

## Senior DC Motor Design Engineer

We are expanding our design team that is engaged in the design and development of DC Motors for mobility and other applications.

### Company

Weber Drivetrain Pvt. Ltd. is the Technology Driven Organization in the Design, Development, Testing, Validation and Manufacturing of **Electric Motor** and **Controller** for EV. Weber Drivetrain having a wide range of products available from 0.25 kW to 4 kW capacity and can serve E-bicycles, E-Scooters and E-Motorcycles. Through a combination of inhouse and collaborative R&D, Weber has established a completely indigenous drivetrain Manufacturing under "**MAKE IN INDIA**" initiative for Future of E-Mobility.

The state of Art automated manufacturing facility is based in Pune, Maharashtra with having massive experience and expertise in Vehicle Design and Development, also provides end to end vehicle integration solution to the Vehicle Manufacturing OEM's

### Job Description

- Design custom high performance DC motors (Switched Reluctance Motors, PMSM, BLDC) of Low and High Voltage (complete Rotors and Stators Design and prototype Development, Thermal management) for mobility and other applications
- Direct technical interface for customers and other Agencies for safety and other compliances
- Development of motor test methods and systems for high Power Motors
- Develop and implement strategies and tools to conduct electromagnetic
- FEA analysis of motor / generator designs
- Model creation and analysis, 2D & 3D FEA model setup and running, critical analysis and communication of the results, correlation to test results, and summary analysis, Design option selection and implementations
- Significant interaction and communication with customers and suppliers
- Collaboration with production group in prototype building

### Location

- Pune, Maharashtra, India

### Required Technical Skills

- 10+ years of experience in Motor Design with Electric Drive traction
- Experience in Switch Reluctance Motor and Synchronous Reluctance Motor is preferred
- Experience and ability to design from Spec to Production Motor
- Strong Understanding and experience in Electro Magnetics design, Magnetic circuits, Design and Working knowledge of Permanent Magnet, Switched Reluctance, and AC Induction Motors & Generators and Induction traction motors

- Experience with Multiphase motor designs, through exposure to Ripple, Cooling, Efficiency, Acoustic Noise Management in Motor Design
- Experience and familiarity with Finite Element Analysis
- Experience with building of prototypes
- Experience with CAD/CAE tools for Motor Design
- Motor simulation and modeling experience using Speed, Altair, Motorcad, Maxwell, or equivalents
- Knowledge of electromagnetic designs such as motors, generators, and power converters

### **Preferred Skills**

- Strong communication skills, written and oral
- Highly competent data analysis capability
- Ability to learn and utilize multiple analysis tools in designing
- Understanding and desire for complex modeling and analysis
- Motivated self-starter who is result oriented and deadline driven
- Comfortable as a hands-on contributor or a in a lead role
- Vector control & Field control understanding
- Experience with thermal modeling and analysis
- Complete Component development & test experience
- Experience with Electric and Hybrid Vehicle
- Strong overall knowledge base of mechatronics, electro-magnetic, magnetic circuits and motors

### **Educational Qualification**

- Master's Degree or higher in Electrical Engineering with a motor design focus