

Mechanical Design Engineer – Job Description

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Position Resides at:

QM Power Inc.
3768 S. Lapeer Rd
Lake Orion, MI 48359

About QM Power Inc.

At QM Power we are hard at work enabling the most efficient, reliable and cost-effective solutions for our customers. Our most important asset is our people. We hire only the very best and brightest for every position in our Company.

Ideal candidates will have a strong track record of setting stretch goals and consistently exceeding them, both as an individual and as part of a team. They will have exceptional organizational skills, a keen intuition obtained through significant experience, the highest integrity, be capable of wearing many hats at the same time and be passionate about doing whatever it takes to deliver results for our customers and stakeholders. In exchange, we will strive to provide a challenging, flexible and fun work environment, competitive compensation packages and an excellent chance to make the world a better place.

If you feel you or someone you know may be a good fit for a listed job posting, please send a cover letter and resume or CV to careers@qmpower.com, with the specific job posting referenced in the E-mail's subject line.

Job Description

This role reports to the Platform Application Engineering Manager and located in Lake Orion, Michigan. As a Mechanical Designer Engineer, you will support all mechanical aspects of our products in electric motor technology. Responsibilities will focus primarily on supporting product engineering by generating drawings and models for manufacturing intent parts, managing design feasibility process with vendors, and ensuring robustness in the overall dimensional and tolerancing integrity of QM Power's products. A self-motivated, team player, who can communicate cross functionally and enjoys a fast paced environment will thrive in this position. Goals for the Mechanical Design Engineer:

- Ability to grasp QM Power's technology and become subject matter expert for all aspects related to the mechanical design and integrity of our products.
- Receive handoff of prototype release designs from R&D team and continue the product development for application specific value streams.

Key Responsibilities

- Responsible for electric motor and associated component drawings, models, and parts lists.
- Complete DFMEA's for all mechanical systems and related components designs as well as any future change requests.

- Provide mechanical design input as relates to component selection such as bearings, material type, manufacturing process, or similar technical topics of expertise.
- Work closely in a team environment collaborating with internal development engineers, external manufacturing partners, and customer's engineering teams to produce accurate drawings and models.
- Maintain integrity of drawings/models including revision history and robust documentation management system.
- Support Manufacturing facilities with drawing changes.
- Participate in continuous improvement and cost reduction efforts.

Required Skills & Experience

- Minimum Bachelor's Degree in Mechanical Engineering, Mechanical Design Engineering, Mechanical Engineering Technology, or related curriculum.
- Minimum 8 years of experience in mechanical design with proven team leadership.
- Excellent GD&T understanding and use per ASME Y14.5 standards.
- Excellent dimensional stack-up and analysis skills.
- Working knowledge and experience with Bill of Materials, Statement of Requirements, DFMEA/PFMEA.
- Working knowledge and proven product design experience with electric motors.
- Good understanding of cast, machined, and stamped components.
- Flexibility and adaptability in a dynamic, fast-paced small company work environment.
- Excellent written and verbal communication skills.

Preferred Skills & Experience

- Strong CAD software knowledge in multiple software platforms a plus.
- Working knowledge and application experience with induction, permanent magnet and or switched reluctance motor's desired.
- Excellent verbal, written and presentation skills in English preferred.
- Interface with customer's technical stakeholders to articulate QM Power's technology, and ensure internal efforts are aligned with voice of customer.