



405 Centura Ct * Spartanburg, SC 29303 * (864) 574-7966

CIRCOR International, Inc. (NYSE:CIR), designs, manufactures and distributes a broad array of valves and related products and services to a variety of end-markets for use in a wide range of applications to optimize the efficiency and/or ensure the safety of fluid-control systems. We have a global presence and operate several manufacturing facilities which are located in the United States, Canada, Europe and the People's Republic of China.

POSITION OBJECTIVE:

The Electro-Mechanical Engineer is responsible for designing mechanical, electrical, and mechatronic devices using the latest 3D CAD solid modeling concepts and creating manufacturing prints to assist in bringing concepts into production.

PRINCIPAL RESPONSIBILITIES:

- Utilize failure modes and effects analysis (FMEA), latest virtual prototyping techniques like FEA and CFD, and Stage-Gate product development concepts to minimize prototype iterations and ensure the highest probability of product development success
- Create automated production test equipment concepts, specifications, and bills of materials, and procedures for calibration / test of all pressure, flow, valves and controllers.
- Create graphical user interfaces for digital instruments for customer use.
- Help assembly/production with building electro-mechanical devices and systems when and where needed.
- Help and collaborate with electrical embedded design engineers to integrate mechanical devices with electrical devices and to create control algorithms using model predictive, PID and feed-forward control mathematics
- Help derive thermodynamic calculation source code for multi-variable sensors and control devices using latest equation of state models and C+, Matlab or Mathematica, to simulate thermodynamic or fluid dynamic source code using simulation tools
- Help to build a world-class product design team and create intellectual property and patents for the company.

POSITION REQUIREMENTS:

Master's degree in Mechanical Engineering (or foreign equivalent) with a minimum of 3 years of industry experience.

Knowledge of valves design, fluid mechanics, and automation and control.

Strong background of Metallurgy.

Familiarity of fabrication and lab experiment environment, proficiency in stress analysis and LabView programming

Good communication skills.

This position is located at our manufacturing facility at 405 Centura Court, Spartanburg, SC 29303.