

# Construction Underway

IOWA STATE FEED MILL AND GRAIN SCIENCE COMPLEX TO BE COMPLETED BY FALL 2022

Construction on Iowa State University's (ISU) Kent Corporation Feed Mill and Grain Science Complex in Ames reached a milestone in October as the structure of the new feed mill tower was completed.

According to Dirk Maier, director of the complex and professor of agricultural and biosystems engineering, plans are for the complex to include feed milling and mixing equipment, grain storage bins, grain drying and handling equipment, a warehouse, and an education building with classroom, lab, and meeting spaces.

Ground was broken for the project in November 2020, and the complex is expected to be completed by fall of 2022 on approximately 10 acres of university-owned land.

## Feed Mill Tower Completed

The feed mill tower, which is more than 100 feet tall, took 4-1/2 days for general contractor Todd & Sargent, Ames (515-232-0442), to erect with two crews working



Artist rendering of the \$21.2 million Iowa State University Kent Corporation Feed Mill and Grain Science Complex in Ames. Renderings courtesy of Dirk Maier.

12-hour shifts, 24 hours a day.

The feed mill is designed to produce diets and feeds for the university's livestock and poultry teaching and research farms. The feed mill will have two production lines – one for small-scale research and the other for larger-scale pro-

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Todd & Sargent's construction crews worked 24 hours a day for 4-1/2 days to pour cement for the 100-foot-tall feed mill tower. Photo courtesy of Iowa State University.

duction. An attached warehouse is being built to store ingredients and finished feeds.

Construction on the grain handling and corn storage facility began in early December. It includes the following Sukup Manufacturing Co., Sheffield, IA (641-892-4222) equipment:

- Four 54-foot-diameter steel tanks, 50,000 bushels each.
- A mixed flow grain dryer rated for 1,800 bph at 5% moisture removal. It is designed to be expandable by adding another module to make it 2,500 bph at 5% moisture removal.
- One 20-ft. diameter 20,000 bushel stir-drying bin.
- Two 18-foot-diameter hopper bins, 10,772 bushels each.
- Two 4,000-bph receiving and shipping bucket elevators and eight 4,000-bph fill and unload drag conveyors.
- Support tower and catwalk.

Sukup also supplied two pre-engineered metal buildings totaling over 16,000 square feet for the feed mill.

### Fulfilling a Vision

Maier says the complex is long overdue and will help propel ISU into the future. "The purpose of this facility is unique in the world. This is really fulfilling a vision in terms of bringing together the grain sciences, post-harvest engineering, animal nutrition, and feed technology faculty, students, and programs in one facility."

One of the goals of the project is to provide an environment of the highest safety standards, biosecurity, and regulatory compliance, Maier said in July during a presentation at the CONVEY '21 conference in Omaha, NE.

Maier says the complex combines teaching, research, extension, and international outreach conducted ▶

*Located at the intersection of Highway 30 and State Ave. in Ames, IA, the complex is expected to be completed by fall 2022.*



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*The foundation for the feed mill tower was laid in November 2020, and the structure was completed in November 2021. Photo courtesy of Dirk Maier.*

by the animal science and agricultural and biosystems engineering departments at ISU. It has also helped bring about the creation of a new feed technology minor, which started being offered to students in the fall of 2019.

Once the complex is operational, Maier says students will receive hands-on training to prepare them to enter the grain and feed industry. He explains the complex is intended to provide a growing pool of talent for Iowa and the Midwest's grain and feed allied industries, from operations to nutrition, technology, engineering, and management.

"One of the most amazing things about this place is that it will be run by students," says Tony Ewing, manager and associate director of the complex. "We will be developing the future leaders of the grain and feed industry."

### Training Center Planned

Maier says the complex will include a hands-on training center for equipment maintenance, personnel safety, regulatory compliance, and developing technical competence.

The target group will be operations employees of grain elevators and feed mills, along with community college and university students, he says.

Maier adds the center will be modeled on the Cargill Operations Training Center, Iowa Falls, IA, and the Asmark Institute, Bloomington, IL.

One of the classes to be offered on-site is the Advanced Grain Elevator Operations Management short course, which is intended for operations managers and superintendents. It will provide an opportunity to earn three Continuing Education Units and hours toward a Professional Engineer certification. It is next scheduled for the week of April 4-8, 2022.

### Project Funding

Funding for the \$21.2 million complex has come exclusively from private donors, including Kent Corporation, Iowa Corn Promotion Board, Sukup Manufacturing Co., Todd & Sargent, Inc. and the Sargent family, California Pellet Mill, Iowa Crop Improvement Association, and NEW Cooperative. ■

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