

# Feed for Rotisserie Chickens

POULTRY PROCESSING COMPLEX INCLUDES NEW ELEVATOR AND FEED MILL



**Lincoln Premium Poultry**  
Fremont, NE • 402-704-2200

**Founded:** 2016  
**Feed milling capacity:** 15,000 tpw at one location  
**Grain storage:** 408,000 bushels  
**Number of mill employees:** 30  
**Feed products:** Full line of chicken feeds

**Key personnel:**

- Brent Brinegar, feed mill manager
- Bill Kreifels, maintenance manager
- Chelsea Kerdell, commodity mgr.

**Supplier List**

- Air compressor.....** Atlas Copco
- Automation system.....** Beta Raven
- Bearing sensors..** 4B Components Ltd.
- Bin level monitors .....** BinMaster Level Controls
- Boiler.....** Cleaver Brookis
- Bucket elevators...** Warrior Mfg. LLC
- Conveyors.....** Warrior Mfg. LLC
- Distributor.....** Hayes & Stolz Ind. Mfg. Co. Inc.
- Dust collection system.....** Aircon Corp.
- Elevator buckets ....** Maxi-Lift, Inc.
- Engineering ....** KC Engineering PC
- Hammermills.....** CPM Roskamp Champion
- Liquid tanks.....** Assman Corp.
- Manlift.....** Schumacher Elevator Co.
- Mass flow meters .....** MicroMotion
- Microingredient system..** Beta Raven
- Mixer .....** Scott Equipment Co.
- Motion sensors .....** 4B Components Ltd.
- Pellet coolers....** Bliss Industries Inc.
- Pellet crumbler .....** CPM Roskamp Champion
- Pellet mills .....** CPM Roskamp Champion
- Roller mill.....** CPM Roskamp Champion
- Scales ..** Rice Lake Weighing Systems
- Screeners.....** CPM Roskamp Champion
- Screw feeders.....** WAM, Inc.



*Lincoln Premium Poultry's new feed mill and elevator in Fremont, NE produces feed for chickens intended to be sold as rotisserie chickens at Costco stores nationwide. Photo by Ed Zdrojewski.*

One of the most popular items in any supermarket are rotisserie chickens, whole roasted chickens under a heating element, ready to be served as-is as a family dinner entree or to be shredded as a pre-cooked ingredient in a variety of recipes.

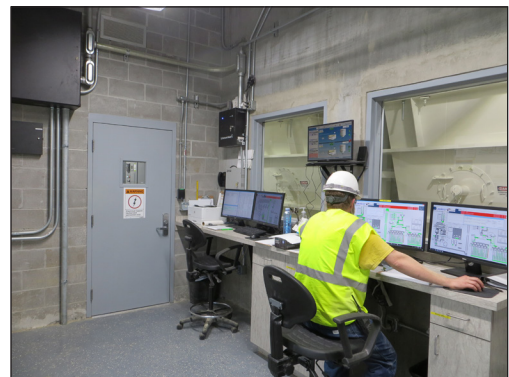
Long before they get to the supermarket, however, those are live birds that need to be fed. That's why Lincoln Premium Poultry included a high-capacity slipform concrete feed mill and adjacent grain elevator as part of its poultry processing complex at the south end of Fremont, NE.

The mill, rated eventually to process 15,000 tpw of chicken feed products, supplies that feed to chicken producers throughout eastern Nebraska and portions of western Iowa. All of those birds are processed in Fremont exclusively for Costco stores. *(For more background on the Costco operation and how it came to Nebraska, see page 192.)*

The mill produced its first loads of feed in August 2019. It currently is producing about 7,000 tpw, as it slowly ramps up production

as needed, says Mill Manager Brent Brinegar, who came to Fremont in August 2018 from a Cargill facility in Council Bluffs, IA, while the new mill was already under construction. "At the time, the concrete shell was already up, and the mill was awaiting the start of equipment installation," he says.

Before construction began earlier in 2018,



*Operator utilizes a Beta Raven automation system to monitor and control feed milling operations. Interior photos courtesy of Lincoln Premium Poultry.*



ABOVE: Two 70-tph CPM Roskamp Champion pellet mills with steam conditioners.  
BELOW: Two Bliss counterflow pellet coolers operate at approximately 75 tph.



Costco took bids and selected Younglove Construction LLC, Sioux City, IA (712-277-3906), as general contractor and millwright on both the elevator and mill.

In addition to Younglove, KC Engineering, Sioux City (712-252-2100), performed engineering work on the project.

### Grain Elevator

Younglove constructed a 408,000-bushel grain elevator consisting of four 102,000-bushel slipform concrete tanks standing 35 feet in diameter and 135 feet tall. The tanks have 60-degree steel

cone bottoms eliminating the need to enter the tanks for cleanout.

Receiving is done through a pair of 15,000-bph Warrior legs, with a third leg serving the feed mill structure dedicated to soft stocks. The legs are equipped with 18x8 Maxi-Lift Tiger-Tuff buckets mounted on 20-inch belts. These deposit grain into the elevator tanks or onto a 15,000-bph Warrior overhead drag conveyor running to the feed mill through a series of IDFI two-way diverter valves.

Trucks delivering corn or other ingredients to Lincoln Premium Poultry

are routed through the property by a CompuWeigh SmartTruck traffic management system. (See a case study article on this system on page 113 of the March/April 2020 issue.)

### Mill Operations

The feed mill is housed in a 175-foot slipform concrete structure on a XX-x-XX-foot footprint. All mill operations are under the control of a Beta Raven automation system.

The mill structure includes 21 ingredient square bins holding an average of 2,500 tons total. It also includes six mash feed bins holding a total of 110 tons, two dedicated to bagged mash feeds and the other four feeding the pelleting systems, plus 22 finished pellet tanks holding 3,364 tons, six of which are tied to the weigh lorry truck loading operation.

Corn as a feed ingredient is ground on a pair of 350-hp Roskamp Champion hammermills rated at XX tph or a 110-hp Roskamp Champion roller mill rated at XX tph. Corn ground on the roller mill is preferred for starter feeds.

Feed ingredients are mixed in a Scott 10-ton dual-ribbon mixer. In addition to the main ingredient bins, minor ingredients are added through a six-tote system plus a 20-bin Beta Raven microingredient system. Liquids added at the mixer include fats, choline, lysine, methionine, and zinc. The mixer is rated at 180 tph. The average mix time of three minutes still is being tweaked.

Mash feed intended for pelleting goes to a pair of CPM 70-tph pellet mills. Steam is supplied through overhead steam conditioners by a pair of 400-hp Cleaver Brooks boilers. Fats are supplied to the pellet mills by Apec fat coaters.

Pellets are cooled in a pair of 75-tph Bliss counterflow pellet coolers. Pellets intended for poulters are run through a CPM pellet crumbler.

Finished feeds are loaded onto trucks in a bay with two weigh lorries. It takes about eight minutes to load up to 28 tons onto a semi-truck.

“Like any startup, there’s been a few bugs, but overall, it’s gone very well,” says Brinegar. “We’re shipping good-quality feed. Sourcing talent for our staff is easier with a greenfield mill like this.”

*Ed Zdrojewski, editor*