



Motors & Generators

From prototype to production quantities, consistency of magnetic grade and performance is maintained

Magnet Sales and Service Ltd are leading industry experts in the supply of Permanent Magnets, Magnetic Assemblies and Design Solutions. We supply motor grade materials in NdFeB, Ceramic Ferrite and High temperature Samarium Cobalt with rapid prototyping in bespoke parts for a variety of different markets including Transport, Defence and Energy. Arc segments can be machined in house to a variety of radii to suit your prototype Motor and Generator applications.

At Magnet Sales we build rotor assemblies & sub-assemblies to customer specific requirements. Our expert Engineers and Technicians work closely with you from the initial design concept, including specific material and grade selection, through to full fabrication using either our own manufactured parts or free issue materials.

Our experience allows us to recommend magnetic materials, grades, bonding, assembly methods and adhesive selection all depending on required torque, RPM, maximum operating temperature, environmental conditions and cost.

We offer the following services;

- The supply of motor grade magnets and parts including hubs, housings and sleeves
- Manufacture rapid prototyping bespoke systems and parts including magnetic arc segments
- Magnetisation and De-magnetisation pre and post production
- Design input throughout the developmental and assembly stages
- Machining and precision grinding of Rotors and Hubs
- Assembly and sub-assembly (using our own parts or free issue materials)
- Temperature curing of some adhesives
- Testing of magnetic materials to ensure a consistent result from prototype to production



Recent Project

Our latest collaboration in the automotive industry involved design input both prior to and during the build process of a magnetic hub. The series of prototype large Rotor Hubs for Brushless Permanent Magnet Motors will be used to drive an Electric bus. These hubs in particular were half a metre in diameter holding 300 Neodymium iron boron magnets which we assembled in alternate polarity. However, we also have other existing partnerships creating hubs on a much smaller scale involving precision assembly techniques using other magnetic materials such as high temperature Samarium cobalt.

We are pleased to participate in technical input and build to forward motor and generator research and development. We welcome the opportunity to establish new professional partnerships for technically and commercially sensitive projects.