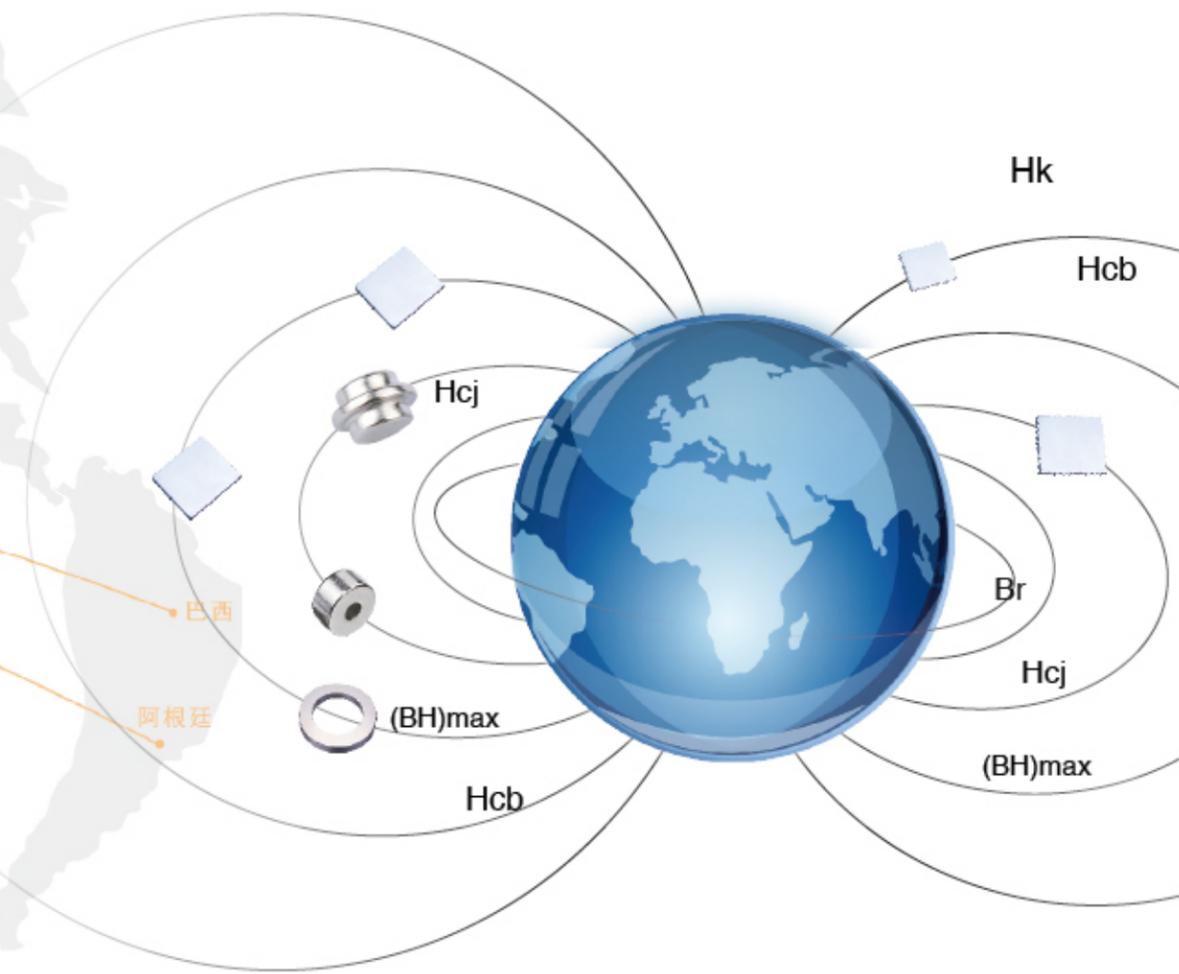




... **COCO** ...



COCO
可可磁业
 COCO MAGNETIC INDUSTRY
 股票代码: 870147



宁波可可磁业股份有限公司

NINGBO KEKE MAGNET INDUSTRY CO.,LTD.
 地址: 宁波余姚市三七市镇安捷西路117号
 Add: No.117, West Anjie Road, Sanqishi Town, Ningbo City, Zhejiang Province, China
 电话Tel: +86-574-62925557 +86-574-58221933
 传真Fax: +86-574-62938889 62947528
 邮箱E-mail: sales@kkmagnet.com
 网址Web: <http://www.kkmagnet.com> <http://www.kkmagnet.cn>
 股票代码: 870147

宁波可可磁业股份有限公司
 NINGBO KEKE MAGNET INDUSTRY CO.,LTD.



公司简介 Company Profile

宁波可可磁业股份有限公司【股票代码：870147】成立于2006年，是一家专业致力于烧结钕铁硼永磁材料的研究、生产、销售及应用的的高新技术企业。公司生产基地位于中国浙江宁波，占地30000m²。

生产能力

目前年产各种型号的中高档磁铁2000吨。钕铁硼系列包括N30-N54, N35M-N52M, N33H-N50H, N33SH-N45SH, N30UH-N42UH, N30EH-N38EH, N28AH-N33AH。目前公司有员工150人，研究人员10人，大中专毕业生25人。公司通过ISO9001:2001和TS16949:2009质量管理体系认证。产品远销欧美、日韩、东南亚，畅销全国。

品质控制

公司坚持品质是企业之生命；并通过品质管理认证；ISO/TS16949:2009及ROHS认证。我们致力于产品的高品质和客户所需产品的成本控制。

经营理念

我们将坚持以诚信至上、持续改进、质量第一、顾客满意的企业精神，提倡科学管理，遵循平等、互利、双赢的市场原则，同客户建立长期友好的合作伙伴关系，努力促进双方贸易和友谊的发展，共创辉煌！

Established in 2006, Ningbo Keke Magnet Industry Co., Ltd 【 Stock Number:870147 】 is a professional Neodymium magnet high-tech enterprise, Our company commits to the R&D, production and application of rare earth permanent magnetic materials. Our production site, with an area of 30000m², is located in Ningbo City, Zhejiang Province, China.

Capabilities

We owns the annual capacity of 2000 metric tons productivity of various types of high-grade magnets. The Neodymium magnet covers N30-N54, N35M-N52M, N33H-N50H, N33SH-N45SH, N30UH-N42UH, N30EH-N38EH, N28AH-N33AH;We have staff 150 persons. Among them, 10 persons are engineers, 25 persons are collage graduates.We have passed ISO 9001:2001 and TS16949:2009.

Welcome to visit our company and establish business relationships.

Quality Control

The quality is the life of the enterprise; We are certified with ISO/TS16949:2009 and ROHS. The consistently high quality and low cost are guaranteed.

Our belief

We adhere to the enterprise spirit that sincerity uppermost, continuous improvement, quality first, customer satisfaction. Scientific management and the principle of equality, mutual benefit and win-win market strategy are promoted. We believe that we can establish long-term friendly business partnership and promote the development of both trade and friendship to create the brilliancy together!

成长历程

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宁波可可磁业股份有限公司
2016年新三板市场成功挂牌

NINGBO KEKE MAGNET INDUSTRY CO.,LTD
Successfully listed to OTC market,
Registered capital was increased to 30 million RMB.

Start to apply "High-Tech Enterprise".

2014年高新技术企业申报项目上线。

宁波可可磁业股份有限公司
2013年注册资金增加到1000万

NINGBO KEKE MAGNET INDUSTRY CO.,LTD
Registered capital was increased to 10 million RMB.

Moved to new manufacture plant, with an area 30000m²

2011年新厂房搬迁，占地面积30000m²

2008年成立湖州生产基地

A production line was built in HUZHOU city.

YUYAO KEKE MAGNET CO.,LTD was established

2006年公司成立余姚可可磁业有限公司

工艺流程

PRODUCTION WORKSHOP



1.真空熔炼
Vacuum Smelting



2.氢破
HDDR



3.气流磨
Jet Milling



4.成型
Pressing



5.真空烧结
Vacuum Sintering



6.切片
Slicing



7.线切割
Wire Cutting

质量控制

QUALITY CONTROL



- ① EV2515型 影像测试量仪 EV2515 Image Measuring Instrument
- ② PCT-30型 高压加速老化试验机 PCT-30 Highly Accelerated Stress Tester-HAST
- ③ X-STRATA 920 X射线荧光镀层测厚仪 X-STRATA 920 Fluorescent X-ray Coating Thickness Gauge
- ④ ⑤ 盐雾试验箱 Salt Spray Test Chamber
- ⑥ DHG-9023A 电热恒温鼓风干燥箱 DHG-9023A Electro-Thermostatic Blast Oven
- ⑦ HT-701 数字磁通计 HT-701 Digital Magnetic Flux Meter
- ⑧ AMT-4 磁性能测试仪 AMT-4 Magnetic Measurement For Permanent Magnets

产品一览

PRODUCT SHOWCASE



核心优势

CORE ADVANTAGES

技术优势

Cutting-Edge Technology

1. 自主创新的关键设备。
Self-Developed Key Equipment.
2. 独特先进的生产工艺。
Unique Manufacturing Process.
3. 实力雄厚的研发团队。
Energetic R&D Team.

规模优势

Full Scale Production

1. 总产能2000吨。
Capacity 2000 tons.
2. 专业化工厂。
Specialized Factories.

产品优势

Outstanding Product

1. 高牌号 High performance

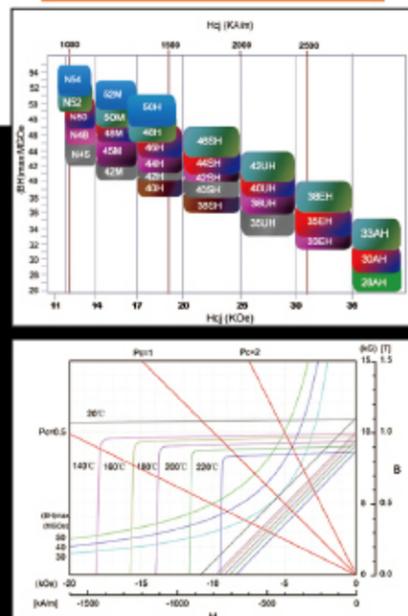
N54、52M、50H、46SH、42UH、38EH、33AH等。

2. 高温工作 High Working Temperature

目前生产的AH系列产品，最高矫顽力可达40kOe，可成功替代钕钴永磁。
The AH series with 40kOe super-high coercive force can replace Smco magnets in most applications.

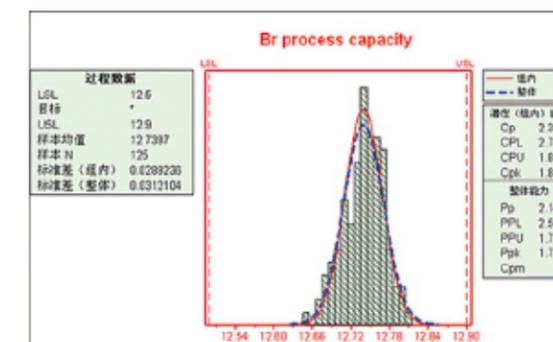
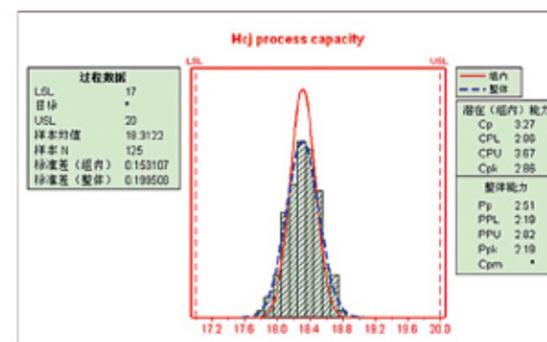
产业链优势

The Integrated Industry Supply Chain



3. 高一致性 High Consistency

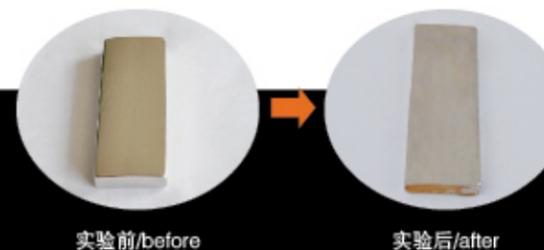
Br及内秉矫顽力Hcj的cpk值远远高于1.67。同一批次产品之间，表面磁、磁通的一致性可控制在+/-1%范围之内。
The Cpk of Remanence (Br) and Intrinsic Coercive Force (Hcj) are much higher than 1.67. The consistency of the surface magnetic field and magnetic flux can be controlled at +/-1%.



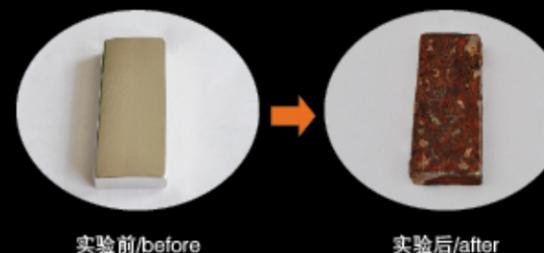
4. 高防腐 High Anti-Corrosion

高防腐电镀镍+环氧耐中性盐雾及湿热试验可达≥500hrs。
The salt spray test and humidity heat test of the high anti-corrosion coating Nickel+Copper+Epoxy is typically more than 500 hours.

高防腐样品/ High Anti-Corrosion Sample.



普通样品/ Traditional Sample.



5. 低失重 Low Weight Loss

PCT试验: 130°C, 湿度100%, 蒸汽压力2.7bar, 20天, 平均失重<2 mg/cm²。
PCT: 130°C, humidity 100%, vapor pressure 2.7bar, 20days, average low weight loss <2 mg/cm².

低失重样品/ Low Weight Loss Sample.



普通样品/ Traditional Sample.





磁性能表

MAGNETIC TABLE

钕铁硼标准磁性能表 Standard Specification For KEKE's Sintered NdFeB Magnets

Item 类别	Grade 性能	Remanence, Br 剩磁				Coercive Force, bHc 磁感应强度矫顽力		Intrinsic Coercive Force, iHc 内禀矫顽力		Max Energy Product, (BH) max 最大磁能积				Working Temp. °C 工作温度
		kGs		T		kOe	KA/m	kOe	KA/m	MGOe		KJ/m³		
		Max.	Min.	Max.	Min.					Max.	Min.	Max.	Min.	
N	N54	15.1	14.5	1.51	1.45	≥10.5	≥836	≥11	≥876	55	51	438	406	≤80
	N52	14.8	14.2	1.48	1.42	≥10.5	≥836	≥11	≥876	53	49	422	390	≤80
	N50	14.5	14.0	1.45	1.40	≥11.0	≥876	≥12	≥955	51	47	406	374	≤80
	N48	14.3	13.7	1.43	1.37	≥11.0	≥876	≥12	≥955	49	45	390	358	≤80
	N45	13.8	13.2	1.38	1.32	≥11.0	≥876	≥12	≥955	46	42	366	334	≤80
	N42	13.5	12.9	1.35	1.29	≥11.0	≥876	≥12	≥955	44	40	350	318	≤80
	N40	13.2	12.6	1.32	1.26	≥11.0	≥876	≥12	≥955	41	38	334	302	≤80
	N38	13.0	12.2	1.30	1.22	≥11.0	≥876	≥12	≥955	40	36	318	287	≤80
	N35	12.2	11.7	1.22	1.17	≥10.9	≥868	≥12	≥955	36	33	287	263	≤80
	N33	11.7	11.3	1.17	1.13	≥10.5	≥836	≥12	≥955	34	31	271	247	≤80
N30	11.3	10.8	1.13	1.08	≥10.0	≥796	≥12	≥955	31	28	247	223	≤80	
M	N52M	14.8	14.2	1.48	1.42	≥13.3	≥1059	≥14	≥1114	43	49	422	390	≤100
	N50M	14.5	14.0	1.45	1.40	≥13.1	≥1043	≥14	≥1114	41	47	406	374	≤100
	N48M	14.3	13.7	1.43	1.37	≥12.8	≥1019	≥14	≥1114	49	45	390	358	≤100
	N45M	13.8	13.2	1.38	1.32	≥12.4	≥987	≥14	≥1114	46	42	366	334	≤100
	N42M	13.5	12.9	1.35	1.29	≥12.1	≥963	≥14	≥1114	44	40	350	318	≤100
	N40M	13.2	12.6	1.32	1.26	≥11.8	≥939	≥14	≥1114	41	38	334	302	≤100
	N38M	13.0	12.2	1.30	1.22	≥11.7	≥915	≥14	≥1114	40	36	318	287	≤100
	N35M	12.2	11.7	1.22	1.17	≥10.9	≥868	≥14	≥1114	36	33	287	263	≤100
H	N50H	14.5	14.0	1.45	1.40	≥12.9	≥1027	≥16	≥1274	51	47	406	374	≤120
	N48H	14.3	13.7	1.43	1.37	≥12.7	≥1011	≥16	≥1274	49	45	390	358	≤120
	N46H	14.0	13.4	1.40	1.34	≥12.5	≥995	≥17	≥1353	47	43	374	342	≤120
	N44H	13.7	13.1	1.37	1.31	≥12.3	≥979	≥17	≥1353	45	41	358	326	≤120
	N42H	13.5	12.9	1.35	1.29	≥12.1	≥963	≥17	≥1353	44	40	350	318	≤120
	N40H	13.2	12.6	1.32	1.26	≥11.8	≥939	≥17	≥1353	42	38	334	302	≤120
	N38H	13.0	12.2	1.30	1.22	≥11.5	≥915	≥17	≥1353	40	36	318	287	≤120
	N35H	12.4	11.7	1.24	1.17	≥11.0	≥876	≥17	≥1353	37	33	295	263	≤120
N33H	11.7	11.3	1.17	1.13	≥10.5	≥836	≥17	≥1353	34	31	271	247	≤120	
SH	N45SH	14.0	13.4	1.40	1.34	≥12.5	≥995	≥20	≥1592	47	43	374	342	≤150
	N44SH	13.7	13.1	1.37	1.31	≥12.3	≥979	≥20	≥1592	45	41	358	326	≤150
	N42SH	13.5	12.9	1.35	1.29	≥12.1	≥963	≥20	≥1592	44	40	350	318	≤150
	N40SH	13.2	12.6	1.32	1.26	≥11.8	≥939	≥20	≥1592	42	38	334	302	≤150
	N38SH	12.9	12.2	1.29	1.22	≥11.5	≥915	≥20	≥1592	40	36	318	287	≤150
	N35SH	12.4	11.7	1.24	1.17	≥11.0	≥876	≥20	≥1592	37	33	295	263	≤150
	N33SH	12.1	11.4	1.21	1.14	≥10.7	≥852	≥20	≥1592	35	31	279	247	≤150
UH	N42UH	13.5	12.9	1.35	1.29	≥12.1	≥963	≥25	≥1990	44	40	350	318	≤180
	N40UH	13.2	12.6	1.32	1.26	≥11.8	≥939	≥25	≥1990	42	38	334	302	≤180
	N38UH	12.9	12.2	1.29	1.22	≥11.5	≥915	≥25	≥1990	40	36	318	287	≤180
	N35UH	12.4	11.7	1.24	1.17	≥11.0	≥876	≥25	≥1990	37	33	295	263	≤180
	N33UH	12.1	11.4	1.21	1.14	≥10.7	≥852	≥25	≥1990	35	31	279	247	≤180
EH	N30UH	11.6	10.8	1.16	1.08	≥10.2	≥812	≥25	≥1990	32	28	255	223	≤180
	N38EH	12.9	12.2	1.29	1.22	≥11.5	≥915	≥30	≥2388	40	36	318	287	≤200
	N35EH	12.4	11.7	1.24	1.17	≥11.0	≥876	≥30	≥2388	37	33	295	263	≤200
	N33EH	12.1	11.4	1.21	1.14	≥10.7	≥851	≥30	≥2388	35	31	279	247	≤200
AH	N30EH	11.5	10.8	1.15	1.08	≥10.2	≥812	≥30	≥2388	32	28	255	223	≤200
	N33AH	12.1	11.4	1.21	1.14	≥10.7	≥852	≥35	≥2786	35	31	279	247	≤230
	N30AH	11.5	10.8	1.15	1.08	≥10.2	≥812	≥35	≥2786	32	28	255	223	≤230
	N28AH	11.2	10.4	1.12	1.04	≥9.70	≥772	≥35	≥2786	30	26	239	207	≤230

物理特性 Physical Properties

项目 Item	参数 Parameters	参考值 Reference Value
辅助磁性能 Additional Magnetic Properties	剩磁温度系数 (α (Br)) / (%/K) Temp. Coeff. of Br	-0.08 ~ -0.12
	内禀矫顽力温度系数 (β (Hcj)) / (%/K) Temp. Coeff. of Hcj	-0.42 ~ -0.07
	居里温度 (Tc) / K Curie Temperature	310 ~ 380
	回复磁导率 (μ rec) [-] Recoil Permeability	1.05
机械物理特性 Mechanical and Physical Properties	密度 (g/cm³) Density	7.50 ~ 7.70
	维氏硬度 (Hv) Vickers Hardness	650
	电阻率 (μ Ω om) Electrical Resistivity	1.4
	抗压强度 (MPa) Compressive Strength	1050
	抗拉强度 (MPa) Tensile Strength	80
	抗弯强度 (MPa) Bending Strength	290
	热传导率 (W/(mK)) Thermal Conductivity	6 ~ 8
	杨氏模量 (GPa) Young's Modulus	160
	热膨胀系数 (垂直于取向方向) (10⁻⁶/K) Coefficient of Thermal Expansion (C ⊥)	-1.5
热膨胀系数 (平行于取向方向) (10⁻⁶/K) Coefficient of Thermal Expansion (C //)	6.5	

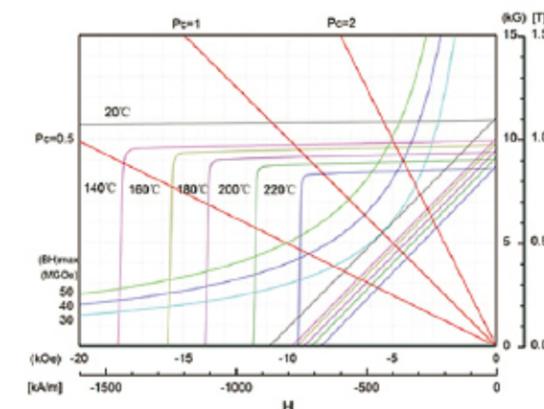
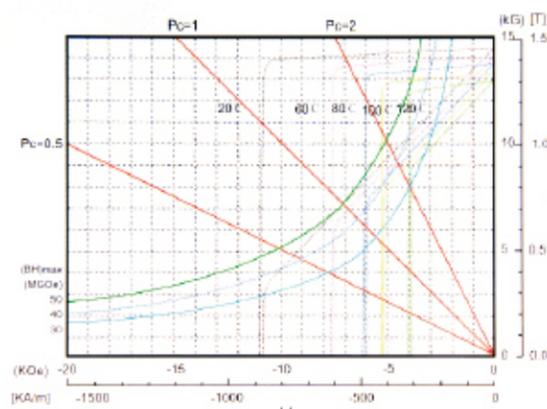
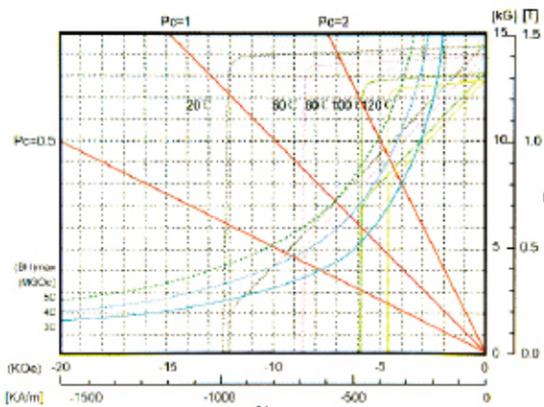
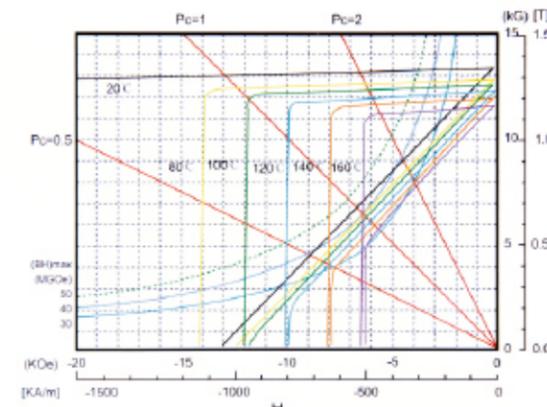
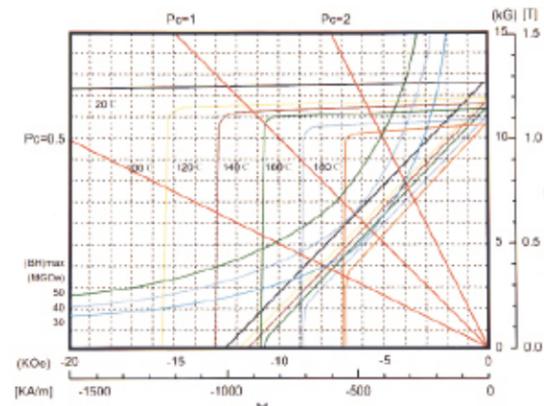
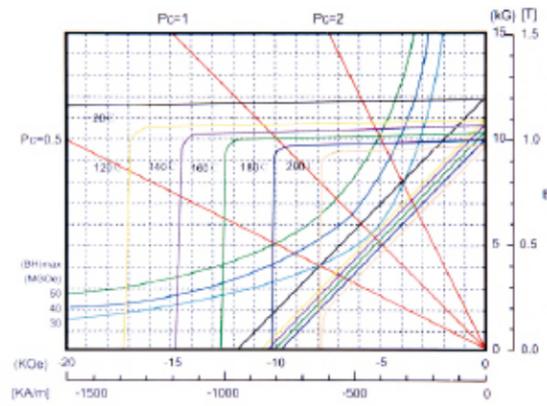
技术规格和参数如有变化, 恕不另行通知。
Technical specifications and parameters are subject to change without notice.

磁性性能参数及换算表 Magnetic Parameter and Conversion Table

参数及表示 Unit and Symbol	国际单位 SI-units	单位换算 Conversion Table
磁感应强度 B Flux density B	T (Tesla)	1T=1Vs/m²=10kGs
磁极化强度 J Polarization J	T (Tesla)	1T=1Vs/m²=10kGs
磁场强度 H Magnetic field intensity H	KA/m	1KA/m=4 π Oe ≈ 12.57Oe
磁能积 (BH) m Energy Product (BH) m	KJ/m³	1KA/m³=0.126MGOe
磁通 Φ Magnetic flux Φ	Wb (Weber)	1Wb=1Vs=10⁸Mx

退磁曲线

DEMAGNETIZATION CURVE



表面处理

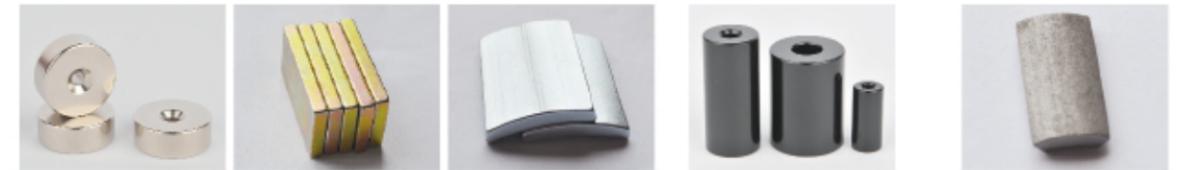
SURFACE TREATMENT

钕铁硼磁体极易被腐蚀，为了克服此缺陷，常常对其表面进行涂覆。通常采用的方法有镀蓝白锌、彩锌；镀锌、双层镍、镍锡、镍铜镍；镀环氧树脂；（临时保护）磷化等。

The corrosion resistance of NdFeB is considered drawback. In order to prevent the corrosion, it is effective to paint, coat, or plate NdFeB. Plating NdFeB is a different process, and commercial plating houses are unlikely to be able to achieve plating with good adhesion. Zinc, Nickel, or Tin plating provides good corrosion resistance for NdFeB magnets, A variety of organic coatings have also been successfully developed for NdFeB.

无机涂覆 Metallic

有机涂覆 Organic 临时保护 Temporary



White Zinc 蓝白锌、Color Zinc 彩锌；Nickel 镀锌、Nickel+Nickel 双层镍、Nickel+Tin 镀锡、Nickel+Copper+Nickel 镀铜镍、Gold 镀金。

Epoxy 环氧

Phosphating 磷化

表面处理指标

Characteristics of Surface Treatment

coating	Zn	Color Zn	Ni	Double Ni	NiSn	NiCuNi	ElectrolessNi	Epoxy	Passivation
Color	white	multicolour	silver	silver	silver	silver	silver	black	silver
Thickness (μm)	5-10	5-15	10-15	15-20	10-20	10-25	10-20	25-30	1-5
Pressure Cooker Test (120°C, 2atm, 100%RH)	> 15hr	> 24hr	> 48hr	> 48hr	> 72hr	> 48hr	> 48hr	> 24hr	> 4hr
Salt Spray Test (5%NaCl, 35°C, 1.2atm)	> 15hr	> 24hr	> 24hr	> 24hr	> 48hr	> 24hr	> 48hr	> 500hr	> 8hr

应用领域

APPLICATION FIELDS



医疗领域 Medical Field

交通运输 Transportation

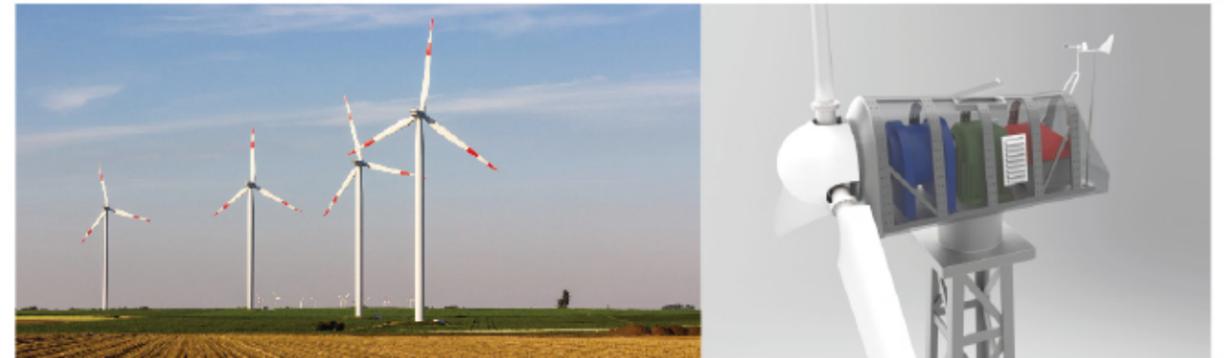


曳引机 Traction Machine



通讯设备 Communication Device

IT产业 IT Industry



风力发电 Wind Driven Generator



音响设备 Audio Equipment

机械设备 Mechanical Equipment



马达电机 Motor Driven

专利
PATENT



荣誉证书
APPLICATION FIELDS

