Sintered NdFeB Magnetic Characteristics

N Series

GRADE	Br		Hcj		Hcb		(BH)max		Tc	TW
	T	KGs	KA/m	KOe	KA/m	KOe	KJ/m3	MGOe	°C	°C
N35	1.18-1.23	11.8-12.3	≥868	≥10.9	≥955	≥12	263-287	33-36	310	≤80
N38	1.22-1.28	12.2-12.8	≥899	≥11.3	≥955	≥12	287-310	36-38	310	≤80
N40	1.26-1.29	12.6-12.9	≥907	≥11.4	≥955	≥12	302-326	38-41	310	≤80
N42	1.28-1.33	12.8-13.3	≥915	≥11.5	≥955	≥12	318-342	40-43	310	≤80
N45	1.33-1.38	13.3-13.8	≥923	≥11.6	≥955	≥12	342-366	43-46	310	≤80
N48	1.38-1.42	13.8-14.2	≥923	≥11.6	≥955	≥12	358-390	45-48	310	≤80
N50	1.40-1.45	14.0-14.5	≥836	≥10.5	≥876	≥11	382-406	48-51	310	≤80
N52	1.42-1.48	14.2-14.8	≥796	≥10.0	≥876	≥11	394-422	49.5-53	310	≤80

M Series

GRADE	Br		Hcj		Hcb		(BH)max		Tc	TW
	T	KGs	KA/m	KOe	KA/m	KOe	KJ/m3	MGOe	°C	°C
N35M	1.17-1.22	11.7-12.2	≥868	≥10.9	≥1114	≥14	263-287	33-36	320	≤100
N38M	1.22-1.28	12.2-12.8	≥899	≥11.3	≥1114	≥14	287-310	36-39	320	≤100
N40M	1.26-1.31	12.6-12.31	≥923	≥11.6	≥1114	≥14	302-326	38-41	320	≤100
N42M	1.28-1.33	12.8-13.3	≥923	≥11.6	≥1114	≥14	318-342	40-43	320	≤100
N45M	1.33-1.38	13.3-13.8	≥876	≥11.0	≥1114	≥14	342-366	43-46	320	≤100
N48M	1.36-1.42	13.6-14.2	≥876	≥11.0	≥1114	≥14	366-390	46-49	320	≤100

H Series

GRADE	Br		Hcj		Hcb		(BH)max		Tc	TW
	T	KGs	KA/m	KOe	KA/m	KOe	KJ/m3	MGOe	°C	°C
N33H	1.14-1.19	11.4-11.9	≥836	≥10.5	≥1353	≥17	247-270	31-34	330	≤120
N35H	1.17-1.22	11.7-12.2	≥868	≥10.9	≥1353	≥17	263-287	33-36	330	≤120
N38H	1.22-1.28	12.2-12.8	≥899	≥11.3	≥1353	≥17	287-310	36-39	330	≤120
N40H	1.26-1.31	12.6-12.31	≥923	≥11.6	≥1353	≥17	302-326	38-41	330	≤120
N42H	1.28-1.34	12.8-13.4	≥923	≥11.6	≥1353	≥17	318-342	40-43	330	≤120
N45H	1.33-1.39	13.3-13.9	≥923	≥11.6	≥1353	≥17	342-366	43-46	330	≤120
N48H	1.37-1.43	13.7-14.3	≥923	≥11.6	≥1353	≥17	366-390	46-49	330	≤120

SH Series

GRADE	Br		Hcj		Hcb		(BH)max		Tc	TW
	T	KGs	KA/m	KOe	KA/m	KOe	KJ/m3	MGOe	°C	°C
N30SH	1.08-1.13	10.8-11.3	≥810	≥10.2	≥1592	≥20	223-247	28-31	340	≤150
N33SH	1.14-1.19	11.4-11.9	≥836	≥10.5	≥1592	≥20	247-270	31-34	340	≤150
N35SH	1.17-1.22	11.7-12.2	≥876	≥11.0	≥1592	≥20	263-287	33-36	340	≤150
N38SH	1.22-1.28	12.2-12.8	≥899	≥11.3	≥1592	≥20	287-310	36-39	340	≤150
N40SH	1.26-1.31	12.6-13.1	≥923	≥11.6	≥1592	≥20	302-326	38-41	340	≤150
N42SH	1.28-1.34	12.8-13.4	≥939	≥11.8	≥1512	≥19	318-342	40-43	340	≤140
N45SH	1.32-1.38	13.2-13.8	≥987	≥12.4	≥1592	≥20	342-366	43-46	340	≤150

UH Series

GRADE	Br		Hcj		Hcb		(BH)max		Tc	TW
	T	KGs	KA/m	KOe	KA/m	KOe	KJ/m3	MGOe	°C	°C
N28UH	1.02-1.08	10.2-10.8	≥780	≥9.8	≥1990	≥25	207-231	26-29	350	≤180
N30UH	1.08-1.13	10.8-11.3	≥812	≥10.2	≥1990	≥25	223-247	28-31	350	≤180
N33UH	1.13-1.17	11.3-11.7	≥852	≥10.7	≥1990	≥25	247-271	31-34	350	≤180
N35UH	1.18-1.22	11.8-12.2	≥860	≥10.8	≥1990	≥25	263-287	33-36	350	≤180
N38UH	1.22-1.25	12.2-12.5	≥876	≥11.0	≥1990	≥25	287-310	36-39	350	≤180
N40UH	1.25-1.28	12.5-12.8	≥899	≥11.3	≥1990	≥25	302-326	38-41	350	≤180

EH Series

GRADE	Br		Hcj		Hcb		(BH)max		Tc	TW
	T	KGs	KA/m	KOe	KA/m	KOe	KJ/m3	MGOe	°C	°C
N28EH	1.04-1.09	10.4-10.9	≥780	≥9.80	≥2388	≥30	207-231	26-29	380	≤200
N30EH	1.08-1.13	10.8-11.3	≥812	≥10.2	≥2388	≥30	223-247	28-31	380	≤200
N33EH	1.13-1.17	11.3-11.7	≥836	≥10.5	≥2388	≥30	247-271	31-34	380	≤200
N35EH	1.17-1.22	11.7-12.2	≥876	≥11.0	≥2388	≥30	263-287	33-36	380	≤200
N38EH	1.22-1.29	12.2-12.9	≥915	≥11.5	≥2388	≥30	287-318	36-40	380	≤200

AH Series

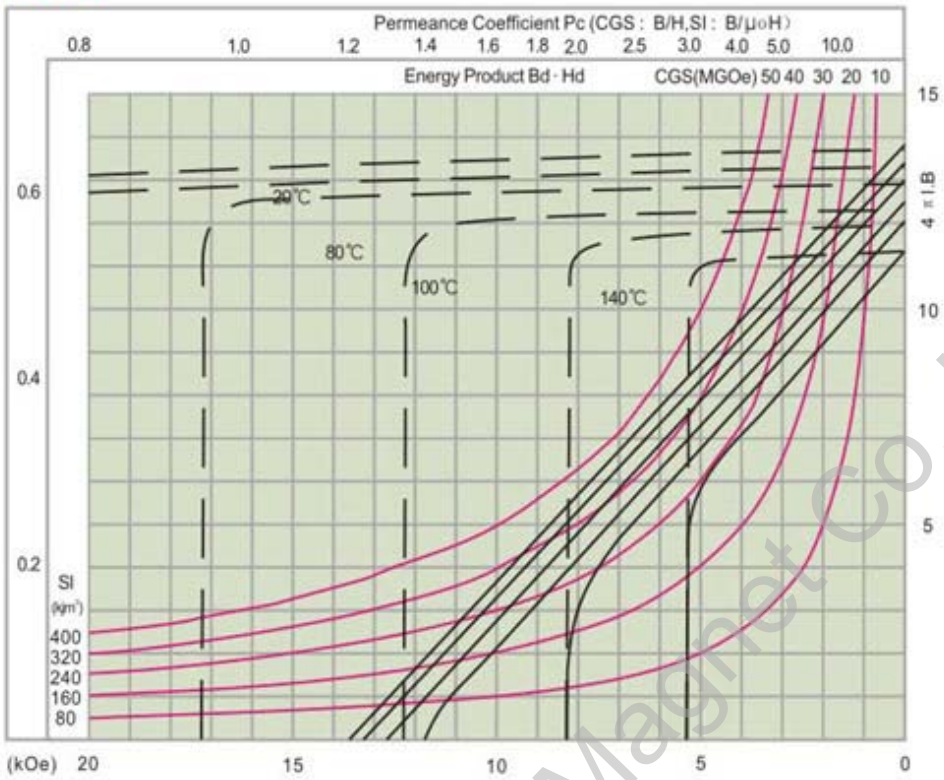
GRADE	Br		Hcj		Hcb		(BH)max		Tc	TW
	T	KGs	KA/m	KOe	KA/m	KOe	KJ/m3	MGOe	°C	°C
N30AH	1.08-1.15	10.8-11.5	≥804	≥10.1	≥2786	≥35	223-255	28-32	380	≤230
N33AH	1.14-1.21	11.4-12.1	≥852	≥10.7	≥2786	≥35	247-279	31-35	380	≤230

Note:The above mentioned data is given at room temperature.

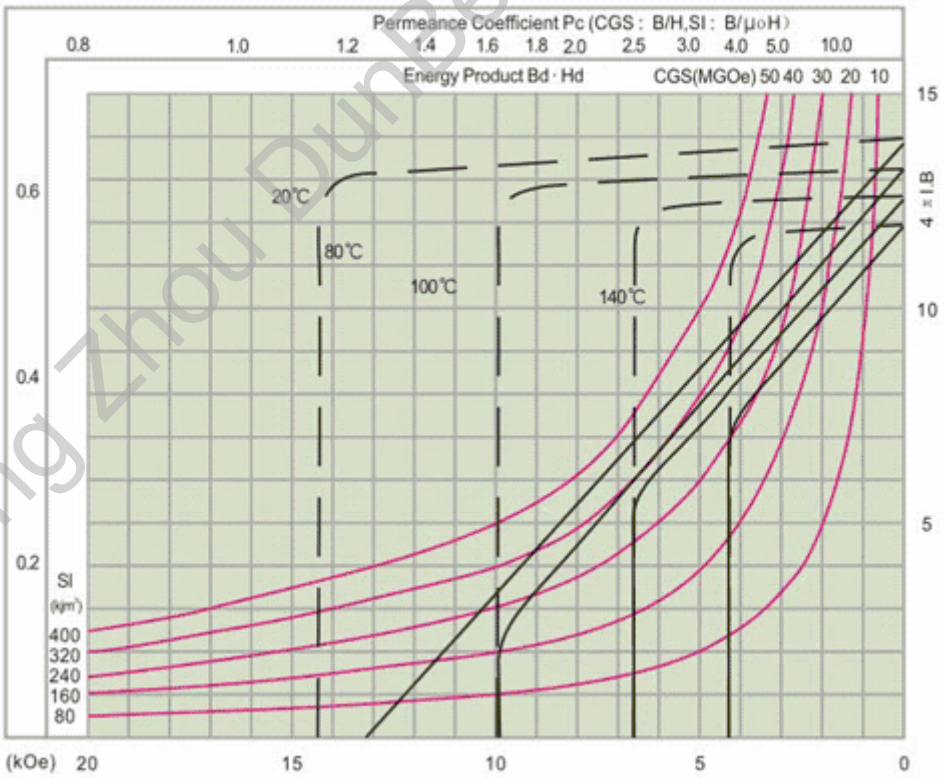
The above-mentioned maximum working temperature of magnet is changeable due to the ratio length and diameter,surface coating and environmental factors。

Sintered NdFeB Demagnetization Curve

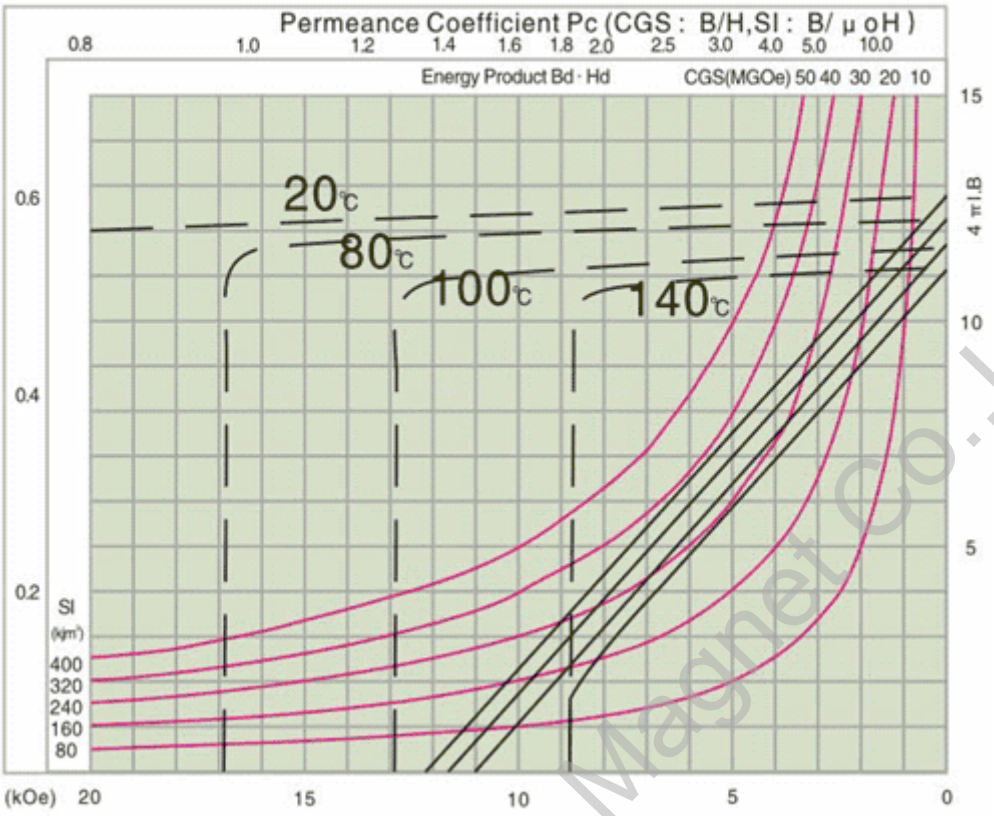
N42H



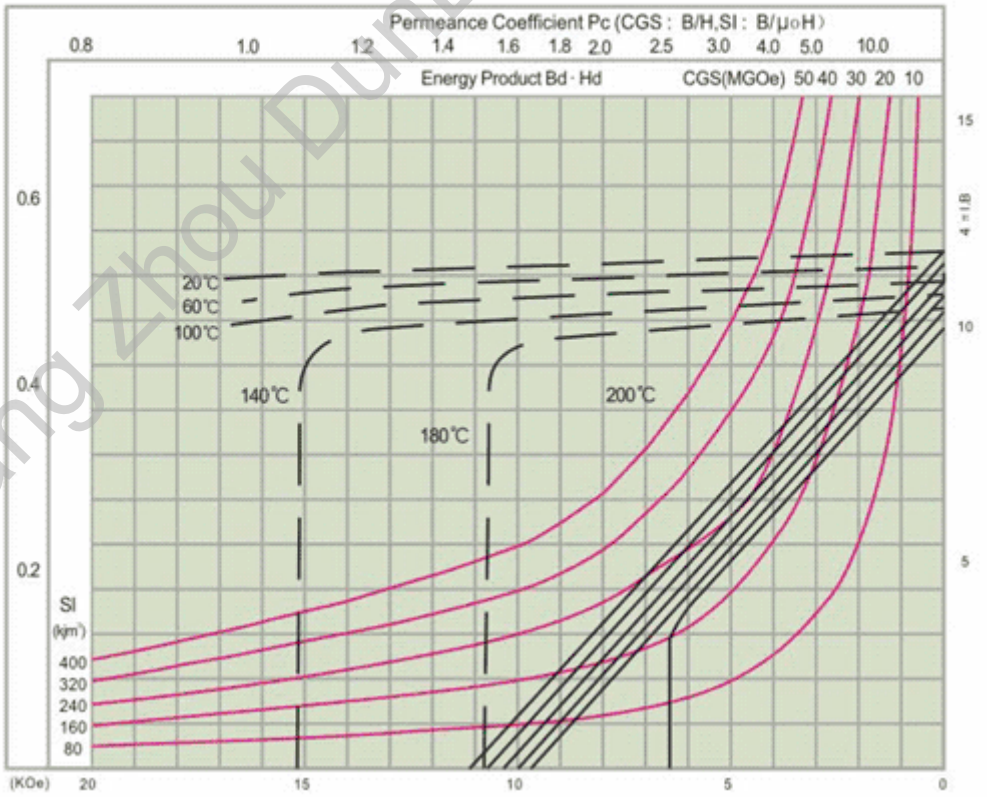
N48M



N38SH



N33EH



Physical Properties Of Sintered NdFeB Magnet

Temp.Coeff.of Br	-0.09~-0.11%/℃	Specific Heat	0.12Kcal/(kg,℃)
Density	7.4-7.6g/cm^3	Young's Modulus	1.6x10^{11}N/m2
Vickers hardness	600Hv	Poisson's Ratio	0.24
Tensile Strength	8.0Kg/mm^2	Curie Temperature	310~340℃
Temp.Coeff.of Hc	-0.50~-0.60%/℃	Thermal Conductivity	7.7Kcal/(m.h.℃)
Electrical Resistivity	114μΩ.cm	Rigidity	0.64N/m^2
Flexural Strength	25Kg/mm	Compressibility	9.8x$10^{-12}$$m^2$/N
Coeff. Of Thermal Expansion	4x10^{-6}/℃	Relative recoil permeabilityμrev	1.05

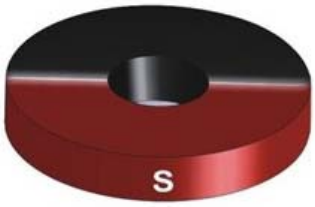
Surface Protection and Coatings				
Surface	Coating	Thickness(Microns) of coating	Color	Resistance
Passivation		1--2um	Silver Grey	Temporary Protection
Nickel coating	Ni+Ni	10--20um	Bright Silver	Excellent against Humidity
	Ni+Cu+Ni			
Zinc coating	ZN	8-10 um	Bright Blue	Good Against Salt Spray
	C-Zn		shiningColor	Excellent Against Salt Spray
CR3+Zinc	ZN	8-10 um	Bright Blue	Good Against Salt Spray
	C-Zn		shining Color	Excellent Against salt Spray
Tin coating	Ni+Cu+Sn	15-20 um	Silver	Superior Against Humidity
Gold coating	Ni+Cu+Au	10-20 um	Gold	Superior Sgainst Humidity
Ag coating	Ni+Ag	10-20 um	Silver	Superior Against Humidity
Epoxy	Epoxy	15-25 um	Black,Grey	Excellent Against Humidity & Salt Spray
	Zn+Epoxy			
	Ni+Cu+Epoxy			

Magnetization Methods

Radial Magnetised

Multi-poles Magnetised

Multi-poles Magnetised
Radial Orientation



Diametic Magnetised

Magnetised Through its Thickness

Axial Magnetised

Axial Magnetised Multi-poles

Single Surface Multi-poles
Magnetised

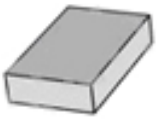
Sectors on One Surface
Magnetised

Tile-type Magnet Radial
Magnetised

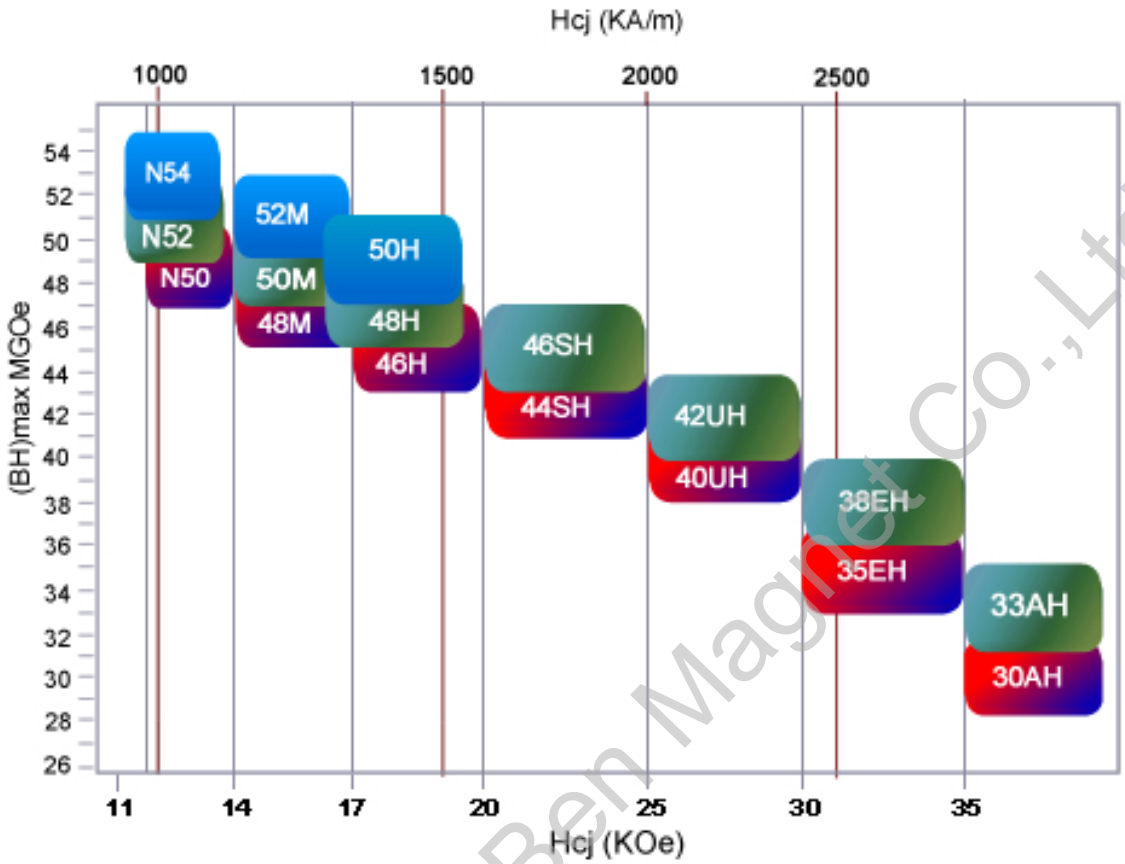
Double Surface Multi-poles
Magnetised

Tile-type Magnet Diametic
Magnetised

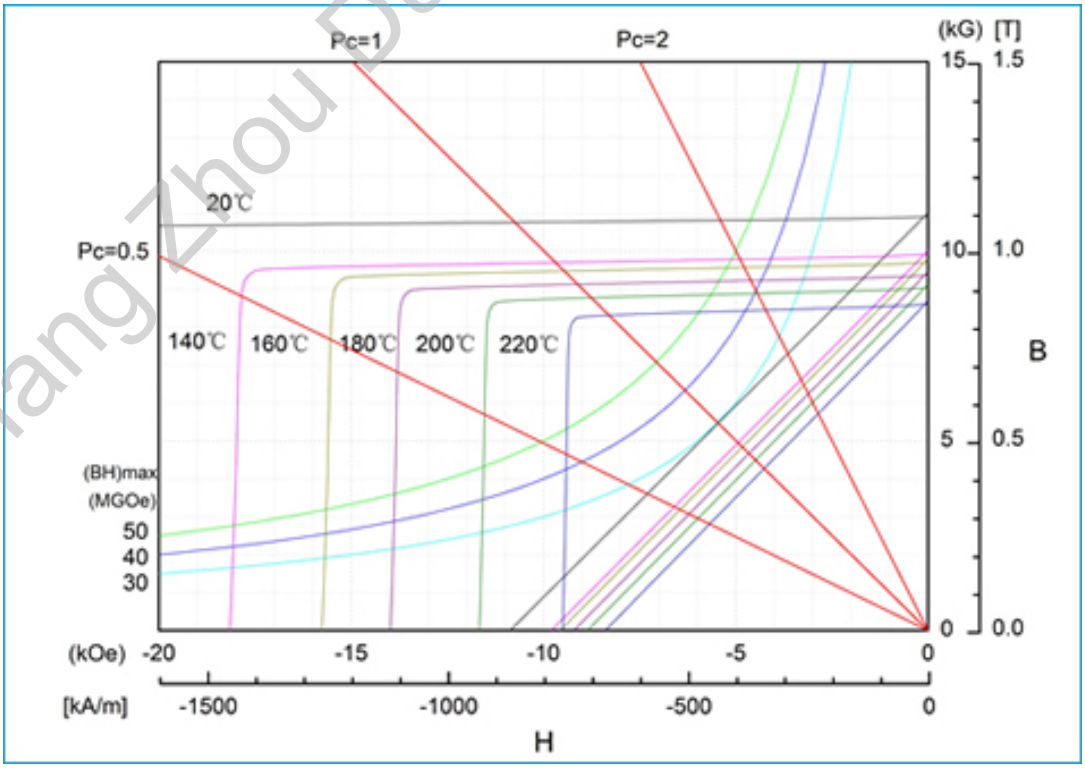
Dimensional Tolerance Chart

Shape	Diagram	Normally Dimensions	Max. Dimensions	Tolerance
Ring		D≤50 d≥1 (D-d)/2=W≥3 T≤50	D<=240 0.7<=T<=100	Dimensions Tolerances : 0.02mm-0.05mm Coaxiality : 0.05 Perpendicular : 0.1 Parallelism : 0.03
Disc		D≤80 T≤50	L<=240 L<=240	Dimensions Tolerances : 0.02mm-0.05mm Perpendicular : 0.1 Parallelism : 0.03
Block		L≤90 T≤50 L/W≤5 Re≥0.1	L<=240 2<=H<=100	Dimensions Tolerances : 0.02mm-0.05mm Perpendicular : 0.1 Parallelism : 0.03
Bread-shaped		L≤90 T≤50 W≤45	W<=240 H<=100 1<=T<=100	Dimensions Tolerances : 0.03mm-0.05mm Perpendicular : 0.05
Arc		L≤90 W≤45 2≤T≤45 Re≥0.1	W<=200 T<=100 1<=H<=100	Dimensions Tolerances : 0.03mm-0.05mm Coaxiality : 0.05 Perpendicular : 0.05 Angle : 0.2°-0.4°
Segment		W≤45 H≤50 1.5≤T≤35 W/H≤3 Re≥0.1	W<=240 H<=100 1<=T<=100	Dimensions Tolerances : 0.03mm-0.05mm Coaxiality : 0.05 Perpendicular : 0.05 Angle : 0.2°-0.4°
Shaped part		W≤45 1≤T≤35 10≤H≤50 W/H≤2.5	W<=200 T<=100 1<=H<=100	Dimensions Tolerances : 0.03mm-0.05mm Coaxiality : 0.05 Perpendicular : 0.05 Angle : 0.2°-0.4°
Square		W≤50 1≤T≤45 2≤H≤35	W<=240 T<=100 H<=100	Dimensions Tolerances : 0.02mm-0.05mm Perpendicular : 0.1 Parallelism : 0.03
Ring		10≤D≤40 d≥3 (D-d)/2=W≥2 3≤H≤30	D<=100 d>=1 (D-d)/2=W>=0.25 1<=H<=100	Dimensions Tolerances : 0.02mm-0.05mm Coaxiality : 0.05 Perpendicular : 0.1 Parallelism : 0.03
Disc		10≤D≤45 5≤H≤30	D<=100 1<=H<=100	Dimensions Tolerances : 0.02mm-0.05mm Perpendicular : 0.1 Parallelism : 0.03

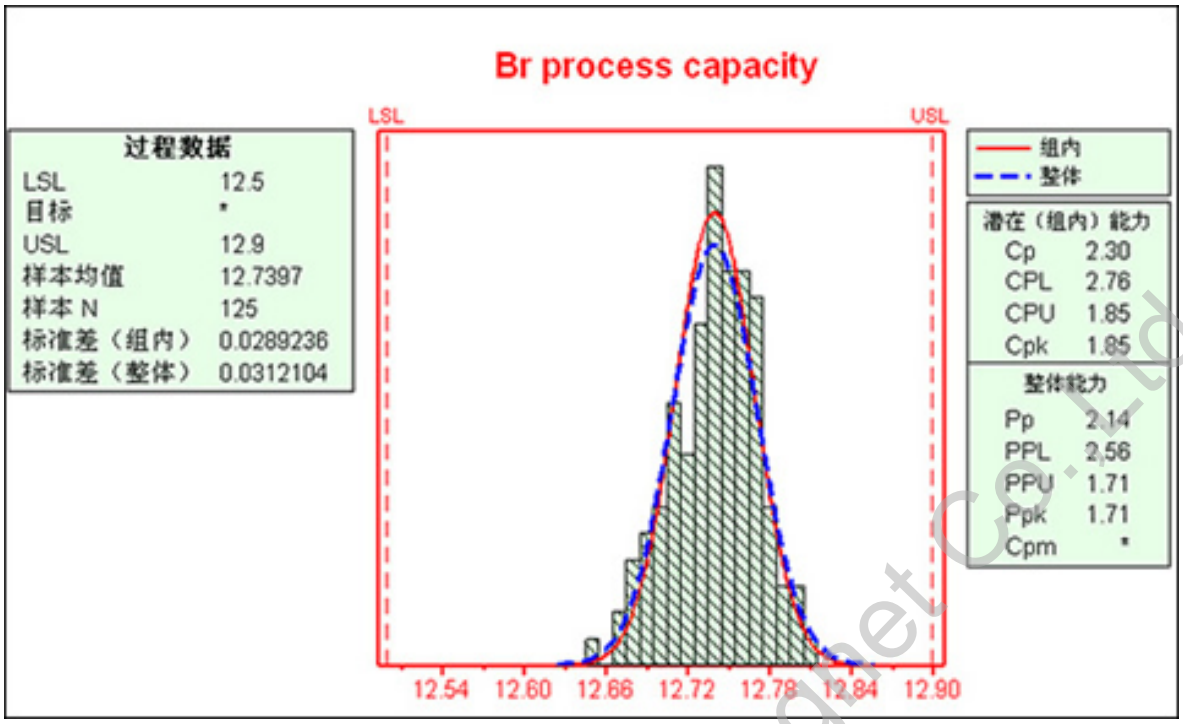
High Performance



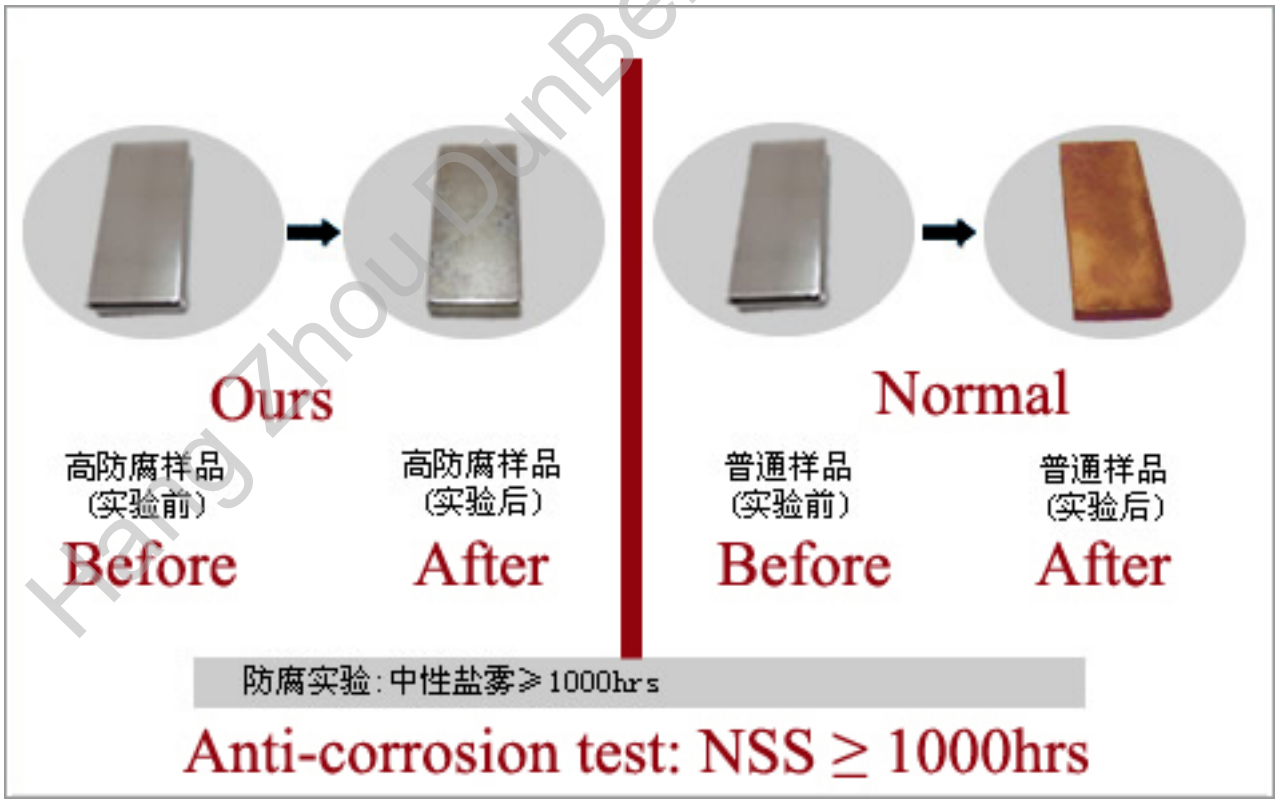
High Working Temperature



High Consistency



High Anti-corrosion



Low Weight Loss

PCT: 130℃, humidity 100%, vapor pressure 2.7bar, 20days, average low weight loss <2 mg/cm^2.