

REQUEST FOR PROPOSAL (RFP)

Lin and Sons

PROJECT OVERVIEW

Name: Tech Teresachester Facility Upgrade

Type: Facility Upgrade

Location: Teresachester, GU (Refinery Zone)

Industry: Manufacturing

Value: \$5,416,759

Complexity: 1/5

Date: April 09, 2025

Disciplines: Mechanical Engineering, Process Engineering, Industrial Automation

Regulations: OSHA Regulations

SCOPE OF WORK

****Scope of Work: Upgrade of Conveyor System in Food Processing Facility****

****Project Goal:**** Upgrade an existing conveyor system in a food processing plant to increase throughput and improve sanitation. This project focuses on a simple upgrade, not a complete overhaul.

****1. Mechanical Engineering:****

* ****Task 1: Conveyor Belt Replacement:**** Replace the existing 100 ft long, 24-inch wide conveyor belt with a new belt made of FDA-compliant, food-grade polyurethane material (meeting NSF Standard 51). The new belt should have a minimum tensile strength of 5000 lbs and a thickness of 0.5 inches. Deliverables include a material selection report and installation instructions.

* ****Task 2: Roller Replacement:**** Replace 50 existing conveyor rollers with new, self-lubricating rollers made of stainless steel (304 grade) to reduce friction and improve sanitation. Rollers should have a diameter of 4 inches and a length of 12 inches and meet food-grade standards. Deliverables include a parts list and a detailed installation procedure.

****2. Process Engineering:****

* ****Task 1: Flow Rate Optimization:**** Analyze the current conveyor system throughput and identify bottlenecks. Develop and implement minor adjustments to conveyor speed and incline to increase the throughput by 15%, maintaining product integrity. Deliverables include a process flow diagram (PFD) before and after optimization and an efficiency report.

* ****Task 2: Sanitation Procedure Update:**** Develop and document a revised sanitation procedure for the upgraded conveyor system, ensuring all components are easily accessible and cleaned in accordance with FDA regulations for food processing equipment. This will include a detailed cleaning schedule and a checklist for sanitation personnel. Deliverables include a revised Sanitation Standard Operating Procedure (SSOP).

****3. Industrial Automation:****

* ****Task 1: PLC Program Update:**** Update the existing Programmable Logic Controller (PLC) program to accommodate the new conveyor belt speed and any changes in sensor locations resulting from the upgrades. The program should include improved error detection and reporting features. Deliverables include updated PLC program code, and a comprehensive testing procedure.

****Cross-Disciplinary Tasks:****

* ****Task 1: Integration Testing:**** Conduct a joint testing phase to ensure seamless integration between the mechanical, process, and automation components. This will involve running the upgraded conveyor system under simulated production conditions and verifying that it meets the specified throughput and sanitation requirements. Deliverables include testing documentation and a joint-team report documenting performance and any adjustments needed.

* ****Task 2: Safety Review:**** Conduct a joint safety review of the upgraded system to ensure compliance with all relevant OSHA regulations, focusing on machine guarding and worker safety around moving parts. The review should produce a comprehensive safety checklist.

****Complexity Impact:**** The complexity of this project is appropriately rated as Level 1 due to the straightforward nature of the upgrades and the limited scope of engineering required.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Tech Teresachester Facility Upgrade

1. Project Overview:

The Tech Teresachester Facility, located in the Teresachester Refinery Zone, GU, requires an upgrade to its existing conveyor system within its food processing plant. This project involves a straightforward upgrade focusing on improved throughput and sanitation, not a complete overhaul.

2. Scope of Work: Upgrade of a 100ft, 24-inch wide conveyor system including belt and roller replacement, process optimization, PLC program update, integration testing, and a safety review. Detailed scope outlined in Appendix A (attached separately).

3. Deliverables: See Appendix A for a comprehensive list of deliverables.

4. Qualifications:

- * Minimum 3 years of experience in manufacturing facility upgrades.
- * Proven track record of regulatory compliance (FDA, OSHA).
- * Relevant experience in food processing plant maintenance and upgrades.

5. Proposal Requirements:

- * Technical designs (1-2 pages) detailing proposed solutions for each task.
- * Comprehensive cost breakdown, including all labor, materials, and contingency costs.

6. Evaluation Criteria:

- * Technical Approach (50%)
- * Cost (30%)
- * Experience and Qualifications (20%)

7. Project Timeline:

- * RFQ Release Date: April 09, 2025
- * Questions Due: April 16, 2025
- * Proposals Due: May 01, 2025
- * Project Start Date: May 04, 2025
- * Project Duration: 11 months

8. Contract Type: Fixed Price

9. Contact:

Submit proposals electronically to procurement@manufacturing.com

Appendix A (separate document): Detailed Scope of Work (as provided in the prompt)

Note: Appendix A would be a separate document containing the detailed Scope of Work provided in the original prompt.

CONTACT

[Insert Contact Name and Phone Number Here (Optional)]

TIMELINE

Include key dates such as submission deadlines, inquiry deadlines, and project start dates.