



40 years of Machinery Innovation Insight innovation

As Claydon celebrates 40 years of trading this year, *CPM* takes a look back on the founding innovation, as well as the journey from small scale to an internationally recognised brand.

By Charlotte Cunningham

An immaculate crop of spring oats lines the sprawling drive down to Claydon HQ in Suffolk, while thermometers hit 27°C, turning thoughts to 'harvest weather'.

"I rogued these last week, so hopefully you won't find any weeds to photograph," laughs Jeff Claydon — the founding pioneer behind the brand.

And it's this hands-on, in-touch approach with farming and crop production that has helped Jeff accelerate his inventions from tinkering in a shed on the family farm in Wickhambrook, to a recognised international brand.

Today, the company is run by a powerhouse of Claydon genetics — with Jeff's sons Oliver and Spencer bringing in expertise from engineering and commercial perspectives.

This year, Claydon celebrates its 40th birthday, but where did it all begin?

Those eagle-eyed among you will know that Claydon trades under the name, 'Claydon Yield-o-Meter Ltd,' and it is in fact the Yield-o-Meter that is the *raison d'être* of Claydon Drills as we've come to know it today...

Good on the practical front

Cast your mind back to the 70s (if you're old enough) and a young Jeff would never be found too far from the family farm.

"When I was 15, I couldn't wait to leave school — I wasn't a great academic but was always really good on the practical front. I loved the farm and the outdoors and just wanted to come home to work.

"However, my Father told me I had to go to college and learn a trade, so I took an engineering course and unlike school, I excelled. But shortly after, my father got ill, and I had to come home and farm."

At a time when the industry was flooded with innovation and technology, like many farmer's sons/daughters, Jeff said he regularly found himself trying to justify to his father why they should spend money. "For me, this raised the question, how do we know if anything we're doing is working?"

And in 1980, the concept which became the Claydon Yield-o-Meter was born — which at the time was the first-ever on combine grain monitoring device.

"The Yield-o-Meter was a product of my engineering skills and thoughts which turned to be being able to measure how much crop we could harvest, how many tonnes we could get out of a certain area, and if any of the new fungicides and treatments that were coming onto the market would actually make a difference in terms of yield."

Jeff engineered a design which could provide an accurate reading of how many tonnes were being harvested in real-time — tried and tested using his family's own combine. "My cousin came over while I was building it and told me I was mad, but I saw it as a much more accurate way of understanding what was going on with our crops — rather than using the traditional weighbridge method which didn't really tell us an awful lot other than total volume."

Though the unit was very much designed initially just for personal use, it's fair to say the Yield-o-Meter was a fairly revolutionary innovation at the time — giving solution to a real on-farm challenge — which naturally attracted a lot of interest from other farmers, explains Jeff.

"We did an interview with BBC Look East and it started a surge in interest — it seemed other farmers wanted to measure their yields too."

Jeff managed to get a patent on the Yield-o-Meter and in 1981, Claydon Yield-o-Meter Ltd was formed. "It started in a very small way with just a couple of us — selling just a few monitors — working alongside an engineering company in



Jeff Claydon founded the firm 40 years ago in 1981

“ We’ve kept kit simple – but made solidly – which we believe is the reason we have continued going strong.”

Just a year later, the new electronic package was available and the updated Yield-o-Meter was tried and tested at Wickhambrook, before being marketed to customers again — something that has remained a core principle of Claydon innovation right up to present times.

It seemed the former challenge had been conquered — impressing the local Claas dealership in Bury St Edmunds — who picked up on Claydon’s work and placed an order for 15 Yield-o-Meters to fit onto their combines. “From that point on, we concentrated on fitting the monitors predominantly to Claas combines and at the time were giving accuracy to about 1%,” explains Jeff. “Sales built up very quickly and at one point we were fitting about half the Claas combines that went out.”



Eldest son, Oliver Claydon, returned to the business in 2004 after studying engineering at London’s Brunel University.

This upward trend of interest and sales continued successfully until 1996, when Claas brought out a new range of combines. ▶



With a background in financial services, Spencer Claydon, has helped elevate the commercial side of the business.

Bury St Edmunds to manufacturer the steelworks for us and a small business in Sudbury who built an electronic control box for the yield monitor.

“It was very simple — it just had tonnage and area on it — but it worked. I suppose you could call it accidental engineering,” he laughs.

The team began fitting it to a few combines and it cost between £1600-£1700 at the time, with the later models coming in at around £2500 (fitted).

The challenge came on the electronics side of things. “Electronics in those days were all done on computers which frequently used to go into ‘lockdown’ and would not receive information,” explains Jeff. “Though we tried to improve it, unfortunately, the technology just wasn’t available at the time.”

To overcome this, the electronics side of the monitor was taken back in-house, with Jeff spending £25,000 in 1986 with a different company to build better electronics.



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Today, the company is run by a powerhouse of Claydon genetics (L-R: Jeff Claydon, Oliver Claydon and Spencer Claydon)

▶ “Unfortunately, our technology couldn’t be fitted as they had changed the elevator design. This is when Yield-o-Meters came to an end, sadly — coupled with the fact that many other manufacturers were starting to

bring out their own version — but really, we started this market.”

Despite his founding innovation dwindling in demand, Jeff wasn’t one to rest on his laurels — already looking for another on-farm challenge that could be fixed with an innovative engineering solution. “While on our travels we came across a very small manufacturer from Germany which was making what came to be known as the ‘Furrow Cracker’.”

Marketed with the tagline “preparing the ground for success” the Furrow Cracker was designed to be fitted to ploughs and sliced through the freshly turned clods at up to 15.2cm deep in 5cm rows, allowing the weather into the soil to decompose the clod naturally.

“At the time ploughing was the big thing in the UK, but I’d been thinking about how we could do things a little differently. And so we brought it back to the UK and started marketing it here. It went really well and we sold hundreds of them,” he says.

Though initially Claydon made its name fitting kit to other manufacturers’ machines, the firm continued to develop its own product range in the background, which launched in 2003 with the V-Drill — Claydon’s first direct strip tillage drill.

Again, this was designed to tackle a

real-life problem — the constant driver behind all of Jeff’s innovation — at a time when grain prices had dropped but the cost of inputs on the Claydon farm were ever-increasing. “The early 2000s marked a really difficult time for farming as the prices were so low, particularly against the backdrop of increased costs.

“People were moving away from ploughing and looking at how they could make cheaper seedbeds.

“So while the Furrow Cracker sales took a big dive, it opened a new market for the V-Drill.”

The Claydon leading tine paired with the “in-line” A-share design which Claydon has become well-known for, this launch saw growers able to slash costs and alleviate compaction, which in turn delivered consistently higher yields on farm, he explains.

Though Jeff is humble about his beginnings, he makes no secret of how the business, and the innovation offered under the Claydon umbrella, has rocketed since his two sons joined the family business.

In 2004, eldest son Oliver joined the business, bringing a modern engineering edge from his time at Brunel University in London. “We collared him to help build the drills and create designs for future machines, and we really benefited from the skills he’d attained from his time outside of the business,” says Jeff. “It took us from



The Yield-o-Meter was Claydon’s founding innovation — which was also claimed to be the first-ever on combine grain monitoring device.



The original Yield-o-Meter was very simple — it just had tonnage and area on it.

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Eyes on the prize

Claydon are holding a July prize draw to celebrate their milestone 40th anniversary, with the winner set to receive a year's free access to Hutchinsons' Omnia Precision — see claydonrill.com/news/claydon-40 for more details on how to enter and its and cs.

paper-based to modern computer aided designs.”

Five years later in 2009, youngest son Spencer came home, after gaining a degree in financial services at Sheffield University. “I had studied engineering at college, but it wasn't something I really wanted to do — so I went to the city, got my degree and worked for SAB Miller — the second biggest brewer in the world.”

After gaining a wealth of business experience, Spencer says he realised the potential the family business could have if it was given a little bit more of a commercial steer. “I thought it wasn't as well marketed as it could be and the sales process could do with a revamp, so I asked if I could come back and do that.

“Obviously, it meant taking a huge pay-cut,” he laughs.

However, this fresh perspective and adopting learnings from outside of the industry has proved to be very beneficial. “I learnt so much from doing other things — being in a fast-paced environment selling consumer goods — and we've been able to engrain some of those principles into the business.”

All the while, Jeff's wife, Denise, was

running the financial side of things, reinforcing that is has always been — and still is — a truly family-run business.

Spencer's return to the farm coincided with the launch of the Hybrid — which was based heavily on designs done by Oliver. “From this point on, the combination of having both the boys at home meant we took a much more professional approach to the business, with sales increasing from just shy of £1m to £1.8m that year,” notes Jeff.

2012 saw a decision to exhibit at Agritechnica which Spencer says launched the international recognition of the brand. “At the time, we thought it was best not to mention it to Dad — I don't think we ever told him how much it cost,” he chuckles. “But actually, it went really well, and I came home with a whole pile of enquiry cards and questions over how on earth we were going to set up international distribution.”

Extensive portfolio

Today, Claydon is a well-known name across the industry, with a pretty extensive portfolio of products and distributors in over 30 countries. “Exports account for about 50% of sales,” says Spencer. “It was up at about +60% — but the combination of COVID-19 and Brexit has caused this to dip back slightly.”

While the team are keen to keep their powder dry regarding upcoming launches/innovation, Jeff says the future of the brand will remain true to what it has over the past 40 years, and that's selling whole solutions — not just products. “We've kept kit simple — but made solidly — with low-cost, easy maintenance, which we believe is the reason we have kept



Claydon's main site remains on the family farm at Wickhambrook.

going strong.”

When asked about what the next 40 years may hold, though it's impossible to guess what agriculture is going to look like, Oliver's daughter, Charlotte, is already showing a keen interest in the family business. “Whenever you ask her what she wants to do, she always says ‘be a farmer’.”

What's most impressive about Jeff is that despite the growth and success of the brand, he and brother Frank have continued to maintain the family farm. “Frank establishes around 400ha in an autumn drilling season with a single 6m drill — Claydon of course — and a single tractor, and also drills another 1250ha on contract.

“Having the site on a working farm really helps to focus the mind when it comes to thinking about what kind of products the market might require next.”

When asked what his proudest moment has been over the past 40 years, Jeff beams and says instantly: “My proudest moment is seeing my whole family involved in the business and seeing our products make a real difference to people and their farms.

“My whole team here are really dedicated to moving the business forward, and I have to say, I'm really honoured.”

Spencer grins: “I hope my proudest moment is yet to come...” ■

A holistic view

With a hard focus on selling whole solutions, not just products, Claydon has been working with agronomy firms Hutchinsons and Agrii over the years to test the value of their kit on their own farm and really demonstrate the benefits. “We've done open days with Hutchinsons' Dick Neale, and have spent a lot of time digging holes,” says Jeff. “We haven't ploughed the farm since 2002 and we've found that we've got some of the healthiest soils in the area. We've got extremely high levels of anecic worms which makes the drainage work really well, and the resilience has been proven in slake tests — everything has become so much easier, but all we've been doing is drilling and a little bit of stubble management — proving the value of this kind of kit.”

Being farmers themselves, Oliver says that they recognise in farming every year is different

and has its own challenges. “Every year we've had to look at different timings or a slightly different approach, which is why we've always wanted to maintain a really close relationship with our customers to really understand their challenges and which of our solutions would be ideally suited to them.”

Spencer agrees. “We know that farming is changing and I think the reality is that there are a lot of unprofitable businesses. With the loss of subsidies, farm businesses are no longer going to get paid for what they own, but what they do and how they do it.

“Our type of technology has proven benefits to the soil, as well the ability to reduce costs without reducing yields, and I think that's going to be even more important going forward.”

Innovation Insight

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