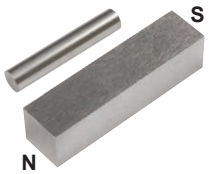
RAW MAGNET MATERIAL

Alnico Magnet Material

Alnico magnets are made of Aluminum, Nickel and Cobalt (AlNiCo) offer **medium strength** and the best temperature characteristics of any standard magnet material. Alnico magnets have a medium resistance to demagnetization and are very hard and brittle. Machining or drilling cannot be accomplished by ordinary means.

Alnico Features
- Ideal for high heat applications
- Alnico 5 Magnet Material
- Maximum temperature 800°F (427°C)
- Tolerance ±0.005'' on all dimensions



Alnico Rectangular Material

Hold - lbs (kg)	Th. (in)	Wd. (in)	Ln. (in)	Wt. (lbs)	Model No.
0.75 (0.34)	0.25	0.25	1.00	0.01	ABAR025X025X100
2.0 (0.90)	0.375	0.375	1.50	0.05	ABAR037X037X150
4.5 (2.04)	0.50	0.50	2.00	0.15	ABAR050X050X200

Alnico Cylindrical Material

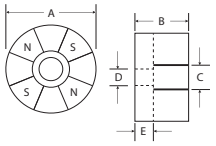
Hold - lbs (kg)	Dia. (in)	Ln. (in)	Wt. (lbs)	Model No.
0.75 (0.34)	0.1875	1.00	0.01	A5RC018X100
1.125 (0.51)	0.250	2.00	0.05	A5RC025X200
3.0 (1.36)	0.375	2.00	0.05	A5RC037X200
4.0 (1.81)	0.500	3.00	0.15	A5RC050X300
6.0 (2.72)	0.875	3.00	0.50	A5RC087X300

Alnico Rotor Magnets

Alnico Rotor Magnet Features
- Constructed for difficult holding applications
- Especially effective on thin metal applications
- Heat resistance up to 800°F (427°C)
- Alnico 5 magnet material

Alnico Rotor Magnets

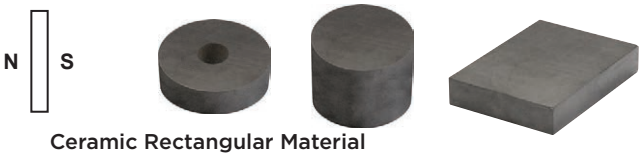
Hold - bs	A (in)	B (in)	C (in)	D (in)	E (in)	Wt. (lbs)	No. of Poles	Model No.
16	1.00	0.75	0.50	0.26	0.25	0.10	4	5X11B
25	1.25	0.75	0.63	0.26	0.25	0.16	6	5H177
70	2.00	1.25	0.90	0.50	0.38	0.70	8	5X13B



Ceramic Magnet Material

Ceramic magnets are a non-metallic, non-conductive, hard, brittle material compound of iron oxide, Strontium Ferrite and small quantities of other metal oxides that can only be cut with a diamond wheel.

Ceramic Features
- Low cost, high energy material
- Performs best at temperatures below 480°F (249°C)
- Difficult to grind or drill, cannot be machined utilizing EDM
- Tolerance ±2% on O.D., Length & Width. ±.005'' on Thickness



Ceramic Disc Material

Hold - lbs (kg)	Dia. (in)	Ln. (in)	Wt. (lbs)	Grade	Model No.
4.24 (1.92)	0.875	1.000	0.11	5	7/8DIAX1C5

Ceramic Ring Material

Hold - lbs (kg)	O.D. (in)	I.D. (in)	Ln. (in)	Wt. (lbs)	Grade	Model No.
0.36 (0.16)	0.750	0.271	0.250	0.022	8	F1409
0.75 (0.34)	1.230	0.885	0.431	0.044	8	F1407
3.5 (1.58)	1.723	0.705	0.250	0.082	8	F1405
9.5 (4.31)	2.800	1.203	0.590	0.466	8	710006
5.5 (2.49)	2.825	1.250	0.330	0.600	8	431005
20.5 (9.30)	5.250	2.312	0.750	2.408	8	455005

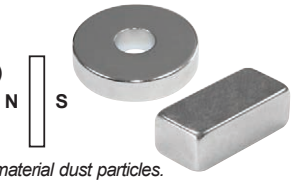
Ceramic Rectangular Material

Hold - lbs (kg)	Th. (in)	Wd. (in)	Ln. (in)	Wt. (lbs)	Grade	Model No.
6.0 (2.72)	0.375	0.875	1.875	0.11	8	5C458
5.0 (2.26)	0.250	1	2	0.10	8	250X1X2C8
7.0 (3.17)	0.500	1	2	0.15	8	500X1X2C8
9.0 (4.08)	0.750	1	2	0.25	8	750X1X2C8
11.0 (4.99)	1.000	1	2	0.35	8	1X1X2C8
15.0 (6.80)	1.000	2	2	0.70	8	1X2X2C8
6.5 (2.95)	0.187	4	4	0.75	8	187X4X4C5
8.5 (3.85)	0.250	4	6	1.00	8	250X4X6C5
8.0 (3.62)	0.312	4	4	0.83	8	312X4X4C5
10.5 (4.76)	0.375	4	4	1.00	8	375X4X4C5
14.0 (6.35)	0.500	4	6	2.00	8	500X4X6C8
18.5 (8.39)	0.750	4	6	3.00	8	750X4X6C5
23.5 (10.66)	1.000	4	6	4.00	8	1X4X6C8

Rare Earth Magnet Material

Rare Earth Neodymium-Iron-Boron (NdFeB) magnets are commonly referred to as Neo. This magnet material provides the **highest magnetic strength** of any magnet material, very high resistance to demagnetization and is ideal for applications requiring maximum strength in a limited area. Neo is usually coated or plated to prevent oxidization, therefore, avoid grinding.

Neodymium Features
- Extremely powerful magnet
- Ideal for miniaturized applications
- Operates best at temperatures below 180°F (82°C)
- High resistance to demagnetization
- Nickel plated finish
- Tolerance ±0.005'' on all dimensions



NOTE: *Avoid grinding, as flash fires may occur from rare earth material dust particles. Crystalline structured material is easily chipped, cracked or broken.*

Rare Earth Ring Material

				35 MgO		42 MgO	
O.D. (in)	I.D. (in)	Ln. (in)	Wt. (lbs)	Hold - lbs (kg)	Model No.	Hold - lbs (kg)	Model No.
0.250	0.060	0.060	0.0002	0.2 (0.09)	NE250060060NP35	-	-
0.365	0.200	0.250	0.001	4.2 (1.91)	NE365200250NP35	-	-
0.375	0.136	0.100	0.001	2.0 (0.90)	NE375136100NP35	-	-
0.750	0.125	0.125	0.600	-	-	9.63 (4.37)	NE751212NP42
0.750	Counter Sink #8 Screw	0.125	0.600	-	-	8.60 (3.90)	NE7512CSNP42
1.000	Counter Sink #8 Screw	0.125	0.800	-	-	12.6 (5.72)	NE10012CSNP42
0.875	0.275	0.200	0.050	19.0 (8.62)	NE875275200NP35	-	-
1.000	0.1975	0.125	0.070	-	-	12.39 (5.62)	NE101912NP42
1.500	0.125	0.125	0.080	-	-	20.28 (9.20)	NE151212NP42

Rare Earth Rectangular Material

				35 MgO		42 MgO	
Th. (in)	Wd. (in)	Ln. (in)	Wt. (lbs)	Hold - lbs (kg)	Model No.	Hold - lbs (kg)	Model No.
0.187	1.000	1.500	0.100	-	-	34.0(15.42)	NEO 3/16 RECTNP
0.1875	1.000	1.500	0.100	-	-	28.0 (12.70)	NE181510NP42
0.250	0.500	2.000	0.070	21.0 (9.53)	NE2550200NP35	-	-
0.250	1.000	2.000	0.140	30.0 (13.61)	NE25100200NP35	-	-
0.340	0.250	0.750	0.018	6.0 (2.72)	NE342575NP35	-	-

Rare Earth Square Material

				35 MgO		42 MgO	
Th. (in)	Wd. (in)	Ln. (in)	Wt. (lbs)	Hold - lbs (kg)	Model No.	Hold - lbs (kg)	Model No.
0.100	0.250	0.250	0.001	4.25 (1.93)	NE012525NP35	-	-
0.125	0.500	0.500	0.009	-	-	9.0 (4.08)	NE010505NP42
0.125	0.500	1.000	0.018	-	-	12.8 (5.81)	NE010510NP42
0.500	0.500	0.500	0.030	18.0 (8.16)	NE505050NP35	-	-
0.125	1.000	1.000	0.034	-	-	18.0 (8.16)	NE011010NP42
0.125	1.500	1.500	0.076	-	-	28.0 (12.70)	NE011515NP42
0.250	0.750	0.750	0.040	16.0 (7.26)	NE257575NP35	-	-
0.500	1.000	1.000	0.030	45.0 (20.41)	NE50100100NP35	-	-