REQUEST FOR PROPOSAL (RFP)

Richards-Williams

PROJECT OVERVIEW

Name: Indust Michaelland Facility Upgrade
Type: Facility Upgrade
Location: Michaelland, DE (Industrial Park)
Industry: Manufacturing
Value: $5,368,533
Complexity: 1/5
Date: April 09, 2025
Disciplines: Electrical Engineering, Process Engineering
Regulations: OSHA Regulations

SCOPE OF WORK

Scope of Work: Industrial Manufacturing Plant Upgrade - Conveyor System Enhancement

Project Goal: Enhance existing conveyor system in a manufacturing plant to increase throughput and improve safety. This involves minor upgrades and adjustments to existing infrastructure.

Disciplines: Electrical Engineering, Process Engineering

Complexity Level: 1/5
Electrical Engineering Tasks:
1. Conveyor Motor Control Upgrade: Replace the existing motor control system for conveyor belt #3 (approx. 20ft length) with a new variable frequency drive (VFD) system (ABB ACS580 or equivalent). This will include wiring the new VFD to the existing motor, programming the VFD for speed control and soft start functionality, and providing updated electrical schematics compliant with NEC standards. All work must adhere to OSHA lockout/tagout procedures.
2. Emergency Stop Circuit Enhancement: Install additional emergency stop switches (three units, 22mm diameter, mushroom type, conforming to IEC 60947-5-1) at strategically placed points along conveyor belt #3. These must be wired into the existing emergency stop circuit, ensuring a fail-safe system that stops the conveyor within the required safety time (as per OSHA standards). Testing and documentation of the updated system will be required.
3. Lighting Improvement: Upgrade the existing lighting above conveyor belt #3 (approximately 50 square feet) with LED high-bay fixtures (minimum 100 lumens/watt), ensuring consistent illumination across the area. Wiring must conform to NEC standards, including proper grounding and surge protection. All materials will be sourced from reputable suppliers and comply with relevant safety standards.
Process Engineering Tasks:
1. Conveyor Belt Material Assessment and Replacement: Inspect conveyor belt #3 (20ft x 18 inch) for wear and tear. If necessary, replace sections of the existing belt with a new belt of the same dimensions, using high-strength, fire-resistant material with a minimum tensile strength of 1000 lbs/in. Documentation of the belt condition, wear analysis, and replacement (if any) will be provided.
2. Roller Alignment and Lubrication: Inspect and adjust alignment of all rollers on conveyor belt #3 (approximately 20 rollers). Lubricate all rollers with appropriate high-temperature grease (NLGI Grade 2). Document the alignment adjustments and lubrication procedures performed. All procedures must be performed safely and in accordance with relevant lockout/tagout procedures.
3. Improved Material Handling: Implement a new system for diverting faulty products from the main conveyor line to a designated rejection area. This will involve designing and installing a simple diverting mechanism using existing infrastructure, minimizing disruption to the main process flow and adhering to OSHA guidelines on safe handling of potentially damaged products.
Cross-Disciplinary Tasks:
1. Integrated System Testing: Jointly test the electrical and process upgrades to ensure seamless integration and optimal performance of the enhanced conveyor system. This will involve conducting safety checks, verifying proper functioning of emergency stop switches and VFD, and confirming the effectiveness of the improved material handling system.
2. As-Built Documentation: Collaboratively create updated as-built drawings and documentation reflecting the changes made to the electrical and process systems of conveyor belt #3. This will include electrical schematics, process flow diagrams, and a detailed list of all replaced components and materials.
Complexity Impact Note: The project?s low complexity is attributed to the limited scope and straightforward nature of the upgrades.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Indust Michaelland Facility Upgrade

Project Title: Indust Michaelland Facility Upgrade - Conveyor System Enhancement

Project Location: Michaelland Industrial Park, Michaelland, DE

Industry: Manufacturing

Issued Date: April 09, 2025

Response Due Date: May 02, 2025

Project Duration: 6 months (Start Date: May 01, 2025)

Contract Type: Fixed Price

Scope of Work: This project involves enhancing the existing conveyor system (conveyor belt #3) in a manufacturing plant to improve throughput and safety. Specific tasks include: (detailed description provided in attached Appendix A)
* Electrical Engineering: Motor control upgrade (VFD installation), emergency stop circuit enhancement, lighting improvement.
* Process Engineering: Conveyor belt assessment/replacement, roller alignment/lubrication, improved material handling system.
* Cross-Disciplinary: Integrated system testing, as-built documentation.

Qualifications: Bidders must demonstrate a minimum of 3 years of experience in manufacturing facility upgrades, with a proven track record of regulatory compliance (OSHA, NEC, IEC).
Proposal Requirements: Proposals must include:

1. Detailed technical designs (1-2 pages) addressing all scope elements.

2. Comprehensive cost breakdown.
Evaluation Criteria: Proposals will be evaluated based on:
* Technical Approach (50%)
* Cost (30%)
* Experience & Qualifications (20%)
Submission Instructions: Submit proposals electronically to procurement@manufacturing.com.
Questions and Clarifications: Submit any questions by April 21, 2025, to the same email address.

Appendix A: (Detailed Scope of Work as described in the prompt)

Contact: procurement@manufacturing.com

CONTACT

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TIMELINE

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