

Magnequench[®]

Leading Magnet Innovation[™]

The Magnequench Technology Center in Singapore is expanding and looking for dynamic, self-directed and self-motivated individuals for the position of Motor and Magnetic Applications Scientist. The job responsibilities and requirements are specified below.

Magnequench International, Inc., a subsidiary of Neo Material Technologies, Inc., is the global leader in the bonded Neo powder market, with over 20 years of manufacturing experience in the production of metal powders for bonded rare earth-iron-boron magnets. Magnequench's Neo powders are used to produce bonded magnets, generally used in micro motors, precision motors, sensors and other applications requiring high levels of magnetic strength, flexibility, small size and reduced weight.

Magnequench maintains a state-of-the-art technology center in Singapore. At the Singapore Tech Center, we possess extensive applications expertise encompassing the manufacture of magnets as well as the design of permanent magnet components and devices. We work closely with magnet manufacturers and motor designers to tailor the magnetic and physical characteristics of our magnetic powder, right from the initial motor design phase through to magnetization analysis and optimization. For more information and examples of our work, refer to www.mqitechnology.com

Responsibilities

- Design brushed and brushless permanent magnet motors, actuators and sensors
- Design magnetizing fixtures
- Work as a team member on product development activity including prototype development and testing
- Identify and report on market trends in permanent magnet applications
- Characterize and report on the performance of magnetic applications and magnetic materials
- Liaise with magnet producers and manufacturers of magnetic applications on technical specifications and requirements for their products
- Interact with manufacturers of magnetic applications regarding optimal utilization of bonded neo magnets
- Travel when required (About 10-20%)

Requirements

- Minimum of 5 years experience in the design and development of magnetic applications with particular emphasis on permanent-magnet motor design
- Strong knowledge of magnetic field principles and permanent-magnet motor operation and design

- Experience with 2D/3D Magnetic FEA. Knowledge on Opera VectorFields FEA software is a plus.
- Knowledge of motor test equipment, and experience with testing of electric motors
- Master or PhD in electrical or mechanical engineering with experience in Electrical motor design
- Fluency in Mandarin is required

Besides the above mentioned skills the applicant should have an aptitude for high quality research work with good documentation and presentation skills.

The interested candidate can send their latest CV to maghr@magnequench.com.