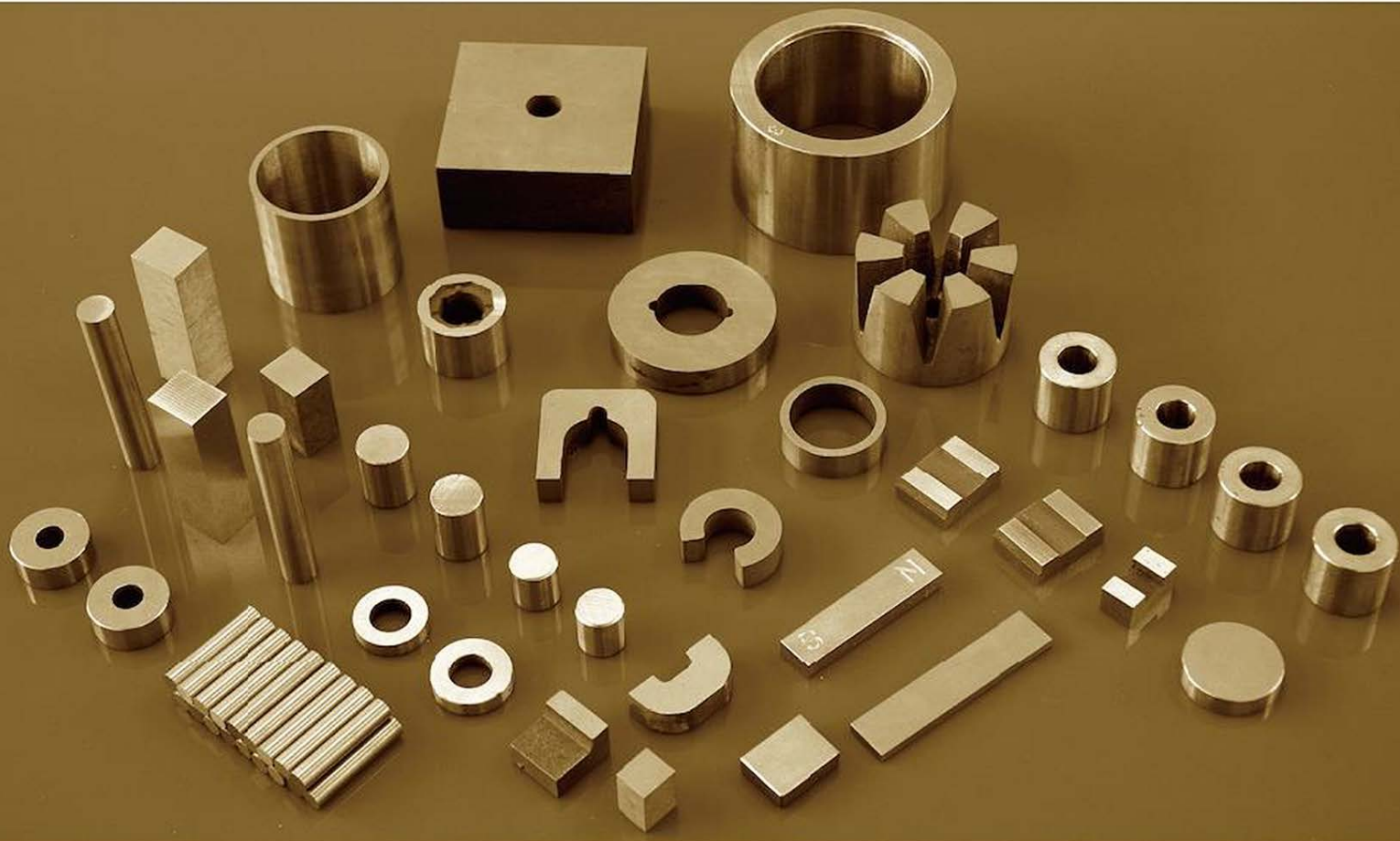


AlNiCo

Aluminum Nickel Cobalt

First used in the 1930's, Alnico is the oldest family of permanent magnets. Its energy products range from 2.0 to 9.0 MGOe and it is produced in both cast and sintered forms. The most common grades are cast Alnico 5 and 8 with Alnico 5-7 and 9 being premium grades. Sintered Alnico materials are used for applications where the geometries are smaller and more complex.

Alnico magnets are easy to magnetize and have high resistance to corrosion. They are used where high temperatures exist and/or where very stable properties are required.



Magnetic Properties of AlNiCo Magnets

Grade	Remanence Flux Density		Coercive				Max. Energy Density		Temp. Coefficient		Operating Temp.	MMPA
	B_r		H_{c5}		H_{c2}		$(BH)_{max}$		TK(B_r) %/K	TK(H_{c2}) %/K	T_w max	
	kGs	mT	kOe	kA/m	kOe	kA/m	MGOe	kJ/m^3			°C	
ISOTROPIC CAST ALNICO												
LN10	6.5	650	0.48	38	0.5	40	1.25	10	-0.035	-0.025	450	ALNICO 3
LNG12	7.5	750	0.56	45	0.58	46	1.5	12	-0.03	-0.02	450	ALNICO 2
LNGT18	5.5	550	1.13	90	1.21	97	2.25	18	-0.025	0.01	550	ALNICO 8
ANISOTROPIC CAST ALNICO												
LNG34	11	1100	0.63	50	0.65	52	4.25	34	-0.02	0.01	525	ALNICO 5
LNG37	11.8	1180	0.61	49	0.64	51	4.63	37	-0.02	0.01	525	
LNG40	12	1200	0.63	50	0.65	52	5	40	-0.02	0.01	525	
LNG44	12.5	1250	0.65	52	0.68	54	5.5	44	-0.02	0.01	525	
LNGT28	11.5	1150	0.73	58	0.75	60	3.5	28	-0.02	0.03	525	ALNICO 6
LNG52	13	1300	0.7	56	0.73	58	6.5	52	-0.02	0.03	525	ALNICO 5DG
LNG60	13.5	1350	0.73	58	0.75	60	7.5	60	-0.02	0.03	525	ALNICO 5-7
LNGT38	8	800	1.38	110	1.4	112	4.75	38	-0.025	0.01	550	ALNICO 8
LNGT40	8.5	850	1.44	115	1.46	117	5	40	-0.025	0.01	550	
LNGT44	9	900	1.44	115	1.46	117	5.5	44	-0.025	0.01	550	
LNGT36J	7.2	720	1.88	150	1.9	152	4.5	36	-0.025	0.01	550	ALNICO 8HC
LNGT60	10	1000	1.38	110	1.4	112	7.5	60	-0.025	0.01	550	ALNICO 9
LNGT72	10.5	1050	1.44	115	1.46	117	9	72	-0.025	0.01	550	
LNGT80	10.8	1080	1.5	120	1.53	122	10	80	-0.025	0.01	550	
ISOTROPIC SINTERED ALNICO												
FLNG10	6.5	650	0.5	40	0.53	42	1.25	10	-0.03	-0.02	450	ALNICO 2
FLNG12	7.5	750	0.56	45	0.58	46	1.5	12	-0.035	-0.025	450	ALNICO 3
FLNGT18	6	600	1.19	95	1.23	98	2.25	18	-0.025	0.01	550	ALNICO 8
FLNGT20	6.2	620	1.25	100	1.31	105	2.5	20	-0.025	0.01	550	
ANISOTROPIC SINTERED ALNICO												
FLNG34	11.5	1150	0.6	48	0.63	50	4.25	34	-0.02	0.01	525	ALNICO 5
FLNGT28	11	1100	0.73	58	0.75	60	3.5	28	-0.02	0.03	525	ALNICO 6
FLNGT36J	7.2	720	1.88	150	1.9	152	4.5	36	-0.025	0.01	550	ALNICO 8HC
FLNGT38	8	800	1.38	110	1.4	112	4.75	38	-0.025	0.01	550	ALNICO 8
FLNGT44	8.5	850	1.5	120	1.53	122	5.5	44	-0.025	0.01	550	
FLNGT48	9.2	920	1.56	125	1.59	127	6	48	-0.025	0.01	550	

1. The above-mentioned data of magnetic parameters and physical properties are given at room temperature.
2. The above values also have relationship to products shapes and dimensions. It is recommended that the final test data to be fixed on actual products.
3. For other special magnetic parameters, please contact us, and we can make them to your specifications.