REQUEST FOR PROPOSAL (RFP)

Franklin and Sons

PROJECT OVERVIEW

Name: Forge Taylorport Facility Upgrade
Type: Facility Upgrade
Location: Taylorport, VA (Refinery Zone)
Industry: Manufacturing
Value: $7,947,433
Complexity: 1/5
Date: April 09, 2025
Disciplines: Electrical Engineering, Process Engineering, Industrial Automation
Regulations: ASME Standards, ISO 9001

SCOPE OF WORK

Scope of Work: Industrial Manufacturing Facility - Minor Upgrade Project

Project Goal: Implement minor upgrades to an existing industrial manufacturing line to improve efficiency and safety. This project focuses on a single production cell within a larger facility.
Project Complexity: Level 1 (Basic Upgrades)
Applicable Standards: ASME B31.1 (relevant sections), ISO 9001 (document control and quality checks).
I. Electrical Engineering:
1. Motor Control Center (MCC) Upgrade: Replace three existing 15HP, 480V, 3-phase AC induction motors with energy-efficient premium efficiency models (IEC standard IE4). Document all wiring diagrams and motor specifications, including nameplate data and torque-speed curves, for the upgraded MCC. These updated documents will be submitted for review and approval to the plant engineer.
2. Lighting Upgrade: Install 50 units of LED high-bay lighting fixtures (minimum 150 lumens/watt, 5000K color temperature) to replace existing fluorescent lighting in the production cell, ensuring compliance with relevant safety standards (e.g., sufficient lux levels at work surfaces). This lighting upgrade should improve workspace illumination and reduce energy consumption. Quantify the expected energy savings.
II. Process Engineering:
1. Conveyor Belt Optimization: Replace 10 meters of existing conveyor belt (200mm wide, material: standard rubber) with a new belt of the same dimensions but featuring a higher tensile strength (minimum 1000 N/mm) to reduce material degradation. Provide detailed specifications for the new belt material, including supplier certification and testing results.
2. Improved Material Handling: Design and implement a simple gravity-fed chute (stainless steel, dimensions: 1m x 0.5m x 2m) to improve the flow of small parts (maximum weight 5kg) from one stage of the production process to the next. Provide detailed CAD drawings and material specifications for the chute.
III. Industrial Automation:
1. PLC Program Modification: Modify the existing Programmable Logic Controller (PLC) program to incorporate the new motor and conveyor specifications. This includes updating the input/output configurations and creating new logic to manage the upgraded equipment. Test the modified program thoroughly using a PLC simulator before implementation.
IV. Cross-Disciplinary Tasks:

1. Safety Review: Conduct a joint safety review of all upgraded components and processes, focusing on risk assessment and mitigation, ensuring compliance with all relevant safety regulations. Document all findings and corrective actions with appropriate signatures.
2. Commissioning and Testing: Collaborate to commission and test the integrated system, verifying the performance of all upgraded components and processes. Create a commissioning report detailing the test procedures, results, and any deviations from the design specifications.
Complexity Impact Note: The project's low complexity is due to the straightforward nature of the upgrades, involving replacement of existing components with readily available and similar alternatives.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Forge Taylorport Facility Upgrade

Project Name: Forge Taylorport Facility Upgrade

Project Location: Refinery Zone, Taylorport, VA

Issued Date: April 09, 2025

Due Date: May 16, 2025

Project Overview: This RFQ solicits proposals for minor upgrades to a single production cell within an existing industrial manufacturing facility. The project involves electrical, process, and automation upgrades detailed below. Project complexity is rated as Level 1 (Basic Upgrades).

Scope of Work:
* Electrical Engineering: MCC upgrade (3 x 15HP motors), LED lighting upgrade (50 units).
* Process Engineering: Conveyor belt replacement (10m), gravity-fed chute design & installation.
* Industrial Automation: PLC program modification to accommodate upgrades.
* Cross-Disciplinary: Safety review, commissioning, and testing. Compliance with ASME B31.1 (relevant sections) and ISO 9001 required.

Detailed Scope (see attached Appendix for full specification)
Proposal Requirements:

1. Qualifications: Provide a brief company overview highlighting at least 3 years of experience in industrial manufacturing facility upgrades and demonstrated regulatory compliance.

2. Technical Design: Submit a concise technical design (1-2 pages) outlining the proposed solutions for each scope item.

3. Cost Breakdown: Provide a detailed and itemized cost breakdown.

4. Timeline: Project start date: May 24, 2025; Project duration: 4 months.

Evaluation Criteria:
* Technical Approach (50%)
* Cost (30%)
* Experience & Qualifications (20%)

Contract Type: Fixed Price

Submission: Submit proposals electronically to procurement@manufacturing.com.

Key Dates:

*** RFQ Release: April 09, 2025**

*** Questions Due: May 04, 2025**

*** Proposals Due: May 16, 2025**

Appendix: (A more detailed specification document will be provided upon request.)

CONTACT

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TIMELINE

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