# CLAYDON CUSTOMER FARMFOCUS





## FOCUS YORKSHIRE

#### **QUICK FACTS**

- Farmer Graham Potter Location Yorkshire
- Area Farmed 200ha
- Soil Type

Mixed

Average Rainfall Circa 600 mm/yr

Cropping Wheat, OSR and Spring barley

Plough-based establishment of combinable crops is unsustainable at current prices according to awardwinning farmer Graham Potter, who has seen significant economic and agronomic benefits since changing to strip seeding.

Four years ago Yorkshire farmer Graham Potter, a finalist in the 2015 Farmers Weekly Arable Farmer of The Year Award, stopped ploughing in favour of strip seeding, a technique which now allows him to operate the family farm single-handed and has reduced the cost of establishing wheat from £116/ha to just £76/ha. What's more, in that time yields have increased from just over 8t/ ha to 12t/ha, and there are numerous other benefits too.

The use of strip seeding is part of a range of changes introduced on W.M. Potter & Sons' Topcliffe Grange near Thirsk, which has also adopted Controlled Traffic Farming (CTF) and precision farming technology to improve soil fertility, cut production costs and boost grain quality. Farming 200ha, the business produces 50ha of first wheat (Skyfall), 60ha of second wheat (J. B. Diego), 46ha of high erucic oilseed rape and 32ha of spring barley (Propino), as well as 21ha of cover crops. Bordering the River Swale, the farm includes 20 types of soil, from blowing sand to heavy clay, and while the fact that no two fields the same makes crop husbandry more difficult, strip seeding has made a big difference, as Graham explains.

"For eight years I worked on a 14,000-acre arable farm in Western Australia where

they have always used the latest technology, so when I came home that experience put me ahead of the curve in terms of knowing about the latest ways of doing things. Conditions are obviously very different over there and many of the drills used on Australian farms have angled discs or low-disturbance tines which work well in dry soils but are not a suitable long-term solution for the wide range of conditions we see in the UK as a result of our maritime climate. That's why I bought a drill that was developed under UK conditions. The key reason for changing to strip seeding was to reduce the time and cost of establishing crops I wanted to operate the farm

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myself so that in addition to any savings in establishment costs I didn't have to pay someone else to do a lot of work which was unnecessary from an agronomic point of view. Having seen the results that one of my neighbours was achieving with his Claydon drill I went to look around Jeff Claydon's farm in Suffolk Claydon System was where the developed. That convinced me to invest in a 4.8m Claydon Hybrid drill to fit in with our 24m CTF System. I can't fault the drill in any way, as it is simple, well made and costs very little to maintain. It is also easy to pull and my 205hp John Deere 7830 handles it comfortably at the 11 to 12 km/h needed for the drill's front cultivating tines to work effectively."

#### SIGNIFICANT BENEFITS

"This is the fourth season that I have used the Claydon System and there is no doubting the fact that it has made a big difference to the profitability of this business through savings in establishment costs and higher yields.

Previously, half the farm was ploughed and on the other half I used a Sumo Trio followed by a KRM disc drill, which was expensive as well as labour and time. intensive. The cost of establishing wheat was £116/ha, which included £47/ha for ploughing, £57/ha for drilling, plus £12/ ha for rolling. It took two weeks to drill all the crops and I and a part-time employee clocked up hundreds of tractor hours every autumn just turning the soil over.

Now, I establish all of the crops myself for just £76/ha - £14/ha for the Claydon Straw Harrow, £50/ha for drilling and £12/ha for rolling. The number of tractor and man hours has fallen dramatically because it only takes three days to get crops in the ground, in one pass.

I certainly have not experienced the drop in yield that often gets talked about on internet forums by people who probably have no practical experience of strip seeding, in fact quite the opposite. During the last four years my yields have increased steadily, from 8t/ha with the previous systems to 10.5t/ha in 2013, the first year of using strip seeding, then 11t/ha in 2014 and 12t/ha in 2015.

Timeliness of establishment is also much improved as I can drill 40ha in a normal day and up to 60ha in a long day, which allows me to establish all the oilseed rape in a day, the same for spring barley and second wheat. Added to that the land is now in much better condition and more supportive of machinery, which allows me to spray or apply fertiliser well before others can get on their fields.

The Straw Harrow is a key part of the system. I bought a 7.5m model and quickly found out how important it is in getting the best from the Claydon System. In fact, it is essential, as the Claydon Hybrid Drill, Straw Harrow and Rolls are designed to work as one. I've learned a lot about using the Straw Harrow, particularly its essential role in distributing chopped straw evenly across the field, controlling weeds and keeping on top of slugs.

I carried out trials to see what difference stubble height makes to how well the Claydon System works, with some stubbles left at 30cm some at 25cm and others at 15cm. The drill works best when the stubble is 15cm high, which also produces the best germination and crop, so now I set the combine's header to that height and the chopper to cut the straw as short as possible.

The ability to deal with slugs effectively has become increasingly important in





The Straw Harrow is also a very useful tool for breaking down any clods which remain on the surface of heavier fields after drilling, so plants are better able to germinate and herbicides can work more effectively. I have also seen better results on this type of land from running the drill through the soil, with no seed in the hopper, after any green material has been sprayed off, then leaving it for a week before drilling.

Probably the most difficult aspect of using the Claydon System is getting to grips with how crops look during the first three months after drilling. In fact, it's probably best to go on holiday in January and February because if you spend too much time looking at them you might convince yourself that this is not the way to go, as they can seem rather backward and untidy. Some of that is because some stubble remains from the previous crops and draws your eye away from the new crop. But as soon as spring comes around and the crops see a bit of sunshine they tiller vigorously and race away, leaving those which were established using plough or min-till techniques trailing.

Apart from the obvious financial benefits from establishment cost savings and higher yields the structure and condition of the soils is improving significantly as a result of strip seeding, as is the amount of soil organic matter, which has traditionally been an issue here. My agronomist is impressed by the increase in worm counts since I started Claydon drilling, which is setting the farm on the right track for the future."



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Claydon Hybrid drill uses a leading cultivator tine operating up to 15cm deep in combination with a following seeding tine.

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Graham Potter's John Deere 7830, a 2011 model with just 1700 hours on the clock, copes easily with pulling the 4.8m Claydon Hybrid at 11-12 km/h and can drill up to 60ha per day







Winter wheat established using the Claydon System at Topcliffe Grange



Oilseed rape drilled directly into wheat stubble emerged strongly and evenly