

Food, Beverage, and Dairy – Engineering & Automation

Engineered Solutions for Food, Beverage and Dairy Production

Food and beverage products have become more complex and expensive to produce while globalization and regulatory requirements continue to limit margins. To remain competitive, companies must find innovative ways to produce their products faster, at lower cost, and with minimal waste.

Not long ago, a capable maintenance group could design and maintain your process well enough to meet demand. New requirements and technology have made this model expensive at best. Today's competitive environment requires a shift in design, selection, and deployment of process automation solutions.

Deaton Engineering can help in this transition. Our engineering services take you beyond the "trial and error" approach to addressing the source of production and process issues. We design, build, and manage projects — from a single piece of equipment to a major plant expansion.

Meeting Regulatory Expectations regarding Product Safety, Quality, and Production

Compliance Engineering (FDA, 3-A, USDA, & NSF)

Deaton Engineering's mechanical, electrical, and software engineers are experienced with food and beverage regulatory requirements (FDA, USDA, NSF, and EFSA) and process requirements (sanitary piping systems and clean-in-place systems). By evaluating your facilities and process systems, we can make recommendations for improvements in production management, recipe management, asset utilization, safety, and monitoring systems to help you evolve your process.

Process and Facility Engineering & Safety

Deaton Engineering can help you apply a risk-based approach to regulatory compliance, thereby containing costs and seizing new opportunities. At any point in the production cycle, Deaton Engineering can lead the compliance process by developing and executing strategies that satisfy federal regulations. Our experts will verify the system was installed correctly and functions as designed.

Manufacturing & Process Automation and Machine Design

Deaton Engineering designs fully automated systems and can incorporate industrial robots, automated process control systems, and in-line monitoring. We integrate off-the-shelf equipment into our designs to build equipment that evolves with your needs. We are experts at developing systems for in-line testing, security, and quality control. All of our equipment and processes are designed for quality.

Engineering & Design Services

- Clean in place systems (CIP)
- Steam in place systems (SIP)
- Sterilization in place systems
- Pasteurization and sterilization processes
- Food, beverage, & dairy processing
- Food, beverage, & dairy packaging
- Food, beverage, & dairy manufacturing
- Material handling systems
- Plant operations
- Food engineering
- Cross contamination
- Product handling and conveying equipment
- Ice cream and water ice extrusion nozzle design & fabrication
- Ergonomics, safety equipment & machine guarding
- Retrofitting manufacturing equipment & lines
- Industrial microwave systems
- Sanitary, clean equipment design
- 3-A, FDA, USDA and NSF standards
- Process & utility piping
- Plant & site layout
- Process safety and risk management
- Hazardous area classification
- Factory acceptance testing (FAT)
- Industrial robots
- Process and manufacturing equipment list
- Engineering services list
- Process engineering services list
- Facilities engineering services list
- Validation engineering services list