

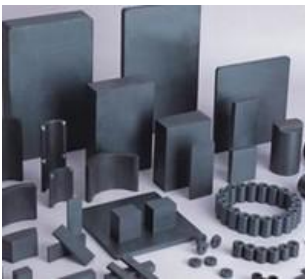
General Introduction

Sintered Ferrite magnet (Ceramic Magnets, Hard Ferrite Magnet) were developed in the 1960's as a low cost alternative to metallic magnets. Even though they exhibit low energy (compared with other permanent magnet materials) and are relatively brittle and hard, **Sintered Ferrite magnet (ceramic magnets, Hard ferrite magnet)** have won wide acceptance due to their good resistance to demagnetization, excellent corrosion resistance and low price per pound. In fact, measured by weight, ferrite represents more than 75 percent of the world magnet consumption. Sintered Ferrite Magnet (Hard Ferrite Magnet) is the first choice for most types of DC motors, magnetic separators, magnetic resonance imaging and automotive sensors.

The elements of **Sintered NdFeB Magnet (Hard Ferrite magnet)** are ferric oxide/barium, strontium. Ferrite has higher coercive force and higher resistance to be demagnetized and oxidized than other non-rare earth permanent magnets. The biggest advantage of such magnet is their low cost. It is widely used from motors and loudspeakers to toys and craft, industrial holding magnet etc.

Besides industrial application, **Sintered Ferrite magnet (Ceramic Magnets, Hard Ferrite Magnet)** are widely use in Educational area.

What shapes can it be formed? ceramic magnet, sintered ferrite magnet



Magnetic properties of Sintered Ferrite Magnet (ceramic magnets, Hard ferrite magnet)

Chinese standard								
Material	Br		Hcb		Hcj		(BH) _{max}	
	mT	KGs	KA/m	KOe	KA/m	KOe	KJ/m ³	MGOe
Y10T	200~235	2.0~2.35	125~160	1.57~2.01	210~280	2.64~3.52	6.5~9.5	0.8~1.2
Y20	320~380	3.2~3.8	135~190	1.70~2.38	140~195	1.76~2.45	18.0~22.0	2.3~2.8
Y22H	310~360	3.1~3.6	220~250	2.77~3.14	280~320	3.52~4.02	20.0~24.0	2.5~3.0
Y23	320~370	3.2~3.7	170~190	2.14~2.38	190~230	2.39~2.89	20.0~25.5	2.5~3.2
Y25	360~380	3.6~4.0	135~170	1.70~2.14	140~200	1.76~2.51	22.5~28.0	2.8~3.5
Y26H	360~390	3.6~3.9	220~250	2.77~3.14	225~255	2.83~3.21	23.0~28.0	2.9~3.5
Y27H	370~400	3.7~4.0	205~250	2.58~3.14	210~255	2.64~3.21	25.0~29.0	3.1~3.7
Y30	370~400	3.7~4.0	175~210	2.20~2.64	180~220	2.26~2.77	26.0~30.0	3.3~3.8
Y30BH	380~390	3.8~3.90	223~235	2.80~2.95	231~245	2.90~3.08	27.0~30.0	3.4~3.7
Y30-1	380~400	3.8~4.0	230~275	2.89~3.46	235~290	2.95~3.65	27.0~32.0	3.4~4.0
Y30H-2	395~415	3.95~4.15	275~300	3.46~3.77	310~335	3.90~4.21	28.5~32.5	3.5~4.0
Y32	400~420	4.0~4.2	160~190	2.01~2.38	165~195	2.07~2.45	30.0~33.5	3.8~4.2
Y33	410~430	4.1~4.3	220~250	2.77~3.14	225~255	2.83~3.21	31.5~35.0	4.0~4.4
Y35	400~410	4.00~4.10	175~195	2.20~2.45	180~200	2.26~2.51	30.0~32.0	3.8~4.0

USA standard								
Material	Br		Hcb		Hcj		(BH)max	
	mT	KGs	KA/m	KOe	KA/m	KOe	KJ/m ³	MGOe
C1	230	2.3	148	1.86	258	3.5	8.36	1.05
C5	380	3.8	191	2.4	199	2.5	27	3.4
C7	340	3.4	258	3.23	318	4.00	21.9	2.75
C8(=C8A)	385	3.85	235	2.95	242	3.05	27.8	3.5
C8B	420	4.2	232	2.913	236	2.96	32.8	4.12
C9	380	3.8	280	3.516	320	4.01	26.4	3.32
C10	400	4.0	288	3.617	280	3.51	30.4	3.82
C11	430	4.3	200	2.512	204	2.56	34.4	4.32

Europe standard								
The standard from International Electronics Committee (IEC404-8-1)								
O×100=Y10T=C1 ×300=Y30=C5 O×330=Y30 BH								
Grade	Allowed Value (min-typical)							
	Br		Hcb		BrHcj		(BH)max	
	mT	KGs	KA/m	KOe	KA/m	KOe	KJ/m ³	MGOe
HF8/22	200-220	2.00-2.20	125-140	1.57-1.76	220-230	2.76-2.89	6.5-6.8	0.8-1.1
HF20/19	320-333	3.20-3.33	170-190	2.14-2.39	190-200	2.39-2.51	20.0-21.0	2.5-2.7
HF20/28	310-325	3.10-3.25	220-230	2.76-2.89	280-290	3.52-3.64	20.0-21.0	2.5-2.7
HF22/30	350-365	3.50-3.65	255-265	3.20-3.33	290-300	3.64-3.77	22.0-23.5	2.8-3.0
HF24/16	350-365	3.50-3.65	155-175	1.95-2.20	160-180	2.01-2.26	24.0-25.5	3.0-3.2
HF24/23	350-365	3.50-3.65	220-230	2.76-2.89	230-240	2.89-3.01	24.0-25.5	3.0-3.2
HF24/35	360-370	3.60-3.70	260-270	3.27-3.39	350-360	4.40-4.52	24.0-25.5	3.0-3.2
HF26/16	370-380	3.70-3.80	155-175	1.95-2.20	160-180	2.01-2.26	26.0-27.0	3.2-3.4
HF26/18	370-380	3.70-3.80	175-190	2.20-2.39	180-190	2.26-2.39	26.0-27.0	3.3-3.4
HF26/24	370-380	3.70-3.80	230-240	2.89-3.01	240-250	3.01-3.14	26.0-27.0	3.3-3.4
HF26/26	370-380	3.70-3.80	230-240	2.89-3.01	260-270	3.27-3.39	26.0-27.0	3.3-3.4
HF26/30	385-395	3.85-3.95	260-270	3.27-3.39	300-310	3.77-3.89	26.0-27.0	3.3-3.4
HF28/26	385-395	3.85-3.95	250-265	3.14-3.33	260-275	3.27-3.45	28.0-30.0	3.5-3.8
HF28/28	385-395	3.85-3.95	260-270	3.27-3.39	280-290	3.50-3.60	28.0-30.0	3.5-3.8
HF30/26	395-405	3.95-4.05	250-260	3.14-3.33	260-270	3.27-3.39	30.0-31.5	3.8-3.9
HF32/17	410-420	4.10-4.20	160-180	2.01-2.26	165-175	2.07-2.20	32.0-33.0	4.0-4.1
HF32/22	410-420	4.10-4.20	215-225	2.70-2.83	220-230	2.76-2.89	32.0-33.0	4.0-4.1
HF32/25	410-420	4.10-4.20	240-250	3.01-3.14	250-260	3.14-3.27	32.0-33.0	4.0-4.1