NdFeB Magnet



NdFeB, namely Neodymium(Nd) -Iron(Fe)-Boron(B), the third generation of rare-earth permanent magnets and the strongest permanent magnets to date, has not only the excellent qualities of high remanent magnetization, high coercive force and high magnetic energy product but also the advantages of being easy to process and a relatively high performance/cost ratio. Since made from Neodymium, one of the most plentiful rare-earth elements, and inexpensive iron, NdFeB magnets offer the best value in cost and performance. For NdFeB, its surface is usually treated with some special methods. The surface treatment method include Zinc, Nickel, Tin, Sliver, Gold plating, Phosphor and Spray Epoxy Resin etc. NdFeB magnets are available in both sintered and bonded forms. Sintered NdFeB offers the highest magnetic properties (33 MGOe to 51 MGOe) while Bonded NdFeB offers lower energy properties. Although bonded magnets do not possess magnetic properties as advanced as those of sintered magnets, they can be made in shapes and sizes that are difficult to achieve with sintering.

NdFeB is now widely used in apparatus and instruments where a strong magnetic field is needed such as devices for avionics, spacecraft, electronic instruments, electro-acoustic devices, electrical machinery, meters and medical instruments. This magnet is thus especially suitable for developing those new products demanding high quality, small volume and light weigh. NdFeB magnet can be used as an ideal magnet in mini-motor, permanent magnet instrument, electronic industry, auto industry, petro-chemical industry, nuclear magnetic resonance, sound device magnetic suspension system, magnetic transmission machine and iatrical apparatus and etc.