

HIGH CAPACITY 'MOD'

A modified KRM Bredal spreader/Unimog power unit is allowing a North Yorkshire contractor to serve its customer base more efficiently

Coning Fertilizer Ltd does a lot of road and field miles in its specialist fertiliser spreading operation. The business is based at Tollerton, near York, and is active in an area that stretches from Goole in the South to Scotch Corner in the north treating over 120,000 acres/year for up to 450 customers. It also farms 2500 arable acres.

The spreader fleet was expanded with the arrival of a new KRM Bredal twin disc spreader mounted on a Unimog U500 power unit, which was delivered to the firm's yard in April 2011. It joined a four-year old forward control Unimog U500 and a Multidrive, both mounted with KRM Bredal K85 spreader bodies, and a JCB Fastrac with a trailed Bredal. The firm also has another infrequently used trailed Bredal.

It is a make of spreader the firm has been using for the last 25 years. "We have looked at other manufacturers' products but we have stayed with Bredal as we like the way the machines spread," Richard Coning says. "KRM is nearby but the spreaders are reliable, they're incredibly good."

The latest spreader is not a standard unit. It is a K65 model with a nominal capacity of 5m³ that has been modified, something of a Coning Fertilizer Ltd tradition and a service Bredal also provides. "We spread on some steep slopes so had the angle of the sides altered to widen the spreader and lower the centre of gravity as much as possible," Richard explains. "The redesign has also increased the capacity to 6.5m³, which we can utilise



Coning Fertilizer Ltd's modifications to its new KRM Bredal twin disc spreader have increased its capacity, while lowering the centre of gravity to increase safety when working on steep land.

fully. The hopper is also shorter than the unit on the forward control Unimog to fit onto the new U500's standard bed.

"It is a modification that we first had done to the Multidrive's spreader and subsequently to the unit on the older Unimog. It didn't increase the K85s' 6.68m³ capacity but on the Multidrive it also improved the balance of the unit and enabled us to see into the hopper."

Another non-standard feature of the firm's KRM Bredal spreaders is that the spinning discs are hydraulically, rather than belt, driven. "Hydraulic drive enables us to infinitely vary the speed of the individual discs and we've been specifying it for 11 years now," Richard says. "We've also adapted the headland management system, with a speed sensor on each of the discs rather than on just one. Whichever way we go round the headland we can slow the speed of the outer disc for environmental reasons, which are becoming even more important with the issues of stewardship schemes."

Bredal in Denmark carried out the adaptation to the spreader bodies, which were mounted on the U500s by main Unimog dealer South Cave Tractors. "As the area expanded road speed increasingly became the key issue and we progressed from the Fastrac-trailed spreader combination to a self-propelled with the Multidrive and then onto the Unimogs," Richard explains.

"Also, customers like the self-propelleds. They don't damage grassland as there is not the potential problem of grass damage from wheelslip of the trailed unit, which also produces another set of wheelings when going through growing cereal crops." The majority of the work is now done with the two Unimog-KRM Bredal spreaders, driven by Richard and John Burkhill, who has been with Coning Fertilizer Ltd for 35 years. The Multidrive

and the Fastrac are now back-ups for peak periods, when the farm staff drives them.

Tyre pressures

Minimising compaction is also critical and both Unimogs run on flotation tyres. The forward control model is fitted with Michelin 650 AxioBIBs; the new U500 has Michelin XeoBIBs at the front and Alliance tyres on the rear. And the Unimogs' Central Tyre Inflation (CTI) system is used constantly to adjust tyre pressures so the spreaders run at 1.0 – 1.5 bar in the field and 3.0 – 5.0 bar on the road, depending on the load and whether they are on 'standard' or row crop wheels.

CTI also contributed to reduced fuel consumption. "The new Unimog is rated to 90kph but we average 70kph in both models," Richard says. "Being able to increase the tyre pressures means that we can run at fewer revs due to the lower drag. We've compared the Unimogs working side by side with the Multidrive and the Fastrac and they used 40 – 60 litres less/day. Effectively in three days we've gained an extra day's fuel."

The two Unimogs and their modified KRM Bredal twin disc spreaders enable them to cover up to 500 acres/day with each machine. This means up to eight loads of fertiliser, but the combinations' road speed means that it is more effective to return to base to load the material.

"We've tried wagons and elevator systems on the farms but they are not as efficient or as adaptable," Richard explains. "The carrying capacity of the modified KRM Bredal spreaders, combined with the Unimogs' road speed and CTI system have enabled us to become more efficient and get round our customers quicker and improve the timeliness of application. And we can do it with two mainline machines, and call on the others only when needed." ●