

Making adjustments

Tyson's Dakota City expansion has created greater capacity, better efficiency and a safer environment for workers and products.

Tough times call for tough measures, and once again, Tyson Foods has stepped up its effort.

In early May, *The National Provisioner* was invited to join local media outlets, government officials and businesspeople on an inaugural tour of the new, state-of-the-art addition at the Dakota City, Neb., Tyson Fresh Meats beef complex.

The original facility was IBP's first plant, was acquired in 2001 when Tyson purchased IBP, and needed updates to meet the challenges that new products and new product specifications required.

The addition, built during tough times for the entire protein-processing industry, was part of an \$80 million improvement project at the plant and included modifications designed to strengthen the plant's long-term viability.

Operations began at the new facility on March 8, 2006, after approximately two years of construction.

The plant's former processing areas were vacated and moved into the 84,500-square-foot addition, which houses a new processing floor chock full of efficiency enhancements and improvements to the ergonomics of beef processing, a cooler, shipping docks and a box shop.

"We [were able] to walk through the old section, ... and we realized how we've been able to change the environment for our folks," says John Tyson, chairman and CEO of Tyson Foods. "The rooms are bigger, the walls are taller, the ceiling's higher, and [we had] the ability and freedom to lay the lines out in a way that is the best processing flow."

The new floor has improved product



flow and the company's ability to produce more value-added products, according to company literature on the expansion. It also gives the Dakota City facility the capacity to process 15 to 20 percent more beef carcasses — approximately 6,000 head per day.

The Dakota City complex employs more than 3,800 Tyson team members currently, and the opening of the renovated facility allowed the company to consolidate its Nebraska beef-processing business into the Dakota City complex, leading to the shutting of the doors of facilities in Norfolk and West Point, Neb.

"Almost 40 percent of the folks we displaced have been able to find work in our other plants — some of them here and some of them have gone to our poultry and pork operations," Tyson adds. "It's never easy, but as our industry changes, you always have to make the adjustments."

Improvements to the handling and processing of carcasses, as well as enhancements to the food- and employee-safety arenas, were on display during Tyson's "grand opening" of the facility. During design and construction, Tyson Engineering targeted those areas for improvement and improved the ergonomics and ease of sanitation of equipment on the plant floor.

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"A lot folks had been on that old floor about 30 years, so they had a lot of relationships on how the plant ran and the layout worked," Tyson explains. "They're all getting used to driving the new car, but they'll tell you the new car feels good and they'll make the adjustments."

Plant floor employees have a new set of "keys," as it were, to drive that new car more easily. On the new floor, workers have the help

of pneumatic tools and gravity along the breakdown line. Some of the tasks employees once had to perform by hand, such as pulling the shoulder blade, are now mechanical. Chuck is now hung at the employees' eye level above the tables, where they can make cuts and let gravity work in their favor, rather than cutting and straining to pull pieces from the chuck as it sat on the table in front of them.

Giant pneumatic clippers allow operators to separate the loin with one large snip of the clippers. Skirts are pulled and slid across a large saw blade, which separates the rib from the bottom of the skirt. Machinery also assists employees in deboning the round efficiently and with minimal ergonomic stress.

Quality assurance checks the product, and then product is vacuum-packed, regardless of whether product is boneless or bone-in. During *The National Provisioner's* tour, the machines were pumping out 40 packages per minute. Boxes slide down chutes to the packaging area from the new box shop high above the ceiling of the processing floor.

Tyson's material-handling area is extensive and an automation wonder, with a capacity of 120,000 boxes in two separate systems. Three automated cranes can sort and store 100,000 boxes in static shelving, while an automated carousel can hold 20,000 boxes. Automated inserters and extractors search for open areas for storage of off-the-line product and boxes that have been ordered for shipment via bar codes.

The shipping docks are nearby, and a conveyor carries the boxes slated for shipment from the material-handling area to the truck awaiting loading. An expandable conveyor assists employees by stretching into a trailer, taking boxes directly to the employees packing the trucks. Pallets of product also can be shrinkwrapped and loaded if such treatment is required.

The plant has room to expand as well, given the additional space created in the areas of the plant the formerly housed processing floor. Tyson can use that now-vacated space to add equipment and keep making adjustments for success in the future. **NP**



Photos courtesy of Tyson Foods