working width



## Yield-oriented border spreading

100% of the material is spread up to two metres from the field border. Use: along field borders to adjacent crops



## Environmental border spreading

100% of fertiliser is supplied to the special border spreading vane. Use: along field borders to waterways or paths

# EASE OF OPERATION

-C-CISOBUS



### **Full control with your CCI terminal**

The **CCI-1200 ISOBUS** terminal: superior technology, delivered via a sophisticated 12.1" widescreen display with multi-touch operation at smartphone level. The terminal layout is flexible, allowing it to be used in both landscape and portrait mode to ensure that your CCI-1200 always shows all the information you need at a glance.

The display can additionally be split to show several applications at the same time. Implement controls can, for example, be displayed together with a map for GPS-based width section control.



The new **CCI-800 ISOBUS** terminal offers the same level of functionalities as the CCI-1200 terminal, but in a more compact size.



### Optimal preparation – with the Polaris 12

The Polaris 12 features ISOBUS control as standard, just like its "bigger brother".

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-CCI 800

# **ECONOV**

From the outside towards the

centre, and from the centre

towards outside!

# **ECONOV** AUTOMATIC WIDTH SECTION CONTROL

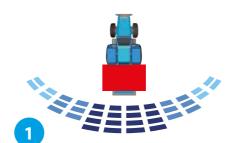
Our GPS-based **ECONOV** section control system not only takes a lot of strain off operators, but also protects the environment and helps you save operating costs. **ECONOV** switches the 12 cres-

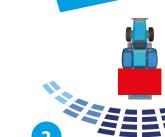
cent-shaped width sections on and off fully automatically at the headland or field edge as soon as there is any risk of unwanted overlaps or application gaps. **ECONOV** thus ensures that there is

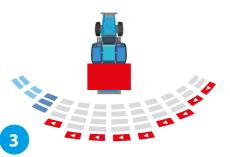
neither over-fertilisation nor under-fertilisation in any field sections. This also minimises the risk of lodging in the crops, and the more efficient use of materials supports savings of at least 6%.

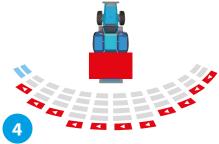
## PRECISE DISTRIBUTION ACROSS 12 SECTIONS

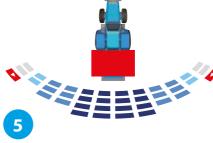
Individual width sections can be switched on or off both from the outside towards the centre, and from the centre towards the outside. This technology, which is unique on the market, ensures supremely effective application.

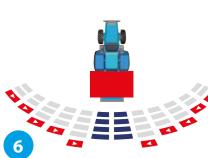














- 2 As the working width gets smaller, e.g. during the last pass, width sections are automatically closed in keeping with the width that still needs to be spread (here: 3 closed width sections on the right-hand
- side are closed, and those on the lefthand side are gradually closed from the

- 4 Towards the end of spreading work in wedge-shaped fields, only one width section on the very outside remains open.
- **5** When the machine reaches a straight headland, the width sections are gradually closed from the outside towards the centre to reflect the actual, CRESCENT-SHA-PED spreading pattern.
- 6 On straight headlands, only the two width sections in the centre remain open before all sections are closed. This ensures maximum precision when spreading in a crescent pattern.



and 12 open width sections). 3 The width sections on the right-hand centre towards the outside.

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## **PRECISION FARMING**

## WITH ECONOV

Precise. More precise. **ECONOV** 

With our innovative **ECONOV**, precision farming becomes reality. The application quantity can be adjusted independently on both sides, as the left and right gates are operated separately. Combined with a DGPS signal and an **ISOBUS** TaskController GEO, application maps can be implemented with outstanding precision. Different application rates can be implemented for the right and left of the spreader. That's what we call needs-based fertilisation.



# EVEN GREATER FUNCTIONALITY WITH GENUINE LEMKEN ACCESSORIES



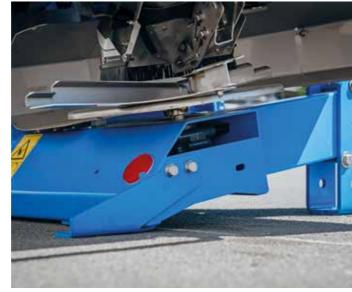
**Hydraulic drive** for constant disc speeds even on slopes



**Roller tarp** available in a mechanical or hydraulic version



**Calibration test kit** comprising a feeder chute, bucket and adjustment shutter



**Stands**for easy mounting and dismounting without any need for pallets.



**Hydraulically lowerable border deflector**for spreading across half working widths



**Folding step** for comfortable tank inspection

### **POLARIS 12 TECHNICAL DATA**

Working width	12–44 m					
Max. tank volume	1,900	2,500	3,000 l			
Overall width	2.7	2.98 m				
Filling dimensions	1.17 x 2.3	1.17 x 2.81 metres				
Filling height	1.23 m	1.41 m	1.52 m			
Weight (approx.)	540 kg	557 kg	585 kg			
Load capacity	3,000 kg					

### **POLARIS 14 TECHNICAL DATA**

	Worl	king width 12–4	44 m	Working width 12–50 m			
Max. tank volume	1,900   2,500		3,000 l	2,400	2,400   3,200		
Overall width	2.70	) m	2.98 m	2.98 m			
Filling dimensions	1.17 x 2.31 metres		1.17 x 2.81 metres	1.32 x 2.81 metres			
Filling height	1.23 m 1.41 m		1.52 m	1.26 m 1.44 m		1.62 m	
Weight (approx.)	540 kg 557 kg		585 kg	670 kg 705 kg 730		730 kg	
Load capacity	3,000 kg			4,000 kg			

# MODEL COMPARISON

	Model	Max. spreading width in m	Max. tank size in l	ISOBUS	Weighing unit	Working width adjustment	Quantity adjustment	Section control	Border spreading	Precision farming with application maps
	SPICA 8	18 /24	900 / 2100	not available	not available	manual	manual	-	Via ECOBORD spreader vane (optional): TRIBORD 2D	-
C. C	TAURI 8	36	3000	not available	not available	manual	manual	-	Via ECOBORD spreader vane (optional): TRIBORD 2D	_
	TAURI 12	36	3000	optional	yes	manual	automatic, speed-dependent	6 width sections by regulating the application quantity	Via ECOBORD spreader vane (optional): TRIBORD 2D	<b>√</b>
	POLARIS 12	44	3000	optional	yes	manual	automatic, speed-dependent	2 width sections by regulating the application quantity	TRIBORD 3D	<b>√</b>
	POLARIS 14	44	3000	standard	yes	automatic, via ECONOV	automatic, speed-dependent	ECONOV 12 width sections	TRIBORD 3D	<b>√</b>
	POLARIS 14	50	4000	standard	yes	automatic, via ECONOV	automatic, speed-dependent	ECONOV 12 width sections	TRIBORD 3D	<b>√</b>



