Leading Food Manufacturer Plans Plant Expansions

A leader in authentic and premium food and beverage brands, including extended shelf life (ESL), organic, natural and indulgent favorites, partnered with MAVERICK to baseline current plant operations and develop a plan for upcoming plant expansions.

Objective

The customer requested a plant optimization study to determine what changes would need to occur to the existing plant to support further plant expansions.

Results

MAVERICK delivered a thorough assessment that met the customer’s time constraints. This included a detailed evaluation of the plant’s utilities, a production baseline and a plan to allow the plant to achieve the required increase in capacity, which would justify upcoming plant expansions.

Solution

The MAVERICK team reviewed and studied the process capabilities in relation to the existing and future filling capacity requirements. Specific recommendations were made on whether to optimize, retrofit or replace equipment.

The filling operation was studied and documented in detail. The assessment included an overview, observations, assumptions and conclusions. The current state was reviewed with plant and corporate personnel to verify observations, validate assumptions and discuss conclusions.

Next steps included an assessment for equipment to be added later in the year. The conclusions identified constraints that would be present after the equipment addition. It also contained possible run scenarios to optimize and maximize production capacity.

Plans for upcoming expansions were developed, including budgetary estimates for the addition of new equipment, an increase in capacity of operating equipment and utilization of existing process equipment that previously had not been used.

All recommendations were considered and were classified as either proceed or do not proceed. Each recommendation was provided with supporting information that stated clear benefits, assumptions and conclusions.

Budgetary estimates included a bill of materials for process equipment, engineering labor, mechanical and electrical installation, and controls and instrumentation hardware.

Utility requirements were identified for all new pieces of process equipment, and additions and upgrades were included as part of the estimate.

In addition, the plant received baseline knowledge of the current capacity of their utilities system as a part of the study.

The MAVERICK Difference

MAVERICK developed SAMA documentation that the project team used to deliver a high quality product and improve boiler safety and efficiency. Boiler configuration is demanding, so knowledge of how to create and use this type of documentation was crucial to the project’s success.