

Supermax

釹鐵硼磁石

Nd-Fe-B Magnet



秀越實業堅信科技存在的價值在於滿足"人"的需求，因此本公司投入研發、創新技術，提供優質的磁性材料及相關產品。

釹鐵硼磁石具特性強、磁能積高的特質，可廣泛應用於通訊、資訊、DVD、手機、機電、醫療、電動車輛等產業，且可提高效能，縮小體積，符合輕、薄、短、小之特點，為現代人類依賴的重要材料。



The Nd-Fe-B magnet offers the highest magnetic properties available in the industry, which can be used in VCMs for HDDs, motors, sensor, MRI and electronic devices. The magnet helps to make electronic equipment higher in performance, smaller in size and lighter in weight.



Supermax

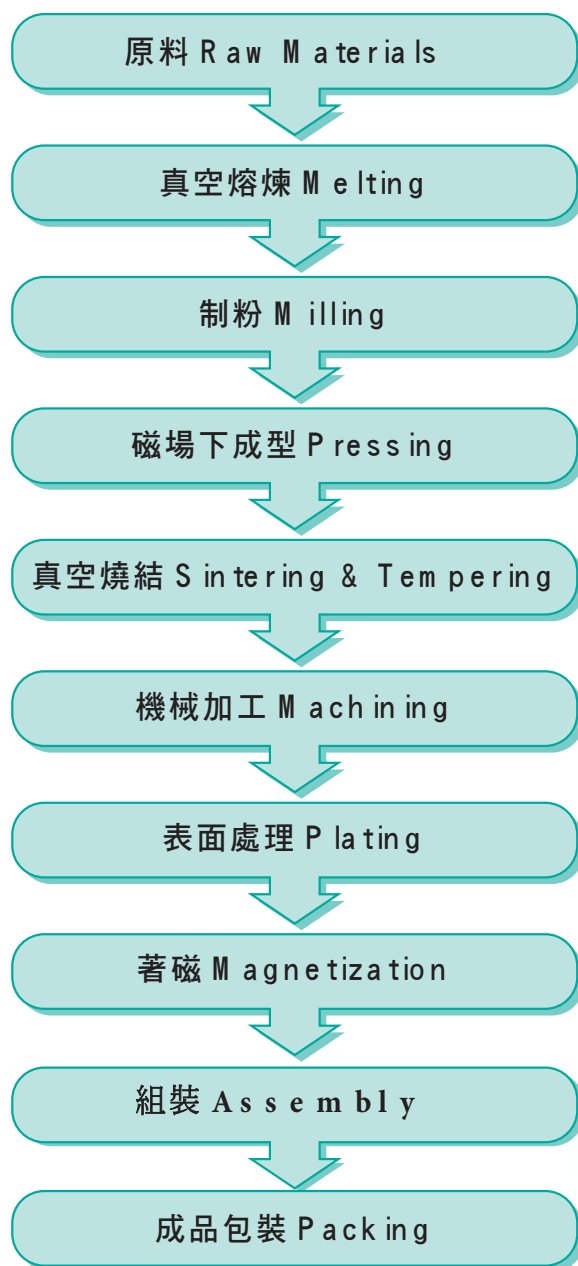
燒結釹鐵硼磁石的物理特性：

Sintered Magnets other physical properties:

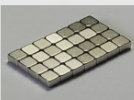
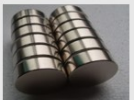
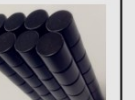
Temp. Coeff. of Br.:	-0.11 %/°C
Temp. Coeff. of iHc.:	-0.6 %/°C
Density:	7.4~7.6 g/cm ³
Vickers Hardness:	600 Hv
Tensile Strength:	8.0 kg/mm ²
Specific Heat:	0.12 k Cal/(kg°C)
Young's Modulus:	1.6*10 ¹¹ N/m ²
Poisson's Ratio:	0.24
Curie Temperature:	310~340 °C
Electrical Resistivity:	144 μΩ.cm
Flexural Strength:	25 kg/mm ²
Coeff. of Thermal Expansion:	4*10 ⁻⁶ /°C
Thermal Conductivity:	7.7 kcal/(m.h.°C)
Rigidity:	0.64 N/m ²
Compressibility:	9.8*10 ⁻¹² m ² /N

燒結釹鐵硼磁石生產流程

PROCESS CHART OF SINTERED NdFeB MAGNET



處理表面方法 SURFACE TREATMENT:

鍍層 Plating/Coating	鍍鎳 Nickel	鍍黑鎳 Black Nickel	化學鎳 Electroless Nickel	環氧樹脂 Epoxy	藍白鋅 Zinc	黑鋅 Black zinc	鍍金 Gold Plating
模厚 Thickness	8~15μm	10~15μm	7~8μm	7~8μm	6~7μm	6~7μm	≥6μm
色澤 Color							
應用 Applied	燒結 Sintered	燒結 Sintered	燒結 Sintered	沾結、燒結 Bonded、Sintered	燒結 Sintered	燒結 Sintered	燒結 Sintered

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燒結釹鐵硼(Nd-Fe-B)磁性及物性表 MAGNET CHARACTERISTICS SINTERED NDFEB MAGNET

CODE 牌號	PROPERTY 性能	殘留磁束密度 Br mT (K G)	矯頑力 bHc KA/m (K Oe)	內稟矯頑力 bHc KA/m (K Oe)	最大磁能積 (BH)max KJ/m ³ (MGOe)	最高工作溫度 Tw °C (L/D = 0.7)
N35		1180-1240 (11.8-12.4)	≥859 (≥10.8)	≥995 (≥12)	263-287 (33-36)	80°C
N38		1230-1280 (12.3-12.8)	≥859 (≥10.8)	≥995 (≥12)	286-310 (36-39)	80°C
N40		1260-1320 (12.6-13.2)	≥859 (≥10.8)	≥995 (≥12)	302-326 (38-41)	80°C
N42		1280-1340 (12.8-13.4)	≥859 (≥10.8)	≥995 (≥12)	318-342 (40-43)	80°C
N45		1320-1380 (13.2-13.8)	≥836 (≥10.5)	≥995 (≥12)	342-366 (43-46)	80°C
N48		1360-1410 (13.6-14.1)	≥836 (≥10.5)	≥995 (≥12)	366-390 (46-49)	80°C
N50		1390-1440 (13.9-14.4)	≥836 (≥10.5)	≥995 (≥12)	382-405 (48-51)	80°C
N52		1420-1460 (14.2-14.6)	≥836 (≥10.5)	≥995 (≥12)	398-422 (50-53)	80°C
N54		1450-1490 (14.5-14.9)	≥836 (≥10.5)	≥875 (≥11)	406-438 (51-55)	80°C
N35M		11.80-1240 (11.8-12.4)	≥876 (≥11.0)	≥1114 (≥14)	263-287 (33-36)	100°C
N38M		1230-1290 (12.3-12.9)	≥915 (≥11.5)	≥1114 (≥14)	286-310 (36-39)	100°C
N40M		1260-1320 (12.6-13.2)	≥939 (11.8)	≥1114 (≥14)	302-326 (38-41)	100°C
N42M		1300-1360 (13.0-13.6)	≥955 (≥12.0)	≥1114 (≥14)	318-342 (40-43)	100°C
N45M		1320-1380 (13.2-13.8)	≥971 (≥12.2)	≥1114 (≥14)	342-366 (43-46)	100°C
N48M		1370-1430 (13.7-14.3)	≥995 (12.5)	≥1114 (≥14)	366-390 (46-49)	100°C
N50M		1390-1440 (13.9-14.4)	≥1011 (12.7)	≥1114 (≥14)	382-405 (48-51)	100°C
N52M		1420-1460 (14.2-14.6)	≥1019 (12.8)	≥1114 (≥14)	398-422 (50-53)	100°C
N54M		1450-1490 (14.5-14.9)	≥995 (12.5)	≥1035 (≥13)	406-438 (51-55)	100°C
N33H		1130-1170 (11.3-11.7)	≥836 (≥10.5)	≥1353 (≥17)	247-271 (31-34)	120°C
N35H		1180-1240 (11.8-12.4)	≥876 (≥11.0)	≥1353 (≥17)	263-287 (33-36)	120°C
N38H		1230-1290 (12.3-12.9)	≥915 (≥11.5)	≥1353 (≥17)	286-310 (36-39)	120°C
N40H		1260-1320 (12.6-13.2)	≥939 (≥11.8)	≥1353 (≥17)	302-326 (38-41)	120°C
N42H		1300-1360 (13.0-13.6)	≥955 (≥12.0)	≥1353 (≥17)	318-342 (40-43)	120°C
N45H		1320-1380 (13.2-13.8)	≥917 (≥12.2)	≥1353 (≥17)	342-366 (43-46)	120°C
N48H		1360-1410 (13.6-14.1)	≥1011 (≥12.7)	≥1274 (≥16)	366-390 (46-49)	120°C
N50H		1390-1430 (13.9-14.3)	≥1035 (≥13.0)	≥1274 (≥16)	382-405 (48-51)	120°C
N52H		1420-1460 (14.2-14.6)	≥1051 (≥13.2)	≥1274 (≥16)	390-422 (49-53)	120°C

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燒結釹鐵硼(Nd-Fe-B)磁性及物性表 MAGNET CHARACTERISTICS SINTERED NDFEB MAGNET

CODE 牌號	PROPERTY 性能	殘留磁束密度 Br mT (K G)	矯頑力 bHc KA/m (K Oe)	內稟矯頑力 bHc KA/m (K Oe)	最大磁能積 (BH)max KJ/m ³ (MGOe)	最高工作溫度 Tw °C (L/D = 0.7)
N33SH		1140-1200 (11.4-12.0)	≥852 (≥10.7)	≥1592 (≥20)	247-271 (31-34)	150°C
N35SH		1180-1240 (11.8-12.4)	≥884 (≥11.1)	≥1592 (≥20)	263-287 (33-36)	150°C
N38SH		1230-1290 (12.3-12.9)	≥923 (≥11.6)	≥1592 (≥20)	286-310 (36-39)	150°C
N40SH		1260-1320 (12.6-13.2)	≥939 (11.8)	≥1592 (≥20)	302-326 (38-41)	150°C
N42SH		1280-1340 (12.8-13.4)	≥955 (≥12.0)	≥1592 (≥20)	318-342 (40-43)	150°C
N45SH		1320-1370 (13.2-13.7)	≥987 (≥12.4)	≥1592 (≥20)	342-366 (43-46)	150°C
N48SH		1360-1410 (13.6-14.1)	≥1011 (≥12.7)	≥1512 (≥19)	366-390 (46-49)	150°C
N50SH		1390-1430 (13.9-14.3)	≥1035 (≥13.0)	≥1512 (≥19)	374-406 (47-51)	150°C
N52SH		1420-1460 (14.2-14.6)	≥1059 (≥13.3)	≥1512 (≥19)	390-422 (49-53)	150°C
N28UH		1020-1080 (10.2-10.8)	≥764 (≥9.6)	≥1990 (≥25)	207-231 (26-29)	180°C
N30UH		1090-1150 (10.9-11.5)	≥812 (≥10.2)	≥1990 (≥25)	223-247 (28-31)	180°C
N33UH		1140-1200 (11.4-12.0)	≥860 (≥10.8)	≥1990 (≥25)	247-271 (31-34)	180°C
N35UH		1180-1240 (11.8-12.4)	≥892 (≥11.2)	≥1990 (≥25)	263-287 (33-36)	180°C
N38UH		1220-1280 (12.2-12.8)	≥923 (≥11.6)	≥1990 (≥25)	286-310 (36-39)	180°C
N40UH		1260-1320 (12.6-13.2)	≥955 (≥12.0)	≥1990 (≥25)	302-326 (38-41)	180°C
N42UH		1280-1340 (12.8-13.4)	≥971 (≥12.2)	≥1990 (≥25)	318-342 (40-43)	180°C
N45UH		1320-1370 (13.2-13.7)	≥987 (≥12.4)	≥1990 (≥25)	334-374 (42-47)	180°C
N48UH		1360-1400 (13.6-14.0)	≥1019 (≥12.8)	≥1911 (≥24)	358-398 (45-50)	180°C
N28EH		1040-1090 (10.4-10.9)	≥780 (≥9.8)	≥2388 (≥30)	207-231 (26-29)	200°C
N30EH		1090-1150 (10.9-11.5)	≥820 (≥10.3)	≥2388 (≥30)	223-247 (28-31)	200°C
N33EH		1140-1200 (11.4-12.0)	≥860 (≥10.8)	≥2388 (≥30)	247-271 (31-34)	200°C
N35EH		1170-1230 (11.7-12.3)	≥884 (≥11.1)	≥2388 (≥30)	263-287 (33-36)	200°C
N38EH		1220-1280 (12.2-12.8)	≥923 (≥11.6)	≥2388 (≥30)	286-310 (36-39)	200°C
N40EH		1260-1310 (12.6-13.1)	≥955 (≥12.0)	≥2388 (≥30)	302-342 (38-43)	200°C
N45EH		1320-1360 (13.2-13.6)	≥995 (≥12.5)	≥2308 (≥29)	334-366 (42-46)	200°C
N30AH		1090-1150 (10.9-11.5)	≥820 (≥10.3)	≥2768 (≥35)	223-255 (28-32)	220°C
N33AH		1140-1200 (11.4-12.0)	≥860 (≥10.8)	≥2768 (≥35)	239-271 (30-34)	220°C
N35AH		1170-1230 (11.7-12.3)	≥884 (≥11.1)	≥2768 (≥35)	255-287 (32-36)	220°C

* 最大工作溫度取決於磁體的長徑比、鍍層和環境因素。The maximum service temp magnet is changeable due to the ratio length and diameter and environmental factors.