

Our Customers

Industry: Food Processing



Customer:

Food production facility

Location:

Birmingham, AL

Equipment selected:

ADCO Custom Engineered Package:

- Armstrong Python® Control Valve
- Grundfos CR Pumps
- Heat Exchanger, Buffer Tank and Air Separator



Background:

A leading food manufacturer in Birmingham, Alabama utilizes steam for batch and sanitation processes to produce a variety of sauces, spreads, dips and cooking oils. The facilities older steam system and heat transfer equipment was not reliable for delivering the consistent temperatures required for production. Heat exchangers throughout the plant utilized steam to heat up either product or hot water, however, due to the lack of control of hot water and steam, the product requirements were not being held at consistent temperatures. As a result, production was slow, and the heat exchangers were failing. The heat exchangers were also causing increased air temperatures within the production floor causing discomfort to employees. The challenge was to provide reliable product temperatures along with maximizing the efficiency of the production process and maintain a comfortable temperature for the employees.

Results:

The food manufacturer made the investment to procure several new process heat exchangers. ADCO's directive was to provide consistent hot water to each of the heat exchangers utilizing steam as the heat source. A new closed loop hot water system was designed and implemented. ADCO constructed a skid system using redundant Grundfos multi-stage centrifugal in-line pumps, Armstrong Python industrial steam control valve and controller, air separator, thermal buffer tank and a shell and tube heat exchanger. Today, the closed loop water is heated through the shell and tube heat exchanger by controlling steam with the Python control valve and then delivered by the Grundfos pumps to supply consistent temperatures to the new process heat exchangers.

The engineered skid package is capable of delivering the exact water temperature and flow to the process heat exchangers that is needed to maintain consistent product viscosity. The closed loop system has ensured product consistency and positively impacted production capabilities.

Go online to learn more about the Armstrong [Python® Control Valves](#) and Grundfos [CR vertical multistage centrifugal inline pumps](#).