The 6m Claydon Hybrid T trailed drill in action. A 350hp tractor is recommended to pull it.

CLAYDON HYBRID T

Latest development from Claydon is a trailed version of its Hybrid T drill which, available now in a 6m working width and later as an 8m, is clearly aimed at large scale growers in the UK, Europe and beyond. Andy Collings reports

Fair to comment that while the Claydon Hybrid T drill could be considered to offer a degree of conventionality in the way its seed storage and distribution systems work, when it comes to seed placement there is perhaps more than a touch of originality.

Ground is opened up by the leading rigid tine before the surface soil is moved again to allow the seed to be sown in a band behind it. Note the wheels which support the tool frame and not the seed hopper.

And it is the way, when working directly into stubbles, it uses a combination of rigid tines, A-shares and levelling boards to create an environment for seeds to germinate in, will, for most observers, be its key feature.

But first a closer look at the new Hybrid T drill which is basically a trailed version of the company's tractor mounted Hybrid drill for which sales are now reported to have exceeded 400. Attached to the tractor via the drawbar, there is an option for use of a Sharmuller ball connection system rather than a clevis and pin arrangement.

Like most drill manufacturers, Claydon realised that there was a change in the view of growers regarding the placement of fertiliser at the time of drilling. For Scotland's growers this practice had never been discontinued and, if drill manufacturers had not chosen to produce all-grain drills a couple of decades ago, it's likely that growers further south would have also continued to place fertiliser at the time of sowing.

Claydon says it has listened to the demands of the industry and has produced a hopper having a dividing panel to allow it to be used for fertiliser and seed or, if required, just seed. Total capacity is put at 5500 litres which, says the company, equates to about four tonnes of seed and fertiliser. The dividing panel provides for a 60:40 split between the two.

Interestingly, the drills construction is such that the weight of the hopper is always carried on four wheels and the weight of the toolbar fitted with the sowing coulters is supported on six separate wheels. It is an arrangement which allows the toolbar to follow contours and maintain working depth, irrespective of the weight of seed and fertiliser on board.

For the record, the unladen weight of the 6m Hybrid T is 6.75 tonnes and fully loaded, very nearly 11 tonnes and, bearing in mind the running gear is rated for 55kph, there will be readers who may be surprised to learn that braking is currently considered to be an option and only fitted as standard where country rules make it mandatory, although this situation could change as production gets underway.

Each section of the hopper delivers to its own metering system, an Accord metering system which, using RDS Artemis electronics, draws its forward speed information from a radar activated sensor and allows pre-programmed variable rate seed application along with on-the-move rate changes.

Metered into an air stream generated by a hydraulically powered fan unit, the seed and fertiliser is conveyed to their respective distribution heads which then deliver it the individual coulters.

Enter then, the Claydon strip seeding system which is not, insists the company a direct drill – even though it has been designed to operate directly into stubble. A direct drill employs a single coulter or disc to place the seed into the unmoved ground and the Claydon uses a seeding system which has three key components.

For starters there is a rigid opening tine which cuts a slot up to 18cm deep but is more likely to be set to operate at between 7cm and 15cm. There are two banks of tines to create a generous spacing to allow surface trash to pass through and each of the tines are faced with tungsten carbide to reduce wear. And on the subject of wear Claydon puts wear costs for all soil engaging elements at £2/acre.

The paddles 'ski' along the surface firming the soil immediately above the seed to ensure soil contact. A light set of spring tines provide the finishing touch.

The opening slot revealed which creates loose soil at depth for plant roots to grow into.

The tine then, which has sheer bolt or hydraulic pressure protection, produces a slot that removes surface compaction, allows drainage and enables the soil to oxygenate.

Next comes the A-share which is mounted on curved tine and has an 18cm spread (there are different sizes available to cater for different crop types), the seed is delivered from a chute immediately behind it to create a band of seed spread. The action of the A-share is to partially fill the slot with fresh, moist soil and to deliver the seed at a shallow depth over the drainage channel – a situation designed to provide soil to seed contact and free soil for roots to develop.

Following the A-Share are paddles which, under a light spring pressure 'ski' across the surface of soil pressing the seed in to soil contact and gently firming the ground. The recommendation is that all drilled ground should be Cambridge rolled after drilling to provide a firm level and weatherproof finish – there are plans afoot to incorporate a press into the design of the Hybrid T drill.

Positioning the tines in two banks provides a generous space for surface trash to pass through and this situation is further enhanced through use of high clearance tines.

The 6m Hybrid T, which can be used to sow pulses, cereals and oilseed rape, requires a tractor rated at about 350hp to operate. On the Claydon farm near Newmarket, Suffolk where the drill has been under test to the tune of 4000 acres, it is reported that fuel consumption worked out to be 11 litres/ha.

And the cost of the Hybrid T drill? We are told that the 6m version is about the £100,000 mark and the 8m will be £115,000.

**Claydon reports it is now selling its products in 24 countries with key export markets being Scandinavia, Germany and France. New markets are being opened up and there has already been a few sales made in Eastern Europe. Last year the company sold a total of 550 drills, 260 straw harrows along with 15 sets of its new Cambridge rolls.* ●