



thespeedchallenge

Sponsored by Retrotech

Raising the steaks

Automated high-bay storage in a new shipping facility keeps beef moooving Texas-style at Cargill.

DEEP IN THE HEART OF THE TEXAS PANHANDLE IS FOUND SOME of the nation's best-tasting beef. It is here that Cargill packs about 30,000 cases of beef each day at its Friona facility, located southwest of Amarillo. Up until not long ago, the distribution side of the Friona processing center was operating 24/7 to keep up with customer demand. It was difficult, manual work, as employees had to perform their tasks in coolers, selecting heavy boxes of meat from flow racks. Annual turnover in the distribution area was high, employees had few days off, and they had to work extensive overtime just to keep up with production and orders.

SKU counts were also growing, as customers now order their meats by specific cut, weight, grade, and age. This was made even more difficult because Friona did not have a good method of managing its inventory. Workers basically memorized where each SKU was stored in the flow racks and then pulled cases as required. Accuracy was only at about 90 percent and fill rate was also at about 90 percent.

"We had more SKUs than we were set up to handle. That made it difficult to get the throughput we needed, and we could not rotate our products as we wanted," says Tom Randolph, shipping supervisor.

Cargill called Retrotech, a system design firm specializing in technology applications and implementation, to see if they could help. Retrotech and its partners worked for nearly three years with Cargill, looking at a wide range of alternatives. "Retrotech was there the entire route with us, helping us design what we have today," says general manager Steve Thompson.

And what Cargill has now is a new 50,000-square-foot distribution building adjacent to production that houses the shipping area and a large automated storage and retrieval system (AS/RS). This mini-load system consists of 20 aisles where 20 cranes maneuver to quickly handle inbound and outbound cases utilizing 78,000 storage locations. Each crane in the system can handle two cases at a time for even greater efficiencies. viastore systems supplied the AS/RS, while Hytrol, through its Dallas-based dealer Cisco-Eagle, provided conveyors and sorters used in the building.

The new systems have now provided Cargill with world-class

service capabilities.

"We designed everything into these systems that a customer would want from us," says Randolph. "Capacity has doubled what we were able to do before and now it is organized. Every box has its own address."



Where's the beef?

Once beef is packed in the processing center, it is conveyed through a 600-foot skyway bridge to the new distribution building. Here cases are sorted to lanes in the AS/RS. This storage system is continuously depositing products into storage while also picking cases for customer orders. Depending on customer needs, some cases are sent through an automated palletizer and stretch-wrapping system, while others are diverted to extendable conveyors for direct loading onto outbound trucks.

Cargill also installed Retrotech Warehouse Management software at Friona. This customized software tracks inventory and manages all processes within the distribution facility. Product can now be easily rotated and traced, which is crucial in food production. Cargill can also better serve its customers by accurately locating meats immediately that match the grades and weights that their orders require.

Since the Retrotech design was installed, labor has been reduced by two-thirds and order accuracy is now well above 99 percent. The shipping area, which had been 24/7 because of the bottlenecks, now operates on two staggered shifts, five or six days a week. Workers are much happier and there is much less staff turnover.

"Not to have to work on Sundays is absolutely huge for us, from both a cost side and morale," says Thompson. "We are substantially better now as we have reduced a lot of human error. Our plant went from last in our company to first."

Thompson adds that clients no longer have any beefs about their service levels either. "When customers come here to look at us, they say, 'I want my beef to come out of here.'"

For more information on Retrotech, call (585) 924-6333 or visit www.retrotech.com.

To watch a short video showing the distribution operations at Cargill's Friona facility, go to www.dcvelocity.com and click on The SPEED Challenge.