Danish fans cut production costs by 9p a bird

Cutting your gas bill in half sounds too good to be true, but a UK producer is living the dream by following in the footsteps of the Danes. *Caroline Lovell* visited Shropshire to discover more about a new ventilation system

It all started over a cup of coffee with a production manager at Sun Valley who had just returned from a business trip to Denmark.

Peter Jones was looking to expand his farm in Wistanstow, Shropshire, from 110,000 to 190,000 broilers. And after looking at the production manager's photographs of a cost-saving ventilation system widely used on the Continent, Mr Jones gave DACS, the Danish manufacturer, a phone call to find out more.

He was soon on the next plane to Denmark to see the system in action, leaving his family behind to run Manor Farm. A few days later he returned with a contract for systems for two sheds and plans to retro-fit the inlets in his older buildings.

So what clinched the deal? Mr Jones says it all weighed on cutting growing costs; and after the maker showed him Danish production costs, where they were spending 9p a bird less, he was sold.

The ventilation system went into the first 40,000-bird building in September 2006 and planning permission is in place for the second shed. Now in its fourth crop, Mr Jones has achieved a 45% saving in gas use and estimates that this will reach 50% once he gets to know the system.

"Flock performance is about the same as the older sheds, but the growing costs are much better. And that is what it's all about. We're struggling to get more money from the supermarkets, so we have got to cut our costs at home. And that's what they've done in Denmark," he says.

Peter Jones likes trying new systems.

So how does it work? Jo Mettrick, managing director of LA Systems, the UK distributors for DACS, says: "The system utilises forced air inlets and variable speed extraction fans all placed in the roof. The key to the system is the Corona air inlet, which uses a fan to draw in cool air from outside and mix it with the warm air in the roof space before distributing it around the house."

By making use of the pre-heated air produced in broiler houses, farmers reduce their fuel consumption, he adds. Plus in the summer the Corona air inlet blows cool air directly on to the birds when it is set for cooling alongside a high pressure misting system.

Mr Mettrick believes it is set to revolutionise broiler growing in the UK: "Fuel costs are key to making profit from producing broilers. The DACS system can halve fuel costs while also improving litter quality. The equipment can also be installed in older houses relatively economically," he says.

> **"You get a good reward at the end with a good crop"**
> PETER JONES, MANOR FARM

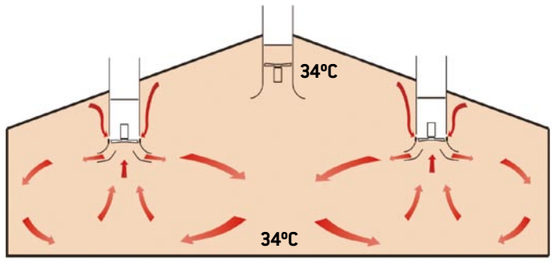
Powell & Co, the company that built Mr Jones' new shed, estimates that installing the system also cut building costs by £13,000, simply because it was easier to fit, as there were fewer holes to cut out in the walls.

Mr Jones' foresight and willingness to invest in new technology, consistently places him in the top producers on Sun Valley's league table. As the first UK producer to install the Danish ventilation system, he says: "I like testing systems out, as you get a reward at the end with a good crop."

He also believes it gives him peace of mind. "I came down one morning and it was -8C and the heaters were roaring away in the older sheds. But in the new one there was warm air and no heaters were on. It's a gentler system, as you don't have a mass of cold air coming in and then nothing; it's a little bit at a time."

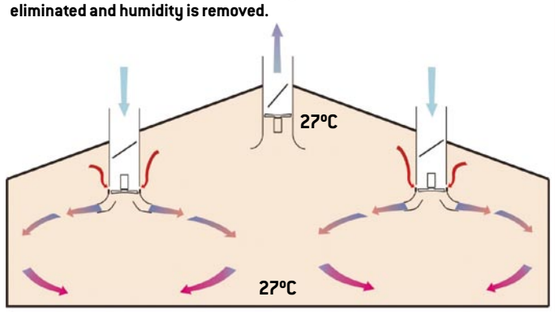
So why will this system be successful in the UK? Mr Mettrick sums it up: "It's got the three things that producers look for: Reduced gas costs, improved litter quality and more effective summer ventilation. We are confident it will help in the summer. Even though Mr Jones has not been through a summer yet, southern and eastern European countries have already seen the cooling action of the system."

HOW THE SYSTEM WORKS



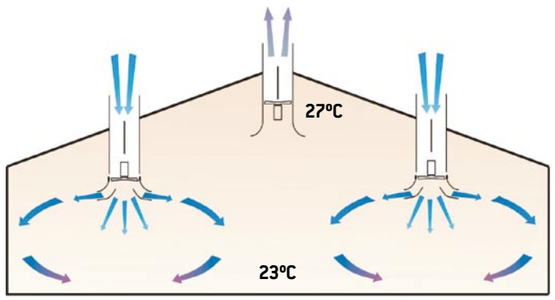
Destratification

When it is cold outside and birds are young, the damper in the Corona is partially closed. By mixing a small quantity of incoming air with the warm air already in the roof space, draughts and cold air patches are eliminated and humidity is removed.



Mixing

When the dampers in the Corona are partially open, producers can choose a desired temperature by mixing different quantities of outdoor and indoor air simply by altering the angle of the damper.



Full flow

When the dampers are in the vertical position, fully opened, the Corona forces the air outwards and downwards, introducing maximum airflow and no air mixing. This is used in hot weather or for fully-grown birds.

SYSTEM BENEFITS

- Cuts gas usage by up to 50%
- Reduces building costs
- Improves litter quality
- Can retrofit to inlets on old buildings
- Provides summer ventilation

New chicks are benefiting from the improved litter quality seen with the Danish ventilation system.