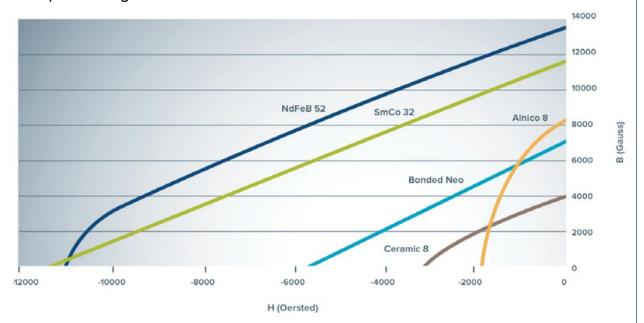
## **Magnet Materials**

## **Overview**

There are a number of major families of permanent magnet materials commercially available. They range from ferrite, which is low cost and low energy, to rare earth materials, which are more expensive and offer higher performance. Many factors affect the choice of magnetic material, such as operating temperature, size, weight constraints, environmental concerns and required magnetic energy. More information on our specific magnet materials is available online.



	Material	Maximum Operating Temperature	Maximum Magnetic Energy Product	Resistance to Demagnetization
_	Neodymium Iron Boron (Nd-Fe-B)	200°C	52 MGOe	Very High
_	Samarium Cobalt (Sm-Co)	300°C	32 MGOe	Very High
_	Alnico	550°C	10 MGOe	Low
_	Bonded Nd-Fe-B	150°C	10 MGOe	High
_	Ceramic (Hard Ferrite)	300°C	4 MGOe	Moderate

## Need help in selection?

Our sales and engineering teams are trained to assist with the proper selection of permanent magnet material to optimize your application while working within your budget.

