

# Properties for Sintered Nd-Fe-B Magnets

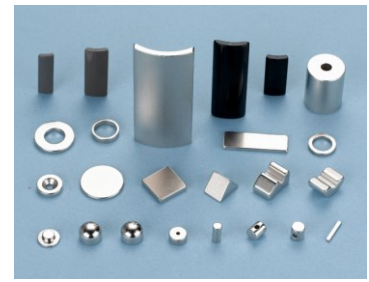
## 燒結釹鐵硼磁石特性表

New Favor Industry Co., Ltd.  
新祺實業有限公司

Tel: (02) 2577-5038 (Rep.)

Fax: 886-2-2578-5017

<https://www.nf-magnet.com> / <http://www.newfavor.com>



Property Grade	Remanence Br (KG)		Coercive Force bHc( Koe)		Intrinsic Coercive Force iHc(Koe)	Max. Energy product BHmax.(MGOe)	Working Temperature °C
	min.	nom.	min.	nom.			
N28EH	10.4~10.8		≥ 9.5		≥ 30	26~29	200°C
N30H	10.8~11.3		≥ 10.0		≥ 17	28~31	120°C
N30SH	10.9~11.4		≥ 10.1		≥ 20	28~31	150°C
N30UH	10.9~11.4		≥ 10.2		≥ 25	28~31	180°C
N30EH	10.8~11.3		≥ 10.2		≥ 30	28~31	200°C
N30AH	10.8~11.3		≥ 10.2		≥ 35	28~32	220°C
N33	11.3~11.7		≥ 10.5		≥ 12	31~33	80°C
N33M	11.3~11.7		≥ 10.5		≥ 14	31~34	100°C
N33H	11.3~11.7		≥ 10.5		≥ 17	31~33	120°C
N33SH	11.3~11.7		≥ 10.6		≥ 20	31~33	150°C
N33UH	11.3~11.7		≥ 10.7		≥ 25	31~33	180°C
N33EH	11.3~11.7		≥ 10.5		≥ 30	31~33	200°C
N33AH	11.2~11.7		≥ 10.2		≥ 35	31~34	220°C
N35	11.7~12.1		≥ 10.8		≥ 12	33~36	80°C
N35M	11.7~12.1		≥ 10.9		≥ 14	33~36	100°C
N35H	11.7~12.1		≥ 10.9		≥ 17	33~36	120°C
N35SH	11.7~12.1		≥ 11.0		≥ 20	33~36	150°C
N35UH	11.7~12.1		≥ 10.7		≥ 25	33~36	180°C
N35EH	11.7~12.1		≥ 11.0		≥ 30	33~36	200°C
N35AH	11.7~12.1		≥ 10.2		≥ 35	33~36	220°C
N38	12.1~12.5		≥ 11.3		≥ 12	36~39	80°C
N38M	12.1~12.5		≥ 11.3		≥ 14	36~39	100°C
N38H	12.1~12.5		≥ 11.3		≥ 17	36~39	120°C
N38SH	12.1~12.5		≥ 11.4		≥ 20	36~39	150°C
N38UH	12.1~12.5		≥ 11.4		≥ 25	36~39	180°C
N38EH	12.1~12.5		≥ 11.4		≥ 30	36~39	200°C
N38AH	12.1~12.5		≥ 11.4		≥ 33	36~39	220°C
N40	12.5~12.8		≥ 11.4		≥ 12	38~41	80°C
N40M	12.5~12.8		≥ 11.6		≥ 14	38~41	100°C
N40H	12.4~12.8		≥ 11.5		≥ 17	38~41	120°C
N40SH	12.5~12.8		≥ 11.8		≥ 20	38~41	150°C
N40UH	12.5~12.8		≥ 11.4		≥ 25	38~41	180°C
N40EH	12.5~12.8		≥ 11.4		≥ 30	38~41	200°C
G40AH	12.6~13.1		≥ 11.4		≥ 35	38~41	240°C

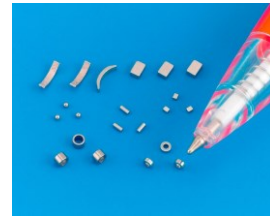
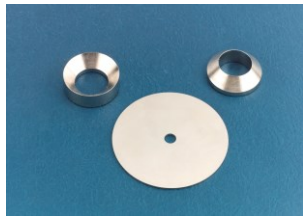
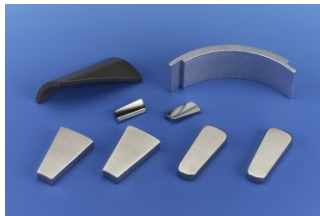
Property Grade	Remanence Br (KG)		Coercive Force bHc (Koe)		Intrinsic Coercive Force iHc(Koe)	Max. Energy product BHmax.(MGOe)	Working Temperature °C
	min.	nom.	min.	nom.			
N42	12.8~13.2		≥ 11.5		≥ 12	40~43	80°C
N42M	12.8~13.2		≥ 12.0		≥ 14	40~43	100°C
N42H	12.8~13.2		≥ 12.0		≥ 17	40~43	120°C
N42SH	12.8~13.2		≥ 11.8		≥ 20	40~43	150°C
N42UH	12.8~13.2		≥ 11.4		≥ 25	40~43	180°C
N42EH	12.8~13.2		≥ 12.0		≥ 29	40~43	200°C
G42AH	12.8~13.4		≥ 11.4		≥ 35	40~43	240°C
N45	13.2~13.8		≥ 11.0		≥ 12	43~46	80°C
N45M	13.3~13.8		≥ 12.5		≥ 14	43~46	100°C
N45H	13.2~13.5		≥ 12.0		≥ 17	43~46	120°C
N45SH	13.2~13.8		≥ 12.6		≥ 20	43~46	150°C
N45UH	13.1~13.7		≥ 12.5		≥ 24	43~46	180°C
G45EH	13.0~13.6		≥ 12.6		≥ 30	43~46	200°C
G45AH	13.0~13.6		≥ 12.6		≥ 35	43~46	220°C
N48	13.8~14.2		≥ 10.5		≥ 12	46~49	80°C
N48M	13.8~14.3		≥ 12.9		≥ 14	46~49	100°C
N48H	13.8~14.3		≥ 13.0		≥ 17	46~49	120°C
N48SH	13.7~14.3		≥ 12.6		≥ 20	46~49	150°C
G48UH	13.7~14.3		≥ 13.0		≥ 25	46~49	180°C
G48EH	13.7~14.3		≥ 13.0		≥ 30	46~49	200°C
N50	14.0~14.5		≥ 10.8		≥ 12	48~51	80°C
N50M	14.0~14.5		≥ 13.0		≥ 14	48~51	100°C
N50H	14.0~14.5		≥ 13.0		≥ 17	48~51	120°C
G50SH	14.0~14.5		≥ 13.0		≥ 20	48~51	150°C
G50UH	14.0~14.5		≥ 13.0		≥ 25	48~51	180°C
G50EH	14.0~14.5		≥ 13.0		≥ 30	48~51	200°C
N52	14.3~14.8		≥ 10.8		≥ 12	50~53	80°C
N52M	14.3~14.8		≥ 13.0		≥ 14	50~53	100°C
G52H	14.1~14.7		≥ 13.2		≥ 17	50~53	120°C
G52SH	14.3~14.5		≥ 13.2		≥ 20	51~54	150°C
G52UH	14.1~14.5		≥ 13.2		≥ 25	51~54	180°C
N55	14.7~15.3		≥ 10.8		≥ 11	52~56	80°C
G55H	14.4~14.8		≥ 13.3		≥ 17	53~56	120°C
G55SH	14.4~14.8		≥ 13.3		≥ 20	53~56	150°C

#### PRODUCT ADVANTAGE:

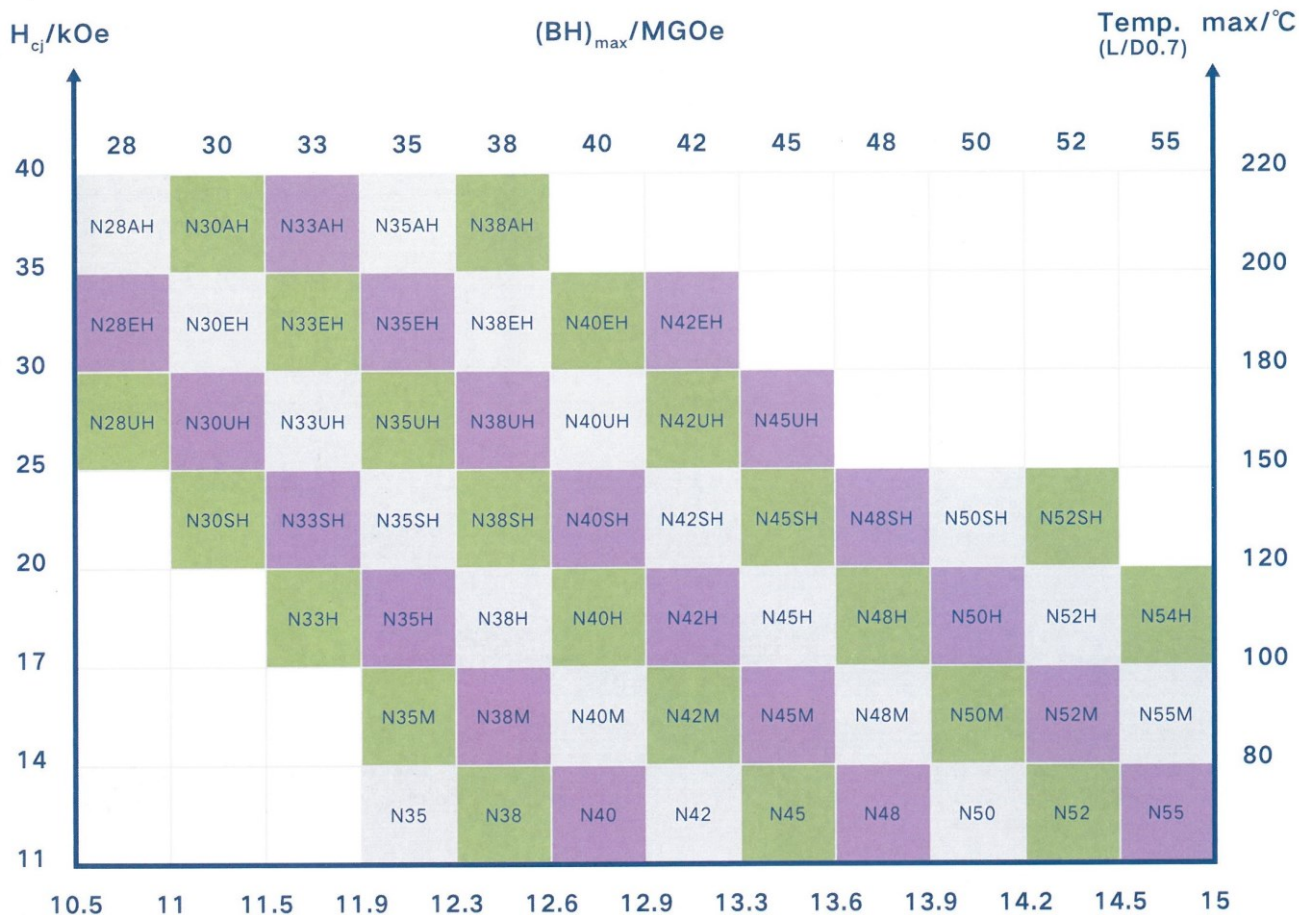
1. The Sintered NdFeB Magnet belongs to the rare earth alloy magnet group. It is made from Nd, Fe, B and other rare earth elements.
2. The NdFeB Magnet is known as the strongest magnetism with the highest energy product and coercive force.
3. It is very easily formed into various shapes, sizes by the cutting, drilling, grinding and wire cutting process. The popular shapes are for the disc, ring, square, sector and segment types as well as the custom made shapes.
4. Because of the high energy product, the NdFeB can be designed for the light weigh, smaller or thinner products for the electronic devices, mobile phones and the micro motors. The green power and the automotive industries also play the big roles of the current application for the NdFeB Magnet.

#### 產品特點:

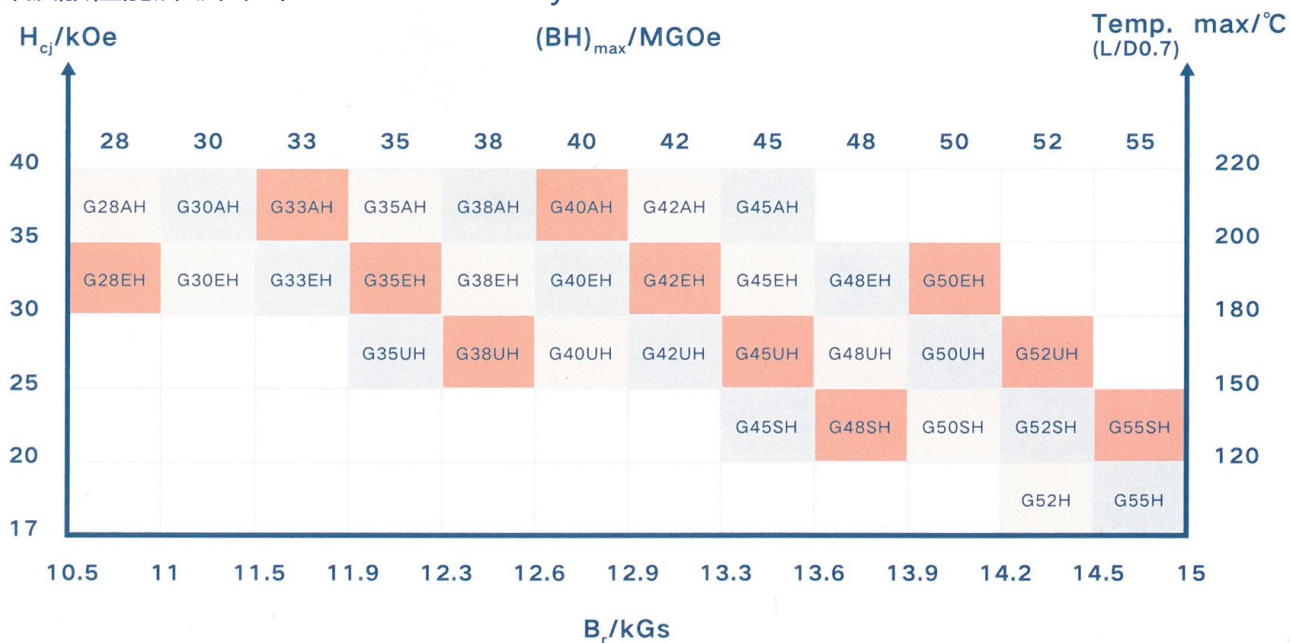
1. 釹鐵硼主要是由釹, 鐵, 硼及其他稀土元素所構成的金屬合金永久磁石。
2. 燒結釹鐵硼磁石是目前所知磁能積最高的永久磁石材料, 高矯頑力也是本產品的特點之一。
3. 釹鐵硼磁石可透過專業的機械加工如切割、鑽孔、研磨及線圈割方式加工成不同的形狀及尺寸。比較常見的外型為圓片, 環型, 方塊, 扇形, 瓦型。另外異型的加工在合適的夾具及合適的工藝輔助下也是可行的。但不建議客戶將磁石自行做後續的加工。因塗層的破壞會產生產品的氧化。
4. 由於釹鐵硼的高磁能積特性, 產品可設計於輕、薄、短、小的電子產品、手機及微小電機; 近來綠能及汽車工業也是釹鐵硼磁石應用上的要角。



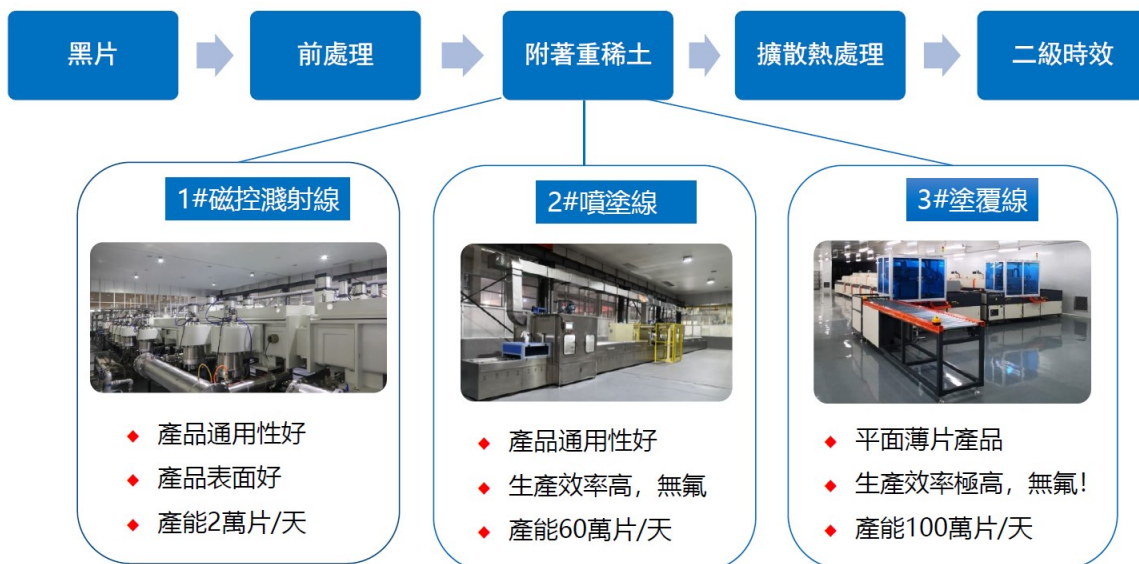
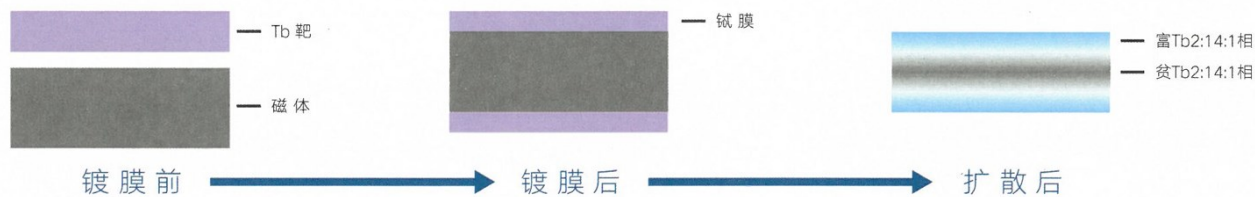
傳統工藝性能牌號圖 / Traditional Technology Grade



晶界擴散性能牌號圖 / Grain Boundary Diffusion Grade



# 晶界擴散技術 / Grain Boundary Diffusion Technology



## 研發方向 / R&D Direction

