

# A combine packed with technological advances



Philip Green

While the Cotswolds' predominantly brashy soils might not be viewed as a hotbed of potato production, there are a few growers quietly plugging away with root vegetables. One such outfit is WC Green and Son near Woodstock which grows some 80 ha of spuds alongside 1,050 ha of cereal crops.

With such a broad range of cropping there are inevitably pinch points at certain times of the year when men and machines are pulled in different directions.

"If we've had a wet spring we can often find cereal drilling and potato land preparation over-lapping but it's generally manageable," explains Philip Green.

"But when it comes to the tail-end of harvest and the potatoes are ready to lift, the pressure builds. To ease that we take the view that we're better off to be over-capacity on the combine front and tend to buy a bigger machine that we would need if we were an arable-only farm."

Up until last year a LEXION 770TT had been tasked with ensuring all the cereals were cleared before potato lifting needed to get underway but with five harvests under its belt it was felt due for a change.

"In 2021 we had a demo of an 8700 with a 12.3m VARIO cutterbar which was roughly the same power as the 770 but had the bigger threshing gear up front so as a result ran cleaner and produced a better sample. But there was nothing wrong with the old combine and I couldn't justify changing just for the sake of it.

"Then we were offered the opportunity to trial a 10.8m CONVIO header on a smaller 7500. We put it into some flat oats and it just flew.

"Previously with our VARIO cutterbar we'd be shunting backwards and forwards with lifters but the CONVIO's belts just Hoovered the crop up. It immediately convinced me – I could see it would enable us to do more in a day, with the result that in a tricky season we could potentially get finished earlier and move onto the spuds in good time."

So convincing was the extra boost in capacity brought about by the CONVIO that when Mr

Green came to ordering his new combine he opted for an 8700 with a 12.3m cutterbar rather than the 10.8m table fitted to the 770 previously. It arrived for harvest 2022 and immediately impressed the team.

## HOW HAS THE 8700 PERFORMED?

"The new combine is packed with technological advances which all add up to make it a more efficient package," says operator Ian Smith.

"Cruise Pilot works really well in making sure the machine is kept fully loaded all the time and takes the pressure off me.

At the backend the extra rotor grating and additional bomb doors mean losses are no longer the limiting factor so I can really push the stick forward.

"Critically the bigger drum and concaves means it's not held back by difficult to thresh crops. Last year we had some green-strawed wheat early on that would have challenged the 770 – the 8700 just sucked it up."

## OUTPUT

“Previously we’d be averaging 50 tonnes an hour in wheat – with the new combine it’s more like 70 tonnes,” says Mr Green.

“While much of that hike in output is down to the changes made to the threshing gear and the extra horsepower, a good chunk of it is down to the CONVIO header – I estimate that on its own it’s added a 20% increase in capacity.

“Not only does that mean we can pick and choose when to get going each day, cutting crops at the driest, but it also means we can potentially finish cereal harvest a week earlier, allowing us to get onto the potatoes.

“With spuds, one week in September is worth three in November so the extra investment in the 8700 and belt-fed header have proved well worth it.”

## CONVIO HEADER

“It’s certainly true that if we hadn’t demo-ed the CONVIO header we probably wouldn’t have changed the combine last year. The impact of that belt feed can’t be under-estimated whether it’s in picking up laid crops or simply presenting the crop correctly to the threshing drum.

“But it’s other less obvious things – because of its geometry and flexibility it hardly picks up any stones. Previously we would have to empty the stone-trap on the 770 twice a day. Throughout the whole of last harvest we found just one in the header trap and two in the intake trunking.

“That has a further impact on running costs. Because there isn’t the amount of nasty material going through the combine there isn’t the wear-and-tear on the guts of the machine. That’s particularly evident with the chopper – where previously a set of blades would last just one season, the ones on there now will do at least two, if not more.”

## FUEL USE AND HOURS WORKED

“We’re fairly rigorous about recording fuel use – while the 770 averaged 14.76-litres/ha in its five harvests with us, this season the new combine was running at 12.87-litres/ha.



Ian Smith

“That saving in fuel is fantastic but the other more impressive factor is the hours worked. During harvest 2022 the 8700 clocked a total of just under 250 hours whereas the old machine averaged 300 hours annually on the same acreage. That factor alone could significantly reduce our running costs and has the potential to extend the machine’s life so that we might be able to keep it seven years rather than five while still maintaining a decent residual value.”

## CAB AND CONTROLS

“The new cab is vastly quieter than the one on the 770 – it’s made a huge difference to the point where it’s now possible to speak on the phone via Bluetooth without straining to hear what’s being said,” comments Ian.





**“We believe that CLAAS combines offer the best combination of output, reliability and running costs.”**

Philip Green

“Much of that is down to the rubber belt intake elevator as well as the CONVIO header which is so much less clattery than the VARIO. “Visibility-wise it’s also a big improvement. The flatter front screen means in bright conditions there isn’t the glare and the narrow pillars make for brilliant views across the whole platform.”

“The new CEBIS touchscreen is super-logical. You just hit the part of the combine image you want to alter and the relevant settings menu pops up.

“By cutting lock-to-lock steering down to one turn of the wheel, Dynamic steering has made a huge difference in the speed of headland turns. Helped by the wider header, I can now get away with just cutting twice round the headland and still have plenty of room to go back on myself.

“It’s also made the whole machine that much more planted on the road – there’s no twitching, even at 40kph.”

#### **GRAIN HANDLING**

“The adjustable nozzle on the spout makes a big difference in loading trailers, particularly on slopes. Just a small flick means the flow of grain stays in the centre even if the driver’s not quite in the right place.

“Also being able to fully empty the auger means it’s not folding in and out full – taking the weight off it has got to be good for its lifespan.”

#### **WHY CLAAS?**

“We believe that CLAAS combines offer the best combination of output, reliability and running costs,” says Philip.

“We’ve only ever experienced exemplary back-up from CLAAS Western whether it’s service, sales or stores – it’s the total package that counts.”



### Farm Facts

WC Green and Son Ltd near Woodstock, Oxfordshire

#### **Farmed area**

1,174 ha

#### **Cropping**

Winter wheat 566 ha  
 Winter barley 71 ha  
 Winter oats 60 ha  
 Spring barley 202 ha  
 Winter beans 121 ha  
 Spring beans 40 ha  
 Italian ryegrass 30 ha  
 Potatoes 80 ha

#### **Staff**

Michael and Philip Green plus three full-timers and up to six others at peak times.

#### **LEXION history**

2012	760TT with 10.5m VARIO
2017	770TT with 10.8m VARIO
2022	8700TT with 12.3m CONVIO