

# Every kilo counts

“The result is a more even application and crucially – with today’s high fertiliser prices – a saving in product applied.”

## Fertiliser spreaders

As the fertiliser market records its highest ever prices, precision spreaders are likely to play an even more vital role in maximising the potential of every kilo available. *CPM* examines the current outlook and some of the latest launches on the market.

By Charlotte Cunningham

Fertiliser has been in the headlines for all the wrong reasons lately — with prices of ammonium nitrate and urea more than doubling over the past year.

For those who didn’t secure supplies earlier in the season, arguably cheaper, there’s no doubt that there will be difficult decisions in the spring over rates — with some growers likely to face no other option than to cut back significantly.

And while this is an understandable eventuality, Tim Kerr — crop nutrition manager at Hutchinsons — warns that

doing so mustn’t compromise yield potential. However, he adds that there are a number of ways growers can mitigate the impact of reduced nitrogen supplies and maximise what’s available.

### Nitrogen rates

“We’ve seen a polarisation of the market between farmers who were lucky enough to secure supplies at lower prices and will therefore manage crops as normal by pushing for yield and quality, versus those facing much higher prices who may only buy 60-70% of their normal requirement to save costs.

“Those in the latter category will have to consider optimum N rates very carefully and talk to their agronomist before making any final decisions.”

According to Tim, there are four ways growers can get the most from nitrogen fertiliser this season.

If rates of applied fertiliser are to be cut, then ensuring crops can capture and utilise what is already in the soil will be fundamental to reducing any impact on yield, says Tim.

Though a lot of this work will have already been done in the autumn with practices like sowing into good conditions and using targeted seedbed fertiliser to boost P, K and Mg if necessary, where it’s

not been possible to apply a seedbed starter fertiliser. Tim says phosphite biostimulants can also help by stimulating early root development. “These are normally applied as a split dose, with one in the autumn at GS12 and a second in spring at GS30.”

Given that the nitrogen use efficiency (NUE) of granular fertilisers can be relatively low in dry springs, more farmers ▶



Ensuring spreaders are calibrated is essential for performance and accuracy – particularly in a difficult season, says Tim Kerr.



# Fertiliser spreaders



*EasySet 2 ensures a consistently precise spread pattern and increases work rates by being able to vary the forward speed.*

## JUWEL 10 – THE POWERFUL MOUNTED REVERSIBLE PLOUGH FOR THE TOUGHEST CONDITIONS



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► are turning to foliar nitrogen within their fertiliser strategies and Tim believes it's something worth considering this spring.

"Applying nutrients directly to leaves facilitates much more efficient plant uptake than is possible from surface-applied fertilisers taken in via roots, and crucially doesn't rely on soil conditions. Therefore, more of every kg applied is utilised by plants, allowing total rates to be reduced compared with granular fertilisers," he says.

"The NUE of some foliar N products is as close to 100% as you can get, so there's a good chance that you could make up much or all of any reduction in applications of less efficient granular nitrogen fertiliser."

Understanding how much nitrogen is in the soil is vital for maximising NUE, so growers should plan to carry out soil mineral nitrogen (SMN) tests at the beginning of the year so that nitrogen rates can be tailored accordingly, reckons Tim.

Accurate spreader calibration is important in any season, but it could take on added significance where growers buy in fertiliser products that are different to their usual supplies, notes Tim.

"The quality of some imported fertiliser products may not be of the same standard that farmers have become accustomed to, so it's vital to check spreader performance and accuracy, especially when applying over larger working widths," he says.

On the machinery front, there are several new launches within the fertiliser spreader segment which could help growers maximise the accuracy of their applications.

### Kuhn

The Aero GT 60.1 is the latest addition to Kuhn's fleet of fertiliser spreaders and is available in 30, 32 and 36m options.

According to Kuhn, the Aero GT replaces the AGT 6036, with upgrades on its predecessor including a significant 25% increase in the maximum application rate, greater precision in section control, and improvements in the control unit, calibration, and maintenance, explains the firm's Duncan McLeish.

"Higher application rates are possible due to increased mass flow characteristics brought about by a bigger air intake and larger capacity pipes," he explains. "For example, when spreading urea to 36m, application rates of up to 320kg/ha are possible for the Aero GT when travelling at 15kph, compared with



250kg/ha from the AGT. "

A new metering system on the Aero GT incorporates six individual units that can be shut off independently when using automatic section control, adds Duncan. "When used in combination with a variable rate map, each individual unit can also apply a different fertiliser rate.

"The possibility of applying a different application rate every 6m across the width of the machine is ideally suited to those farmers who are looking to maximize the control of their inputs."

An upgrade in the Aero GT's control unit compared with the AGT creates greater compatibilities with ISOBUS terminals. The Aero GT can be controlled by the CCI 800 or CCI 1200, or the tractor's own ISOBUS terminal.

Other improvements include improved kinematics, with calibration being significantly simpler for the operator. In addition, the fan units are fitted with maintenance-free bearings and the material thickness has been increased on the wearing elements, improving the machine's durability, and reducing the running costs, he concludes.

## Amazone

Both comfort and precision are prioritised in the latest updates to Amazone's offerings with the new ZA-M 02 and ZA-X 03 mounted spreaders now able to be specified with the firm's EasySet 2 in-cab terminal.

According to managing director, Simon Brown, this electric control unit enables a constant application rate to be maintained irrespective of forward speed. In addition to this, both spreader models boast a new look, he adds.

"With EasySet 2, Amazone offers a solution for automatic spread rate regulation at varying forward speeds for the ZA-M and, for the first time, the ZA-X.

"In this respect, the size of the apertures are adjusted by automatically setting the shutter position in such a way that the application rate always remains the same.

"This means that the operator is not forced to maintain a constant forward speed but can speed up or slow down depending on the size of field and the ground conditions.

"The operator has the option of using an X-sensor (counting pulses), a signal cable (transmission of the tractor speed) or a GPS antenna to determine or transmit the speed signal."

What's more, EasySet 2 — in conjunction with the electric shutter control — has the ▶



*Kuhn's new Aero GT 60.1 boom spreader offers higher application rates and greater precision farming capabilities than its predecessor.*

## Amazone WindControl - windless spreading conditions at the touch of a button

Current global fertiliser supply means that it's vital to get the most out of every granule. Now you can create windless fertiliser spreading conditions at the 'touch of a button' for a wider application window and increased accuracy.

Winds can be strong or light, blow from different directions, a constant speed one moment and in gusts the next - so the effect of the wind on the spread pattern never stays the same.

Now available across the ZA-TS mounted and ZG-TS trailed spreaders range - the NEW standalone Amazone WindControl system means that the effect of the wind on the spread pattern is permanently monitored and automatically compensated for.

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# AMAZONE



# Fertiliser spreaders



Updates to KRM's Dynamic Section Control system is claimed to increase accuracy in irregular shaped fields.

► added advantage that the application rate can be adjusted accurately and on the move, in order to avoid wastage, save costs and protect the environment, notes Simon. "The desired application rate is simply entered into the in-cab terminal to the exact kg, and this can be easily increased or reduced from the cab on both sides, or either side, during the spreading process.

In terms of usability, EasySet 2 doesn't require any menu prompting, meaning that each button only has one function and is easy to use, he notes. "In this way, the shutter slides can be opened and closed electrically both sides or one side.

"Simple entry of the required spread rate in the terminal eliminates the need to leave the tractor cab and make manual adjustments to the setting scales on the

rear of the machine. All that's required is a 12V power connection for the in-cab terminal, meaning that, as opposed to hydraulic shutter control, any hydraulic connections to the tractor can be dispensed with."

A neat feature is the integrated ha meter, which allows the user to always keep an eye on the machine output. The terminal also has a total area counter, adds Simon.

## KRM

For North Yorkshire distributor, KRM, the big focus is on upgrades and refinements to its Dynamic Section Control system. "For the coming season, the number of sections will double from 40 to 80," explains Mike Britton, managing director. "This increases accuracy in irregular

shaped fields and short work areas, resulting in a more even application and, crucially, a saving in product applied.

Mike says there are several ways a KRM spreader can achieve this. "Firstly, by ensuring the correct application rate is achieved. The fully automatic weigh-cell system with Intelligent Control ensures the correct amount is applied regardless of material type and operating conditions.

"Secondly, by ensuring the fertiliser is spread evenly. Our tolerant spread pattern with Double, Double Overlap technology minimises the risk of inaccuracies.

"Another way to do this is by ensuring headlands are evenly spread and the Trend Headland system creates the optimal spread pattern from the vanes and, as such, is gentle on the fertiliser while ensuring optimum coverage across the headland."

Looking to the 2022 updates, doubling the number of sections on the Dynamic Section Control provides finer incremental adjustment, especially advantageous on long headland runs, adds Mike. "The Dynamic system is not only for short work, but the system also works alongside variable technology and our Trend headland system.

"Today an increasing number of machines are operated via GPS often via ISOBUS. When variable rate spreading the Dynamic Section Control system can alter the rate applied — to the left and right of the machine — to match whatever's required on the ground. When headland spreading the Dynamic Section Control system automatically adjusts on corners to transfer material from the in-field side to the headland side." ■

# KRM

With today's high input costs, accuracy and evenness of spread have never been so important. KRM Spreaders are loaded with features to maximise accuracy and minimise waste.

Find out more at:  
[krm-ltd.co.uk](http://krm-ltd.co.uk) 01423-324221

## Make every kilo count!

