

Establishment will always be the most vital time for any crop, and having the right drill for the job plays an important role in this. *CPM* takes a look at some new additions to the market from the past year.

By Melanie Jenkins

Whether growers are operating a full tillage situation, minimum tillage or direct drilling, drill and seeding technology manufacturers likely have a tool for the job and new innovations are constantly being launched to optimise establishment. Below are just some of the newer machines on offer.

Amazone

Amazone recently expanded its range of precision seeders with the new trailed Precea models, the 9000-TCC and 12000-TCC, with working widths of 9m and 12m, respectively. This variant, which has been developed specially for large-scale farms and contractors, is designed to have high-performance overpressure singling, large tank capacities and a Central Seed Supply seed delivery system. The precision seed placement should provide optimum field emergence, even at increased working speeds of up to 15km/h.

For the simultaneous application of fertiliser, the Precea-TCC is equipped with an easily accessible twin-chamber hopper with a total filling volume of 6000 litres. Each hopper has its own electric metering unit that's connected to a distributor head, meaning that half-side shut-off is available as standard. Fertiliser is placed via the FerTeC Twin HD fertiliser coulter.

The drill features a central seed hopper with a capacity of 2000 litres. The new Central Seed Supply delivery system carries the seed from the central hopper to the singling units via an air stream. There, it's temporarily stored in a small reception unit. Once this reception unit reaches the maximum fill level, the air stream is automatically cut off, shutting off any further supply. When the fill level decreases again, the air stream, and therefore the flow, restarts automatically.

The furrow formers and catcher roller system should allow for precise seed placement. Two carrying rollers and the high, hydraulically adjustable coulter pressure system should ensure uniform depth control.

The ElectricDrive metering allows the desired seed rate to be set via the

ISOBUS terminal and serves as the basis for precise, part-area, site-specific rate control using GPS and field zone maps. In addition, the GPS SectionControl actively saves seed row-by-row in wedge-shaped fields and on headlands, especially at these larger working widths, and provides optimal conditions for mechanical weed control with a hoe.

The Precea-TCC is offered with 12 or 16 rows at widths of 70cm, 75cm and 80cm. A telescopic axle is available for the running gear of the Precea. During field operations, this allows the position of over-sized tyres to be adjusted so that the wheels run between the seed rows, preventing compaction directly beneath.

KRM

Launched at Cereals in June, KRM has introduced the new Sola Aura Front Tank and Seed Ramp to its Seed Drill range. The drill uses the new Sola Aura front hopper and Seed Ramp rear mounted tine coulter frame. Splitting the drill between the front and rear of the tractor provides better weight distribution and with the Aura's various metering options, growers can sow companion crops or grain and fertiliser simultaneously.

"The real benefit is in splitting the weight, rather than having the full weight of the drill at the back," explains the firm's Mike Britton.

The new Aura front hopper has a capacity of 2000 litres, it can be supplied ►

HORSCH

#FUTUREGROUND

PERFORMS IN ALL CONDITIONS SPRINTER

Sprinter is a drill you can depend on in all conditions; for use after the plough, minimum cultivation and direct sowing. The Sprinter tine drill combines soil preparation, seeding and fertiliser application in one pass with high performance in poor soil conditions and high levels of residue. **HORSCH.COM**

- Working widths from 3m to 12m
- Large-capacity seed hoppers; 5000 litres ST and 8000 litres SW
- ThinEdge coulter, ideal for sowing catch crops directly into the stubbles



Scan to find out more

TOGETHER FOR A HEALTHY AGRICULTURE



CULTIMER PROLANDER PERFORMER OPTIMER STRIGER OPTIMER STRIGER Seee us at: TILLAGE THE CROP STABLISHMENT

Warwickshire, 14th September 2023

be strong, be KUHN





Amazone's Precea-TCC is offered with 12 or 16 rows at widths of 70cm, 75cm and 80cm.

► for a single product with a single metering unit or with two metering units to provide half width shut off. The Aura can also be supplied as a split hopper where 1000 litres of two separate products can be accommodated and individually metered. In this configuration, it can sow either two types of seed for those wishing to sow a companion crop; or seed and fertiliser can be applied.

"The pressurised hopper system is new for KRM," says Mike. "The benefit comes in the form of more efficient airflow. The funnel hopper is hydraulically driven, but the pressurised waste air is pushed through the hopper. In a front hopper situation, because air isn't being wasted, there's more capacity to accurately and reliably deliver seed to the rear."

The Aura utilises the same stainless steel metering units as KRM's Ares-P and SM-P drills and also has the same ISOBUS control. The hopper is pressurised with a sealed lid to ensure a consistent and even seed flow to the metering unit from hopper full to empty, on level seedbeds or when working on slopes.

Each Sola developed metering system, providing rates from 2-400kg/ha; is electrically driven with ISOBUS control of all functions of the drill including tramline shut-off and monitoring of forward speed; fan speed and hopper seed level. The Aura is ready prepared for auto on/off section control at headlands and for



Launched at Cereals in June, KRM has introduced the new Sola Aura Front Tank and Seed Ramp to its Seed Drill range.

variable seed rate. Both left and right half width shut-off is available as an option, which can be controlled manually or automatically by GPS section control.

The drill can be supplied with a number of different coulters, explains Mike. "The Elite tine is suited to ploughing and min-till, while the PT and MS coulters are for min-till or direct drilling."

The coulters are mounted in four rows at an effective row spacing of 16cm (25cm spacing is available as an option) with a stagger of 40cm to ensure free movement of trash or large stones. Each coulter mounting incorporates an auto reset spring to protect against damage from hidden obstructions below the soil surface.

Behind the coulters is a combination following harrow of angled and straight tines to ensure the seedbed is left level and firmed for good soil/seed contact and to retain moisture in dry conditions.

Kuhn

Kuhn's new Venta 330 completes the firm's range of light and compact pneumatic seeding combinations. The new machine has a working width of 3m, and the entire range is available in 20 and 24-row versions with 15cm and 12.5cm

spacings, respectively.

The 300 seed drill is equipped with a coulter bar featuring SeedFlex 100 seeding units with double discs, offset by 41mm, to help achieve ideal furrow opening. The double discs are mounted on a parallelogram and come with press wheels that control seeding depth with precision and optimise seed-to-soil contact. The 15cm spacing between two rows is designed to make it easier to work in plant residues. The coulter pressure of each seeding unit can be adjusted up to 40kg to maintain sufficient pressure and ensure good tamping in dry conditions or when deep seeding at high speeds.

Other new features have been rolled out to the entire Venta 100 range, including ISOBUS control for seeding. On non ISOBUS tractors, Kuhn's VT 30 terminal can be used instead.

Seed drills in the Venta 100 range are compatible with HRB 302, HRB 303, HR 304 and HR 3004 power harrows which can work with high-power tractors up to 250 hp (depending on the associated harrow). Coupling and uncoupling should be quick and easy due to the special linkage parts.

The seed drill is directly attached to the



Kuhn's new Venta 330 completes the firm's range of light and compact pneumatic seeding combinations.

power harrow's frame, and the 850-litre hopper is positioned towards the front so the machine's centre of gravity is close to the tractor. This provides manoeuvrability, lower power requirement for lifting, and good visibility of the seeding units. The design of this range of seed drills makes them well suited for small tractors, from 120 hp.

The volumetric metering unit with electric drive provides application rates of 1-430kg/ha. It's not necessary to disassemble or change parts on the metering unit, even for small seeds. ►

For perfect seed and fertiliser placement – let's get straight to the point

They say size isn't everything, but the Condor direct tine seeder, in 12 and 15 metres, ticks both the size and the flexibility boxes. The 8,000 litre seed hopper, which is carried on the tractor link arms to ensure plenty of traction, is split into 3 - enabling up to three different seed varieties or a mixture of seed and fertiliser to be drilled simultaneously - and all from vari-rate maps,

With up to 200 kg of coulter pressure, the ConTeC pro chisel opener ensures a residue-free seed groove with the seed being embedded into the furrow by the following press wheel on each coulter. It couldn't be simpler, it couldn't be more effective and above all it helps you love your soil.



AMAZONE

The ConTeC pro opener ensures the perfect seed placement.



Contact your local dealer or phone us on 01302 755 725





The Equalizer product range includes precision planters with up to 36 rows and seed drills with a working width of up to 24m.

► All the machine's essential settings are designed to be quick and easy to adjust. For instance, seeding depth is centralised at two points and is independent from the working depth of the power harrow. The metering unit is easy to access, and a stop/start button makes it possible to manage calibration tests without having to climb in the cab.

Lemken

Earlier this year, Lemken acquired the South African seeding technology specialist, Equalizer, allowing the firm to expand its product portfolio, focusing on minimal ground disturbance and no-till farming.

The Equalizer product range includes precision planters with up to 36 rows and seed drills with a working width of up to 24m.

Lemken CEO Anthony van der Ley believes the Equalizer portfolio perfectly complements the firm's seed drill segment and constitutes an important building block for further growth. "There's no overlap in our portfolios. Equalizer offers solutions for customers and markets that Lemken hasn't been able to serve so far."

Maschio Gaspardo

Maschio Gaspardo has launched a new version of its high-speed Chrono precision drill. The Chrono 500 is a mounted machine which can be set up to run with variable row spacings and is equipped with either eight or 12 planting units, making it suitable for sowing a range of crops with 45cm, 50cm, 70cm or 75cm row spacings. This versatility makes it possible for the operator to switch from drilling sugar beet to maize in the same day, the conversion taking less than two hours, according to the firm.

When it was launched in 2020, the Gaspardo Chrono brought a completely new seed delivery system, in the form of its air bag suspension for each unit and electronically controlled metering for both seed and fertiliser.

While conventional precision drills might run at 7-8km/h, the firm claims the Chrono has the potential to at least double these work-rates, at the same time optimising the accuracy of seed spacing and depth placement.

Precision seeding is achieved through the design of the metering unit. Using a combination of traditional vacuum singulation and then pressure delivery down the coulter tube, the moment the

Drganised





THURSDAY 14TH SEPTEMBER 2023 08:00 - 15:00

Hosted by WH CORBETT at

Cottage Lane, Norton-Juxta-Twycross, Atherstone, Warwickshire CV9 3QH

- · Cultivations and establishment Demonstrations
- Cover crop demonstration arena
- Knowledge trail
- · Static trade exhibits



Guarantee your entry by prebooking your tickets online www.tillage-live.com 0845 4900 142

62 crop production magazine august 2023

seed leaves the metering disc, it's kept under control. A venturi puts seed under positive pressure, controlling its speed and therefore directing it to the soil without bounce.

Aside from conventional vacuum singulation, the other factor controlling seed spacing is the angle of each metering unit. Set on an incline of 15°, seed drops off the disc and straight down the coulter tube without touching the sides. This means it's not slowed up at any point with the result that seed spacing should be consistently uniform.

Standard specification includes air-bag suspension, GPS-compatible ISOBUS connectivity, 60-litre low-level easy-fill seed hoppers and front disc-openers. An 1100-litre fertiliser front-tank and electronically controlled microgranular applicators with 16-litre hoppers are an option as are trash-cleaning wheels for minimum tillage and direct-drilling situations.

Mzuri

Available from this autumn, Mzuri is launching a new linkage mounted drill with higher output. The Pro-Til iGen is a one pass drill designed to produce an ideal



Maschio Gaspardo's Chrono 500 is a mounted machine which can be set up to run with variable row spacings and is equipped with either eight or 12 planting units.

seeding environment straight into stubble, cover crops and grassland. Accurate seeding depth should be achievable across the width of the machine and dual reconsolidation is accomplished through a full width packer and individual press wheels.

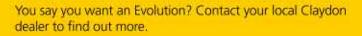
Aimed at farmers looking for a high output mounted solution, the new range has launched as a 4.8m machine which features 15 coulters on a row spacing of 320mm.

Based on the Mzuri Pro-Til core concept, the Pro-Til iGen features a leading tine to prepare a nursery seedbed, dual reconsolidation, and independent coulters as standard. The drill has fully independent coulters, each with its own depth wheel which reconsolidates, and provides individual height control of each ►



Join the Evolution!

Darwin got it right – we have to adapt to benefit from our conditions. Based on over 20 years' direct drilling experience, our new Evolution drill adapts to fit your farm's cropping, soils and weather. It's thanks to some new cost-effective precision tech, plus alternative tines, hoppers and front disc toolbar.



claydondrill.com





New to the market from Stocks Ag is its Turbo Jet 10 which is a mounting kit to fit to the trailed Sky EasyDrill.

► coulter. A simple mechanism is employed to control height and pressure of the rear seeding wheels, to provide seed placement accuracy across the width of the machine.

Reliable seed delivery is achieved through twin metering units with seed being conveyed via a fan system. The iGen's 2200-litre tank is pressurised to effectively double output over conventional metering, with the drill operating at speeds up to 18km/h.

The Pro-Til iGen is fitted with a twin harrow bar as standard to achieve a uniform level surface, to help achieve the best from pre-emergence herbicides.

Stocks Ag

New to the market from Stocks Ag is its Turbo Jet 10 which is a mounting kit to fit



Keeping the depth. Always.

Cultus HD sets a new standard in the mounted tine cultivator segment. It is designed to never compromise on its exact depth precision and high field performance.

The heart of the machine is the new heavyduty Cultus HD tines. With a release force of up to 680kg, Cultus HD will keep its depth in a full range of conditions.

Learn more at vaderstad.com



to the trailed Sky EasyDrill. The new mounting kit allows separate metering and accurate application of Avadex (tri-allate) through an additional set of outlets behind the drill's press wheel.

The mounting kit is designed to integrate with the Sky EasyDrill and consists of a loading platform, steps and guard rail to meet all safety regulations and maintain a safe environment for the operator.

The applicator fitting kit is available for the 4m, 6m and 8m EasyDrill; 4m specified with a Turbo Jet 8 (eight outlets), while the 8m EasyDrill is specified with the Turbo Jet 10 (20 outlets), with the option of a 400-litre hopper.

To help make operations easy, the Turbo Jet 10 is fitted with the intuitive i-CON Control, which allows for rates to be automatically controlled in proportion to forward speed. When the Turbo Jet isn't being utilised for Avadex application it can be used as an additional applicator, enabling a fully specified drill to apply five products at once through three different outlets. Furthermore, the Turbo Jet can apply variable rates of product according to mapping data using a GPS based touch screen. The applicator can also be used for applying clover seed, full-rate grass reseeds, and cover crops, when mounted to a wide variety of machines, including grass harrows and cultivators.

This option is available directly to Sky EasyDrill owners or available through Opico and its Sky Agriculture dealer network for any new Sky EasyDrill installation.

Väderstad

Väderstad has launched a new 12m, high-capacity precision seed drill with responsive double disc seed coulter



New this autumn is Mzuri's Pro-Til iGen - a one pass drill designed to produce an ideal seeding environment straight into stubble, cover crops and grassland.

system for 2023, in the form of its Inspire 1200C/S. The seed-only version, the Inspire 1200S, is equipped with a 5000-litre hopper for seed. The combi version, the Inspire 1200C, has a 7200-litre hopper holding both seed and fertiliser in two separate compartments, which is later mixed into the same airstream and placed together into the soil.

High drilling output is achieved with eight separate sections, which allows the drills to operate with variable rate and sectional control down to 1.5m sections. Constant and even product flow from the hopper to the seed coulters is achieved via eight Fenix III metering units.

The double disc seed coulter system allows it to adapt to any field irregularities, thereby keeping a constant seed depth and accurate placement over the entire field.

The drilling operation is managed via the iPad-based system Väderstad E-Control, which is also possible to connect with an ISOBUS task control system.

At the heart of Väderstad's Proceed is its high-precision row units. Prior to seed placement, individual pre-drilling wheels consolidate the field to ensure the same conditions for each seed. The pre-drilling wheels are individually mounted, using hydraulic down-force to ensure high performance.

To provide the driver with full management function, each row unit is electrically driven and operated using E-Control. Functions include row-by-row shut-off and variable rate, dynamic tramlining, individual calibration, as well as real-time precision monitoring.

The Proceed has a row spacing of either 225mm or 250mm. Easy calibration and a quick change of seed discs allows the drill to switch to 450mm or 500mm for crops such as sugar beet or oilseed rape, and up to 750mm for crops such as maize.

Weaving

Building on from its GD Disc Drill which was launched in 2015, the mounted GD has been given an upgrade. The grain-only models now feature a plastic tank, the same used on Weaving's Sabre Drill for better weight distribution, longevity and through-flow of material.

The mounted GD has also been given a tubular frame which deters any material from sitting on the machine. Both the mounted and trailed will now have a new coulter cylinder which replaces the hydraulic cylinder. This upgrade will allow a more responsive and consistent coulter pressure for better speed placement. It's available in 3m and 4m mounted formats.

Since the release of the Sabre Tine in 2019, there's been an increased move towards applying fertiliser when drilling. This wasn't possible without compromising hopper capacity when using the integrated hopper on the mounted drill, explains Weaving's George Flack. "We've now developed a front tank system in combination with our rear mounted Sabre drill allowing operators to apply multiple products simultaneously, which increases not only capacity of the drill, but also the output. Product is blown from the front tank into a cyclone which exhausts the air allowing the product to be fed into the side of the metering unit and is delivered down the same coulter as the seed." ■



Building on from its GD Disc Drill which was launched in 2015, Weaving's mounted GD has been given an upgrade.



'IMPROVE SOIL HEALTH BY STEALTH'

Alleviate compaction, minimise soil burst and in turn grass weed germination with HE-VA's Stealth.

Designed to satisfy the requirements of no-till and min-till systems, it is also suitable for use where repair to damaged soil structure is required e.g. headlands, tramlines or other high traffic areas.



OPICO Ltd. ask@opico.co.uk 01778 421111 opico.co.uk

- · Working widths of 3m 6m
- · Scalloped, straight, front cutting discs
- Two rows of staggered 'Hardox' legs
- Discs and legs hydraulically controlled from the tractor seat.
- Tungsten hardened cast steel points
- Working depth of up to 300mm (12")
- Adjustable leg spacing
- Range of seeders and fitting kits available

Stealth (leg and point) kits are available to retro-fit to existing HE-VA Subsoilers, Combi-Discs and come as standard on the Evolution OSR seeder.

OPICO Projit from our knowledge