

New Process & Packaging Line Design with Field Fabricated Refrigerated Hardening Tunnel

FOOD & BEVERAGE | ENGINEERING SERVICES & TURNKEY SOLUTIONS

TAI VALUE PROPOSITION

TAI served as one-stop shop for Nestle to manage the project from design, development through construction.



Highlights

- Packaging Layout Design & Reorganization of Remaining Lines
- Piping System Design & Layout
- Facility Planning – Mechanical/Electrical/Plumbing Design
- Equipment Layout
- Control Panel Design & I/O Drawings

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CLIENT: CONFIDENTIAL
LOCATION: Laurel, MD
MARKET: Food & Beverage
TAI SERVICES:

- Construction Management
- Documentation & Bid Package

COMPLETED: 2010
VALUE CLASS: \$1MM

VALUE PROPOSITION:
 TAI served as one-stop shop for the Client to manage the project from design, development through construction.

ABOUT: The Client is a major U.S. ice cream and frozen snack producer which manufactures and distributes a full spectrum of ice cream and frozen products.



CHALLENGE

The Client needed an engineering firm to oversee the entire project from design and development of construction documents to Construction Management services.

SOLUTION

The project required equipment for new processing, packaging, palletizing, and CIP capabilities compliant with a cGMP manufacturing environment as well as -20°F ice cream hardening tunnels. The new production line had to meet FDA standards and comply with the Owners and industry standard cGMP manufacturing guidelines. A construction bid package, containing design calculations, drawings, spec-

ifications and scope of work was prepared for each area. As part of the deliverables on this project, TAI participated in review sessions at 30%, 60%, 90% and 100% of all deliverables for this new line.

TAI served as the Construction Manager including monitoring all phases of the permit process while communicating progress to the Owner. Throughout the construction phase of this project, TAI collected necessary Red Lines from the construction contractor and provided Owner with a final “as built” AutoCAD documentation for all power distribution, single line diagrams, utility distribution diagrams and PID’s for process piping, glycol, city water, process hot water, and central chemical.

RESULTS

TAI provided design and architectural building improvements, utility modifications, floor plans for new equipment, equipment rigging, evaluating costs associated with purchasing and installing equipment, and creating a schedule for implementation. A construction bid package, containing design calculations, drawings, and specifications were also prepared for each area. The TAI project team participated in contractor walk-throughs and provided the written documentation to answer technical questions throughout the bid and construction phases. Additionally, TAI served as the Construction Manager and was required to acquire all necessary construction permits.

ABOUT TAI: TAI is a full-service engineering, management and technical services firm, headquartered in Baltimore, MD, with offices in Dallas, TX and Wilmington, DE. TAI has completed over 10,000 projects since 1989, specializing in chemical, power, food & beverage, pharmaceutical, consumer goods, commercial, and government sectors. TAI’s diverse skill set in these markets positions the firm as an industry leader.