

## FOOD & BEVERAGE MANUFACTURING

TAI is a full-service engineering firm that has served the **Food & Beverage Manufacturing Industries** with Engineering, Management and Technical Services since it's establishment in 1989. Our extensive technical expertise has enabled our clients to design, build, operate and maintain world class facilities over the last 33 years.

TAI is headquartered in Baltimore, MD and has offices in Dallas, TX, Phoenix, AZ, and Wilmington, DE.



### ENGINEERING

- Process & Mechanical
- Electrical, Instrumentation & Controls
- Automation & Systems Integration
- Packaging & Material Handling
- Structural & Civil
- Buildings & Facilities (MEP)



### MANAGEMENT

- Project Management
- Construction Management
- Procurement Services
- Design-Build & Turnkey Solutions
- Staff Augmentation
- Process Safety Management



### TECHNICAL SERVICES

- I&C Field Services
- 3D Scanning
- Inspection & Test
- Site Safety
- Mechanical, Electrical and Steel Construction

### SERVICES

- \* Preliminary & Detailed Engineering
- \* Scope Development
- \* Construction Cost Estimation
- \* Master Planning
- \* Project Economic Analysis
- \* Equipment Sizing & Selection
- \* Start-Up
- \* Commissioning
- \* Facility Documentation
- \* Peer Review
- \* Calibration Program Development
- \* Electronic Calibration Lab Services

### CERTIFICATIONS

ISO / IEC 17025:2017 (International)  
ANSI / NCSL Z540-1-1994 (National)  
Certification #: AC-2055

#### CONTACT

TAI Engineering  
600 Red Brook Boulevard  
Suite 300, Owings Mills, MD 21117  
Toll Free: (844) 261-1080

# NOTABLE PROJECTS

## ■ Spice Manufacturing Plant



TAI provided multi-discipline engineering, design, and construction services to complete the construction documentation and bid packages for a new spice manufacturing plant. TAI also provided electrical and mechanical services, construction management services, project management, 3D Scanning, Construction Bid Documentation, and Construction Administration Services.

**CLIENT:** **CONFIDENTIAL**  
**MARKET:** Food & Beverage Manufacturing  
**LOCATION:** Hampstead, MD  
**SERVICES:**

- Electrical & Mechanical
- Construction & Project Management
- Construction Bid Documentation
- Construction Administration
- 3D Scanning

**COMPLETED:** 2016  
**VALUE CLASS:** \$5M

## ■ New Bottling Equipment & Upgraded Production



TAI supported the Client's project from concept to start-up to upgrade their key production areas and their three new high speed bottling lines; all which required a large-scale bulk storage area.

TAI provided engineering, design, procurement, construction management and commissioning. The project scope included: new receiving and bulk storage capability, new concrete containment, continuous in-line blending, automation of existing batch processing, and control system replacement.

**CLIENT:** **CONFIDENTIAL**  
**MARKET:** Food & Beverage Manufacturing  
**LOCATION:** Baltimore, MD  
**SERVICES:**

- Engineering & Design
- Procurement
- Construction Management
- Commissioning

**COMPLETED:** 2010  
**VALUE CLASS:** \$5-10M

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



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.

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

- Construction Bid Package
- Construction Management & Documentation

**COMPLETED:** 2010  
**VALUE CLASS:** <\$1M

## ■ Flour Handling Improvements



TAI worked with the Client to complete the engineering assessment, preliminary engineering and cost estimations for modifications of an existing flour unloaded, storage and supply operations. These multi-plant assessments also including upgrading the present flour handling systems. TAI's work included project definition, and evaluating several options for solving flour dust collection, leakage, and storage silo pressurization problems.

TAI's equipment design, implementation plans, and operational modifications addressed safety and operational concerns related to exposure, contamination and over pressurization in the operating and storage environments.

**CLIENT:** **CONFIDENTIAL**  
**MARKET:** Food & Beverage Manufacturing  
**LOCATION:** Hazleton, PA  
**SERVICES:**

- Project Management
- Engineering & Design
- Cost Estimation
- Project Definition and Evaluation

**COMPLETED:** 2017  
**VALUE CLASS:** \$1M+