

# NdFeB Magnet

## General Description NdFeB Rare Earth Magnets



Rare Earth Magnets are including **Neodymium(Nd) -Iron(Fe)-Boron(B)** types and **Samarium(Sm)- Cobalt(Co)** classes. The most commonly produced material is neodymium-iron-boron (NdFeB). This group of magnetic materials provides the highest available magnetic energies of any material. NdFeB magnets allow small shapes and sizes with high magnetic fields. Energy product range from 26 MGOe to about 45 MGOe.

Super-Strength Rare Earth Magnet----Sintered NdFeB magnets, have the characteristics of :

- \*Extreme strong Br Resident induction.
- \*Excellent demagnetization resistance capability.
- \*Good Price relative to its high magnetic properties.
- \*Coating is needed for NdFeB

Surface Treatment Method: Type Information

Metallic Zinc, Nickel, Nickel+Nickel, Copper+Nickel, Nickel+Copper+Nickel,

Gold, Organic Epoxy, Nickel+Epoxy coating

Temporary Surface: Passivation

Both NdFeB and SmCo are available in sintered as well as bonded forms. Sintered NdFeB parts however, will produce the highest magnetic properties. NdFeB is sensitive to heat and should not be used in the environments that exceed 200 °C Bonded NdFeB are generally low in properties due to the special process of gluing the powder in a mold. The bonded form of the material can be produced with close tolerance off tools with little or no finishing required. The sintered form usually some finishing operations in order to hold close mechanical tolerances.