Ishida's Screw Feeder Weigher Handles Marinated Chicken

For almost a decade, a top barbecue-ready chicken producer has used an Ishida Screw Feeder multihead weigher to maintain its lead in the highly competitive poultry market. The new multihead has improved both speed and accuracy in the packing of sticky marinated chicken pieces.

Many poultry producers in the pre-marinated chicken segment of the massive barbecue market could benefit from hygienic state-of-the-art automation.

High speed production of the product is problematic due to its inherent stickiness. That factor is compounded when the product is sold during the warm summer months. Ishida's products minimizes this issue.

In the high-volume barbecue market, many large retailers only sell specific pack weights. To remain competitive, suppliers must control giveaway, making weighing accuracy a major issue. To meet demand for their seasonal product, one of the leading producers of grill-ready chicken needed something that could complete more than 20 weighments per minute and that was more accurate than the semi-automated linear weighing system they had been using.

In 2009, the company purchased a new Ishida multihead weigher designed to handle movement-resistant products. Part of Ishida's R-Series, the 14-head model is equipped with screw feeders rather than the more conventional vibrating feeders. Product falls from the dispersion table at the top of the weigher onto the screws. These rotate gently, driving the product out towards the weigh hoppers in a controlled manner. The rounded cross section of the screws and the flexibility of their spiral structure ensure that the chicken is not crushed or damaged.

Additionally, sturdy, non-stick plastic hoppers fitted with scraper doors prevent product build-up and keep the product moving. The company's marinated chicken line has increased to 35 weighments per minute, a rate similar to a free-flowing product.

Accuracy also has markedly improved, with giveaway cut by half to 0.5 – 1.5%, helping the company to maintain its leadership. Despite only using the machine eight months a year, and it has paid for itself in less than 18 months.

As the technical director points out, "Poultry processing is subject to especially stringent hygiene regulations... because we work with marinated products, the layout of the weigher is a particular advantage." The Ishida multihead, with its lift-off, drop-on contact parts and its watertight body, perfect for hosing down, enables excellent hygiene, but not at the cost of large amounts of downtime. Full changeover cleaning, which is only required when there is a change in the marinade being used, takes under thirty minutes.

"We are now significantly more efficient," maintains the marketing manager. "As far as weighing is concerned, (we have) been relying on Ishida solutions for a long time – and very satisfactorily so."