Drilling made easy

The Hoggard family returned to low-till drilling in a bid to retain seedbed moisture and make more efficient use of smaller drilling windows. After evaluating several drills, they plumped for Sky Agriculture's 4m EasyDrill. *FMJ* found out how the drill has performed

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any years ago the Hoggard family, who farm 500 acres near Malton in the Vale-of-Pickering, tried direct drilling to establish their arable crops. Following mixed results, they switched to a traditional plough-based system centred round an Amazone combination drill. They wanted to return to low-till crop establishment, which they felt would be more efficient, make better use of smaller weather windows in challenging years, and help reduce compaction, leading to better moisture conservation and improved crop yields.

"We bought a set of discs and a Sumo Trio to replace our plough, while the Amazone combi drill made

"We began looking at alternative establishment methods to reduce the amount of traffic"



TECHSPECS

Sky EasyDrill HD Fertisem

Working width 4m
Transport width 3m
Weight 6.4t
Grain hopper capacity
1760 litres
Fertiliser hopper
capacity 1240 litres
Pro 1 hopper capacity
120 litres
Number of coulters 24
Disc coulter diameter
43.5cm
Coulter pressure

Row spacing 16.6cm Power requirement 140-180hp Tyres BKT FL630 750/45 R26.5



First Impression // Sky EasyDril

"While the Horsch was well built it was relatively lightweight and still necessitated a well-worked shallow tilth in drier conditions to perform at its best on our land," he continues. "If the weather went against us in the autumn, like it has done in recent vears, and seedbeds became fractionally too wet, it was much more difficult to establish our winter cereals in a timely manner with the Horsch.

"Wet autumns and dry springs were also becoming the norm and we were concerned that using the discs. Sumo and power harrow was starting to lead to an increase in compaction again and a reduction of moisture content in our soils, resulting in poorer yields.

"To counteract this, last spring we began looking at alternative crop establishment methods to reduce the amount of traffic on our land, with one eye on returning to direct drilling if we could find a drill suited to our soils and acreage. Direct drills have become much more advanced in recent years and more suited to conditions in the UK since we last used one, so we believed heading down that route again would offer us far more benefits this time around," notes Tom.

Drill dilemma

The Hoggards began evaluating different drills, including the John Deere 750A disc drill, Italian Ma/Ag





low disturbance disc drill, heavyduty Alpego combination drill and Weaving's double disc GD drill. However, it was French manufacturer Sky Agriculture's split tank design, dual seed distribution and hydraulic load transfer systems that

> persuaded the Hoggards to order one, without a demonstration. from local dealers Wilfred Scruton Ltd.

"We were able to view some oilseed rape on a

Top left: Cast iron closing press wheels make sure the seed slot is fully sealed in ons and soils

Above left: A two-point pivoting headstock sits on the lower link arms

Above right: The 6.4t EasyDrill is kept afloat with a pair of BKT 750/45R26.5 flotation tvres

Left inset: The Hoggards' 2019 Sky EasyDrill uses the older Vision itoring termina





Yorkshire Wolds farm that had been established with a companion crop using a 6m version of the EasyDrill," says Tom. "It was one of the most even crops of oilseed rape we had seen in a long time, and we were impressed with how it had thrived thanks to the protection of a buckwheat companion crop. While our soil was substantially different, it gave us the confidence to order an EasyDrill and give serious thought to introducing oilseed rape back into our crop rotation."

Rather than purchase a brand-new 4m Sky EasyDrill Fertisem, the Hoggards had the opportunity to buy a barely used 2019 version that had



unit fitted with peg and cam wheels for differing sizes of seed

Right: A carriage controlled by two hydraulic rams allo and lifting of the dri out of work

previously completed trial plots with agronomy specialists Agrii, which Scrutons could supply for immediate use. Sky Agriculture's EasyDrill can trace its roots back 40 years to the Moore Uni-Drill. Sky Agriculture was conceived in France in 2013 by farmer and agronomist David Guy and Julien Burel of Sulky-Burel. Sky Agriculture's Easy and Maxi Drills are currently marketed in the UK by Opico.

While the Hoggards' 2019 EasyDrill HD doesn't benefit from the latest chassis alterations and electronic updates such as blockage sensing or Sky's revamped coulter line introduced on its latest 20 Series EasyDrills at

the beginning of 2020, the basic design layout, coulter and metering system has changed very little. The 4m EasyDrill HD utilises a bogeymounted coulter system featuring rubber bush shock absorbers front and rear offering plenty of clearance for working into long stubble, cultivated ground and cover crops.

24 notched discs, 43.5cm in diameter and spaced at 16.6cm, come with a disc inclination of 1.5 degrees and an opening of 3.5 degrees to place less-than-ideal conditions has been its seed into a narrow, low-disturbance channel. A streamlined skim coulter sits alongside the disc and carries the seed tube. A second tube is capable of placing fertiliser or a companion crop

Below: Sky Agriculture

agronomist David Guy and Julien Burel of

by farmer and

Sulky-Burel

at three separate levels behind the main seed tube.

Depth setting

The EasyDrill's depth is set from the rubber press wheels running in front of the disc coulters via a turn buckle system. Once loosened, the press wheels can be positioned via a series of spacers to achieve the desired depth.

Behind the disc coulters, a set of larger staggered cast steel closing press wheels are used to seal the seed placement slots, and are also fitted with integrated scrapers for clearing away damp soil.

"While drilling conditions haven't been the best this autumn, we've been very impressed with the even seed placement the coulter system provides, while the rear press wheels do an excellent job at closing the slots, especially on the heavier land we farm, which is prone to cracking when dry," says Tom.

"We bought a low-disturbance sub-soiler to run in front the drill this year to improve our soil's structure before we introduce direct drilling. The coulters have coped very well with the low-till seedbeds we have been drilling into and haven't once bulldozed the soil."

Tom reckons the key to the Easy Drill's favourable performance in adjustable hydraulic weight transfer system. Two hydraulic rams located within the centre of each of the drill's folding wings are capable of exerting up to 250kg of pressure per disc



Front Link

First Impression // Sky EasyDrill

▶ coulter and this can be biased either towards the front press wheels or rear closing wheels to suit the type of crop being drilled, soil type and conditions.

"Because moisture levels have been higher and we've been using the sub-soiler in front, we've tended to place the weight over front press wheels and disc coulters for the best consolidation. However, if we have a dry spring and ground conditions become much harder, we'll position the weight over the rear of the

coulters and closing wheels for the best penetration, and to ensure the slots are fully sealed. The versatility of the weight transfer system is fantastic. It's important to set up and adapt a drill like this for every field, to make the most of its performance.

Trio of hoppers

The Hoggards' EasyDrill comes equipped with three hoppers, each fitted with its own metering unit that feed into a dual distribution circuit designed to avoid blockages and keep seed and fertiliser separate.

The main hopper on Fertisem versions is split into two

compartments. The front half is capable of holding up to 1760 litres of seed while the rear half can hold up to 1240kg of fertiliser. The smaller 120-litre Pro 1 hopper situated at the front of the drill is designed especially for applying micro-granular fertiliser, slug pellets or sowing companion and cover crop mixes.

The Pro 1 hopper feeds into the distribution circuit for the main seed tank and is capable of seed rates between 0.5kg and 30kg per hectare. Peg wheels and cam wheels are used within the electronically driven metering units for the precise distribution of differing seed size from the three tanks. The operator can control the airflow for each distribution unit from the cab to achieve the desired seed rate and fertiliser application.

"Although we're using the older Vision Duo control screen, it's still an excellent user-friendly interface for monitoring the drill's performance and making any necessary seed rate adjustments," says Tom. "Since we first started running the EasyDrill we've also invested in a Trimble GPS system, which has made drilling an even more relaxing task. So far we've used the drill to establish 250 acres of Firefly and Extase winter wheat behind our John Deere 6210R, and have yet to use the fertiliser and Pro 1 tanks

"However, next year we plan to make full use of them to apply both fertiliser and slug pellets while drilling, which will definitely lead to



Above: The drill's depth is adjusted using a turnbuckle system fitted above the front press wheels

Left: The front half of the split tank holds 1760 litres of seed while the rear can handle 1240kg of fertiliser a reduction in fuel costs and traffic on the land. We also intend on using the EasyDrill to direct drill and re-drill our grass leys, avoiding the need to spray and plough to regenerate them."

Learning experience

Tom say's integrating one of the latest generation direct drills into an alternative crop establishment system continues to be a learning experience and has been immensely grateful to the support offered by Wilfred Scruton Ltd since the Easy Drill arrived at Howe Bridge Farm.

"The team at Scruton know these drills inside and out," says Tom.
"They've regularly made courtesy calls to the farm to provide us with useful advice on how to maximise the drill's performance. The only major issue we've encountered so far was with the drill's control unit that required a factory reset. While we're not expecting to achieve miracle yields over the first two years, we've been delighted with the performance of the Easy Drill so far, and hope to see the benefits in the future."

Below: The Hoggard family bought this 4m Sky EasyDrill HD to move back towards a direct drilling crop establishment system

