宁波市易赞磁业有限公司

NINGBO EZC MAGNETIC INDUSTRY CO.,LTD

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微信小程序

易赞磁业
EZC MAGNETIC

易信卓远 赞磁质精

EZC THE RELENTLESS PURSUIT
OF PERFECTION

企业简介
COMPANY PROFILE

7000
建筑面积（m^2）

10
真空烧结炉（台）

100+
配套设备（台）

1500+
年烧结钕铁硼（吨）

宁波市易赞磁业有限公司是一家专业生产、销售钕铁硼磁体及各种钕铁硼原材料的专业企业，公司位于中国专业的磁性材料生产基地——浙江宁波。优越的产业配套及便利快捷多样的运输方式能使产品快速送达客户手中。

公司现占地5000多平方米，建设面积7000多平方米，拥有十台真空烧结炉，以及配套设备100余台，年生产1500多吨烧结钕铁硼。并拥有磁特性测量仪、脉冲红外热导氧氢分析仪.等离子体原子发射光谱仪.投影仪、盐雾试验箱等各种先进的检测设备。为生产加工各种高难度磁性元件提供了质量保证。

公司已经通过ISO9001：2000质量体系,采用先进的管理理念.生产的钕铁硼永磁产品。广泛应用于各类电机、传感器、扬声器、玩具、矿山设备和医药化工等领域。

本着诚信经营，品质优先的宗旨，与客户互惠互利，携手共创美好未来。

Ningbo EZC Magnetic Industry Co..L.td.is a professional manufacturer of rare earth magnet, specilizing in research and sales ofSintered NdFeB magnets and various raw materials, our company is located at the largest and most professional magnetic materialproduction base of China-Ningbo, Zhejiang. Excellent supporting industries and a variety of convenient and efficient ways oftransportation enables rapid delivery of products to customers.

The company now occupies more than 5000 square meters, construction area of 7,000 square meters, have 10 sets of vacurmsintering furnace, and more than 100 sets of other ancillary equipments with annual production1,500 tons of sintered NdFeB or more.And we have magnetic propertes measurement instrument, pulsed infrared thermal conductivity of hydrogen analyzer oxygen plasmaatomic emission spectrometer, projectors,salt spray chamber, and other advanced detection equipments, which can provide a stronggarantee for the production and processing of high difficulty magnetic elements.

Our company has passed ISO9001:2000 qualiy system and adhere to the advanced management conceptsto produce Ndfeb magnets. Our products are widely used in various types of motors, sensors,speakers, toys, mining ecuipment,pharmaceutical and chemical fields.

In line with the good faith management, quality first principle, we are glad to build a better future with our customers.

DEVELOPMENT

发展理念

企业宗旨
Enterprise purpose

精心细作 真诚服务
To elaborate the sincere service

生产理念
Production philosophy

务实创新 持续探索
Continuous exploration of pragmatic innovation

市场理念
Market concept

从客户出发，以客户利益为自身利益
Starting from the customer, to the interests ofcustomers for their own interests

COMPANY CULTURE

企业文化

企业目标
Business goals

依靠自主研发和技术创新，持续成为行业的领跑者。

To rely on independent research and development and technological innovation, continue to become the industry leader.

企业使命
Enterprise mission

竭尽全力提供诚信服务，为客户创造价值，让品牌得到有效的成长。

To make every effort to provide integrity services, to create value for customers,so that the brand has been effective growth.

经营理念
Enterprise mission

依靠自主研发和技术创新，持续成为行业的领跑者。

To rely on independent research and development and technological innovation, continue to become the industry leader.

创新意识
Consciousness of innovation

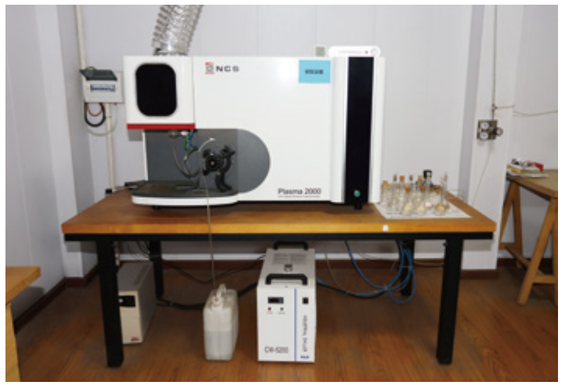
以科学的生产技术为核心，持续探索产品创新的巅峰。

The core of the scientific production technology, continue to explore the peak of product innovation.

PRODUCTION STRENGTH
生产实力

易赞磁业设立独立的科研部门，现有研发人员数名，中高级职称人员5名；专家2名。
同时积极引进培养技术人才，注重科研的持续发展和技术力量的稳步提高，以人才为技术追求核心，积极引进国际先进设备。
同时加强与科研院所进行相关技术合作交流，能力的保障易赞磁业的稳步发展。

Ningbo EZC Magnetic Industry Co., Ltd. is establishment of an independent magnetic industry research department, a number of existing R&D personnel, including five senior professional titles and two experts.
Focusing on the continuous development of scientific research and the steady improvement of technical strength, with talent as the core of the puursuit if technology, and actively introduce the international advanced equipment. At the same time, strengthen the related technical cooperation with scientific research institutes, to make sure that EZC can be developing steadily.



SINTERED NdFeB
烧结钕铁硼

烧结钕铁硼永磁材料是金属钕、铁、硼和其他微量元素构成的合金磁体。其制造通过粉末冶金工艺将熔炼后的合金锭制成粉末在磁场中取向并压型，成型后胚体在惰性气体或真空中烧结使其致密化，所烧结钕铁硼具有极高的磁能积和矫顽力，而且其性价比高，并具有良好的机械特性，拥有当代磁王之称。

The Sintered NdFeB Magnet is an alloy magnet that mainly comprises the Neodymium, Iron and Boron Metal,the manufacturing engineering of NdFeB makes use of a process of powder metallurgy such like alloy powder being pressed in themagnetic flux and being sintered in the vacuum furnace or inert gases environment so that the magnets possibly have high coerciveforce, high product energy, high performance price ratio and favorable mechanicalness.

SINTERED PROCESS
烧结流程

MACHINING PROCESS
成品加工流程

01
毛坯检测 Blank test
- 磁性测量
  Magnetic measurement
- 失重率测试
  Weight loss experiments
- 密度测量
  Density measurement
- 公差测试
  Tolerance test

02
机加工 Machining
- 磨削
  Grinding
- 线切割
  Wire cutting
- 切片
  Section
- 孔加工
  Punch

03
QC检验 QC chenk
- QC检验
  QC check

04
倒角 Rounding
- 倒角
  Rounding

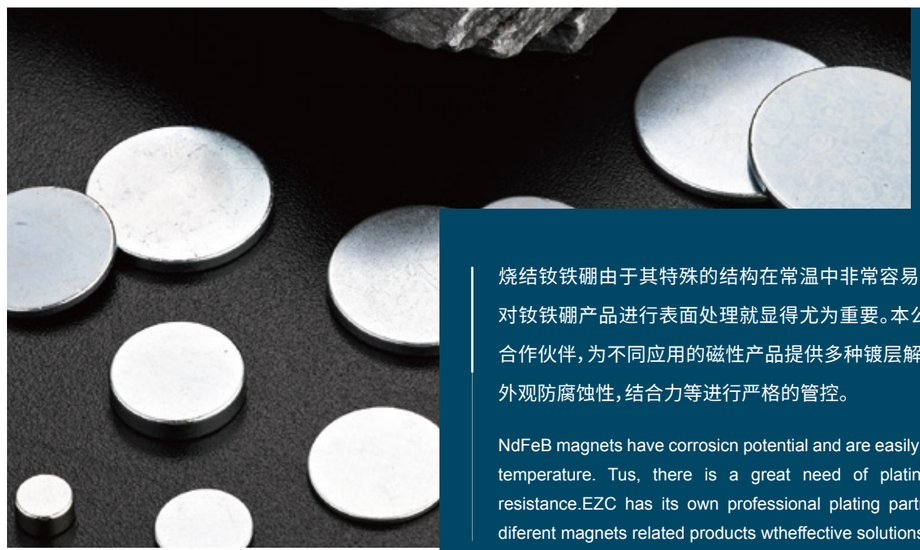
05
电镀 Electroplate
- 环保Zn
  Environmental protection Zn
- 镀 NiCuNi
  NiCuNi
- 环氧树脂 / 磷化
  Phosphating
- 镀金 / 黑 Ni
  Au / Black ni

06
镀层检测 Coating detection
- 镀厚测量
  Fim thickness measurement
- 防腐能力
  Anti corrosion ability
- 结合力
  Binding capacity
- 公差测试
  Tolerance test

07
充磁 Magnetization
- 外观测试
  Visual inspection
- 标记
  Mark
- 取向 / 包卷
  Orienting / Wrapping
- 充磁
  Magnetization

08
包装 Packing
- 磁通检测
  Check for flux
- 装袋
  Bagging
- 包装
  Packing

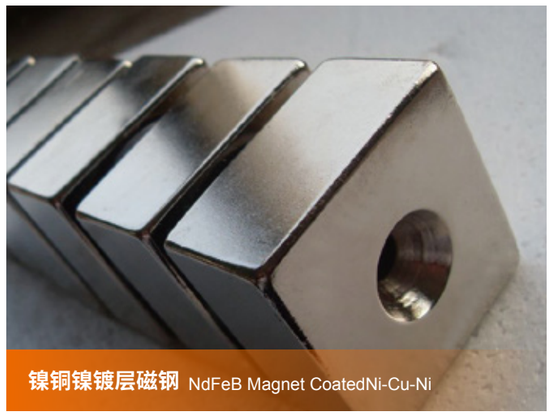
SURFACE TREATMENT
表面处理



烧结钕铁硼由于其特殊的结构在常温中非常容易被氧化和腐蚀，因此对钕铁硼产品进行表面处理就显得尤为重要。本公司拥有专业的电镀合作伙伴，为不同应用的磁性产品提供多种镀层解决方案，并对镀层的外观防腐蚀性，结合力等进行严格的管控。

NdFeB magnets have corrosicn potential and are easily oxidized in the normal temperature. Tus, there is a great need of platingwith high corrosion resistance.EZC has its own professional plating partners, who could offer diferent magnets related products wtheffective solutions.

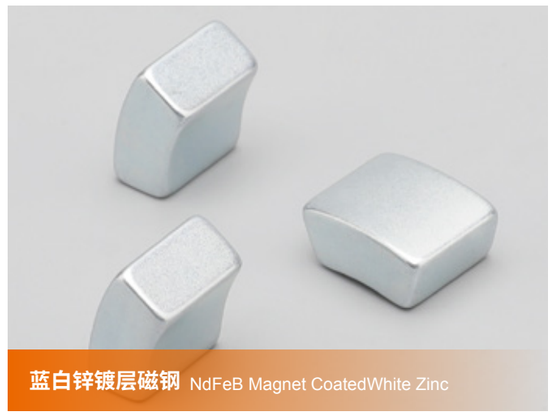
AVAILABLE COATING FOR SINTERED NdFeB MAGNETS
烧结钕铁硼适用镀层



镍铜镍镀层磁钢 NdFeB Magnet CoatedNi-Cu-Ni

镍铜镍镀层具有优秀的耐腐蚀性能、硬度、耐磨性等综合物理化学性能，暴露于复杂的环境中，保证外观与内在性能的长期稳定和较长的使用寿命。对于钕铁硼来说，是一种最常见的镀层之一。

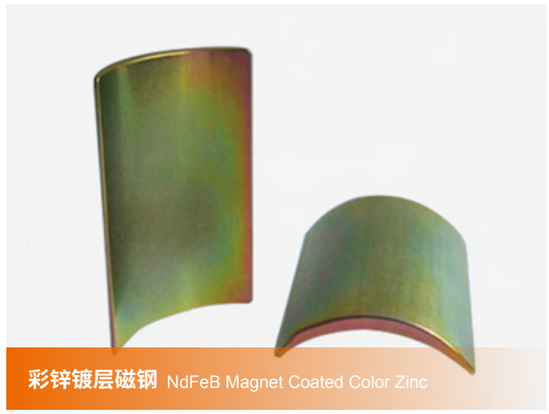
The Nickel-Copper-Nickel(Ni-Cu-Ni)coating has excellent physical and chemicalproperties, like corrosion resistance,hardness, abrasive resistance.When it isexposed in atmospheric environment, ithas long-term stability of the appearance,inherent performance and longer servicelife.For NdFeB permanent magnets,Ni-Cu-Ni is one of the most common coating.



蓝白锌镀层磁钢 NdFeB Magnet CoatedWhite Zinc

锌镀层一般较薄，防腐性相对较好，镀层经钝化后外观漂亮，色泽较美观，磁钢中心与边角镀层的“骨头效应”不明显，对公差较严格的产品也可满足。可使用于抗短期污染变色的有限腐蚀性场合。

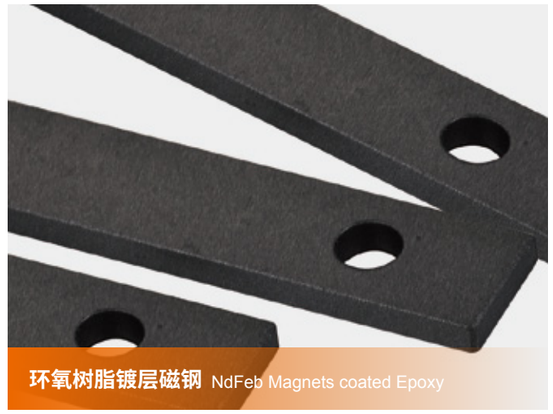
Blue white zinc coating is generally thinnerthan the Ni-Cu-Ni coating and anticorrosionability is relatively good.Blue white zinccoating after passivating have a beautiful appearance in color. "Bones Effect" in thecenter and corners of the plated magnet is not obvious and is easy to meet thetight tolerance. Blue white zinc coatingcan be used in short-term anticorrosionenvironment.



彩锌镀层磁钢 NdFeB Magnet Coated Color Zinc

彩锌镀层具有普通蓝白锌镀层的特点外，具有比蓝白锌镀层更高的防腐性。可使用于较为苛刻的环境中。

Color zinc coating has the characteristics of ordinary blue and white zinc coating, has higher anticorrosion than blue and white zinc coating.-Can be used in harsh environment.



环氧树脂镀层磁钢 NdFeb Magnets coated Epoxy

环氧树脂具有良好的物理、化学性能，对金属和非金属材料的表面具有优异的粘接强度，介电性能良好，变定收缩率小，制品尺寸稳定性好，硬度高，柔韧性较好，对碱及大部分溶剂稳定。本公司采用电镀镍铜之后再涂装环氧树脂工艺，产品具有优异的粘结能力和耐腐蚀能力。

Epoxy resin has good physical and chemical properties, and has excellent adhesionstrength on the surface of the metal and nonmetal materials, good dielectric properties,small shrinkage, good dimensional stability, high hardness, good flexibility, alkali and mostsolvents stable.We use to re-coating epoxy resin after Nickel copper nickel. Our magnethas excellent adhesion ability and corrosion resistance.

MAGNETIC CHARACTERISTICS OF SINTERED NdFeB
磁性能表

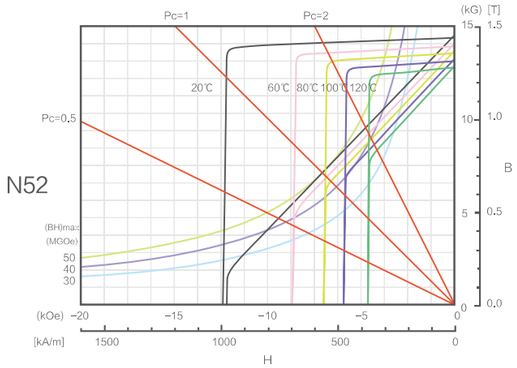
牌号 Grade	剩磁感应强度 (Br)		磁感矫顽力 (Hcb)		内禀矫顽力 (Hcj)		最大磁能积 (BH)max		建议最高工作温度
	Mt	KGs	KOe	KA / m	KOe	KA / m	MGOe	Kj/m³	(TW)℃
N30	1070–1130	10.7–11.3	⩾ 10.2	⩾ 812	⩾ 12	⩾ 955	28–31	223–249	80
N33	1130–1180	11.3–11.8	⩾ 10.6	⩾ 844	⩾ 12	⩾ 955	31–34	247–279	80
N35	1170–1210	11.7–12.1	⩾ 10.9	⩾ 868	⩾ 12	⩾ 955	33–36	263–287	80
N38	1210–1250	12.1–12.5	⩾ 11.3	⩾ 899	⩾ 12	⩾ 955	36–39	287–310	80
N40	1250–1280	12.5–12.8	⩾ 11.6	⩾ 923	⩾ 12	⩾ 955	38–41	302–326	80
N42	1280–1320	12.8–13.2	⩾ 11.6	⩾ 923	⩾ 12	⩾ 955	40–43	318–342	80
N45	1320–1380	13.2–13.8	⩾ 11.0	⩾ 876	⩾ 12	⩾ 955	43–46	342–366	80
N48	1380–1420	13.8–14.2	⩾ 10.5	⩾ 836	⩾ 11	⩾ 876	46–49	366–390	80
N50	1400–1450	14.0–14.5	⩾ 10.0	⩾ 796	⩾ 11	⩾ 876	48–51	382–406	80
N52	1420–1480	14.2–14.8	⩾ 10.0	⩾ 796	⩾ 11	⩾ 876	49–53	390–422	80
35M	1170–1210	11.7–12.1	⩾ 10.9	⩾ 868	⩾ 14	⩾ 1114	33–36	263–287	100
38M	1210–1250	12.1–12.5	⩾ 11.3	⩾ 899	⩾ 14	⩾ 1114	36–39	287–310	100
40M	1250–1280	12.5–12.8	⩾ 11.6	⩾ 923	⩾ 14	⩾ 1114	38–41	302–326	100
42M	1280–1320	12.8–13.2	⩾ 12.0	⩾ 955	⩾ 14	⩾ 1114	40–43	318–342	100
45M	1320–1380	13.2–13.8	⩾ 12.0	⩾ 955	⩾ 14	⩾ 1114	43–46	342–366	100
48M	1360–1430	13.6–14.3	⩾ 12.9	⩾ 1027	⩾ 14	⩾ 1114	46–49	366–390	100
50M	1380–1460	13.8–14.6	⩾ 12.9	⩾ 1027	⩾ 14	⩾ 1114	48–51	382–406	100
30H	1070–1130	10.7–11.3	⩾ 10.2	⩾ 812	⩾ 17	⩾ 1353	28–32	223–255	120
33H	1130–1170	11.3–11.7	⩾ 10.5	⩾ 836	⩾ 17	⩾ 1353	31–34	247–271	120
35H	1170–1210	11.7–12.1	⩾ 10.9	⩾ 868	⩾ 17	⩾ 1353	33–36	263–287	120
38H	1210–1250	12.1–12.5	⩾ 11.3	⩾ 899	⩾ 17	⩾ 1353	36–39	287–310	120
40H	1250–1280	12.5–12.8	⩾ 11.6	⩾ 923	⩾ 17	⩾ 1353	38–41	302–326	120
42H	1280–1320	12.8–13.2	⩾ 12.0	⩾ 955	⩾ 17	⩾ 1353	40–43	318–342	120
45H	1320–1360	13.2–13.6	⩾ 12.5	⩾ 955	⩾ 17	⩾ 1360	43–46	342–366	120
48H	1350–1460	13.5–14.6	⩾ 12.5	⩾ 955	⩾ 17	⩾ 1360	46–49	366–390	120
33SH	1130–1170	11.3–11.7	⩾ 10.6	⩾ 844	⩾ 20	⩾ 1592	31–34	247–271	150
35SH	1170–1210	11.7–12.1	⩾ 11.0	⩾ 876	⩾ 20	⩾ 1592	33–36	263–287	150
38SH	1210–1250	12.1–12.5	⩾ 11.4	⩾ 907	⩾ 20	⩾ 1592	36–39	287–310	150
40SH	1250–1280	12.5–12.8	⩾ 11.8	⩾ 939	⩾ 20	⩾ 1592	38–41	302–326	150
42SH	1280–1320	12.8–13.2	⩾ 11.8	⩾ 939	⩾ 20	⩾ 1600	39–43	310–342	150
45SH	1310–1360	13.1–13.6	⩾ 12.0	⩾ 955	⩾ 20	⩾ 1600	42–45	334–358	150
30UH	1080–1130	10.8–11.3	⩾ 10.2	⩾ 812	⩾ 25	⩾ 1900	28–31	223–247	180
33UH	1130–1170	11.3–11.7	⩾ 10.7	⩾ 852	⩾ 25	⩾ 1990	31–34	247–271	180
35UH	1180–1220	11.8–12.2	⩾ 10.8	⩾ 860	⩾ 25	⩾ 1990	33–36	263–287	180
38UH	1210–1250	12.1–12.5	⩾ 10.6	⩾ 844	⩾ 25	⩾ 1990	36–39	287–310	180
28EH	1040–1090	10.4–10.9	⩾ 9.80	⩾ 780	⩾ 30	⩾ 2388	26–29	207–231	200
30EH	1080–1130	10.8–11.3	⩾ 10.2	⩾ 812	⩾ 30	⩾ 2388	28–31	223–247	200
33EH	1130–1170	11.3–11.7	⩾ 10.5	⩾ 835	⩾ 30	⩾ 2400	31–34	247–271	200
35EH	1160–1200	11.6–12.0	⩾ 10.6	⩾ 835	⩾ 30	⩾ 2400	33–35	263–279	200

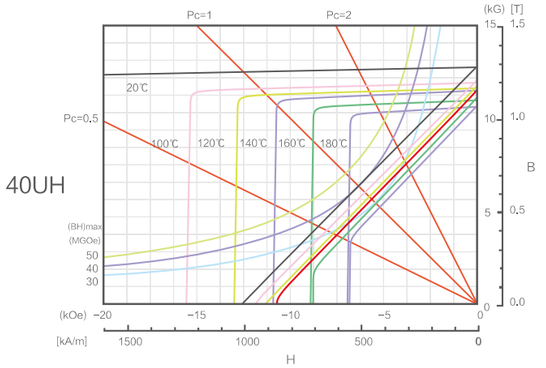
备注 / Remarks：

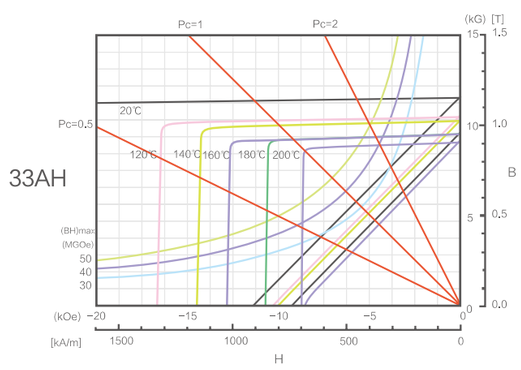
◎以上磁性参数和物理特性均在室温下的数据。
◎最大工作温度依赖于磁铁的长径比、镀层和环境因素。
◎密度 7.40–7.65g/cm³；可逆温度系数 a_{Br}: −0.09~−0.13%℃；a_{hcj}: −0.50~−0.80%℃；硬度 Hardness Hv600。

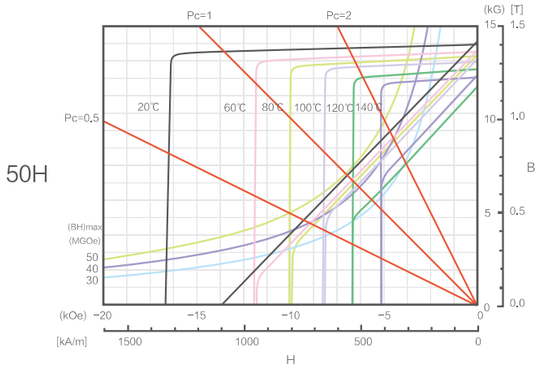
◎ Above magnetic parameter and physical property's data is based on room temperature.
◎ The maximum working temperature depended on magnet's length–diameter ratio, plating and environment factor.
◎ Density 7.40–7.65g/cm³, reversible temperature factor α_{Br}: −0.09~−0.13%℃，α_{Hcj}: −0.50~−0.80%℃, hardness Hv600.

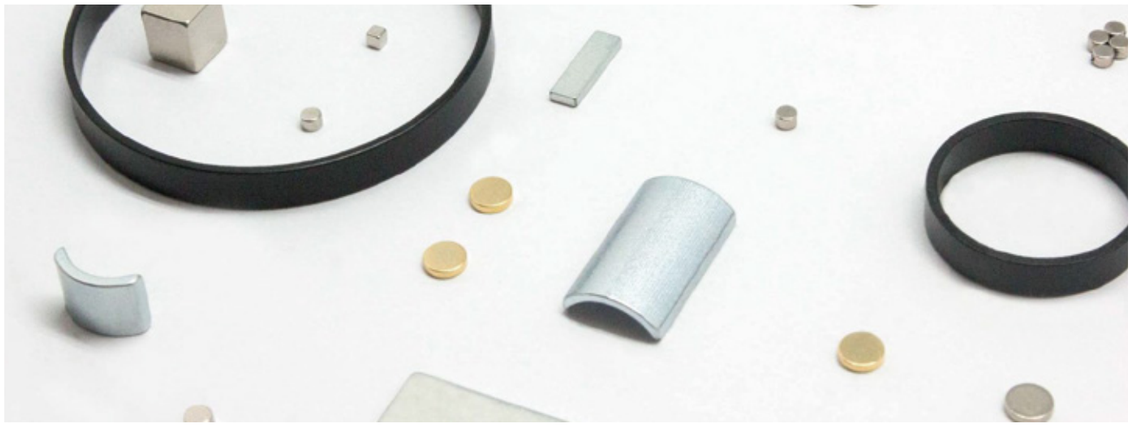
MAGNETIC PROPERTIES CURVES
磁性能曲线











GENERAL PHYSICAL PROPERTIES OF NdFeB
钕铁硼一般物理性能

参数 / Parameter	单位 / Unit	标准值 / Standard Data
居里温度 (Tc) / Curie Temperature	℃	310–380
最高工作温度 (Tw)Maximum Operating Temperature	℃	80–200
硬度 / Hardness	HV	560–600
电阻率 / Electrical Resistivity	μ Ω.cm	180–200
密度 (D)Density	g/cm^3	7.4–7.65
回复磁导率 (μ rec) Recoil Permeability	–	1.05
饱和磁化 (Hs)Saturation Field Strength	KOe	30–40
	KA/m	2400–3200

RANGE OF SIZE
尺寸范围

方块形 / Block	长 / Length	宽 / Width	厚度 / Thickness
最大 Maximum	300mm	200mm	60mm
最小 Minimum	2.60mm	1.80mm	0.50mm

圆环形 / Ring	外径 / Outer Dia	内径 / Inner Dia	厚度 / Thickness
最大 Maximum	280mm	Order	60mm
最小 Minimum	2.00mm	1.50mm	0.50mm

圆饼形 / Disk	外径 / Outer Dia	厚度 / Thickness
最大 Maximum	280mm	60mm
最小 Minimum	2.00mm	0.50mm

瓦形和其他特别形状可按客户提供的样品或按图纸生产
Segment magnet and other special shapes can be produced according to clients' sample or drawing

NdFeb APPLICATION Field
钕铁硼应用领域

扬声器(音响、家用电子产品)

The speaker
(audio, home electronics)

电梯电机(设备电机)

The elevator motor
(equipment motor)

核磁共振(设备电机)

The nuclear magnetic
resonance(equipment motor)

其他(汽车电机)

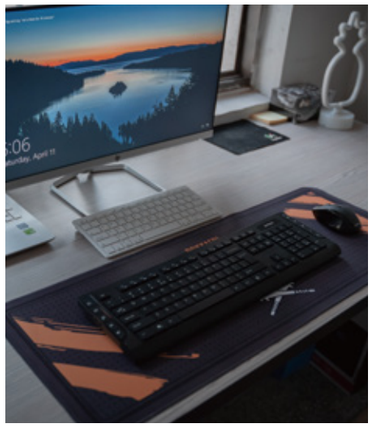
Others(Motor vehicle)

硬盘驱动(计算机)

The hard disk drive
(computer)







易赞磁业
EZC MAGNETIC



易赞磁业的产品已经广泛应用于工业，农业，石化，仪器仪表，风力发电，电动汽车，电子设备，计算机，各类电机，音响系统，汽车等各领域。

Magnetic products of EZC are widely used in areas of computer science,eletronic devices, instruments and meters,wind power technology electric automobile motors, motors, speaker systems, auto motors and so on.