



TALKING DRILLING

HORSCH customers discuss the latest drilling products and innovations

HORSCH

Farming with passion

Introduction



HORSCH is the only manufacturer to offer grain and fertiliser on all drills in all sectors.

Talking Drilling

Welcome to the latest edition of our Talking series looking at drilling, the latest developments and speaking to customers about their approach.

HORSCH has developed a comprehensive range of tine, disc, strip and precision drills for all crops and conditions. These are complemented by advanced productivity systems and a wide range of coulters to

provide high performance drills for all farming and contracting needs.

There is more detailed product information on the HORSCH web site and on our YouTube channel and, of course, at our expert dealer network.

Kind regards,

Stephen Burcham, Horsch UK

Four drill families built for performance and reliability

Disc drills

Designed for high-speed precise sowing after the plough, mulch sowing or direct seed, the **Pronto** features precise depth control and accurate seed placement thanks to preconfigured packer system and Turbo Disc seed coulters. The 12m Pronto DC is the UK's largest cultivating disc seed drill yet folds to 3m for easy transport.

Building on the proven Pronto technology, the **Express KR** is a mounted power harrow and drill combination for intensive seedbed preparation in very difficult soil conditions.

Tine drills

The **Sprinter** combines soil preparation, seeding and fertiliser application in one pass. The robust design and low draft coulters give

high performance in poor soil conditions and high levels of straw residue. The tines effectively remove harvest residues from the seed horizon allowing the drill to be used after ploughing, in minimum cultivation and direct sowing.

Low disturbance and direct drills

As well as the Sprinter range, which can be used for direct drilling, HORSCH has a number of low disturbance and direct drills.

Available in 6m, 8m and 9m working widths, the **Pronto NT** features the proven TurboDisc double-disc coulters at 20cm row spacing in combination with a compact, leading wavy disc, making it ideal for mulch and direct seeding. Speeds up to 20kph allow for high output even at smaller working widths.

The **Avatar SD**, a direct seed drill with discs, features a 200kg coulters pressure and a strong coulters frame to eliminate sideways movement and ensure consistent sowing depth on uneven soils. The **Serto SC** features the new HORSCH parallelogram coulters, ideal for low disturbance drilling.

Precision single-seed drills

The **Maestro** features a revolutionary new pneumatic single grain technology. Developed in-house by HORSCH, this machine brings new levels of speed and precision control to seed drills. Exact grain singling can be used to drill maize, sunflowers, sugarbeet and rapeseed at up to 12kph. Each row has a 70 litre seed hopper feeding its own seed metering device and there is a central 2800 litre fertiliser hopper.



Find us online at www.horsch.com



Both tine and disc drills offer flexibility and high performance in working widths up to 12m.

Grain and Fertiliser on all HORSCH drills

Our range of grain and fertiliser drills has been recently expanded with the addition of a grain and fertiliser version of the Express KR.

We are the only brand in the UK to offer grain and fertiliser application on every drill model, highlighting the importance of this establishment technique. Using the Horsch Duett coulter, the Precision Placement of

Fertiliser (PPF) system places a band of fertiliser in the ground about 30mm below the seed.

Seeds are placed just above and to the side of the fertiliser and the following tine harrow and tyre packers consolidate the soil. By placing fertiliser beneath the seed, a strong crop root structure is encouraged throughout early growth stages.

Express KR now with grain and fertiliser application

Even under difficult conditions, the Express KR power harrow and drill combination allows for an intensive seedbed preparation and the application of fertiliser at the time of drilling gives crops the best start. Pressurised grain and fertiliser tanks

have increased capacity enabling one tonne of seed and one tonne of fertiliser to fit easily.

Available in 3m, 3.5m and 4m working widths, the mounted machine features the proven drill

components of the Pronto model integrated with a powerful 10-rotor Kredo power harrow. The compact and stable design has the seed hopper located close to the tractor enabling tractors from 150hp to handle the machine with ease.



John Aynsley
North Yorkshire
Pronto 6 DC

When John Aynsley joined Skelton Estates in 2011 as farm manager, the priority was to improve soil structure. "The soil had a lot of silt in it and was high in magnesium. We decided to move to a min-till regime to improve the quality of the soil and get a good seedbed established."

The estate has 1400 acres of arable land with a mix of heavy and light soils which are sown with oilseed rape, winter barley and winter wheat. "We tried a number of drills

before buying the Pronto 6 DC, ready for its first season in 2012. We chose it because it simply performed the best and I'm chuffed to bits with how it has worked ever since," says John.

Since the Pronto's introduction, the farm has seen both soil structure and yields improve. "It's a very easy drill to get on with, it pulls well and has been very reliable with very little maintenance required," John explains.

The Pronto's performance is a key highlight. "We can easily do 100 acres per day with the drill. We go in

with our cultivator, a Terrano 4MT, and then leave the soil a few days to drill before drilling."

John and his team like to drill early. "We try to get the oilseed rape sown at the end of August and the

"... the products are high quality and do a great job."

wheat in by mid-September. This gives us a broad window to get all the planting done and we don't have to drill if the conditions are bad."

The six-metre drill works well on the farm's fields, which average 15 acres in size. John remarks that it is quite manoeuvrable but requires a good-sized tractor to operate it. "We run a John Deere 8410 with 280hp, but I wouldn't want to put it with anything smaller than that."

In addition to the Pronto, Skelton Estates has also purchased a used HORSCH CO6 as an introduction to direct drilling. "We have used the drill to plant 600 acres of winter barley, winter beans and spring barley as part of an AHDB monitor-farm project. We're only the first year into a five-year project so we'll see how that goes. It certainly wasn't our intention to go all HORSCH, but the products are high quality and do a great job."



Pronto 6 DC.

Peter Sands
Shropshire
Pronto 8 DC

Drilling 3000 acres of winter rape, wheat, barley and oats keeps the Pronto 8 DC busy at Peter Sands' farm in Brewood, Staffordshire. In addition to the farm, JB Sands also contract a further 500 acres locally.

"We are able to cover between 100 and 150 acres a day with the Pronto, depending on the field sizes we have on the day. Most are between 15 and 20 acres, so the 8m drill is an ideal size for

us to cover the ground and have manoeuvrability," explains Peter.

As well as the Pronto, the farm uses two 4.4m HORSCH Terrano MT cultivators to prepare the seedbed and some of the OSR is planted using a broadcast seeder mounted the cultivator. "Our land is fairly easy going which allows us to maintain a good work rate and we block crop, which helps to simplify drilling."

Drilling usually starts in the second week of September and Peter commends the Pronto on the way it works. "It is a very easy machine

to set up and pull, and it makes a very nice job. We pair the Pronto to a John Deere 8730 tracked tractor, which makes a brilliant combination. The tractor has no traction or

"It is a very easy machine to set up and pull, and it makes a very nice job."

compaction issues and the Pronto discs take out the few markings that are left." The combination works so well that Peter doubts he would see much benefit from moving to a full controlled traffic farming system.

The Pronto 8 DC replaces a

William Smith
Dumfries & Galloway
Pronto 4 DC

The rocky soils in south west Scotland are a punishing environment for drills explains William Smith. Trading as Robert Smith & Co, William contracts around Whithorn in Dumfries and Galloway. He is running his second Pronto 4 DC having run his first for seven years.

“We purchased the first one in 2009 and completed more than 10,000 acres with it, alongside the power harrow drills that we also run.”

As a contracting drill, it plants many different types of seed and William has been impressed with the way the Pronto has performed.

“The harsh, stony territory with rocky outcrops can take its toll on machinery, but it has worked very well. When it came time to replacing it we looked at other drills but considering the support we get from our local dealer, Gordons, in particular Roger Doherty, and Jimmie Carver at HORSCH, getting another Pronto was a no-brainer.”

A key change William made to his second Pronto 4 DC is to move the levelling board from the middle of

previous Pronto 8 DC that the farm ran for five years. “Apart from some minor hydraulics issues early on, it performed very well so replacing it with another was an easy decision.

“However, we have had a modification as we noticed that on engagement of the drill, the discs went in first followed by the coulters. At headlands, this caused the first few metres of ground to not be drilled. A software modification has been made to change this, with the coulters now engaging at the same time as the discs. We’re really pleased with the way it’s performing.”



“The Pronto’s 4m width is ideal for our area.” (Image courtesy of Hazel Smith)

the machine to the front. “I believe this was the first in the country to have this change. In really wet conditions, it allows us to lift the paddles clear of the ground with the tractor hydraulics.

“Usually, we would never drill if the conditions were too bad, but

“When it came time to replacing ... getting another Pronto was a no-brainer.

there was the odd occasion with the previous model with the board in the middle running close to the ground, that it could back up. This now gives us options.”

The addition of a powerful LED

light at the very rear of the Pronto has enabled operator Ian Chambers to see clearly and work more confidently at night. “Ian goes the extra mile to get the job done and this simple option has made his job a bit easier,” adds William.

“The Pronto’s 4m width is ideal for our area. We have small weather windows on the Scottish west coast and, being a livestock area, we have smaller fields too.

“The 4m width works well on our steeper slopes and in wetter conditions, where a bigger drill would be harder to handle. We need to get the job done when the weather allows, and the 4m Pronto has proven to be the ideal tool.”



Pronto DC and tracked tractor make “a great combination”. (Image courtesy of David Peters)

Pronto NT expands seed drill family

Available in 6m, 8m and 9m working widths, the Pronto NT features the well-proven TurboDisc double-disc coulters at 20cm row spacing in combination with a compact, leading wavy disc, making it ideal for mulch and direct seeding.

Operational speeds up to 20kph allow for a high area output even at smaller working widths. Horsepower requirement is very low as the wavy discs cut through



Compact, leading wavy disc.



organic material and cultivate the soil only in the seed rows, creating a fine earth in the seed horizon.

The necessary weight for operation of the wavy discs and seed coulters is transferred via the sophisticated hydraulic system of the machine.

In very hard conditions, additional weight up to 1400 kg can be mounted on the frame.

A large 4,000-litre seed hopper guarantees low idle times while a 5,000-litre double hopper allows seed and fertiliser to be applied at the same time.

A micro-granular unit can be combined with a double hopper as well as with the single hopper version allowing seed, fertiliser and micro-granular compounds to be metered in only one pass.

Why place the nutrients with the seed?

Bill Petrie, fertiliser consultant at Liebig Technology, explains the benefits of placing fertiliser at the same time as drilling.

- To create root miles quickly
- Phosphorus only moves slowly in the soil (0.2mm/week)
- Both N and P have a low pH, this reduces the pH in the seed zone and temporarily helps reduce manganese deficiency.

Regardless of the “P” soil status, trial results from HRI (Horticultural Research Institute) has shown that even on soils with “P” index 8 or (VH) Very High receive a very worthwhile increase in both yield and crop quality on horticultural

crops from the placement of N&P at planting or sowing.

Harper Adams University has demonstrated the **increase** in root miles at 21 days post sowing with combine drilling. This clearly demonstrates that seeds require “colostrum” just like livestock.

Starter fertiliser placed down the side of the seed is not close enough to the plant, when P is required.

PHOSPHORUS

One thing that field trials have shown is that, if you are going to apply any fertiliser to wheat at planting it should be high in

phosphorus, and it should be placed with the seed.

In seven field trials co-ordinated by the Thames Valley Regional Soil and Crop Improvement Association, banded mono ammonium phosphate at 55kg/ha provided an average yield response of 630kg/ha.

A broadcast application of the same fertilizer at 225kg/ha gave only a 175kg/ha response, so the importance of placing is evident. It does not appear to matter whether the fertilizer is liquid or dry, as long as it is placed with the seed and at a high enough rate.

Thanks to Peter Johnson for this data.



D&C Roberts
Ardattin Co. Carlow
Focus 4 TD seed drill

D&C Roberts is a father and son agricultural contracting business based in the heart of Ireland at Ardattin Co. Carlow. Dermot and his son Colin have built up a successful tillage contracting business over 40 years specialising in various aspects of agricultural work. "Tillage is our main enterprise within the business, we cover on average 3,000 acres each year on contract for customers," says Dermot.

The flagship of the fleet is the Focus seed drill which was purchased in 2016. "In our business it is important to use the latest and most efficient machinery available so that we can provide a top quality service. We researched what was available on the market and made the decision to buy our first HORSCH for a number of reasons. Because our work consists of about half and half min-till and conventional tillage the HORSCH Focus drill allows us to do both as well as direct drilling. It is basically 3 drills in 1 which adds to its versatility, it ticks all the boxes," says Dermot Roberts.

"We can easily cover 100 acres in a normal day with the 4 metre Focus. It's very user friendly and easy to calibrate.

"Because we can now place fertiliser along with the seed, which more and more customers want, it has allowed us to expand our business and we've seen an improvement in germination, emergence and crop yields," says Dermot Roberts

The plastic hoppers, which are corrosion resistant, are also pressurised to ensure adequate seed and fertiliser intake and are a particularly nice feature.

"I like the seed and fertiliser hoppers, they are lighter being made of plastic and corrosion resistant when working with fertiliser," says Dermot.

The two hoppers can be used for a combination of seed and fertiliser or solely seed. Each hopper has an individual distribution tower for increased accuracy. "When using

" Because we can now place fertiliser along with the seed, which more and more customers want, it has allowed us to expand our business and we've seen an improvement in germination, emergence and crop yields "

seed and fertiliser, we normally do a 60:40 split with the greater amount going down the front TerraGrip tines which cultivate deeper below the seed while the remainder is placed at the seed itself via the TurboDisc coulters," according to Dermot.

The TerraGrip tines can be interchanged with discs allowing for shallower cultivation. Due to local soil types D&C Roberts normally use the tines to loosen the soil deeper. "We feel that by using the tines and placing the fertiliser below the seed the fertiliser disburses slowly up around the seed where

it is needed, improving yields," says Dermot Roberts.

The HORSCH Focus ST drill has a high ground clearance allowing more room for mixing and trash burial especially at higher forward speeds. Behind the TerraGrip tines sits a row of hollow discs which can form ridges or level the soil according to requirements. The tyre packer roller behind then ensures adequate soil consolidation ahead of the TurboDisc coulters which has its own integrated press wheel to ensure precise and even seed placement.

The HORSCH Terminal in the tractor cab displays all the machine's information in an easy to understand layout.

"The terminal is very user friendly which is important. This feature allows us to use different operators, once you spend a few hours working the machine it becomes like second nature" according to Dermot Roberts. For D&C Roberts Contracting, the Focus has been a real eye opener. "This machine has improved our business opportunities," says Dermot Roberts.



Harry Barton
Lincolnshire
Sprinter 12 SW

A broad mix of winter OSR, barley and wheat, and spring barley, beans and oats keeps the 12m Sprinter 12 SW busy at Barton Farms near Gainsborough in Lincolnshire.

“With around 4,000 acres of owned, contracted and rented land, we have 32 soil types from very light sand to heavy clay, which make up the majority. We need a drill that’s versatile can cope with our wide variety needs,” explains Harry Barton.

Having previously run a HORSCH CO8 and then an 8m Sprinter, a key objective on the farm has been to reduce cultivation. “For spring cropping, we cultivate to four inches in the autumn and then leave it. We go straight in with the Sprinter in March and it does a good job.”

The reduced tillage is part of a number of practices at Barton Farms designed to improve soil health and reduce costs. “The farm runs a 12m controlled traffic farming system that

has significantly reduced fuel costs and improved soil structure. We also use Dutch Opener coulters on the Sprinter which produces less soil movement and makes the Sprinter even easier to pull.”

“ It’s the versatility of the Sprinter that really sets it apart. ”

Covering 70 ha a day, and up to 100ha if the field sizes suit, the 12m drill gives Barton Farms plenty of capacity without having to run in unsuitable conditions.

The Sprinter’s variable rate drilling is complemented by its grain and fertiliser capabilities, which Mr Barton highlights as essential for

spring cropping. Avadex is applied for blackgrass management, which is broadcast from the Sprinter behind the rear tines.

The Sprinter is also being used for some trial direct drilling. “We’ve direct drilled 30 hectares of winter barley into winter wheat stubble. The drill worked very well, and we’ll see how the crop performs. It’s the versatility of the Sprinter that really sets it apart. There’s nothing on the market at the moment that I would consider changing to.”



Variable rate and grain & fertiliser is used with Barton Farm’s Sprinter 12 SW (Image from Pro Horizon)

Charlie Jones
Cumbria
Sprinter 4 ST

Charlie Jones farms more 450 acres with his brother Mark near Calthwaite in Cumbria. Their Sprinter 4 ST has been on the farm for six years and is part of a min-till operation planting winter wheat,

barley, oats and beans. “The ground is mostly sandy loam with a bit of stone in it,” explains Charlie.

Charlie has found the performance and versatility of the Sprinter to be its key assets.

“The drill works well in a wide range of conditions, including the wet but we leave the land alone in these conditions.

Farming in Cumbria means making the most of the weather windows, so we need a drill that will cover the ground. It has good performance allowing us to cover 60 acres per day.”

The versatility of the Sprinter has also allowed Charlie to experiment with direct drilling too.

“We are committed to a min-till operation and we only get the plough out when absolutely necessary. Direct drilling is the next logical step for and we’re at the early stages of seeing how that goes.”

The 4m Sprinter is the ideal drill for Charlie. “It’s reliable, versatile and performs well. We have some steep hills on the farm so the size and the capacity is great; it does everything we want.”





Darragh and Pat Cleary
Monasterevin Co. Kildare
Sprinter 4 ST

Zurich Tillage Farmer of the Year for 2016, Darragh Cleary farms 650 acres in conjunction with his father Pat in Monasterevin Co. Kildare. They specialise in mostly winter crops such as wheat, barley and oil seed rape.

“We operate a high input, high output system here on the farm and although it requires more work, the rewards justify it,” says Darragh. The soils on the farm have a pH level of 7 and an index of 4 for P which particularly suits winter crops. This is further helped by good soil and crop management.

“In 2008, we stopped ploughing altogether and changed to a min-till system”, says Darragh. “With min-till, it’s vital to look after the soil properly, to get the most out of it. We use a disc/tine combination harrow after the harvest to get the weeds to germinate. Twenty one days later the weeds are sprayed off, we then drill directly into the soil 48 hours after that,” Darragh says.

The Clearys produce their own fertiliser in the form of compost which is made from recycled green waste. This is then incorporated back into the land in order to encourage worm numbers.

“It’s all about the worms,” says Darragh. “They produce natural drainage channels in the soil as well as release nutrients for the growing

crop. It’s crucial that they are looked after, the min-till system suits this,” he says. Spring crops such as oil seed rape, beans and peas are used as break crops as well as various cover crops to further help improve the soil.

A 4 metre HORSCH Sprinter ST does all of the 650 acres of sowing. It was purchased new in the spring of 2016 from the local dealer, Kelly’s of Borris. This machine replaced a 4 metre HORSCH Pronto which was came on the farm new in 2008.

“We changed to the Sprinter from the Pronto because it suited our

“ The Sprinter gives us the added advantage of now also being able to direct drill into stubble which is useful in cover crops. ”

system that little bit better. The Pronto can sow both min-till and in a conventional tillage way while the Sprinter gives us the added advantage of now also being able to direct drill into stubble which is useful in cover crops,” according to Darragh.

As most sowing is done in the end of the year the Sprinter has a few advantages. “We found that the tines

worked much better in the wetter soil towards the end of the year than the discs. They weren’t inclined to smear the soil but rather broadcast the seed down where it’s needed. The tandem packer roller is also a great advantage, it is staggered and therefore doesn’t clog with clay as easy,” says Darragh.

The Clearys use the compost as a natural fertiliser, so Darragh opted for a seed-only Sprinter which can hold over 2 tonnes of seed allowing him to easily sow up to 100 acres in a day. “The Sprinter has a power requirement of 160hp plus and is a very easy seed drill to pull. We use 180hp and can sow at 15kph without any problem. Combine this with the large seed hopper and it allows us to cover more ground faster while keeping fuel costs down,” says Darragh.

Up front the Sprinter is fitted with a rigid tyre packer which has two purposes. In ploughed ground it consolidates the soil ahead of the seed tines. When sowing into cover crops, it also acts as a roller to roll down the crop to help incorporate it into the soil.

“We have found the HORSCH Sprinter to be a versatile machine. It is three drills in one compact machine and we have found it easy to use” according to Darragh.



Darragh and Pat Cleary of Monasterevin, Co Kildare with the versatile HORSCH Sprinter seed-only drill.

Express KR

Stuart Hogarth

Penrith Cumbria
Express KR

Drilling 100 acres of barley at the home farm at Glassonby near Penrith in Cumbria and an additional 600 to 700 acres of barley under contract in the surrounding area, Stuart Hogarth needed a drill that was able to perform well across a wide variety of soil types.

“We’ve had the Express KR for two years now. We have to deal with all kinds of soil from the heaviest clay to light gravel and the Express works brilliantly in everything. We hardly ever have to stop,” explains Stuart.

Mounted behind a 200hp tractor, the 3m drill is the first pneumatic HORSCH three-point seed drill with an active tillage tool: the integrated rotary harrow Kredo. The rotary harrow has 10 rotating tools on 3m working width allowing the Express KR to create a seedbed even under difficult conditions and its stable design is ideal even on stony soils.

With up to 800 acres to drill each season, the higher forward speed of up to 13kph was one of the key reasons the Express KR replaced the previous drill. “The ability of the drill to just keep going is really impressive. Because the power



harrow can move independently of the rest of the machine, it goes over stones very easily without lifting the packer,” says Stuart.

The frame of the Express KR is designed in such a way that the working depth of the power harrow does not influence the sowing depth.

“ We have all kinds of soil from the heaviest clay to light gravel and the Express KR works brilliantly in everything. We hardly ever have to stop.”

“The coulters can be lifted to allow the rotary harrow to work on its own or we can remove the harrow from the drill completely using the four fixing points. It’s very flexible.”

There are three packer versions for the Express KR. Stuart chose the

large 64cm diameter tooth packer roller which has proved itself across all conditions including light soils. “In sandy conditions, a packer can slide building up soil in front of it but this packer keeps rolling even in dry, soft conditions. It does an excellent job.”

The hydraulic rams control sowing depth via the ISOBUS-compatible Horsch terminal. The TurboDisc 2 seed coulters follow the soil surface precisely for consistent seed depth and can be lifted completely on the hydraulic ram.

The ability for the drill to deal with high organic residue impressed Stuart. “The discs are the best on the market and able to cope with very trashy conditions. We get a high amount of grass weed in some areas and the discs cut straight through it without problems.”

“Everything to control the drill is electronic, which was a lot to take in, but I quickly became confident in the machine the more I used it and it has never caused any problems.”

Impressed with the drills performance, there is very little that Stuart would change. “It might be nice to go for a bigger width but that brings additional transport problems but its proven to be a good purchase. It’s a bit more expensive than the competitors but you can see where the money goes. It’s very well designed and built; our two-year old machine still looks like new.”





Avatar direct seed drill with single disc coulters

The Avatar SD is the new entry into the direct seeding with discs sector rather than the tine seed drills currently available.

Available in 3, 4, 6, 8 and 12m working widths, its high tare weight and up to 350kg coulters pressure makes it ideal for direct seeding.

The strong coulters frame eliminates sideways movement, which ensures that the coulters keep to the set sowing depth even on uneven soils. A press wheel then closes the seed furrow and consolidates the seed row. Despite the necessary high

weight, the horsepower requirement is low as the SingleDisc coulters are arranged in two bars.

Horsch relies on the well-proven components of the Pronto DC seed drills for hopper and metering with a 3,500 litre hopper for the 6m and 8m versions and 12,000 litres for the 12m model.

Coulters depth control is carried out via a larger and

stronger version of the Pronto's suspension due to the high coulters pressure. Control and monitoring of the machine is carried out via a standard ISOBUS terminal.



Sprinter is easier to handle

We have continued to evolve our popular Sprinter drill with a number of modifications to make the drill easier to handle with lower horsepower tractors.

The chassis of the drill has been streamlined and the rolling resistance lowered to allow a significant reduction in the power required to operate the machine. A 150hp tractor can handle a 4m Sprinter model easily.

Duett and LD coulters

A wide range of coulters is available including the Horsch Duett coulters, which places the seed in a band with

65% of the surface covered, and the Ultra LD low disturbance coulters. The Ultra LD's special shape ensures

that even very heavy soils can be loosened deeply without bringing coarse soil to the surface.



William Haupt
Bedfordshire
Avatar 6 SD

Reducing cultivations to a minimum has been an important part of Will Haupt's strategy at Woburn Farms, Bedfordshire, since he became farm manager a year ago. "Having managed a no-till farm before joining Woburn, I understand that moving to a no-till regime cannot be achieved overnight. There are some parcels of land on the farm that won't respond well to a sudden move to no-till, but I'm aiming to reduce any tillage where I can," explains Will.

Woburn Farms has 4000 acres of combinable crops and farms a further 600 acres under contract. "We have a rotation of winter wheat, barley, rape and beans complemented by spring cereals and beans. We plant as late as we can, establishing some 3000 acres of winter cereals and 900 acres of oilseed rape for 2018, with the remaining land to be planted in the spring ahead of cover crops."

When Will joined, the farm was already running a 6m Sprinter drill. He was interested in the potential the Avatar drill had to offer. "HORSCH had only just announced the release of the Avatar so there wasn't a demonstration machine and no-one else was using it. To get our direct-drilling plans underway, I decided to go for another drill which worked well but didn't tick all the boxes for me. It had a great coulter but the rest of the machine couldn't match the potential of the Avatar." Will followed the progress of the Avatar and following good

Direct drilling into cover crops.



Avatar 6 SD.

demonstrations, he was able to get one on the farm for Autumn 2018 where it has now completed over 2000 acres of drilling.

"The Avatar has worked very well and offers lots of flexibility. Direct drilling with the Avatar offers us many benefits including improving soil health and helping to control blackgrass, although that's not a widespread problem for us.

"The Avatar has worked very well and offers lots of flexibility."

"The Avatar complements the Sprinter very well, with the Sprinter also being used to direct drill into targeted areas. The Sprinter has been fitted with 1" Dutch Openers to reduce soil movement further and is generally used where hair pinning may pose an issue. Both drills now share the same key ability, to drill into tilled or no-tilled seedbeds".

"Between them, we can comfortably get through 200 to 250 acres per day, depending on field sizes, which gives us the required capacity to push drilling back later into the season. We've found the Avatar to cope well in damp conditions due to its very low disturbance, generally being able to drill for longer than the Sprinter if conditions deteriorate."

Large hoppers for seed and fertiliser were an important feature for Will. "Placing fertiliser during drilling is essential. Although we have to be

mindful of the overall weight, the large hopper capacity means we can keep the Avatar running all day without lots of refilling stops. This saves us a lot of time."

The 6m Avatar SD weighs 9,300kg yet despite the high weight necessary for a direct seed drill, the horsepower requirement is low. "The Avatar suits a medium-sized tractor and although we've initially

ran the drill on a John Deere 7r, a brace of new 6r's will take on the drilling duties for 2019. The Avatar is easy to pull and the hydraulic folding to 3m makes it simple to move around."

Spring drilling into cover crops will be key job for the Avatar. Coulter depth control is carried out via the well-proven suspension of the Pronto, strengthened due to the higher pressure of the Avatar. "The Avatar's wide tyres allow it to support its own weight which reduces compaction, which was particularly noticeable on the headlands compared with experience of previous direct drills."

Full ISOBUS compatibility was essential for Will. "We run John Deere control and guidance systems across the farm with all the data feeding into Gatekeeper. The Avatar has fitted in very smoothly to our system allowing it to be easily controlled with our terminals."



Simon Thompson
Leicestershire
Serto 12 SC

we are to where we want to be.”
The Serto’s low-disturbance direct drilling first attracted Mr Thompson as a solution with multiple benefits for the farm.

“With the Serto, we can direct drill into stubble and place DAP (Di Ammonium Phosphate) at the same time. Being able to apply fertiliser at the same time is essential for establishing oilseed rape and spring barley.

“It also provides us with optimum efficiency: we save a pass with the fertiliser spreader and by only placing the fertiliser close to the seeds there are less nutrients for the blackgrass.”

a button, the wavy discs effectively loosen tractor tracks and, due to the low seed hopper, all components are easily accessible and the operator has a great view of the machine and the field.

The Serto SC has proven to be easy to operate. “Moving to a drill with 12m working width has enabled us to cover the ground quickly and very effectively as well as reduce costs. The Serto is a very versatile machine.

“HORSCH has a reputation for reliability, quality and performance. Resale values of HORSCH equipment are very strong, and with the excellent support we get from our local dealer, the Serto is proving to be a great choice.”

The new Serto SC is a key component in Leicestershire-based Parker Farms five-year plan to transition to a pure Controlled Traffic Farming operation while at the same time improve the soil structure and have greater blackgrass control.

The farms’ 5000 acres of arable land has a mixture of soils and

is planted with oilseed rape, winter wheat, spring barley, winter beans, spring oats and peas. “The 12m Serto is the next step in our 12m CTF operation which we started with the combine,” explains Simon Thompson, Farm Director at Parker Farms.

“For us it’s a very important purchase that takes us from where

“ With the Serto, we can direct drill into stubble and place DAP at the same time ... essential for establishing oilseed rape and spring barley.”

Less intensive cultivations across the farm are part of Mr Thompson’s plan. “Low disturbance drilling will enable us to improve the soils across the farm and improve blackgrass control.”

The Serto SC is designed to be easy to use. The machine folds to a 3m transport width by simply pushing

New parallelogram

The new HORSCH parallelogram coulters feature large bearings and is designed to be very stable and durable. It is ideal for difficult conditions and ensures safe seed placement even if the seedbed is rough. The development was influenced by the experiences of the Maestro single grain technology. To guarantee an even placement, the Serto SC is equipped with a packer for levelling and consolidation.



AutoForce: advanced coulter control



Robert Tuckwell

Essex

Maestro 16 SW with AutoForce

AutoForce is an advanced coulter control system that automatically adjusts coulter pressure on the move to varying soil conditions. Drill operators typically set coulter pressure to their heaviest soil conditions, but detailed research by Horsch has revealed this can lead to increased compaction when moving into lighter soils.

The 300kg per row unit coulter pressure on the Maestro maize drill is the highest in the industry. This is ideal for heavy land but the research, conducted across Europe in the past three years, has shown a more even seed germination by reducing coulter pressure in lighter soils.

Using hydraulic rams, AutoForce is the only system available to continuously adapt coulter pressure while drilling to prevent compaction on light land or reduced sowing depth on heavy land.

Early adopters impressed by performance

Buckinghamshire-based Robert Tuckwell Contractors were one of the first in Europe to have the system fitted when they took delivery of a new 12m Maestro 16 SW in 2016. Drilling more than 3200 acres of maize to feed two local anaerobic digester plants, the contractors were impressed with the Maestro drill and the large increase in capacity it offered over their existing 8-row 6m drill.

“AutoForce was not a feature that we specified when choosing the Maestro and I was initially sceptical



of its value,” admits Scott Hosking, main drill operator for Robert Tuckwell. “However, having worked with it for a season I would certainly specify it on my next drill.”

AutoForce uses sensors to monitor two 8-row sections on the 16-row machine. Separate hydraulic arms provide down pressure for each section, enabling the dedicated software to adapt each section independently. The system, which can also be specified as one section for smaller machines, maintains accurate seed depth placement at higher speeds and offers greater control

“I was initially sceptical of its value. However, having worked with it for a season, I would certainly specify it on my next drill.”

over the standard system that provides uniform pressure across all rows.

“We have a wide range of soil types to consider and often we would set the drill to a heavier soil only to find the coulters would become buried on the lighter land,” explains Scott. Horsch’s engineers enhanced the system response time during the season allowing it to react to change more rapidly.

“Now, with AutoForce in place, we can maintain our desired drilling depth of 2.5 to 3 inches far more easily and it has also allowed us to increase our speed too.

“We run about 8kph in heavy clay pushing up to 12kph when the seed-bed condition allows, and all with a seed placement accuracy of 98% or above,” adds Scott.

Maize is renowned for its lazy root structure and ensuring accurate seed and fertiliser placement is essential for good yields.

Covering 160 acres per day with the Maestro, the drill has improved the contractor’s logistics operations too. “We can get about 120 acres of seed in the tank which means we only need one top-up during the day. We have also moved to big bag seed and big bag micro-granular fertiliser which has further simplified operations,” says Scott.

“The presence of such a big drill on some of the smaller farms raised concerns to start with but once they saw how even the planting was and how good the crop looked, we haven’t had any complaints. I think AutoForce has certainly enhanced the seed placement,” concludes Scott.



Olly Neil
Essex
Maestro 8.75 CC

When Olly Neil, founder and managing director of OJ Neil Contracting Ltd, was approached in 2010 to harvest maize by a client that was building a biogas plant, he felt confident that this was just the start of a growing sector of the market. Originally asked to harvest 400 acres near Risby in Suffolk, Olly has seen the business grow to 8000 acres of maize in the past six years, helping to fuel eight biogas plants on customers' farms from Colchester in Essex to Spalding in Lincolnshire.

Olly originally sub-contracted the maize drilling but as the acreages grew, it made sense to take it on themselves. "We had the skills in the business to do it, we just needed the equipment, so in March 2014 we purchased the Horsch Maestro," explains Olly. "We now drill about half of what we harvest, so that's 3500 acres each year through one maize drill."

Having completed two seasons with the drill, Olly has been very pleased with its performance and reliability. "We had overseen the maize drilling for five seasons with subcontractors using a variety of machines, so we knew what wanted from a drill."

After demonstrations, he chose a Horsch Maestro 8.75 CC, a 6m maize drill with eight planters set at 75cm row spacing. Attracted by the brand's reputation for quality, Olly was impressed by the easy of use

but it was the consistent precision drilling across a wide variety of soils and conditions that was key.

"We specified auto row shutoff so the Maestro's seeder units are managed individually using the tractor's RTK positioning system. When you're working on the headland, each individual row shuts off as required; it looks neat and saves on seed. It's a precision technique that shows customers you're taking extra care rather than big overruns. It just looks right and a visual indication of our high quality approach."

Each of the Maestro's eight seed hoppers holds 70 litres while the 2800 litre fertiliser hopper is mounted ahead of the axle for good weight distribution. "Being able to apply fertiliser at the point of drilling is key in this industry and it does make a big difference.

"Auto row shutoff looks neat and saves on seed. It's a precision technique that shows customers you're taking extra care. It just looks right and a visual indication of our high quality approach."

We apply between 85 to 100kg of DAP per hectare and we see a significant improvement in the speed of emergence and healthy crop condition, so we use it on 95% of the land we drill."

Mounted behind a FastTrac 4420 with four-wheel steer and flotation tyres, the Maestro can be folded to a 3m transport width without having



to empty the metering units, making it easy for the operator to move to the next field quickly.

Along side the Trimble RTK control unit sits the Horsch Comfort 2 Terminal that allows the operator to fine tune the electrically-driven metering wheels. "The terminal gives

percentages for each coulter, with singulation ensuring doubles or misses are kept to a minimum. The metering is very good with a 98 per cent accuracy and a consistent linear

spacing between the plants, which is key. And without worrying about steering, the driver can spend more time monitoring," adds Olly.

"It's such a well-thought out drill and an easy machine to maintain with only a few wearing parts to be replaced in the 6500 acres we've drilled so far. I'd certainly get another!"





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