### Dairy Farmers of America, Inc.

GARDEN CITY, KS

#### VALUE DELIVERED

Shambaugh & Son, L.P., an EMCOR Company, designed and built the 267,000-squarefoot Dairy Farmers of America (DFA) Garden City plant. The facility's highly automated, energy- and water-efficient design helps conserve resources and features advanced HEPA-filtration as well as redundant, self-cleaning systems for 24/7 operation.

In 2018, Food Engineering magazine named the facility "Sustainable Plant of the Year," recognizing it for outstanding sustainable engineering features that go above and beyond industry standards.

The plant has the capacity to receive four million pounds, or 84 tanker loads, of milk per day from regional dairy farms. It takes the streamlined facility approximately 68 minutes to offload a tanker's milk, clean the truck, and test the milk. Factor in the the plant's close location to the dairy supply, and now a 5,000-gallon milk tanker that may have taken days to deliver and be processed can make the trip in a day, drastically reducing hauling and trucking costs for DFA members.



# **EMCOR**

#### **CLIENT OBJECTIVES**

In partnership with 12 of its member farms in the southwest region, DFA chose Garden City, KS, as the new home for a state-of-the-art plant capable of whole, skim, and nonfat dry milk powder and cream production.

DFA needed a plant with processing capabilities large enough to centralize their dairy distribution in the Southwest region, that was also built with a focus on efficiency, water conservation, and advanced energy-saving technologies to meet their sustainable strategy for the area.

#### **PROJECT SOLUTIONS**

Featuring some of the most advanced food processing technology available, the 156-acre Garden City site is North America's largest whole and skim milk powder drying facility.

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MANUFACTURING/INDUSTRIAL

FOOD PROCESSING



OPERATING COMPANY Shambaugh & Son

**CLIENT** Dairy Farmers of America

PRIME DESIGN-BUILDER Shambaugh & Son, L.P.

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MANUFACTURING/INDUSTRIAL

FOOD PROCESSING

## CASE STUDY

#### **PROJECT SOLUTIONS (CONT.)**

Shambaugh incorporated cutting-edge biosecurity technology into the plant, including a highly complex air filtration system. Risk is further reduced by implementing various hygiene zones, utilizing card entry throughout, and minimizing contact with the product.

Additionally, numerous environmental safeguards were built into the system including a diffusion tank that allows trace emissions to be captured, helping to ensure contaminants are not released into the environment.

During the project, Shambaugh delivered the following:

- Wet process/evaporation/drying/packaging
- Mechanical, electrical, and refrigeration
- Fire protection
- Waste water treatment
- · Process controls and building automation
- Clean-in-place management
- 24-hour milk processing capabilities

#### **CLIENT BACKGROUND**

DFA is a national cooperative that markets and sells milk products to wholesale buyers around the globe. Formed in 1998 by four of the nation's leading milk cooperatives, DFA now includes more than 13,000 dairy farmers in 48 states.



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