

## **Brandons - the first nitrogen-based controlled atmosphere stunner in the world**

Brandons Plc, became the first poultry company in the world to install the nitrogen-based controlled atmosphere stunning (CAS) system, at its plant in Scropton, Derby, UK in May 2002.

The UK's second largest turkey producer faced the same constraints and demands as other turkey producers and was continuously looking to be even more effective and efficient. The ever-competitive marketplace demanded the best-quality premium product with the most competitive price. The constraints of traditional stunning systems, coupled with welfare and product-quality issues, simply didn't provide an effective solution to the problems faced, which forced Brandons to look at alternative systems.

The use of CAS had previously been viewed by some as a relatively expensive way of stunning, despite the processing advantages. But new technology, gas mixtures and appropriate research demanded a fresh look at the technology and the possible benefits it could bring. Scientific research conducted by the University of Bristol, alongside independent industry tests, concluded that nitrogen-based CAS produced the best meat quality and the best welfare solutions. The results and benefits of nitrogen-based CAS compared to other gas-mixture systems were just too good to ignore. By combining their extensive industry knowledge and experience with the work carried out by the University of Bristol and poultry processing companies, Anglia Autoflow was able to successfully develop the nitrogen-based stunning system. By working with Brandons, Anglia Autoflow helped ensure that the best solutions were implemented for the individual challenges that the turkey company faced. The results simply speak for themselves.

Brandons Plc hasn't just benefited from better meat quality and welfare improvements. The advantages have been seen right across the plant.

- ◆ Hanging is much easier, and now Brandons needs only two hangers per shift. Previously Brandons were employing four people on their hang on line - equating to a 50% reduction in hang on line employee costs.
- ◆ Line speed has increased from 1,500 birds per hour to 1,800 birds per hour since the introduction of CAS
- ◆ Since the meat quality has dramatically improved, notably meat without any blood spots, the need for trimming staff at Brandons has been completely eliminated.
- ◆ Brandons has reported that yield has gone up by up to 1.5% when using nitrogen-based CAS compared to electric stunning. Brandons' own Shear tests confirmed that the meat quality is substantially more tender using CAS, and with appropriate chilling, maturation time can be dramatically reduced.