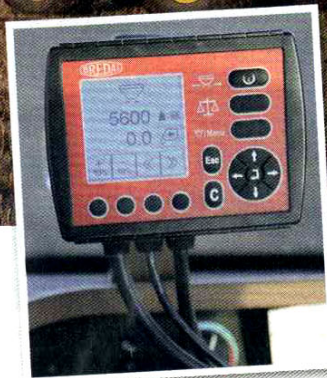


High capacity spreader eases workload

Working in a competitive market and with operating costs rising, a long-established Lincolnshire-based contractor has recently invested in a top-of-the-range KRM Bredal high capacity spreader to increase efficiency. **David Williams** visited him at work at a farm in Cambridgeshire to see the new spreader in action.



Above: The KRM Bredal K135 twin-axle spreader has been used by contractor Bellamys of Weston since July 2013 for lime and chalk spreading. With its twin axles and rear wheel steering, owner Julian Bellamy says the 20t capacity spreader is much easier to pull than his previous 16t single axle version.

Left: The KRM LH500 control box is easy to set-up and use says Julian.



After travelling over bumpy fen roads carrying chalk, there can be a tendency for the material to pack down hard around spreader conveyor feed belts, preventing operation. The new spreader was ordered with an optional hydraulic powered belt shield which covers the front quarter of the belt preventing material becoming packed around it. In the field the shield is raised allowing the full length of the belt to be used, and Julian says the simple device has proved effective.

Each year Julian Bellamy of Bellamys of Weston applies up to 20,000t of chalk and lime products on farms in Cambridgeshire, Lincolnshire and parts of Norfolk and, since 1984, has been using KRM Bredal spreaders. Since the first 7t model purchased, he has had six, and each time he has updated his machine capacity has been increased, each bigger than the one before.

"We bought our first spreader in 1979," explains Julian, "and it was a 3.5t Atkinson which we used behind a Ford 5000. As the workload increased we used two spreaders, and 10 years ago moved from a 7t and an 8t to a single large spreader. Our main spreading season for lime products is usually from as soon as oilseed rape stubbles are available until Christmas, and then from the end of January until June we are busy top-dressing fertiliser and lime on beans. We worked our way up to a large 16t capacity machine two years ago, but with our increasing workload we struggled to get all the orders completed as farmers were keen to get drilled up earlier, or because the weather was against us. We decided we needed to look at ways of becoming more efficient while retaining the convenience of a single spreader and the solution we chose was a twin-axle KRM Bredal

with significantly larger capacity."

The new spreader was delivered in July this year and carries in excess of 20t. The specification includes a steering rear axle and optional larger tyres than standard were specified; Michelin Cargo X-Bib 750/60R30.5 which Julian says spread the load well, and minimise rutting. "When we are applying chalk it is important that we can get it spread as soon as possible otherwise it tends to congeal in the heap, so having decent flotation tyres is a big help allowing us to travel when on smaller tyres conditions might prevent us carrying out the work," he explains.

Careful loading

Early in the season when ground conditions are good the full capacity can be utilised but later, when it is wetter, the spreader has to be loaded to suit the conditions. At the time of Farmers Guide's visit Julian was applying chalk to farmland belonging to EJ Palmer & Son of Coveney, Cambridgeshire on behalf of lime supplier; Keith Mount (Liming), and approximately 12t of chalk was being loaded at a time. "We often have to do more road transport ourselves later in the season as the lorries can't tip in the field, but we still only fill as far as we feel is appropriate rather than risk damaging the land although it means

more journeys for us," he says.

Julian was concerned at the time of ordering the spreader from Doubleday, the local KRM and John Deere dealer, that his current tractor, a John Deere 7930, might not cope with the extra weight. However, he was reassured by his area salesman, John Northern, that there would be no problem; "I was very sceptical and although I believed we were doing the right thing by investing in the larger spreader, in the back of my mind was the thought that we would end up changing the tractor too. But, with its decent size tyres and the twin axles it is much easier to pull than the previous smaller spreader and during the most difficult job so far this autumn on some recently sub-soiled wet, boggy potato land it was noticeable how much more easily it travelled."

Added manoeuvrability

Much of the company's spreading work involves travel down very narrow tracks and a concern was how difficult it might be accessing fields through tight gateways. "A characteristic of lime spreading is that there is a large amount of travel between fields as usually only small areas of a field have to be treated," he says. "There are a lot of tight gateways but the new spreader is



Loading in the field. Later in the season when conditions are wetter, it is often only half-filled, but despite this average application rates have been approximately 40t/hr.

The steering rear axle and over-size tyres specified have both proved worthwhile according to Julian.



very manoeuvrable with its rear axle steering as it tends to pivot around on the fixed forward axle and this makes it turn more easily. For road work we lock the rear wheels straight or there can be a tendency to wander, but for our work the twin axle set up we selected is definitely proving worthwhile."

The new spreader has PTO drive to the spinners, and a transfer box provides either 540 or 1,000rpm drive to the discs. For fertiliser the higher speed is selected but for spreading lime Julian says the lower disc speed is preferable, creating less dust and making the spread pattern less susceptible to being affected by wind. Drive to the bed conveyor is hydraulic, the system allowing disc and feed rate to be adjusted independently.

All types of lime are applied by the company including Limex, limestone and chalk, and much of the work is carried out on behalf of lime suppliers. Typical application rates are 2–3t/acre and Julian explains that the new spreader is easy to calibrate and set up. At the rear of the hopper a door gate is set to a start position, and the opening position, indicated on a scale beside the gate, is entered in to the control screen. From this the system automatically works out the required conveyor speed to provide the appropriate delivery rate of material onto the spreader discs in relation to the travel speed. "Previously my spreaders have been manually controlled, and I have had to set the rear door while stationary, and then adjust the conveyor speed while travelling, but the new automatic system is much easier to use," says Julian.

The new spreader will apply fertiliser and materials with similar spread characteristics accurately at up to 36m, but lower density chalk and lime demand much narrower bouts. "The widest really is approximately 18m with lime, but when applying chalk I usually spread to 12m which provides an even application on the field. Like any spreading system it all depends on what is being applied and the conditions on the day, so I use my judgement as to what will work best at the time. Average work-rates though are approximately 40t/hr of chalk applied during the season."

The company is occasionally called on to top-dress sugar beet during the season if it is not developing as it should, and Julian says that the accurate application rate control available through the new spreader will be a benefit when this service is needed.

At present Julian uses field maps provided by the lime supply companies to determine the areas which require application, and a John Deere guidance system helps him maintain accurate application widths. "Next time we update the tractor we will opt for full auto-steer," he says, "as I can see a significant benefit."

Excellent back-up

"I have stuck with Bredal sprayers as they are reliable and the manufacturer and our dealer provide excellent back-up," explains Julian. "I have never had any major problems with any of the spreaders, but the design is so simple that any issues could be easily sorted by us. We wouldn't go away from Bredal." ■



Julian (left) with his father Anthony Bellamy who helps with the spreading operation. "I'm impressed with the spreader, especially the quality and evenness of spread."