

“ Less disturbance from the drill is definitely a key theme among farmers ”

Soil care at the forefront of priorities

Machinery Tillage Live

From wave discs to semi-mounted ploughs, this year's Tillage-Live had a vast array of kit on display for visitors to the Northants site. CPM takes a look at some of the highlights from the day.

By Charlotte Cunningham

From arriving on site in a raincoat, to quickly switching to sunglasses within an hour, perhaps somewhat reflected the essence of how adaptable cultivation equipment has to be to keep up with modern day practice.

Flexibility was certainly the predominant theme at this year's Tillage-Live event — held at Deenethorpe Airfield — with many big name manufacturers boasting multi-purpose kit on stand. As well as this, blackgrass and weed control were hot topics of the day, with minimal disturbance a key ethos behind many of the new launches.

Väderstad

Dominating the Väderstad stand was the CrossCutter Disc which has been hugely popular with growers who are feeling the burden of increasing weed pressures and also looking to preserve soil structure, according to the firm.

Operating at ultra-shallow working depths of between 2-3cm, the CrossCutter disc is claimed to move substantially less soil than a conventional disc — in turn reducing fuel consumption, while increasing the potential working speed.

The disc itself is fitted to the Väderstad Carrier disc cultivator and is individually mounted to its own rubber suspended disc arm, meaning it has the ability to follow the ground contour independently — ensuring even results — says Väderstad.

Optimised for usage in oilseed rape stubble and cover crops, the CrossCutter Disc has also proved itself in grain stubble and on cultivated land, making it a very versatile tool.

While growers would be forgiven for thinking the CrossCutter Disc works in the same way as a conventional wave disc, there are actually three major differences which contribute to its superior functionality, according to Väderstad.

These include:

- The width of each CrossCutter Disc profile is 11.5cm, compared with the industry standard 5cm.
- CrossCutter Disc works at ultra-shallow depth at 2-3cm.
- The disc angle is optimised to maximise results.

“Rather than throwing material sideways, this disc throws it up in the air and then all the heavy material lands first so your blackgrass seeds are on the surface,” explains Nick Tinker, territory sales manager,

North. “It's all about getting that really good clean stale seedbed between harvest and sowing.”

John Deere

It was very much a case of 'oldie, but a goldie' on the John Deere stand, with the 750A All-Till drill taking centre stage.

Despite it originally being launched in the mid-90s, there's still very much a place for the 750A, says Mark James, John Deere. “We've had this in our portfolio for about 25 years — it's developed over that time, but the basics of the machine are still the same. However, the narrative of modern farming — both now and in the future — absolutely suit this type of machine.”

The driving force behind the popularity of the 750A is its extremely low disturbance,



Operating at ultra-shallow working depths of between 2-3cm, the CrossCutter disc is claimed to move substantially less soil than a conventional disc.

which is helping growers tackle weed issues and boost soil health, explains Mark. "This is a low disturbance drill which has been designed to move as little soil as possible and there's certainly a lot of interest at the moment in this way of doing things.

"Overall, it only moves about 4-5% of



Farmers were largely focused on Lemken's Diamant 16 semi-mounted plough at this year's Northants event.

the soil and can be worked on min-till or ploughed ground so it really does suit all systems."

The 750A is a single disc drill that uses a 46cm disc — mounted alongside the press wheel — to ensure good depth control, explains Mark. "The seed is then dropped into a tiny slot — only moving a small percentage of the soil — and then firmed into the soil using the press wheel. We then crumble the slot shut using a spiked closing wheel, just to push the soil back over again."

Though it has been around for some time, the functionality of the 750A has been developed, including introduction of the ProSeries opener that was actually seen for the first time at last year's Tillage event. "The opener has been changed to ensure less maintenance and increased longevity of the machine," says Mark. "In fact, it only features one grease point for minimal annual maintenance. The seed boot is also placed behind the opener disc, and therefore subject to less soil contact."

New Holland

Among the many bits of kit on display from New Holland was the STX V stubble cultivator.

According to New Holland the STX V



The CrossCutter disc is fitted to the Väderstad Carrier disc cultivator and is individually mounted to its own rubber suspended disc arm.

is an 'all-rounder' which is suitable for conventional stubble operations as well as those looking for mulch tilling.

With New Holland recently acquiring Kongskilde's cultivation kit, the STX V comprises of very similar features to Kongskilde's much-loved Vibroflex — so how exactly does it work?

Working down to a depth of 15cm in one pass, the range features vibrating tines ▶

Twice the machine - twice the performance



The New Amazone Ceus disc and tine cultivator.

The combined action of a compact disc harrow for shallow stubble cultivation with a tine section for deep loosening, makes the Ceus-2TX cultivator the most flexible soil tillage implement in this sector.

- ▶ Working widths from 4m to 7m
- ▶ Ideal for all forms of soil tillage - from primary cultivation through to seedbed preparation
- ▶ Both disc and tine elements can be run either together or in isolation adding to the flexibility
- ▶ Choice of rollers to suit your soil type.

Hydraulic control allows the disc and tine segments to be adjusted independently.





According to New Holland the STX V is an 'all-rounder' which is suitable for conventional stubble operations as well as those looking for mulch tilling.

▶ which reduces the power demands of equipment — as well as reducing fuel consumption.

Furthermore, an additional crumbling effect is achieved as the soil breaks up along its natural fracture lines. The four rows of tines deliver an intensive mixing of field residues in one pass, while the heavy duty spring also features in-built rearward and sideways protection.

Lemken

Though minimum tillage is a buzzword in farming right now, there is still, of course, a place for the traditional plough.

According to Paul Creasy, general

manager at Lemken UK, farmers were largely focused on the Diamant 16 semi-mounted plough at this year's Northants event.

The main features of the Diamant 16 range include the ability to allow plough bodies to be deflected in three directions; the OptiLine adjustment system which is claimed to promote fuel savings of up to 10% and the traction booster which reduces slip and increases the load applied to the rear tractor axle to also reduce fuel consumption.

McCormick

A fleet of McCormick X7 Series and X8 Series tractors were out in force supporting several equipment manufacturers — including Lemken and Pöttinger — at this year's Tillage-Live. "Tillage is an important



The CombiDisc shows its strengths especially on light to medium soils.



Despite it originally being launched in the mid-90s, there's still very much a place for the 750A.

shop window for the tractors needed to operate high-capacity tillage implements," says Adrian Winnett, managing director of UK and Ireland operations at McCormick manufacturer Argo Tractors.

The flagship McCormick X8 VT-Drive was seen working at the event for the first time and it's available in three models spanning 264hp to 310hp.

The McCormick X7 Series tractor was also seen in action, giving event visitors the chance to compare the VT-Drive stepless and new P6-Drive transmissions — with the

Working demonstrations

At the heart of the event was the working demonstration area, which featured an array of the latest tillage kit from sprayers, to ploughs, to cultivators.

Heading up the drill (on stubble) demos was Amazone's Centaya pneumatic harrow-mounted seed drill, working with the new Combi Disc 3000. "Less disturbance from the drill is definitely still a key theme among farmers," says Simon Brown, managing director at Amazone. "For a lot of people that are fighting blackgrass, the last thing you want to do is trigger germination with the drill."

The CombiDisc mounted compact disc harrow was launched earlier this year, and provides an option for those who want to benefit from a disc cutter without the need to purchase a standalone cultivator.

Equipped with 24 serrated discs, each featuring a diameter of 410mm, the CombiDisc is ideally suited for seedbed preparation at depths from 3-8 cm, says Amazone.

Due to the small disc diameter, a high peripheral speed of the disc is achieved to

ensure a good crumbling effect. In addition, the disc elements on the CombiDisc feature a maintenance-free disc bearing and slide seal with a lifetime lubrication.

The CombiDisc can quickly and easily be mounted — and dismounted — via the QuickLink quick-coupling system with the relevant Pack Top seed drill, adds the firm. "This means that, thanks to QuickLink, the CombiDisc can be demounted with a few locking clamps so that it can also be utilised further in solo operation for seedbed preparation."

In its basic version, the CombiDisc is supplied with mechanical depth adjustment. Any change in working depth is very easily done centrally by swivelling round spacer elements on the left-hand side.

For an even work profile, both in the wheel tracks and at the sides, the individual disc arms can be adjusted up or down by 30mm in these areas.

"The CombiDisc shows its strengths especially on light to medium soils," says Simon. "And, thanks to its easy pull, operational speeds



Pöttinger's TerraDisc MultiLine also made its UK working debut in the demo area.

of up to 15km/h are possible, meaning that the sowing combination operates with a high efficiency."

Pöttinger

Pöttinger's TerraDisc MultiLine also made its UK working debut in the demo area. The MultiLine system brings together elements of a compact disc harrow with a seed drill resulting in mulch drilling technology that enables flexibility during operation, according to the firm.

Available in working widths of 3-4m, the MultiLine is designed to be used in tandem with Pöttinger's Vitasem ADD box drill or the Aerosem ADD, pneumatic drill.

Soil for thought

Working in combination with AHDB, soil guru Philip Wright highlighted to visitors the importance of regulating tyre pressure and the impact it can have on soil condition.

Using a small demo plot, Philip demonstrated trafficking after loosening on two sites and the effect using a Valtra T234 with Trelleborg tyres.

Left-hand tyre pressure was set at 0.6 bar (9psi) while the right-hand tyre was much higher at 1.6 bar (23psi). The demo, unsurprisingly, showed much more damage

— in terms of compaction — on the spot where higher pressure was used. “The message here is manage your pressures,” says Philip. “Pressure determines damage severity. While growers could benefit from keeping pressures low across the board, the critical operation to focus on is drilling.

“Every season is different, the soil is different, and it’s worth thinking pragmatically about what you do — in terms of tyres — on a year-on-year basis.”



A new quick fit disc cutter was on display from Kuhn, which is said to boost drilling flexibility.

latter serving up more powershift steps and a greater number of ratios than previous versions for even better control versatility, according to the firm.

Kuhn

A new quick fit disc cutter was on display from Kuhn, which is said to boost drilling flexibility.

Made for quick coupling with the Venta 1030, the CD 1020 — which is available in 3m and 3.5m formats — has two rows of 400mm diameter notched discs to create a fine seedbed to a shallow working depth in light soil conditions.

Designed to operate in combination at up to 15km/h — or up to 4ha/hr in the 3m format — the CD has the potential for high drilling outputs when conditions allow, says Kuhn.

Discs are supported by a single vertical arm, each holding two discs per arm. These arms are fitted onto a cross-shaped profile, with polyurethane blocks aimed at providing both elasticity — to maintain a consistent working depth — and durability. Side deflectors, fitted on a parallelogram and extending as far as the roller, ensure a level finish between passes, adds the firm.

Linkage between the Venta 1030 drill and the tillage tool is via a specially designed roller frame. This is said to ensure cultivations and drilling are fully independent functions and as a result

increase the adaptability of the combination unit — allowing optimum drilling performance to be maintained in the widest range of conditions, says Kuhn.

This design is also said to help facilitate

quick interchanges of tillage tools, with coupling estimated to take less than 10 mins. ■



Tillage is an important shop window for the tractors needed to operate high-capacity tillage implements.

www.sky-agriculture.co.uk

EasyDrill

The most versatile drill on the market

0% FINANCE

SPREAD THE COST OVER 2 YEARS
1+2 annual payments

ENDS 29th NOVEMBER 2019

*See sky-agriculture.co.uk/finance for full details

Designed for perfect seeding in no-till, min-till, & conventional establishment systems making it a truly versatile drill.

- Up to 3 separately metered hoppers
- Separate air circuit for grain and fertiliser
- Up to 250kg coulters pressure to ensure correct seed placement in any system
- Fully adjustable coulters and press wheel pressure to suit soil / weather conditions
- Low hp requirement (from 30hp/m)

*This promotional offer is available in the UK only (excluding Northern Ireland) for new equipment with a maximum RRP of £20,000 and is subject to credit approval and any applicable government or company policy. Finance is available on 0% or RRP or the balance or finance whatever the case. VAT - Full Purchase: Full VAT on signing. Leased: VAT payable on each rental or 1/12th lease. VAT charged at the current flat rate of 9% or applicable. Administration fees are payable on all transactions including interest free agreements. Further conditions are available on-line from Sky Agriculture Finance. Sky Agriculture Finance is a trading style of Pennington Asset Finance Ltd, 3 Maple House, Wykeham Road, Northwood Business Park, Layer Road, North Yorkshire, YO26 6W. Pennington Asset Finance is authorised and regulated by the Financial Conduct Authority number FRN549227. Pennington Finance offers financial facilities to UK businesses only through a number of authorised lenders. A list of lenders is available on request.

Versatile

2 separate air circuits

3 hoppers / 2 inputs

No-till • Min-till • Into Cover Crops • Conventional

OPICO Ltd. 01778 421111 ask@opico.co.uk www.opico.co.uk @opicoeng
OPICO *Profit from our knowledge*