

WEIGHING UP THE BENEFITS OF SPREADER TECHNOLOGY

Latest weigh cell technology helps to maximise the value of inputs

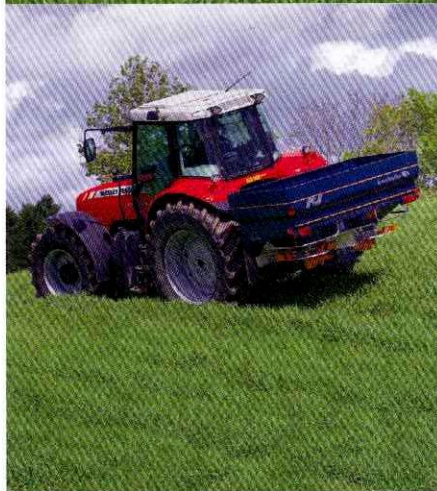
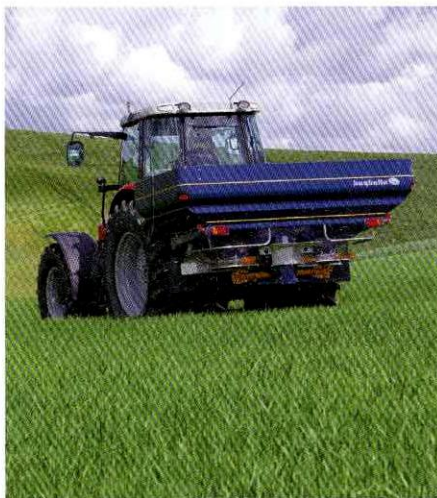
With fertiliser prices riding high, farmers are looking for maximum accuracy and effectiveness with each kilo that they apply. Agricultural businesses are also increasingly bound by the need to produce precise records of the amount of nutrients they apply, whether to comply with NVZ regulations or meet the requirements of assurance schemes.

The business of fertiliser spreading is becoming more reliant on modern technology; yet this technology depends on a development which Danish manufacturer Bogballe pioneered almost 20 years ago: the weigh cell.

The first weigh cell KRM Bogballe spreader simply weighed the contents of the hopper, which was useful when using bulk materials. Subsequently, electronic control was introduced for the spreaders, initially to give automatic calibration, then developed to give 'on the move' calibration to further improve accuracy. Changes in weather conditions or differences between batches of fertiliser could be detected and the spreader automatically adjusted to achieve the required application rate.

The latest development from KRM Bogballe is a new generation electronic controller, the Zurf. This incorporates new hardware and software, exclusive to KRM spreaders, which continuously assess and sift the information from the weigh cell to use only valid data for maximum accuracy on the level, and up or down or across slopes. The data is validated automatically on the move, isolating the effects of bounce in hard conditions, angle of slope and amount in the hopper to be the most accurate spreader on the market.

KRM weigh cell spreaders are available as an L2W in capacities up to 2,050 litres, an M2W up to 3,300 litres and M3W up to 4,500 litres. Introduced for 2011 will be an ISObus version which is compatible with all tractors which conform to ISO 11783. "This will allow spreader functions, including variable rate spreading, to be controlled and accessed via a single terminal in the tractor cab," explains



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introduced to cater for the increasing number of ISObus equipped tractors on the market."

Windermer Contractors of Tavistock, Devon has found that the automatic calibration of the M2W spreader offers considerable time savings. "We may be changing products once or twice a day, and it's so much quicker," says John Windermer. "You also know exactly when the spreader is getting low on fertiliser, so refilling is more efficient."

Another bonus is the spreader's ability to automatically adjust application rates as flow rates alter in changing weather conditions – an occupational hazard in the damp South-West.

"Application rates are always correct, regardless of the conditions, because the weigh cells monitor and adjust the machine settings," Mr Windermer, adds.

Dean Farm, Bishops Waltham, Hampshire, purchased an M2W this season to switch to variable rate spreading, and farm foreman Jamie Wymbys says: "We'll use the Zurf controller on the M2W to spread variable rate P&K according to application maps on 1,852ha of arable land and some grass. I've already applied some N with the spreader and it looks extremely accurate – on 464ha of rape I applied eight bags and it was just 10kg out. I couldn't have achieved that level of precision with our previous spreader."

Mr Wymbys also plans to use spreading information from the Zurf controller for recording purposes, using a memory stick to download it and Zurfcom software to process the data. "It will be useful for inspections or our own records, and because of the weigh cells, we know it's spot on."

Andrew Fuzzell of Church Farm, Rode, near Trowbridge in Wiltshire finds the precise nature of spreading with a weigh cell spreader an advantage: "I know the correct rate is going on, regardless of conditions. We use a lot of chicken manure in addition to mineral fertiliser and I can be confident that nutrients aren't being over applied to the detriment of the crop. With fertiliser at £400/t, if I can save 10t that makes a considerable difference."