The right tillage choice

When James Voakes added a block of land near Whixley, North Yorkshire, he had to make adjustments to his cultivations

Whixley Grange Farm is run by three generations of Voakes, with James farming in partnership with his father, James' brother Andrew running the Voakes Pies enterprise, and James' sons, Ben and Harrison, making up the full-time staff. The 80ha farm is down to winter wheat and barley, with some spring barley depending on the season.

A traditional establishment regime is run on farm, ploughing all the Grade 1 land, then running behind with a combi drill. Grain is used as feed for the livestock enterprise, with meat going into the pie business and manures going back onto the land. "We've tried cutting back on our tillage in the past, but we have a lot of manures to bury and using the plough helps us break up any compaction and help water move through the profile," he says.

The introduction of a 3m He-Va Combi-Disc came after the farm purchased 40ha of Grade 2 ground. James says they ploughed the first year, but found they were bringing up the clay subsoil. "We needed a machine we could pull with our 150hp tractor and that could till the topsoil while still working deep enough to provide drainage."

ABOVE
The Combi-Disc has independent depth control of discs and legs, breaking up compaction and tilling the topsoil

Second-hand option

Knowing the sort of machine required, James looked online and came across a second-hand 3m Combi-Lift and Disc Roller combination at Brockhills of Yorkshire. It came with six legs at the front, with 200mm points and shearbolt protection, followed by two rows of angled discs and a V-profile roller.

"We liked it straightaway, but had to make some adjustments because of the horsepower available," he explains. "Six legs were too many in the heavier soils, so we had two removed and changed the setup so two were clamped directly behind the tractor wheels."

Moving up the power range

For the most part, James says the first machine worked well. They liked being able to create a seedbed in one pass, while still working deep enough to incorporate manures and break up compaction. "If I had to change something, it would be the space between the legs and the discs. You could see the soil being lifted, but the discs were running over it before the process had finished," he says.

After updating their Case Puma to a 180hp CVX model, supplied by Paxtons, they decided to look at updating their He-Va machine. At Cereals 2023, they saw the latest version of the Combi-Disc on the Opico stand and enquired about the changes. "We looked at a five-leg model, with 120mm points, which lowered the power requirement and meant we could easily run with the larger tractor," he says.

Other changes included increasing the distance between the legs and discs, allowing the soil to settle before the discs run through. Unlike the previous machine, this new unit also had hydraulic reset for the legs – eliminating the time wasted changing shearbolts – as well as independent, in-cab adjustment of the working depths for both the legs and the discs.

Impressive upgrade

The new Combi-Disc was delivered last September by local dealer Wilfred Scruton, just in time to finish the autumn sowing. James says they've been impressed with the machine so far. "We normally run the legs down to 25cm, but the hydraulic depth adjustment means we can change this on the fly depending on the conditions. Being able to change both depths independently means we can run either just the legs, or just the discs if certain areas needed specific attention."

He also highlights the arrangement of the working elements. "With the 3m model, the outer legs run in line with the tractor wheels and the discs overlap just slightly. This ensures that the full soil surface is cultivated."

The Depth Synchronised Disc systems automatically changes the working angle of the discs, increasing the aggressiveness. James says this has also stopped any lateral pull from the machine, improving the quality of work regardless of conditions. "It's solidly built as well. This means we have the weight to penetrate the soil, even when it's dry. But it also travels really well.

BELOW
Harrison, Ben and James Voakes

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