Magnet Material Comparison Chart

NOT ALL MAGNET MATERIALS ARE CREATED EQUAL

	Flexible Ferrite	Hard Ferrite	Alnico	Bonded NdFeB (Injection Molded)	Bonded NdFeB (Compression)	SmCo	Sintered NdFeB
			ATING.	366	$\overline{\Omega}$		
Relative Magnet Strength	Lowest	Low	Moderate	Moderate	Moderate	High	Highest
(BH) Max	< 2 MGOe	1–5 MGOe	5–9 MGOe	4–6 MGOe	6-12 MGOe	18–35 MGOe	28-56 MGOe
Resistance to DEMAG (Coercivity)	Easily Demagnetized	Easily Demagnetized	Easiest to Demagnetize	Average	Average	Highest	Medium to High Resistance
Ease of Magnetization	Easy to Magnetize	Easy to Magnetize	Easiest to Magnetize	Difficult to Magnetize	Difficult to Magnetize	Hardest to Magnetize	Medium to High Difficulty to Magnetize
Corrosion Resistance	No Coating Required	No Coating Required	No Coating Required	No Coating Required	Some Applications May Require Coating	No Coating Required	Coating Required
Max Operating Temperature	100°C 212°F	250°C 480°F	530°C 980°F	150°C 302°F	150°C 302°F	Up to 500°C 932°F	220 ° C 428 ° F
Unique Aspects	Typically Multi-Pole	Low Raw Material Cost	Consistent Flux Over Wide Temperature Range	Complex Shapes	Machinable	Good Thermal Performance	Highest Energy Per Unit Volume
Raw Material Cost	Low	Low	Low	Average	Average	Highest	High
Also Known as	Magnetic Rubber	Ferrite or Ceramic	Cast or Sintered Alnico	Plastic Bonded	Compression Bonded or Compression Molded	Fully Dense SmCo	NdFeB

