

Job Title: Product Configuration Engineer**Department:** New Product Development – Dampers**Reports To:** Manager, New Product Development

General Summary

The Product Configuration Engineer is responsible for developing, maintaining, and troubleshooting product configuration logic used to generate CIS reports that guide the manufacturing of air control damper products. This position supports Operations as the primary engineering resource for resolving CIS-related issues, ensuring accurate translation of product requirements into manufacturing instructions. The role works closely with NPD engineers, designers, IT, and Operations to maintain reliable product configuration data and improve production efficiency.

Essential Duties & Responsibilities

- Serve as the primary engineering point of contact for Operations when CIS report issues or configuration errors arise.
- Diagnose and resolve problems related to configuration logic, product rules, BOM structures, and documentation.
- Implement corrections and enhancements to CIS reports in coordination with NPD and IT.
- Maintain and update product configuration data, rules, and component definitions to ensure manufacturing accuracy.
- Integrate new products and design changes into CIS logic in alignment with NPD project outputs.
- Track, prioritize, and close CIS-related support requests while minimizing impact to production schedules.
- Identify recurring issues and recommend improvements to tools, rules, and processes.
- Participate in engineering design reviews to ensure manufacturability and proper configuration alignment.
- Collaborate with Operations and NPD teams to ensure product definitions support efficient production.
- Develop and maintain documentation, guidelines, and training materials related to CIS configuration and best practices.

Education/Experience

- Bachelor's degree in Mechanical Engineering, Manufacturing Engineering, Industrial Engineering, or a related technical discipline.
- 1–5 years of engineering experience in a manufacturing, engineered-to-order, or product configuration environment.
- Experience with ERP/MRP systems, product configuration tools, or rule-based logic systems preferred.
- Familiarity with mechanical products, HVAC and sheet metal components (experience with dampers/louvers is a plus).

Specific Skills Required

- Strong analytical and troubleshooting skills, especially in diagnosing system configuration issues.
- Ability to read and interpret engineering drawings, BOMs, and technical specifications.
- Experience with Computer-Aided Design (CAD), may be required.
- Understanding of product structures, configuration logic, and engineering change processes.
- Effective written and verbal communication skills for cross-functional collaboration.
- Ability to manage multiple priorities, respond quickly to production support needs, and meet deadlines.
- Detail-oriented with a focus on accuracy, repeatability, and process reliability.
- Proficiency with logic-based tools, ERP systems, or configuration software (preferred but not required).
- A proactive, results-oriented, and team-oriented mindset with high learning agility.

Other Duties and Responsibilities

- Support continuous improvement initiatives related to product configuration, documentation accuracy, and production workflow.
- Assist NPD engineers with validation and testing of configuration logic for new products and enhancements.
- Participate in training sessions or provide training for Operations or support staff regarding CIS usage and configuration updates.
- Perform additional engineering or project support tasks as assigned by the NPD Manager.