

Big Thinking Pays Off

Big thinking at Tyson Foods is paying off handsomely at the company's Nashville, Ark. complex. Management recently selected Formax to help them consolidate the facility's batter, breading and fry lines for chicken breast patties for foodservice customers. Formax's ability to deliver on its promises has enabled this top processor to scale back on equipment and personnel while improving product quality and plant efficiency.

"The goal of the Nashville business plan was to eliminate 50 percent of the existing equipment and team members without compromising quality, productivity and efficiency," says Paul Britt, complex manager for 19 years. "Tyson's Nashville complex is a fully integrated facility incorporating five chopped and formed par-fry lines, one whole-muscle strip par-fry line and two whole-muscle IQF filet lines. These lines can produce 3.125 million pounds per week."

In September of 2007, Tyson consolidated their breaded chicken-breast patty lines by installing a Formax Maxum700 Forming System with extended stroke (two rows of patties per stroke) and Servo Shuttle Transfer System (STS). The servo STS, which is positioned perpendicular to the direction of flow of the wider downstream equipment, deposits product across the full width of the belt to provide complete belt coverage. With Formax, Britt and other management at Tyson found a partner offering the advanced technology and technical support that was needed to meet their specifications and long-term goals.

The Maxum700 solution

As the world's largest capacity forming system, the Maxum700

incorporates servo-powered mold plate and knockout drives to ensure smooth operation at rates up to 120 strokes per minute or 8,000 lbs. per hour raw weight. The servo drives provide complete control over the motions of the mold plate to maximize quality across a wide range of products.

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Tyson Foods, Nashville, Ark.**

savings we specified and required," continued Britt. "Because of the system's unique capabilities and technology, Tyson was able to replace four F-19 formers, eight team members and now enjoys a maintenance and repair advantage of \$275,000 annually, coupled with seconds improvement of 2 percent. This new configuration also eliminated one 40-inch batter-bread par-fry line."

Prior to this project, chicken breast patty production was performed on two, 40-inch batter and breading lines with four Formax F-19 formers, providing twin-line capacity of 10,000 pounds per hour finished weight. Currently, the Maxum700 along with a fryer extension produces 10,000 pounds an hour finished weight on one batter and

breading line, and the current production schedule runs 80 hours weekly.

Guaranteed results

Tyson had several options to choose from in satisfying its equipment needs for this project. Management's decision to go with the Formax Maxum700 and STS was based on the equipment's dependability, the company's

reputation for service, the projected lower cost of maintenance and repair and the system's overall simplicity of operation and cleaning.

"The purchasing decision came down to the higher productivity and lower cost of ownership we secured with Formax," says Britt. "We recognized the fact that the Maxum700 was designed with food safety and maintenance in mind. And we saw the huge potential that comes with maximizing our quality. The new line has reduced product defects by two percent, delivered consistent piece weights from one forming machine with one plate, and reduced over-pack giveaway by 1.7 percent."

Britt says Formax guaranteed their equipment could get the job done, and he recognized the robust

performance of the Maxum700 made this forming system a great fit for Tyson Foods.

"The Maxum700 is touch-screen operated with simple touch-and-go instructions, so even I can operate this system," Britt says. A full complement of operating and diagnostic screens facilitates machine operation, maintenance and troubleshooting. And adjustments to operating parameters, including the mold plate and knock-out cup motion, can be made on the run to optimize product quality.

Easy to clean and maintain

Sanitation and maintenance of the

Maxum700 are easily accomplished with the pivoting product hopper, the automated continuous lubrication system and the troubleshooting aids located in the touch screen, Britt claims. "The machine's construction for ease of maintenance along with the cabinet-within-cabinet construction improves reliability by protecting the control components. The servo drives have been very dependable, without any failures, for more than 26 weeks of operation."

To ensure the highest level of hygiene and food safety, the Maxum700 product hopper tilts at the touch of a button and offers clear access to the conveyor, feed screws

and plungers. Even the conveyor assembly pivots with the product hopper to simplify belt removal and machine washdowns. A one-piece pump box further enhances machine hygiene.

Above and beyond

When asked how he rates Formax on servicing the Maxum700 forming system, Britt answers: "Formax goes above and beyond what one would expect in start-up, training, service and follow-ups for satisfaction. This philosophy begins at the top and is embraced by everyone you talk to at Formax. Verbal communication is all you need to get satisfaction."



FORMAX
There's more in it for you.

For additional information:
9150 191st Street, P.O. Box 330, Mokena, IL 60448 (near Chicago)
708-479-3500 • E-mail: marketing@formaxinc.com • www.formaxinc.com