REQUEST FOR PROPOSAL (RFP)

Mills Group

PROJECT OVERVIEW

Name: Indust Jose Facility Upgrade
Type: Facility Upgrade
Location: Lake Jose, NV (Refinery Zone)
Industry: Manufacturing
Value: $2,212,274
Complexity: 2/5
Date: April 09, 2025
Disciplines: Mechanical Engineering, Electrical Engineering, Process Engineering
Regulations: ASME Standards, OSHA Regulations

SCOPE OF WORK

Scope of Work: Automated Packaging Line Upgrade for Food Processing Plant

Project Goal: Upgrade an existing manual packaging line to a semi-automated system, increasing packaging speed by 30% and reducing labor costs by 15%.

1. Mechanical Engineering:

*** Task 1: Conveyor System Design and Installation: Design and install a new 15-meter-long roller conveyor system to transport packaged goods from the filling machine to the palletizer. The conveyor will be constructed from 304 stainless steel to meet food safety standards and utilize a variable-speed drive for adjustable throughput. Deliverables include detailed CAD drawings, material specifications, and a completed installation report.**

*** Task 2: Palletizer Integration: Integrate a new robotic palletizer to stack packaged goods onto pallets. This includes designing and fabricating necessary interface components to connect the palletizer to the existing packaging line, ensuring proper alignment and smooth transfer of goods. The system should be designed for handling boxes with dimensions of 20cm x 30cm x 40cm and a weight of up to 10kg.**

2. Electrical Engineering:

*** Task 1: Control System Design and Programming: Design and implement a PLC-based control system to automate the conveyor and palletizer operations. This will involve programming a Rockwell Automation PLC (e.g., Allen-Bradley CompactLogix) to manage sensor inputs (e.g., proximity sensors, photoelectric sensors) and control motor drives (variable frequency drives). The system should include safety interlocks compliant with OSHA standards for machine safeguarding.**

*** Task 2: Power Distribution Upgrades: Upgrade the existing power distribution system to accommodate the increased power demand of the new equipment. This includes installing new circuits, wiring, and circuit breakers, ensuring proper grounding and compliance with NEC standards. Deliverables include updated electrical schematics and a completed as-built drawing.**

3. Process Engineering:

*** Task 1: Process Optimization: Optimize the packaging process flow to maximize efficiency and minimize downtime. This includes analyzing the current process, identifying bottlenecks, and proposing solutions to improve throughput. This task will involve conducting time studies and flow analysis to inform the design of the automated system. Deliverables include a process flow diagram, a detailed time study report, and recommendations for process improvements.**

*** Task 2: Sanitation and Cleaning Procedures: Develop and document sanitation and cleaning procedures for the new automated system. This should address cleaning protocols for the conveyor, palletizer, and other components to meet food safety regulations (e.g., adhering to relevant sections of the FDA's Food Code). Deliverables include a detailed cleaning and sanitation manual.**

Cross-Disciplinary Tasks:

*** Task 1: System Integration Testing: Conduct rigorous testing of the fully integrated system, ensuring seamless communication and operation between the mechanical, electrical, and process systems. This requires collaborative effort from all three engineering disciplines to troubleshoot issues and verify the system meets performance requirements. Deliverables include a test report documenting performance and validation of safety features.**

*** Task 2: Documentation and Handover: Create complete and accurate documentation for operation and maintenance of the new system, including schematics, manuals, and training materials. This collaborative effort ensures a smooth transition and effective handover to the plant operations team. Deliverables include a comprehensive operations and maintenance manual, training materials for plant personnel, and a final project report.**

Complexity Impact: This project's complexity is appropriately rated as 2/5 due to the relatively straightforward nature of the upgrade and the limited scope of design and integration.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Indust Jose Facility Upgrade

Project Title: Indust Jose Facility Upgrade - Automated Packaging Line Upgrade

Project Location: Refinery Zone, Lake Jose, NV

Industry: Manufacturing (Food Processing)

Issued Date: April 09, 2025

Response Due Date: May 10, 2025
Project Start Date: May 19, 2025

Project Duration: 3 months

Contract Type: Fixed Price

Scope of Work: Upgrade an existing manual food packaging line to a semi-automated system, increasing packaging speed by 30% and reducing labor costs by 15%. This involves the design, fabrication, installation, and integration of a new 15-meter roller conveyor system (304 stainless steel), a robotic palletizer (handling 20x30x40cm boxes, up to 10kg), a PLC-based control system (Rockwell Automation preferred), and power distribution upgrades. Process optimization, sanitation procedures development, and comprehensive system testing and documentation are also included. See attached detailed scope of work for specifics.

Qualifications:
* Minimum 3 years? experience in manufacturing automation projects within the food processing industry.
* Proven track record of regulatory compliance (OSHA, FDA, NEC).
Proposal Requirements:
* Detailed technical designs (1-2 pages max), including CAD drawings (conceptual acceptable).
* Comprehensive cost breakdown.
Evaluation Criteria:
* Technical Approach (50%)
* Cost (30%)
* Experience and Qualifications (20%)

Key Dates:

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

*** Questions Due: April 20, 2025**

*** Proposals Due: May 10, 2025**

*** Project Start: May 19, 2025**
Submission Instructions: Submit proposals electronically to procurement@manufacturing.com.

Contact: For questions, please contact procurement@manufacturing.com.

CONTACT

Amanda Greene MD, Procurement Manager
Phone: 897-959-4780x447
Email: amanda@millsgroup.com

TIMELINE

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