



**Regal Beloit Corporation** is a publicly owned corporation (NYSE: RBC) with operations worldwide. Regal Beloit is a leading manufacturer of electrical and mechanical motion control and power generation products serving markets throughout the world. Annual sales exceeded \$2B in 2008. Regal Beloit is headquartered in Beloit, Wisconsin, and has technology, manufacturing, sales, and service facilities throughout the United States, Canada, Mexico, Europe and Asia.

Regal Beloit has been listed as one of "America's Best-Managed Companies" on *Forbes* magazine's 400 Best Big Companies list (January 2007), and as one of "America's Fastest Growing Companies" in *Fortune* magazine (September 2007).

**Job ID:** 09-385

**Job Title:** Power Electronic Design Engineer

**Location:** Fort Wayne, IN

**Responsibilities:**

Seeking passionate individual to be part of variable speed motor development team. This team will be responsible for the design, development and production of variable speed motors for various applications and markets. Applications include operating voltages up to 600VAC and operating power levels up to 5hp.

This position will be responsible for the specification, design, development, and qualification of electronic circuits related to high variable speed drives (PMSM and VSIM). Circuits include power conversion, protection, switch mode power supplies, and motor drive circuitry. This position will interact with other areas of expertise within the company to take projects from the development phase to the production phase.

**Required Qualifications:**

- Over ten years of experience in the design of industrial power conversion equipment such as PM or VSIM drives, industrial drives, etc.
- Design expertise developing power electronic circuits and components such as IGBTs, MOSFETs, diodes, capacitors and high frequency magnetic components.
- Proficiency and understanding of the architecture, specification, and hardware design of 120  $\mu$ V 600VAC industrial power conversion equipment.
- Demonstrated proficiency in the use of simulation tools i.e. Matlab/Simulink, Simplorer, PSPICE and design analysis.
- Solid understanding of EMI noise reduction techniques, PCB layout, gate drive design, thermal design, voltage and current sensing techniques and protection circuitry.
- Experience with agency approval requirements and design for regulatory compliance (UL, CE).
- Demonstrated expertise with laboratory testing and experience with test equipment including oscilloscope, power meters, data acquisition equipment, spectrum analyzers, etc.
- Candidate must be detailed oriented and possess good organizational and communication skills.
- Demonstrated ability to manage multiple projects.
- Knowledge of industrial drives and/or motion control technology and industry trends.
- Understanding of motor control techniques and algorithms such as vector control and their implementation on high microprocessors or DSPs.
- Understanding of thermal management for power electronics and machine is a plus.
- BSEE/MSEE/PhD required.

**Desired Qualifications:**

- Self-motivated, strong customer focused behavior
- Strong team player with demonstrated ability to work in a cross-functional team to deliver common goals
- Ability to work effectively as a member of a global team
- Excellent interpersonal and communication skills
- Six Sigma, Green Belt trained and certified
- DFSS & DFR trained and Certified

**Relocation Available:** Yes

To apply, please send resume and salary requirements to: **[HRFTWayne@regalbeloit.com](mailto:HRFTWayne@regalbeloit.com)**