



AMAZONE



Mounted spreader **ZA-TS 01**
AutoSpread



A new era in fertilisation: The self-adjusting fertiliser spreader



GPS-Switch



WindControl



Argus

EasyCheck



Headland-
Control

CurveControl



EasyMix



EasyMatch



ZA-TS 01 with
AutoSpread

AutoSpread – automatic adjustment of the spreader through measurement of the actual spread pattern for a new level of precision

TS spreading unit – featuring every functionality for intelligent, effective fertilisation

CurveControl – curve compensation

New border spreading – variably adjustable distance to the boundary

TS *The
Spreader*
LEADER OF INNOVATION

ZA-TS 01 mounted spreader with AutoSpread



PRODUCT FILM
ZA-TS 01 with AutoSpread



PRODUCT FILM
AutoSpread



MORE INFORMATION
www.amazone.net/za-ts-01



15 m – 54 m

4,200 l
to 5,000 l

128 part-width sections

Autonomous
spreader adjustment

ZA-TS 01 AutoSpread – the self-adjusting spreader

With the new ZA-TS 01, AMAZONE is offering a technology which revolutionises fertiliser spreading. The unique AutoSpread feature sets new standards in precision and automation. An autonomous solution for optimum fertiliser distribution has now been realised for the first time. AutoSpread monitors the actual spread pattern of the fertiliser and automatically adjusts the spreader settings to achieve optimum distribution.



PRECISION

Precise!

- ✔ Automatic adjustment of the spreader through measurement of the actual spread pattern
- ✔ Permanent optimisation of all spreading scenarios
- ✔ CurveControl for curve compensation



INTELLIGENCE

Intelligent!

- ✔ Continuous validation of the spread pattern quality through intelligent online connectivity
- ✔ Warning about incorrect or defective spreading vanes
- ✔ New border spreading: set the distance to the border and drive off



RELIABILITY

Safe!

- ✔ No misadjustment possible
- ✔ Overall reliability thanks to detailed evaluation of the fertiliser application process in the AmaConnect data platform
- ✔ The central mySpreader App simplifies operation and centralises all spreading information

AutoSpread – with an all-around view for autonomy and precision

The challenge

The global fertiliser market is characterised by a growing product diversity and an increasing heterogeneity in fertiliser types and fertiliser batches, which further increases the complexity for farmers. Incorrect spreader settings can lead to uneven distribution of the fertiliser, which in turn results in reduced yields and loss of quality.

State-of-the-art

Although existing systems like ArgusTwin enable the measurement of the throwing direction, they lack the "view behind". The actual throwing width of the fertiliser remains unknown. The throwing width can only be determined in the laboratory, yet it is essential for all spreading situations in the field.

Solution

AutoSpread: the ZA-TS 01 self-adjusting fertiliser spreader. Through continuous measurement of the actual spread pattern, all spreading parameters in the field are automatically adjusted and validated by AI-based algorithms. Fertiliser distribution is optimised, costs reduced and environmental pollution avoided.



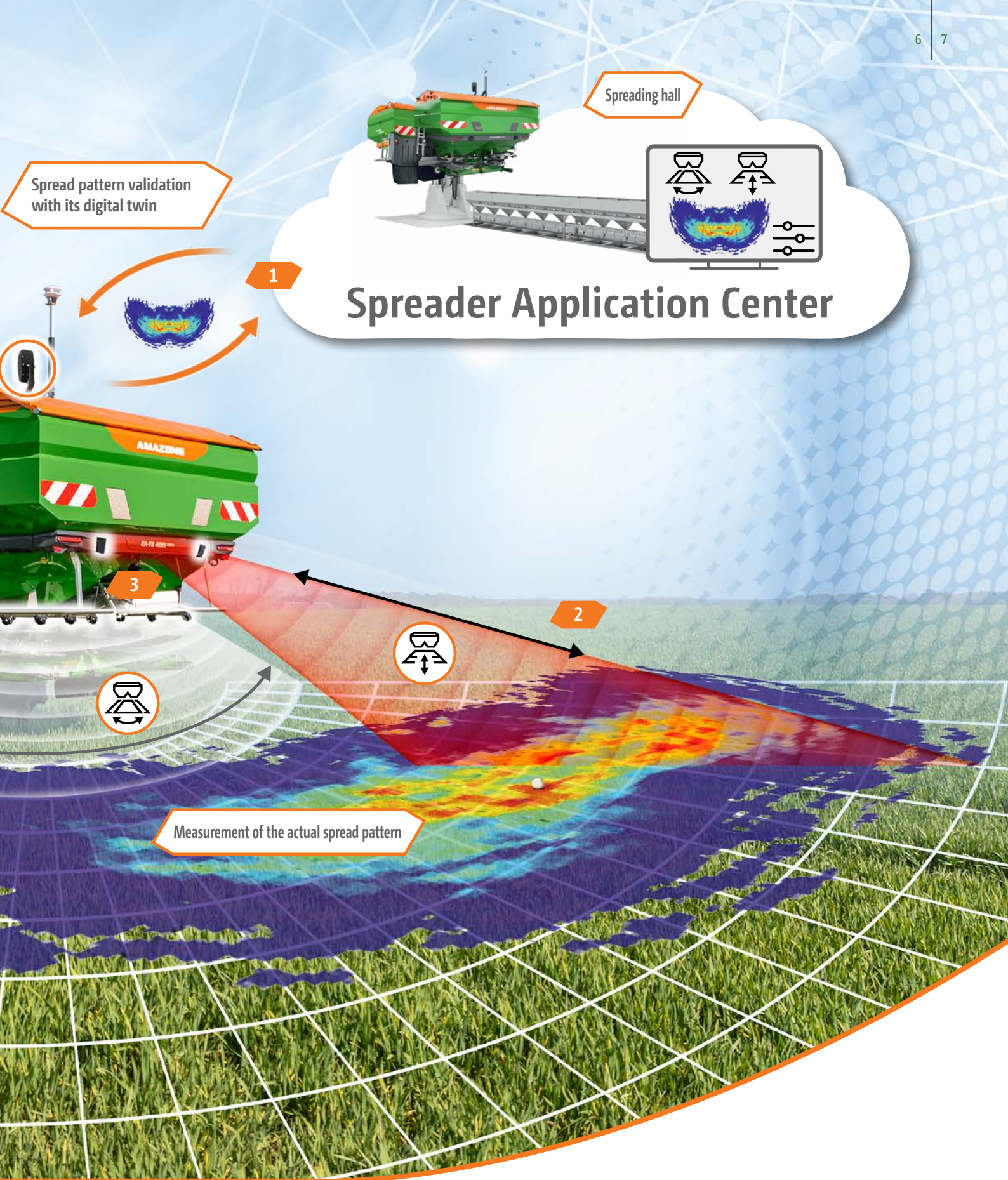
How AutoSpread works

1

Synchronisation of the setting parameters with the spreading hall via the AmaConnect Unit – transfer of its digital twin

2

Continuous analysis of the actual spread pattern based on the throwing width and throwing direction – the spreader becomes a "mobile spreading hall."

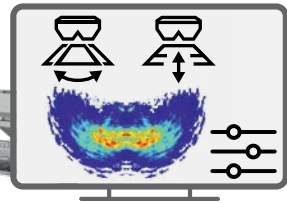


Spreading hall

Spread pattern validation with its digital twin

1

Spreader Application Center



3

2

Measurement of the actual spread pattern

3

Autonomous control of the machine's setting parameters – the self-adjusting spreader

4

Continuous validation of the machine's setting parameters with automatic monitoring and display of the spreading quality

Permanent optimisation of all spreading scenarios

Whereas innovative solutions such as HeadlandControl, WindControl (according to Prof. Dr. Karl Wild of the University of Applied Sciences, Dresden) or Section Control used to be individual solutions, they are now optimally integrated via AutoSpread for the first time.

For example, in the case of Section Control, AutoSpread automatically determines the actual switch-on and switch-off points or adapts the WindControl wind sensor settings to match the actual flight characteristics in the field. In combination with the new border spreading system, distribution is also optimised in the field boundary area.

With AutoSpread, all these systems are more accurate than ever before and all areas of the field are fertilised in the best way possible.



The challenge:
Wind influence during the spreading season

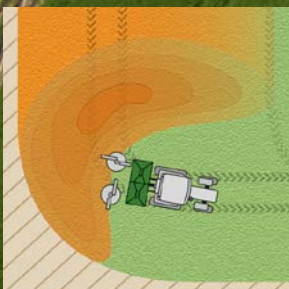
Solution: WindControl
Compensation for the influence of wind on lateral distribution

✔ Optimised with AutoSpread

The challenge:
Uniform distribution around bends

Solution: CurveControl
Optimal lateral distribution even around bends

✔ Optimised with AutoSpread





The challenge:
The correct spreader setting

Solution: Normal spreading in the field
Optimal spreader settings even with heterogeneous fertiliser qualities

✔ Optimised with AutoSpread

The challenge:
Correct switch points for each type of fertiliser

Solution: Section Control and HeadlandControl
Uniform yield on the headlands thanks to parabolic switching of the part-width sections and wider spreading around the headland

✔ Optimised with AutoSpread

The challenge:
Exact distribution right up to the boundary

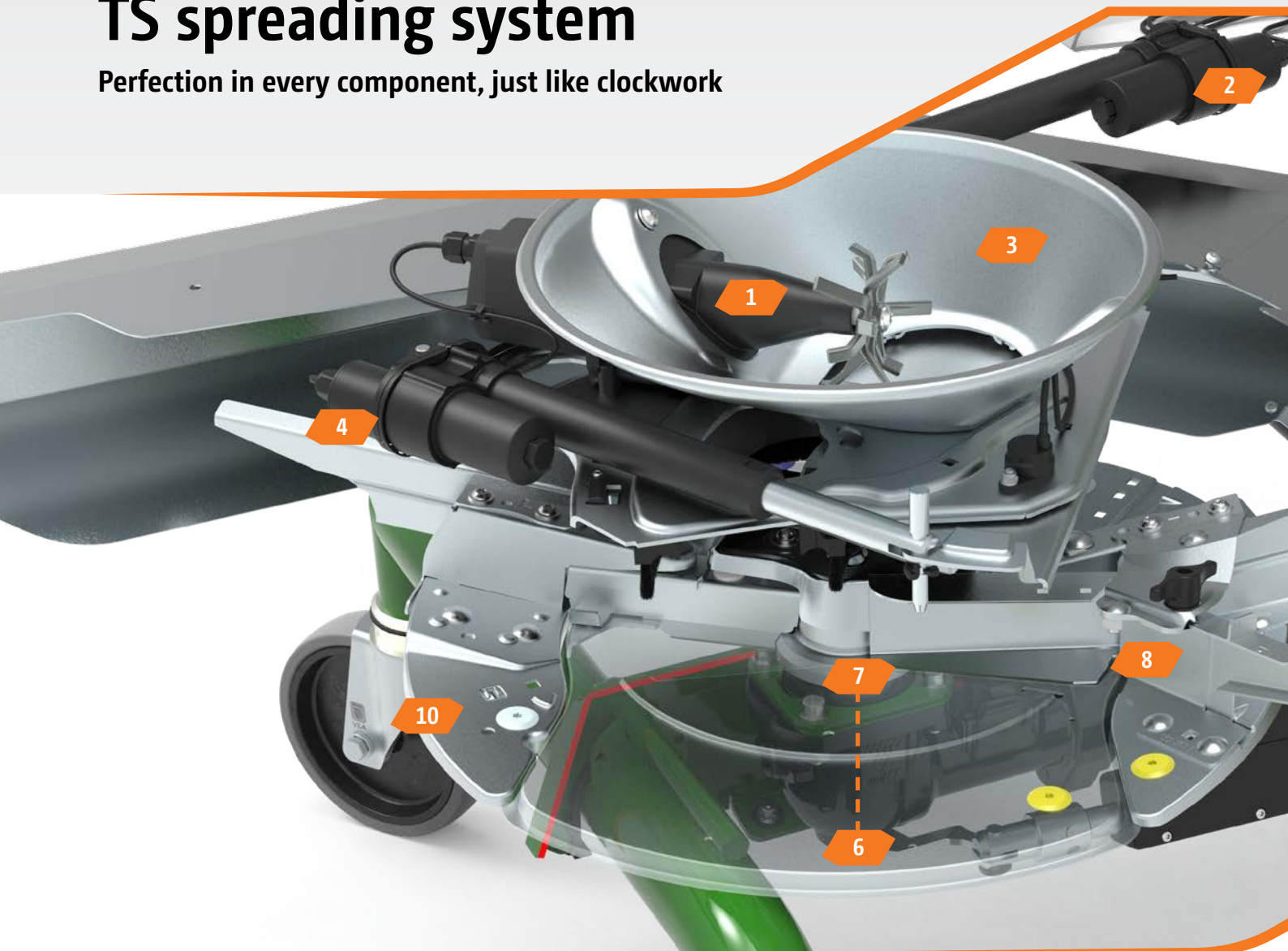
Solution: Border spreading with AutoTS and BorderTS
Higher yields thanks to precise border spreading systems

✔ Optimised with AutoSpread

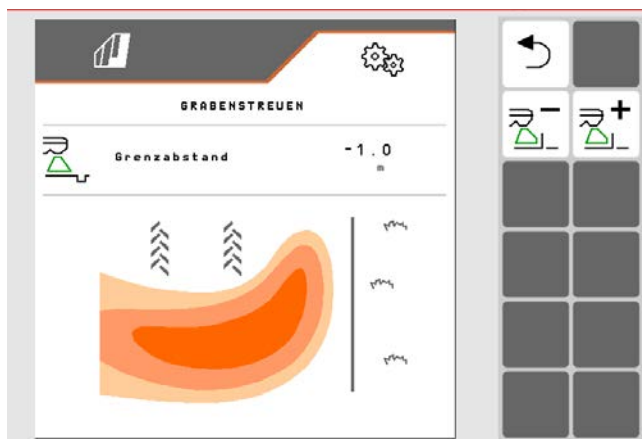


TS spreading system

Perfection in every component, just like clockwork



Border spreading is newly thought-through – simply enter the distance to the field boundary and drive off



The spreader automatically calculates the correct settings for the desired distance to the border and optimally synchronises the parameters. In addition, the delivery point is now also included in the settings. This enabled further optimisation of the border spread patterns, which were already very good.

The benefits

- ✔ Simple operation: set the distance to the field boundary and drive off – optimised border spread patterns and individually adjustable distance to the boundary
- ✔ Complete integration of the BorderTS border spreading system into machine operation
- ✔ Complete and accurate documentation during border spreading – records the actual working widths



Delivery system adjustment of the TS spreading system

- 1) Intelligent agitator for maximum fertiliser protection
- 2) Electric actuator for rotating the delivery system
- 3) Delivery system for implementing Section Control and HeadlandControl, WindControl and AutoSpread functions

Bottom assembly of the TS spreading system

- 4) Electric actuator for precise fertiliser metering at application rates from 3 kg/min to 650 kg/min
- 5) Electric actuator for adjusting the carrier vane
- 6) AutoTS gearbox, the heart of the integrated border spreading system
- 7) Comfortable changeover between border and normal spreading by moving the carrier vane
- 8) Short spreading vanes for side, border spreading and water course spreading
- 9) Long normal spreading vanes for wide throwing widths and double overlap, even at a working width of 36 m

TS spreading disc

- 10) TS stainless steel spreading disc, with only 3 easily interchangeable spreading vane sets: TS 10 HD, TS 20 HD and TS 30 HD for working widths from 15 to 54 m

CurveControl – compensation when cornering

CurveControl adjusts the lateral distribution to the various cornering speeds and corrects the movement of the spread pattern when driving around bends.

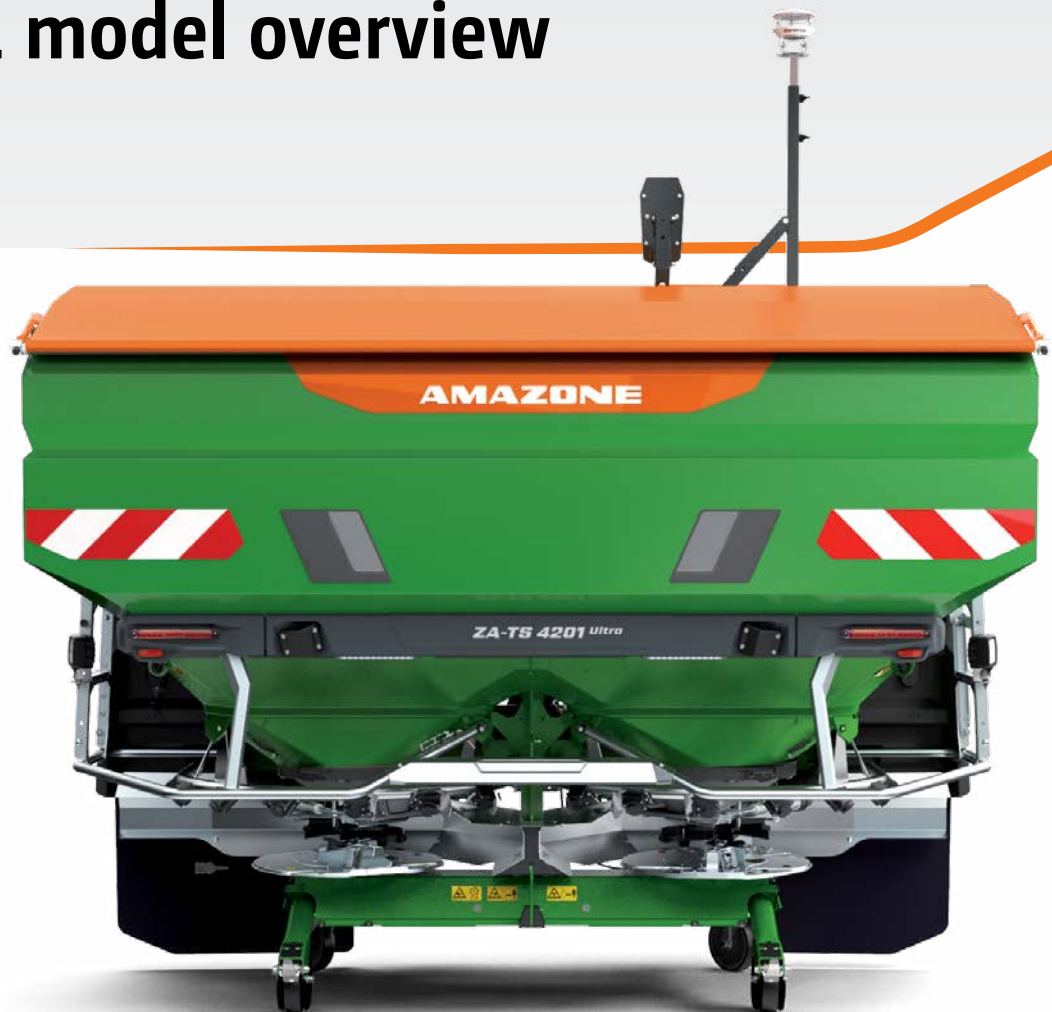
The benefits

- ✔ Precise fertiliser application, even around curves, thanks to CurveControl
- ✔ No swinging out of the spreading pattern beyond the boundary
- ✔ Accurate documentation in the map view of the area worked, for more reliable Section Control* operation

*only in conjunction with AmaTron 4



ZA-TS 01 model overview



ZA-TS 4201 Ultra with AutoSpread

Practical features for easy working

The ZA-TS 01 mounted spreaders can be equipped with a hydraulic roll-over cover. The hopper cover can be opened and closed very conveniently and easily from the tractor cab.

The mobile EasyCheck test kit now fits neatly into the integrated transport boxes. There is no need for cumbersome transport in the tractor cab.





ZA-TS 5001 Ultra with AutoSpread

Technical data:

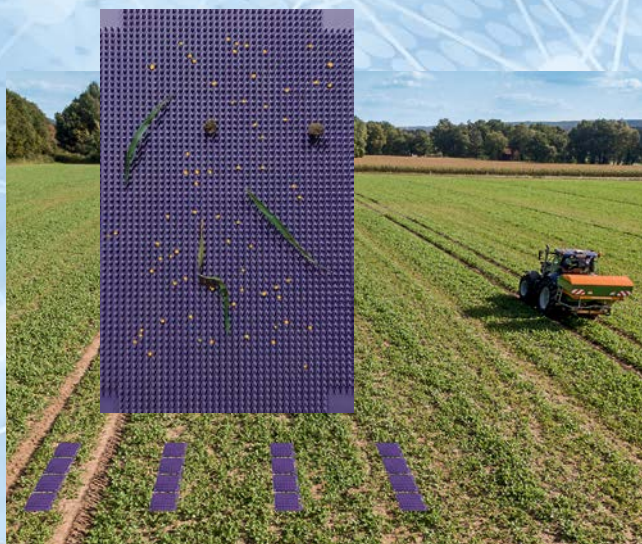
Model	ZA-TS 4201 Ultra	ZA-TS 5001 Ultra
Working width (m)	15–54	
Hopper capacity (l)	4,200	5,000
Payload (kg)	4,500	
Filling height (m)	1.76	1.96
Overall width (m)	2.92	
Min. weight (kg, with TS 20 HD spreading vane set)	685	730

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.



Networking with the digital twin

The cloud-based data platform AmaConnect enables the storage and analysis of work and telemetry data from the connected ZA-TS 01, collected and transmitted during operation via the AmaConnect Unit.



mySpreader App for optimising all fertiliser spreaders

mySpreader app:

- ✔ A single App for all spreader settings
- ✔ The entire fertiliser database at your fingertips
- ✔ Clear and intuitive to use

EasyCheck:

- ✔ Simple optimisation of the lateral distribution using artificial intelligence
- ✔ Practical application thanks to 16 easy-to-handle mats

EasyMix:

- ✔ Intelligent adjustment and evaluation of blended fertilisers
- ✔ Also possible in combination with AutoSpread



The **mySpreader** App for all
AMAZONE fertiliser spreaders



The AmaConnect Unit collects and transmits working data to the AmaConnect data platform

Similarly, its digital twin is automatically transmitted to the spreader in the field through the online connection to the AMAZONE spreading hall (SAC). The actual collected data is compared with the known spread patterns of its digital twin using an AI-supported algorithm and is permanently validated in real time. Incorrect fertiliser settings are reliably detected and the spread pattern is perfectly adjusted. Thanks to the intelligent connection, this is also possible offline in the event of a network failure, so reception problems in the field are not a problem.

The advantages you gain with AmaConnect:

- ✔ Overall peace of mind thanks to detailed evaluation of the fertiliser application processes
- ✔ Simple automation, application monitoring and quality assurance

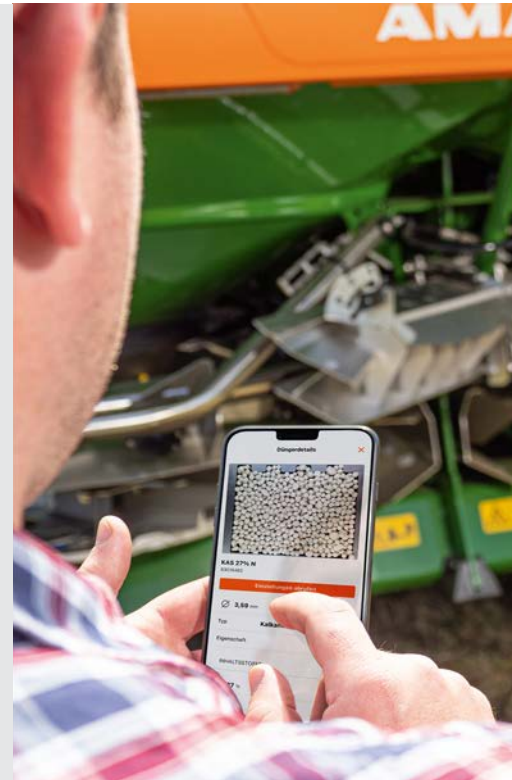
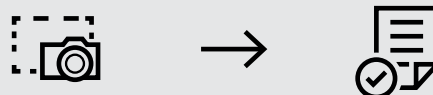


Order your EasyMatch template now from your local sales partner and use it free of charge with all fertiliser spreaders – whether old or new!



EasyMatch

Fertiliser identification using AI
Setting recommendations at the touch of a button



The central challenge with fertiliser spreaders has always been getting the correct setting. Finding the right fertiliser in the extensive setting charts is often difficult. The ZA-TS 01 with AutoSpread adjusts itself automatically – however, configuring other AMAZONE fertiliser spreaders can now be easily achieved with EasyMatch. The AI-based EasyMatch recognition system features an intuitive selection guide for unknown products based on photos. Using artificial intelligence, the system analyses the core properties such

as the granule size, shape and structure of the fertiliser and generates an overview of matching fertilisers at the touch of a button. The result is a quick and comfortable set-up - for every AMAZONE spreader. This saves time, simplifies the setting process and improves fertilisation efficiency. All new machines come with the EasyMatch template. The template for existing spreaders, can be ordered from the fan shop or via the spare parts warehouse.

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.



AMAZONEN-WERKE H. DREYER SE & Co. KG
P. O. Box 51 · 49202 Hasbergen-Gaste/Germany
Phone +49 (0)5405 501-0 · Fax +49 (0)5405 501-193