

Serving Mississippi Producers

PECO FOODS BUILDS A NEW FEED MILL CENTRAL TO STATE'S POULTRY GROWERS

Peco Foods Inc.

Tuscaloosa, AL • 205-345-4711

Founded: 1930s

Processing capacity: 4.59 million head broilers/week

Feed milling capacity: 43,860 tpw at five locations

Annual sales: \$1.175 billion

Number of employees: 4,900

Key personnel at Lake:

- Steve McLaurin, live production mgr.
- Gerald Noland, mill manager
- Billy Perkins, assistant manager

Supplier List

Aeration systemAIRLANCO

Batch control system.....CPM Beta Raven

Bearing sensors ...4B Components Ltd.

Bin level monitors .. BinMaster Level Controls

Boiler Cleaver Brooks

Bucket elevators.....Intersystems

Contractor Younglove Construction LLC

Distributor..... Hayes & Stolz Ind. Mfg. Co. Inc.

Drag/belt conveyors.... Intersystems

Dust collection system Aircon Corp.

Elevator buckets Maxi-Lift Inc.

Engineering Younglove Construction LLC/Graham Engineering Corp.

Grain temp system... Rolfes@Boone

Hammermill CPM Roskamp Champion

MagnetsBunting Magnetics Co.

Manlift.....Harris Elevator

Microingredient system CPM Beta Raven

MixerHayes & Stolz Ind. Mfg. Co. Inc.

Pellet cooler CPM Roskamp Champion

Pellet crumbler CPM Roskamp Champion

Pellet mill..... CPM Roskamp Champion

Rail construction Trackworks

Scales ..Rice Lake Weighing Systems

Screw conveyors WAM Inc.

Steam conditioner.. CPM Roskamp Champion

Tank unloader...Laidig Systems Inc.

Truck probe Intersystems



Peco Foods' new 8,800-tpw slipform concrete feed mill in Lake, MS designed to serve the Alabama-based company's poultry producers in Mississippi. Photos by Ed Zdrojewski.

Tuscaloosa, AL-based Peco Foods Inc. had been producing feed for its poultry producers in Mississippi from an all-steel feed mill in Sebastopol, MS. After 40 years in service, that facility was nearing the end of its useful life and lacked the capacity to meet the needs of the company's producers.

The company made the decision in 2010 to move ahead with building a more modern, 8,800-tpw, slipform concrete mill as a replacement, according to Steve McLaurin, Peco live operations manager. McLaurin is a 34-year veteran of the Mississippi poultry industry who has been with Peco for seven years.

The family-owned company, which is the eighth largest poultry operation in the United States, selected a 408-acre site near Lake, MS, about 20 miles south of Sebastopol, largely because of its transportation links. The site is close to Interstate 20 and has enough space to construct a loop track off of a Kansas City Southern main line. It's also roughly halfway between two concentrations of Peco poultry producers to the north and south.



From left, Steve McLaurin, live production manager; Billy Perkins, assistant manager; and Gerald Noland, mill manager.

Construction

McLaurin says the company considered proposals from several general contractors and settled on a bid from Younglove Construction LLC, Sioux City, IA (712-277-3906). "We felt they offered the best fit," he says.

Younglove did the engineering on the feed mill, and Graham Engineering Corp., Little Rock, AR (501-227-0078) did the engineering



The mill's CPM Roskamp Champion 85-tph pellet mill outfitted with a CPM double-pass steam conditioner.

on the site work. CPM Beta Raven, St. Charles, MO (636-255-1600), supplied the control systems, and its sister company, CPM Roskamp Champion, Waterloo, IA (800-366-2563), supplied much of the feed processing equipment. "We've been very happy with CPM and Beta Raven at our other feed milling sites, and the comfort level was there," says Mill Manager Gerald Noland, who came to Peco from another industry four years ago.

Younglove broke ground on the new \$29 million feed mill in July 2010. Production at the Sebastopol mill ended in February 2012, and at the same time, feed manufacturing got underway at Lake.

Ingredient Handling

The main mill structure is built on a 40-foot-x-87-foot footprint and stands 166 feet tall. The upper structure contains 19 ingredient storage bins holding 2,400 tons, four 106-ton mash bins located over the pellet mill, and 20 finished feed bins over twin loadouts holding 2,860 tons.

In addition, the facility has a pair of upright slipform concrete tanks holding a total of 750,000 bushels of corn, plus a third tank designed for 2,400 tons of soybean meal. The two corn tanks stand 60 feet in diameter and 145 feet tall, while the soy meal tank is 35 feet in diameter and

is equipped with a Laidig silo unloader.

Facility storage also includes a diked tank farm, with tanks dedicated to liquid fat, choline, synermax, liquid methionine, and standby diesel.

The mill is set up to receive corn and other major bulk ingredients by both truck and rail, with the two enclosed re-

ceiving pits operating at 25,000 bph each.

Area corn suppliers bring grain in by truck utilizing inbound and outbound 70-foot Rice Lake scales on either side of a grain receiving office and lab. Trucks are sampled with an Intersystems probe.

Rail shipments arrive on a 7,300-foot loop track with a 110-railcar capacity, with a 2,787-foot, 35-car siding to park railcars holding soft stock.

From upright grain storage, corn is ground on a Roskamp Champion HM44-56 hammermill at 70 tph before going on to bulk bins in the mill tower.

Manufacturing Flow

Ingredients are mixed in a six-ton Hayes & Stolz double-ribbon mixer, with an average mix time of three minutes. Liquids can be added at the mixer, as can microingredients from a 20-bin Beta Raven system.

All of the feed produced at the mill is pelleted using a CPM 9042 pellet mill at 85 tph. The pellet mill is outfitted with a CPM double-pass steam conditioner designed for improved retention rate.

Pellets are sent through a 63-foot-long CPM HDHC7D63 horizontal cooler, and a portion of the mill's production can be routed through a CPM 90-tph crumbler.

Peco Foods operates a fleet of 12 trucks out of Lake. They are loaded in twin bays using a weigh lorry system.

Ed Zdrojewski, editor



The mill's 63-foot-long CPM horizontal cooler is raised to provide additional storage space.