

Machinery

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Kverneland refines variable rate control for spreaders

A more sophisticated Variable Rate Control option for Kverneland Group's IsoMatch Geocontrol fertiliser spreading system enables material to be applied at more than one rate within the overall spread pattern.

The aim is to achieve better rate matching where different rate zones in a variable rate prescription map meet. The new Multirate facility was made available first on the range-topping [Kverneland](#) Exacta TLX and Vicon RotaFlow RO-XXL twin disc tractor-mounted spreaders but it is also available for all Geospread-capable models as a software installation.

Wider working widths

The TLX and XXL machines are capable of wider working widths – 12m to 54m versus up to 28m – and faster working speeds than other Exacta and RotaFlow spreaders, resulting in increased daily outputs.

They have a different version of the dosing system that distinguishes these machines from other twin disc spreaders – a rotating bowl in the base of the hopper that accelerates the fertiliser granules or prills before feeding them on to each disc.

This aims to minimise impact damage as the fast-rotating disc vanes engage the fertiliser; there are eight vanes on each disc – six long, two short.

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Top-spec Vicon Rotaflow twin-disc spreaders with Geospread capability can now offer a more refined variable rate technology that gets closer to target rates at precision map boundaries by adjusting rates within the spread pattern. - Photo: Kverneland

Variable rate application

For variable rate application, all Geospread-capable machines are equipped with load cells and a 'correction' reference sensor to compensate when working up and down or across sloping ground.

Together with a satellite location connection and Geospread software, they can automatically follow a prescription map to vary the rate of fertiliser applied in different zones across a field.

With Multirate, the control system is further refined to make it possible to apply different rates within the overall spreading width of the machines by altering the distribution pattern.

This enables the system to more effectively respond by getting as close as possible to the required rates in parts of the field where different rate zones meet in the prescription map.

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Geospread can already switch between different application rates on a prescription map in full-width blocks....



...but with Geospread Multirate, the spread pattern is adjusted within the working width to accommodate up to eight different rates. - Photos: Kverneland

Up to eight different rates

The system can cope with up to eight different rates (two, four, six or eight) provided by a prescription map, which must be converted to an ISO-XML file.

Growers using Kverneland's IsoMatch FarmCentre cloud-based telematics solution can prepare the prescription file offline and upload it wirelessly ready for the operator to commence spreading.

Similarly, data recording the completed job can be transmitted back to FarmCentre for enterprise and assurance records.

Product summary

Company: Kverneland Group

Name: Geocontrol Multirate

Type: Software application

Key feature: Enables Kverneland and Vicon Geospread broadcasters to apply different fertiliser rates within the spread pattern to get closer to target rates when crossing prescription map zone boundaries.



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Read more about: [Variable Rate Application](#); [Kverneland](#);

<https://www.futurefarming.com/Machinery/Articles/2020/7/Kverneland-refines-variable-rate-control-for-spreaders-617683E/>