Electronics Packaging Engineer II

GENERAL DESCRIPTION OF POSITION
This position will support the design, development, and transition to production of packaging solutions for electronic drives and controls. The chosen candidate will interact within a team of multi-disciplined engineers to design, layout, and document electrical assemblies including variable speed motor drives, controls, and protective devices for pumping and HVAC products. Activities will include material selection, part modeling, thermal/mechanical analysis, and process optimization. The candidate will interface with sourcing, suppliers, engineering teams, and production operations on electronics packaging issues.

ESSENTIAL DUTIES AND RESPONSIBILITIES
• Designs, develops, and validates new electronics packaging solutions.
• Innovates through introducing new ideas and procedures.
• Possesses and applies a working knowledge of compliance requirements to designs. Including UL, CSA, and EN standards.
• Creates and directs development of CAD models and part drawings
• Runs thermal and mechanical simulations.
• Performs dimensional and tolerance analysis as needed.
• Plans, directs, and completes product/part testing and validation.
• Creates design failure mode effects analysis documents as needed.
• Benchmarks competitive solutions.
• Understands customer technical needs. Resolves customer complaints.
• Solves manufacturing issues (assembly, machining, etc.), quality issues (dimensional, material, and design discrepancies, etc.), and purchasing issues (vendor qualification, engineering support, etc.).
• Manages product line cost reduction initiatives and reliability improvement initiatives.

SUPERVISORY RESPONSIBILITIES
• None.

POSITION QUALIFICATIONS
Skills and Abilities
• Reads technical drawings and knows Geometric Dimensioning and Tolerancing (GD&T).
• Knows various manufacturing processes (die casting, machining, molding, sheet metal, and others).
• Working knowledge of 3D Modeling and part drawing practices
• Working knowledge of thermal and mechanical simulation and practices.
• Applies advanced mathematical concepts and operations.
• Uses highly complex machines and equipment, as well as specialized or advanced software programs.
• Applies principles of logical or scientific thinking to a wide range of intellectual and practical problems.
• Responds to complex or difficult inquiries or complaints from customers, regulatory agencies, or members of the business community.
• Effectively communicates information and responds to questions in person-to-person and small group situations with customers, clients, the general public, and/or other employees of the organization.
• Solves practical problems and deals with a variety of known variables in situations where only limited standardization exists.
• Reads, analyzes, and understands common scientific and technical journals, financial reports, and legal documents.

Education and Experience
• Bachelor’s degree in mechanical engineering or a related degree (required).
• Five years of related experience.
• Experience in 3D modeling skills (Pro/E and/or SolidWorks or equivalent) and 2D drafting skills (required).

Computer Skills
• Advanced: PRO-E/Creo (or similar 3D CAD), Thermal Simulation, and Mechanical FEA Simulation, Spreadsheets.
• Intermediate: Microsoft Office Tools
• Basic:

Certificates and Licenses
• None.

PHYSICAL ACTIVITIES
• While performing the functions of this job, the employee is:
  o Continually required to talk or hear.
  o Regularly required to sit.
  o Frequently required to stand or walk; use hands to finger, handle, or feel; and reach with hands and arms.
  o Occasionally required to climb or balance and to stoop, kneel, crouch, or crawl.
• Specific vision abilities required by this job include close vision, color vision, and an ability to adjust focus.
• The employee must regularly lift and/or move up to 10 pounds.

The company will make reasonable accommodations to enable individuals with disabilities to perform the essential functions and expectations.

ENVIRONMENTAL CONDITIONS
• While performing the functions of this job, the employee is:
  o Regularly subjected to work near moving mechanical parts.
  o Occasionally subjected to fumes or airborne particles, toxic or caustic chemicals, outdoor weather conditions, and risk of electrical shock.
• The noise level in the work environment is usually moderate.
Franklin Electric has reviewed this job description to ensure that it includes the role’s essential functions and basic duties. The job description is intended to provide guidelines for job expectations and the employee’s ability to perform the work described. It is not intended to be construed as an exhaustive list of all functions, responsibilities, skills, and abilities. Supervisors may assign additional functions and requirements as appropriate. This document does not represent a contract of employment, and Franklin Electric reserves the right to change this job description and/or assign tasks for the employee to perform as the company deems appropriate.

Signature________________________________________  Print________________________________________