

ALAN MILNE

NORTH MAINS



NORTH MAINS
Turin, nr Aberlemno
ANGUS

- 1,200 Acres
- Spring Barley
- Winter Wheat
- Oilseed Rape
- Seed Potatoes

“...the quality of seed placement was one thing that attracted me to the drill. Running the packer ahead of the drilling coulters means they work into firmed soil and achieve good placement...”

Speedy solution in Angus

Greater output and an improvement in the quality of drilling are two major benefits Alan Milne notices from his decision to invest in a Simba Horsch Pronto DC drill.

He farms 1,200 acres, a mixture of owned and rented land, from North Mains of Turin, near Aberlemno, in Angus, with a significant acreage of spring barley being grown for malting and seed.

He previously used a 3m power harrow combination drill, but felt he needed to improve on its output: “One of the main reasons we bought the drill was to enable us to cover the ground faster. This drill covers 50 to 60 acres/day comfortably, whereas the power harrow combination did 35 acres on a really good day”.

Their soils are mainly sandy loams but with a significant stone content. The plough remains their primary cultivator because of the potatoes in their rotation, and Alan thinks it is the best way to control grass weeds, especially sterile brome:

“For autumn sowing we plough and press which leaves a good, firm base for the tractor pulling the drill. For spring drilling we leave the land ‘in the furrow’ and drill straight into that.



Fertiliser placement is essential for spring crops

“The drill’s leading discs are a very simple design and do a good job. We had some good frost this year which helped get to work on the over-wintered ploughing, and the drill’s discs worked it down very well this spring.

“The crops are looking very well considering they went in fairly late after a wet spring and have had very little moisture for the past five or six weeks”.

His previous drill featured a full width roller run ahead of the drilling coulters, so that part of the Pronto DC’s design seemed logical to him: “The quality of seed placement was one thing that attracted me to the drill. Running the packer ahead of the drilling coulters means they work into firmed soil and achieve good placement. The leading discs perform a good cultivation ahead of the roller.

“We also liked the large hopper size which means you can cover a decent acreage between filling”.

Crop emergence has been good, despite a difficult spring in which drilling was delayed by wet conditions and crops received very little water for five or six weeks after they were sown: “The crops are looking excellent. Those sown in the autumn all came through the winter looking well; we are very pleased with the oilseed rape”.

This spring the drill also did an excellent job of putting in the spring barley, which they sow in a 40%/60% mix with seedbed fertiliser. He has exploited the drill’s ability to drill in all kinds of seedbeds by using reduced cultivations to establish some oilseeds behind winter barley after just discing the ground.

CASE STUDIES

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PRONTO DC 3m, 4m & 6m models



Launched in 2005 the Simba Horsch Pronto DC drill represents the very latest thinking in drill design and technology. Designed for working on ploughing, minimum tillage and direct drilling this range is very versatile and will operate on most soil types. With a full width tyre packer positioned ahead of the disc coulters it has huge benefits over many of the competitive drills currently on the market.



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PROFIT THROUGH INNOVATION



PROFIT THROUGH INNOVATION



Quite simply the Simba Horsch Pronto DC drill 'looks right'.

It was launched on to the UK market in 2005 and therefore represents the very latest thinking as far as cultivator drill design goes. Not only is it a very effective and accurate drill it has a lower horsepower requirement than its key competitors; it is easy to set and has a streamlined appearance.



A Simba Horsch Pronto 4 DC at work in New Zealand

One of the key features with the Pronto DC is the positioning of the full width tyre packer between the front cultivation discs and disc coulters. This has significant benefits in that it reconsolidates the ground ahead of the disc coulters avoiding any coulters stall. It also means that you can fully utilise to depth the front discs.

The positioning of the central tyre packer also has benefits as far as power requirement is concerned. In damper conditions the roller in this position supports the weight of the drill far better than being at the rear of the machine, which often results in sinkage.



Coulters and depth wheel are close together

Each coulters is followed directly by its own press wheel, which closes the slot before firming and consolidating the soil. This action ensures optimum seed to soil contact leading to swift and even germination. Placing a depth wheel close behind each coulters gives excellent contour following and depth control. The double disc coulters fitted to the Pronto DC protects the coulters boot between the discs, a design seen as superior to a single disc with a side mounted coulters which can act as a brake thus increasing draft. Another notable feature of this range is the position of the distribution head, which is outside the hopper. Not only does this increase the hopper capacity it also makes it easier to clean and empty both the head and hopper.

Being positioned at the rear of the machine the drilling coulters are very accessible unlike some drill designs where the middle disc coulters are positioned underneath the hopper.

The working elements on the Pronto have less linkage and pivot points than competitive machines through a simpler design, running costs are therefore considerably less.

Finally, and to many an important issue, headland compaction is less likely to occur with the Pronto DC with its central tyre packer ahead of the disc coulters, other drills with rear full width packer can often seal the surface leading to ponding and very poor emergence.

The range spans from 3m to 6m with 8m versions being added for the 2007 season. Power requirement for the 3m starts at 120hp with the 4m needing around 150hp and the 6m 220hp. All models fold to 3m for transport, 2800 litre hoppers are standard with an extension to 3,500 litres available as an option. Split hoppers (50% seed/50% fertiliser) are also available, and with hopper height around 2m filling using a front end loader is a possibility. An integral grease distribution system helps reduce maintenance so that reliability is improved and increased output is achieved.



The distribution head is located outside the hopper for ease of access

ROBERT DRYSDALE

FARMCARE



FARMCARE
Monymusk
ABERDEENSHIRE

- 3,500+ Acres
- Winter Wheat
- Winter Rape
- Barley



“...there is far less day-to-day maintenance to complete and what there is, is easier to do, which reduces downtime and spare part bills...”

Rely on a Pronto

If you want to establish 3,600 acres of crops every year with just one drill, you need a machine that combines reliability and high output.

The Pronto DC6 now working for Farmcare in Aberdeenshire is proving capable of achieving those aims, as well as achieving other significant benefits over its predecessor, including better seed placement and much lower fuel costs.

It is the only drill used on three farms totalling some 3,000 acres near Inverurie, and another 600 acres some 20 miles away at Fyvie. Cropping includes 800 acres each of winter wheat and winter rape, with 2,000 acres of barley – half planted in the autumn and half in the spring.



Cutting fuel usage is a valuable saving

Cultivations on the mainly light, loamy soils starts with ploughing, with the drill generally running straight onto that, and a following press roll being used to ensure effective consolidation and good soil to seed contact. The roll also presses stones into the seedbed to assist subsequent field operations.



Output is essential for Farmcare

While many cultivator drills look similar, manager Robert Drysdale says the Pronto DC has several key design factors that set it apart, the most noticeable being the use of a full width tyre packer running behind the cultivating discs, but ahead of the drilling coulters: “They do a really good job of firming the soil ahead of the coulters, so they work in a firm seedbed”. This also gives the coulters something to bite into, which helps them achieve accurate and consistent seed placement. Accuracy is also helped by the fact that the depth wheel controlling each coulters is much closer to the coulters than on their previous drill:

“The wheel on our old drill was well behind the coulters, so if you went through a dip the seed would be placed at shallower depth when the coulters went through the depression, but would then dive in deeper as the depth wheel went through it”.

Rear tyre packers can also cause problems: “In wet conditions the roller on our old drill tended to press the soil down too hard particularly on headlands. That inhibits germination and you could see thinner patches in the crops where this occurred”. As well as achieving better results, the Pronto is proving easier to pull and is much easier to maintain. In a long working day, in which he reckons to cover some 100 acres, he says the tractor uses 100 litres less fuel:

“Firming the seedbed ahead of drilling reduces draught, as does using a double disc coulters in which both discs rotate, rather than one rotating disc and a scraper, because that acts as a brake. There are also no scrapers on the tyre packer.

“It is also easier from a maintenance point of view, as all coulters are mounted on sealed bearings. There is far less day-to-day maintenance to complete and what there is is easier to do, which reduces downtime and spare part bills”.

MICHAEL TURNER

HOLKHAM ESTATES



HOLKHAM ESTATES
North Norfolk

- 5,500 Acres
- Winter Wheat
- Winter/Spring Barley
- Sugar Beet
- Other root crops

Aiming to do nothing

Running 5,500 acres is not a job for a lazy man – but farm manager Michael Turner admits that his ambition is to “do nothing” ahead of his new 6m Pronto DC drill.

Holkham Estates, which he manages, uses minimal cultivations to establish wheat and malting barley, while still ploughing land for sugar beet or ground rented out for root production. At the moment their primary cultivator for cereals is a set of Simba 23C discs and a Unipress.

His aim is to do no other cultivation ahead of the Pronto, and rely on its leading discs to create a good tilth: “The discs on the Pronto do a thorough job and create a good tilth ahead of the drilling coulters, even on our stickier land”.

He chose the drill ahead of a range of competitors because he said it was “designed from the ground up”, rather than being compiled from relevant bits: “We had an impressive demonstration last autumn. On one field that was subsoiled after potato harvest the cultivating discs chopped straight through the haulm, as did the discs on the drilling coulters”.

His previous drill – a Freeflow – had a full-width roller ahead of the drilling coulters, so he already appreciates the benefit of working into a firmed seedbed in terms of avoiding ‘disc stall’:



The leading discs create a good tilth

“...the discs on the Pronto do a thorough job and create a good tilth ahead of the drilling coulters, even on our stickier land...”



Direct drilling reduces costs

“We need to firm this land but not compact it. The discs do enough cultivation for the drill to sow spring crops straight into land from which sugar beet had been harvested in the late autumn, which reduces the need for preparatory passes and saves a lot of time and money.

“The fact that the drill’s weight is taken on the full width of the roller when turning on headlands should avoid compacting the soil and reduce our need to subsoil”.

It performed well when sowing spring cereals into marsh land: “We chopped and spread the straw and disced/pressed in the autumn. This spring there was a really good frost tilth, so the fact that we could go straight in with the drill was a major benefit.

“We also direct drilled 30 acres of malting barley into land from which sugar beet had been harvested in the autumn and it has established beautifully. You cannot really establish a cereal crop cheaper than that! It also did a good job of sowing spring beans for a neighbour”.

Output is excellent, and he feels they could cover 150 acres/day working at speeds of 10kph – 12kph.

RALPH THOMPSON

A THOMPSON & SONS



A THOMPSON & SONS
Silvermoor Farm, Denwick
NORTHUMBRIA

- 1,500 acres on contract
- 250 acres cereals/grass ley at home

Added output aids expansion

The opportunity to expand his contracting acreage from 340 hectares to over 600 ha persuaded Northumbrian farmer/contractor Ralph Thompson to look for something to replace his 3m power harrow combination drill.

While the key aim was to improve output, he was also keen to achieve better crop establishment and overcome the limitations of the Suffolk coulter, which failed to achieve consistent sowing depth across the varying soils that A Thompson & Sons (ATS) operates in a 10 mile radius from its base at Silvermoor Farm, Denwick.

His answer was to buy a Simba Horsch Pronto DC3, which has proved more than capable of coping with the increased acreage, working at 13 – 16 kph so it can cover over 2.5 ha/hour, and up to 35 ha/day where required.



Better establishment is key

The drill now covers both their contracted acreage, and all the drilling on the 150 ha home farm, which includes 60 ha of cereals and 40 ha of ryegrass leys grown for their rapidly expanding haylage business, which Ralph runs, while colleague Adam Dunn manages the contracting business:

“Before we expanded the contracting business we got away with using a three metre power harrow combination but that would now be far too slow. It was all we could do to get round the 340 ha that we needed to cover in the autumn, and we ran into problems if the weather turned against us”, says Ralph:

“When the extra land came available we were keen to take it on but knew we had to improve output and felt a new drill was the best option available to achieve that”.

Their cultivation system generally starts with ploughing – although they may disc oilseed rape stubbles for winter wheat – after which they consolidate and level with a Simba Cultipress and then drill, before rolling.

They chose the Pronto DC after examining a range of options: “We both felt it was the best designed tool for the job and would be capable of performing in any seedbed we prepared for it. It is much simpler than some of the competitors, with far fewer wearing parts”.

Adam says it proved its worth in the first season, during which it covered some 680 ha in total:

“It achieves very even seed placement. When we used the combination the headlands would emerge earlier than the rest of the field, which we attributed to the combination struggling to get the seed in as deep.

“It also used to struggle on our heavier land, or on areas where it was harder to make a good seedbed such as beside woods. Now the entire crop appears to come through more evenly. All our customers have noticed it as well and commented on what a good job it has done for them”.

The drill has also proved much cheaper to run than its predecessor, and has also done an excellent job sowing grass for the haylage operation.

The drill has further proved its versatility this spring, sowing some 40 ha of six metre wide game cover strips as part of a grey partridge conservation project run by their landlord, the Duke of Northumberland:

“We have drilled triticale in 12 inch rows to provide a canopy for the birds by blocking off every other coulter”.

ROSS DENNING

TRENITHON CHANCELLOR



TRENITHON CHANCELLOR
Probus,
CORNWALL

- 2,000 Acres
- Winter Wheat
- Peas/Beans
- Grass/Clover Mixes
- Triticale

Dennings raise their game

Organic farmers have an even greater need than their conventional brethren to achieve timely crop establishment, because they do not have the same armoury of inputs to help crops recover from a poor start.

So when the Denning family needed to raise the output of the crop establishment system on the 2,000 acres they run at Trenithon Chancellor, Probus in Cornwall, they examined a range of options before choosing a Simba Horsch Pronto DC4 drill, and pairing it with a Cultipress as a secondary cultivator after the plough.

The increase was necessary because they raised dairy cow numbers to 600, and total stock numbers to 1,500 head, and needed to raise feed production to fill all those extra mouths.

Ross Denning says their existing 3m power harrow combination drill simply would not have coped with the greater acreage, but rejected the idea of a bigger version:

“The 3m combination worked fine, but we needed something quicker if we were to expand. We rejected moving to a five or six metre power harrow combination because we thought the cost of fuel and wearing parts would have been horrendous.

“We looked at several drills and the Pronto DC appeared to be the best. It has fewer wearing parts and we were confident it would work well, which is something I could not say for any of the competitors.



High output ensures timeliness

“...It is easy to calibrate and to adjust, and maintains a far more accurate depth than the combination...”



Even sowing depth is important

“Some of them looked cumbersome. Having seen how some of them performed on neighbouring farms we rejected them. Simba were also prepared to bring it a long way to demonstrate it to us”.

The drill has also proved capable of covering 80 acres a day without resorting to long hours, and places the seed very accurately, he says: “It is easy to calibrate and to adjust, and maintains a far more accurate depth than the combination, which tended to change depending on whether you were driving up or down hill.

“We sowed part of a field of triticale with it last autumn the day after establishing the rest of it with the old combination and the bit sown with the Pronto came up earlier and more even. We will be interested to see how it yields”.

It now sows all their wheat and triticale, as well as protein forage crops like peas and beans, which are undersown with a grass/clover mix so that when the whole crop is foraged in the autumn they already have a ley that will last for three or four years.

Ross may test its capabilities further: “We may try sowing stubble turnips once we have cleared the cereal straw, to provide winter grazing, with whatever isn’t eaten being ploughed in as green manure for the next crop”.

WILLIE MACKIE

WHITESIDE FARM



WHITESIDE FARM
Tullynessle, nr. Alford,
ABERDEENSHIRE

- 2,000 Acres
- Spring Barley
- Oilseed Rape
- Game cover crops

Contractor achieves precision

With 2,000 acres of crops to establish in what can be very short working windows, Aberdeenshire contractor Willie Mackie needs a high capacity establishment system – and that especially applies to his drills.

Some 350 acres of his own 1,000 acre Whiteside Farm, Tullynessle, near Alford is arable land, with the rest of that acreage being split between customers up to 20 miles away from this base.

In spring they may have three drills working simultaneously, with their new Pronto DC4 covering 860 acres on its own inside a fortnight this spring, establishing a mix of spring barley, oilseed rape and game cover crops.

Willie has been delighted with the drill’s performance, especially the precision with which it places the seed:

“It looks like every seed has germinated. The double disc coulters gives excellent seed placement. The drill’s calibration system is the simplest to set and the most accurate on any drill I have used as well, and the seed sensors also ensure that we can quickly rectify any blockages”.

They chose a disc drill over a tined one to avoid the danger of bringing up stones, which are a problem across much of the land they work. The leading discs perform a significant role:

“They do a really good cultivation and levelling operation ahead of the roller and drilling discs, which makes the drill itself easier to pull. It can also work faster than a power harrow combination, which tended to suffer from coulters bounce if you tried to work above a certain speed”.

Their standard crop establishment system starts with ploughing, a levelling and cultivating pass with a ‘spade roller’ before drilling and a final roll to consolidate the seedbed and ensure good soil to seed contact, which optimises the evenness and speed of crop emergence.

They may try to streamline that system this autumn, with Willie considering whether to exploit the drill’s ability to work straight into stubble by establishing some oilseed crops by direct drilling.

Output thus far has been excellent, as has fuel usage. They can do 60 to 70 acres/day easily – with the potential to get up to 100 acres if required – working behind a 170hp John Deere tractor, with the additional power being helpful in maintaining drilling speed on some of the steeper land they work:

“The power harrow combination could cover 60 acres a day if we really pushed it, but it used about twice the amount of diesel that we do with the Pronto because it is pto driven and the tractor has to work far harder”.



High capacity and precision

He expects that to translate into lower maintenance bills and longer working life for his tractors. Another feature that pays its way is the drill’s oil cooling circuit, which extracts heat from the hydraulic oil and blows it into air being fed into the fertiliser hopper – which achieves two key benefits, says Willie:

“It means we can work long hours without risking ‘cooking’ the tractor hydraulics, while the hot air ensures the fertiliser is kept dry when we start work on cold, misty mornings, so the risk of blockages is greatly reduced”.