

Muck

Trading in three smaller manure spreaders for two larger models has increased daily outputs, improved application accuracy and allowed variable rate application for a large farming and contracting company. CPM finds out more.

By Melanie Jenkins

Accurately applying more than 50,000t of compost and sewage sludge meant James Ashley, farm operations manager at AT Bone, required precise machines that could cope with an intense workload at peak periods and match existing tramline widths to reduce compaction.

AT Bone is a farming and contracting operation, working across 3100ha of combine crops and a further 600ha of maize and sugar beet. The business is based in North Hertfordshire and operates across a 40-mile radius along the A1 corridor, with land inside the M25 motorway.

The firm traded in two Bunning Lowlander 150 HD TVA machines and a Lowlander 150 HBD to upgrade to the two Lowlander 280 HBD spreaders, which were launched last year to suit users spreading large volumes of lighter products such as compost. It increases the carrying capacity over the previous largest Lowlander 230 HBD and means each

machine can carry up to 28t of compost per load, depending on the product.

than with the old "We spread a mixture machines. 99 of compost, gypsum and sewage sludge this year and as a business we don't see the benefits of blanket applications so require variable rate technology to maximise these products," explains James. "These are large fertiliser spreaders and the manures are having a greater role in how we farm each year."

Reliable machines

"We've run Bunning spreaders for 12 years and have always been impressed with the reliability and build quality of the machines. A key part of the investment in the two Lowlander 280 HBDs was to increase capacity and accuracy but also utilise our on-farm soil mapping data through variable rate. Bunning's Lowlander machines offered all of this technology and, although we looked at other makes, the HBD models have everything we require and a brand we have confidence in.

"The new spreaders have to be as accurate as other machinery on the farm and operate technology seamlessly. Our older TVA models had a smaller spread width and we were running across more of the land than we wanted to. We knew to achieve the accurate spread pattern at a wide enough width for us to apply vast quantities of manures, we had to invest in two high-capacity, spinning disc spreaders," he explains.

The investment in the two Lowlander HBD models has increased carrying capacity by an average of 8t per load, but the improved accuracy of the twin disc application means spread width is now a comfortable 18m to allow a single run in-between the 36m tramlines.



Both models have weigh cell application via ISOBUS control which allows easy setting changes and clear displays of machine readouts. Rate control is adjusted via the screen and the spreader will

automatically match the floor speed to achieve the required rate. Variable rate application via prescription maps was a key addition for the farm to maximise the soil and crop data already gathered.

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around 10 days earlier

James says the output and accuracy increases have been highly advantageous. "The weather dictates our work, so we have to cover the ground quickly and accurately when we can. We've managed to complete the spreading around 10 days earlier than with the old machines, which has huge advantages to the rest of the business.

"The farm invests heavily in nutrition as we believe it's essential to build soil health and improve the following year's crops, and this is only possible with precise application. Using technology such as weigh cells and variable rate ensures it's spread evenly and to the rate required. We have soil mapping data, so applying manures based on this to increase nutrient values is essential for us."

Some basic tray tests, similar to those



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carried on granular fertiliser spreaders, were undertaken when the spreaders arrived in 2023 and the results highlighted an even application across the 18m width.

Given the complexities that the business has regarding location, the operation runs like clockwork and the pair of spreaders apply products efficiently following the combines to avoid any hold ups with the cultivation team, he explains.

James highlights this is what they require to match the efficiencies elsewhere on the farm. "We run three combines with chaser bins supported by our own lorries so we can clear fields quickly. We required spreaders with outputs that could slot in neatly between the combines leaving the field and the cultivators arriving. By handling the work in-house, we have complete control of the full harvest process."

Maximising opportunity

The 2024 spreading team started early, allowing a maximum window to achieve high daily outputs and maximise the available daylight, continues James.

"We keep three operators on the spreaders all season, one to load and two on the spreaders, as we feel they can then get the most from these machines. Some may think the loader is sat there waiting a lot of the time, but the guys manage it so one spreader is completing fields close to the pile, whereas the other machine starts at the furthest point, and they end up meeting in the middle. The spreading process and moving between fields would be much slower if we only had two drivers."

Loading is handled by a Volvo loading shovel and the spreaders are powered by two hired John Deere 7R series tractors, which offer the capacity to spread wider than 18m should it be required when contracting. The spreaders have the optional border spreading deflector to maintain product accuracy on headlands.

Additional work is possible in the future as the spreaders have been purchased to offer contracting support to other growers in the area. Yearly tonnages have increased with 40,000t in 2023, to 50,000t in 2024 and a predicated 55,000t in 2025, with the spreaders capable of more if required.

"Daily output can be more than 1000t per spreader when we're spreading close to the heap, so we have the capacity and accuracy to help growers on a variety of widths and products. The investment in the two Bunning HBD spreaders will be set across a 10 year stay on the farm. We're confident to run them for this period as the build quality, technology and reliability have future-proofed them for years to come," adds James.

Heavy duty handling

Early this year, Richard Western launched a number of new products at Lamma including the release of a new trailer design in answer to demands from farmers and contractors requiring a universal option built to handle high workloads and demanding conditions yet retaining a high payload.

The new MP18 Multi-Purpose Trailer shares many design principles with Richard Western's SRT20 Stone and Rubble Trailer, a 20t-capacity model for construction, track creation and similar tasks. The 18t-capacity MP18, which has the same 29.58m³/17.71m³ silage/grain capacities as the firm's SF14HS Suffolk standard trailer, incorporates a number of additional heavy-duty features as standard to meet the requirements of particularly demanding agricultural applications.

"Customers have been asking us for many of the heavy-duty features of our SRT Stone and Rubble trailer in a more universal model, so that's exactly what we've designed here," says Richard Western's Amy Taylor.

The MP18 body is constructed from Hardox steel to reduce weight and increase strength, while enhancing wear resistance above the high-grade steel used in the firm's other trailers. Heavy-duty features include a sprung drawbar with hitch ring secured by an eight-bolt flange, 10-stud commercial axles and 100mm-wide twin-leaf spring parabolic suspension. Further specification extends to heavy-duty galvanised mudguards and mudflaps, plus a comprehensive lighting package including LED road lights, side markers that also serve as downlighters, and a flashing LED beacon. Standard tyres are BKT Ridemax 560/60 R22.5 165D units, and brakes can be specified as either air or hydraulic with load-sensing.

Optional equipment includes silage sides, a headboard-mounted front-to-rear sheet, grain chute, small perspex window, ABS and auto slack adjusters, and 600/55 R26.5 BKT Ridemax 177D tyres — which with their higher load rating, are highly recommended for maximum payloads.

Among other updates from the firm this year, the



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full range of Suffolk tipping trailers are running new lights. Mounted along the side of the trailer, these cast a beam down onto the road or field surface, marking out the extremities and enhancing visibility and safety. Meanwhile, all Suffolk trailers of 15t capacity and above now feature an uprated suspension to enhance ride and stability. This sees the 76mm single springs previously fitted replaced with new 100mm wide double-leaf parabolic springs with a suspension equalizer featuring outboard bushes.







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