



Linc's Farmer's Mobile Grain Dryer Tops 18,000 Tons in 15 Seasons

Reliability, coupled with low operating costs and improved bushel weights are just some of the advantages that Lincs arable farmer Mark Pettit has found after fifteen seasons with an OPICO 580H mobile batch grain dryer.

Mark is the third generation of his family to farm at East Ferry, Gainsborough. The principle crop on his 450 acres of mainly silty, heavy loam is 320 acres of winter wheat. He also grows 40 acres of HEAR oil seed rape on setaside land plus 90 acres of sugar beet. "Having your own drying facility is essential," says Mark - a firm believer in drying his own grain, rather than relying on a third party. Mobile batch driers have been responsible for drying the grain at Ferry Farm since 1977... and his detailed records prove that this is a policy that makes sense.

Acquired in 1988, the OPICO 580H drier is powered by the tractor PTO and has a holding capacity of 12 tons. The machine can provide a 5% reduction in moisture content in under four hours and operating 24 hours a day, can handle 6/7 batches or up to 84 tonnes of feed grain.

"The durability and life expectancy of The machine can't be questioned," says Mark. "we've had The OPICO for 15 years compared to a maximum of five years with The other dryers we had before that. And its probably been drying more grain per season, too."

In fact, apart from a new set off bottom bearings once every three seasons, plus one set of fan belts and one set of fan bearings, The machine has run faultlessly throughout 15 harvests, drying on average 1200 tons per year - a total of 18,000 tons.



And it still carries a remarkably high trade-in value - "something that cannot always be said about fixed drying equipment," says Mark. One of the great benefits Mark has found is a marked increase in bushel weight of the grain after drying. "Continuous dryers don't move the grain around so much," says Mark. "But with the OPICO batch dryer, the bushel weight increases in line with the drying time. A batch taking three hours to dry will recirculate nine times, or 12 times over a four hour period. Augering and moving the grain polishes it and makes it more slippery."

Last harvest, for example, bushel weight increased from an average of 74.60 H/Lt to 79.10 H/Lt on 27 batches (330 tons) of Sabyre and Claire.

Harvesting of the winter wheat in 2002 started on August 12 and finished two and a half weeks later. "We had to wait for the later crops to mature," explained Mark. For the past three seasons, Mark has used a contractor for combining, with the John Deere CTS high output machine harvesting 250-300 tons of grain per day.

"The contractor comes in for two days at a time and that grain takes about 4 to 5 days to transfer through the dryer, into the dry grain store," says Mark. The weather at the start of the harvest was very wet and some of the wheat was harvested at high moisture levels.

"Without the OPICO we would have had to gamble and wait for better weather. This would have meant sacrificing grain quality."

Cost of operation has proved extremely economical. Drying grain from 19.5%mc to 14.5%mc used 173 litres of propane per batch; from 18.5% to 14.5% used 140 litres per batch; and from 17.5% to 14.5% used 110 litres per batch. With the price of propane at 20p-25p per litre, these figures equate to £34.60 - £43.25, £28-35 and £22-27.50.

The only additional cost was for diesel fuel for the tractor running the PTO drive to the dryer.



The dryer is stored under cover in an open sided Dutch barn with plenty of ventilation. Grain from the combine is taken away from the trailer by a 10 inch auger into an 80 tonne holding bin. "When this is full, we tip into one of our two 600 ton grain buildings that acts as a buffer store," says Mark. These concrete floored stores were built in 1974 and 1981.

New automatic machine.

The decision to move up to a new machine - a fully automatic version of the OPICO 795 QF machine will be delivered in May - was prompted by several reasons. Increased capacity is one: according to the suppliers, the new machine's fully automatic operation gives a throughput of approximately 150 tons per 24 hour day. "The output will only be known after it's first season of use, for this will be the first fully automatic 795QF to roll off the assembly line," says Mark.

"We wanted to have an automatic machine to do two or three batches unattended," he continued. "We are going to install a dry grain bin to hold three batches, giving 55/60 tonnes capacity." It is hoped the new drying facility will bring some extra contract drying work, a service the farm has provided in the past.

The existing 80 tonne wet grain bin, complete with 8 inch 3-phase discharge auger, will be wired to one of the sockets on the control panel of the 795.

The 795 will have two independent electrically driven unloading augers, one of which will go out of the building to discharge the grain into a trailer or lorry. The other will discharge into The dry grain holding bin.

The new machine will also be equipped with a quiet fan. Ferry Farm's location in The middle of The village does have its problems: It is next to The only pub and surrounded by a number of barn conversions occupied by incomers to The village.



“In 2002 for the first time in twenty-six seasons we had complaints over noise at night,” said Mark. There were visits from the council. Not surprisingly, the new machine will use a 100 amp electrical supply to drive it, rather than a tractor PTO. This is not only to further reduce noise; electric drive is an essential part of a fully automatic machine. It will also dispense with the need to hire a small tractor to power the grain dryer for 4-6 weeks. Another advantage of the new dryer is its flexibility. It has an increased discharge height, which will enable the extended unloading augers to discharge directly into the recently introduced 30 tonne lorries. This was not possible with the 580, so the grain had to be handled several times before ending up in the lorries - a time consuming and costly process. The new dryer is also equipped with a Sky Vac dust extractor for a cleaner grain sample although, as Mark says from experience, “the finished sample is as good as you will get with any grain dryer.” The fact that the grain is dried at a relatively low temperature is particularly valuable if you are growing for seed, he adds.