



A LEADING EXPERT IN
**PERMANENT MAGNET
TECHNOLOGY**



2026

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About Jinlun Magnet



Ningbo Jinlun Magnet Technology Co., Ltd.

Established in 1996, it is a national high-tech enterprise dedicated to the R&D, production, and sales of high-performance permanent magnet materials. With sintered NdFeB permanent magnet materials as its core, it is committed to providing high-performance and cost-effective magnetic solutions for global customers.

Production Base

The company operates four intelligent production bases in East China, covering a total area of 80,000 square meters, with an annual production capacity of 8,000 tons. Equipped with industry-leading manufacturing and testing equipment, it achieves full-process intelligent control from raw materials to finished products.

Technological Core

Backed by four self-developed core material technologies and a professional technical team, the company continuously drives product innovation and technological advancements.

Market and Certifications

With 30 years of industry experience, it has served over 3,000 customers, and its products are exported to more than 20 countries and regions worldwide. The company has been recognized as a national-level "Specialized, Refined, Distinctive, and Innovative" Little Giant Enterprise and a Four-Star Green Factory. It holds over 60 patents and has passed international system certifications including ISO9001, IATF16949, and ISO14001.



8000_T

8,000 tons—Annual production capacity



80000 m²

80,000 m² production base



60⁺ 项

60+ items Publication of invention and utility model patents



360⁺

360 + Excellent Team

30⁺

Since 1996

having served customers continuously for 30 years

10000⁺

5 Major Series

over 10,000 types of magnet products



3000⁺ customers' choice

30 YEARS OF CUMULATIVE SERVICE

Jinlun Magnet has provided high-performance rare earth permanent magnet products and magnetic material solutions to over 3,000 domestic and international customers.

For three decades, Jinlun has remained committed to the mission of "Keep innovating to provide high quality and competitive products for customers."

Leveraging four intelligent production bases in Ningbo, the company offers one-stop service capabilities ranging from magnetic circuit design and magnetic field analysis to material selection



30-year Development History



2003 year

Established Ningbo Heli Magne Technology Co., Ltd.



JAFEN
MAGNET 佳丰磁材

2012 year

Established Ningbo Jafen Magnet Technology Co., Ltd.



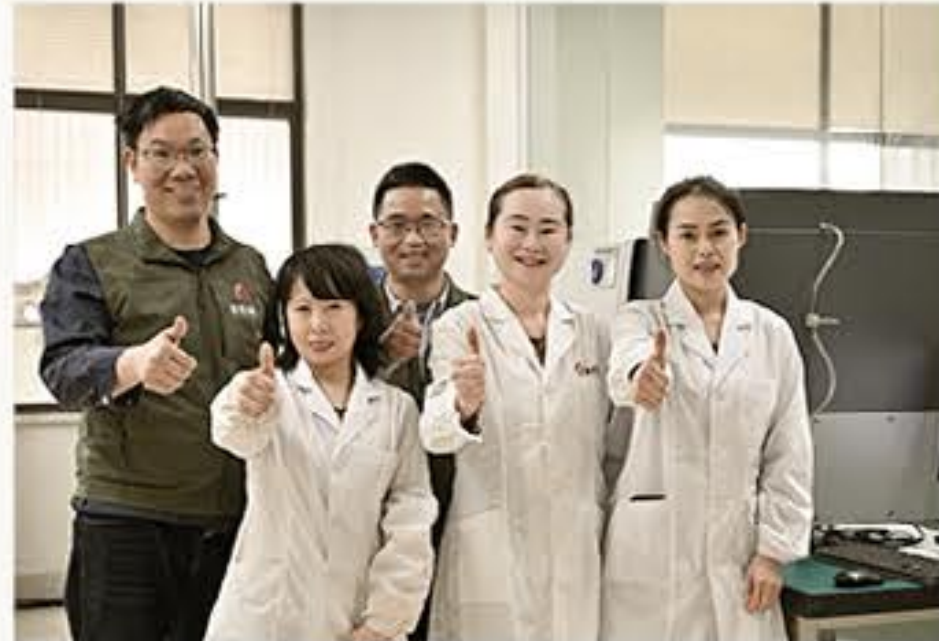
2019 year

Passed ISO9001, IATF16949 Automotive Quality Management System Certifications; Broke through the magnet diffusion process.



2022 year

Designated as a National-Level "Little Giant" Enterprise.



2026 year

Jinlun Magnetic Materials Precision Industrial Park commenced production



1996 year

Established Cixi Jiwei Magnetic & Electrical Materials Factory



2006 year

Established Ningbo Jinlun Magnet Technology Co.,Ltd.



2013 year

Launched R&D and production of CeFeB magnets.



2021 year

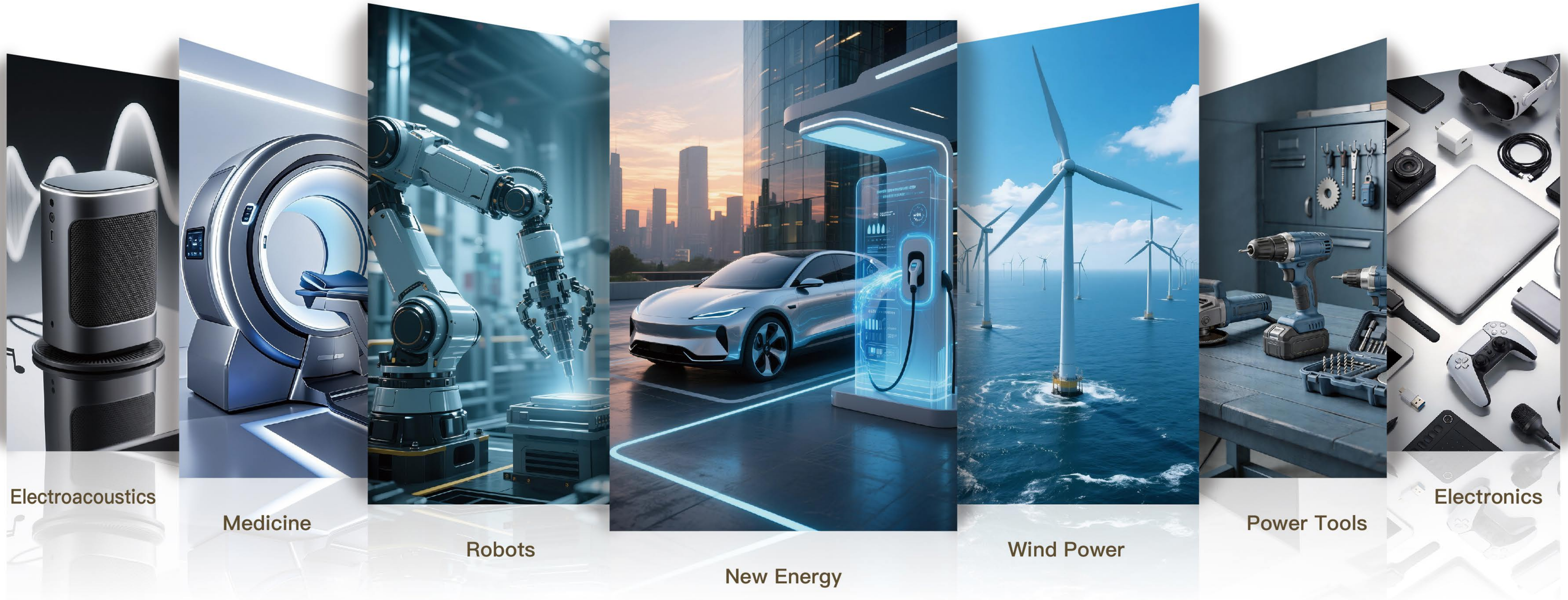
Obtained National High-tech Enterprise; Passed ISO 14001 & IPMS Certified.



2023 year

Contributor to National Industry Standards, MES & WMS Systems Implemented.

Product **Application**



Sintered NdFeB Magnets offer excellent magnetic properties and are widely used in electronics, electric power, machinery, medical devices, toys, packaging, hardware, aerospace, and other fields. Common applications include electric vehicles, generators, speakers, magnetic separators, computer disk drives, and MRI equipment.

Global Layout



BASED IN CHINA AND SERVING MARKETS WORLDWIDE

Jinlun Magnet operates with a comprehensive global marketing network. Supported by advanced permanent magnet technology and an exceptional production management team, the company delivers world-class products and services. This commitment has earned high recognition and trust from industry clients, with exports reaching over 20 countries across Europe, the Americas, and Asia.



R&D Center

- Ningbo
- Shanghai

Production Base

- Ningbo

Sales Center

- Beijing
- Shanghai
- Ningbo
- Guangzhou

Exporting Countries

- USA
- Germany
- UK
- France
- Italy
- Canada
- Poland
- Czech
- Netherlands
- Turkey
- Brazil
- India
- Malaysia
-

Built on superior performance and precision manufacturing, and driven by strong R&D and rigorous quality control, we provide stable, reliable, and customizable magnetic material solutions for global customers.

R&D Focus of Jinlun Magnet



Ultra-High Performance Permanent Magnet

Breaking the performance limits of magnets under extreme temperatures and strong radiation, delivering high-reliability solutions for aerospace, deep-sea exploration, and related fields.



Green Replaceable Magnetic Material

Reducing and substituting key rare-earth elements to provide high-performance, low-cost, and sustainable magnetic materials that meet green supply chain standards.



Near End Forming Manufacturing

Integrating advanced molding and additive processes to directly manufacture high-precision, highly consistent complex magnetic components, offering integrated design-to-manufacturing solutions.

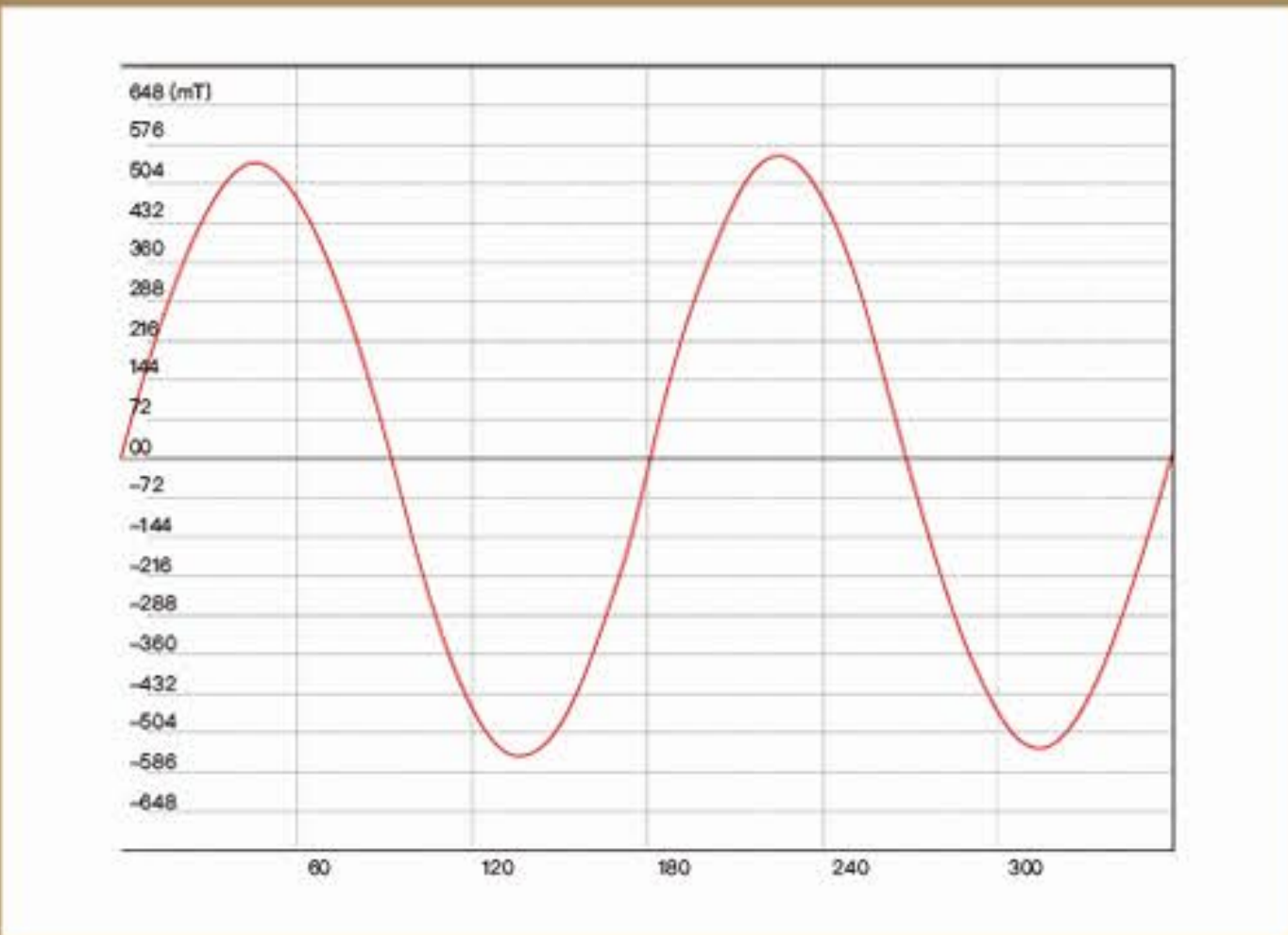
Multipole Ring and Radial Ring Technology

Using multipolar and radial orientation technologies, we produce multipole rings and radial rings to deliver high-performance, highly consistent solutions for applications such as motors and sensors.

Magnetic Circuit Optimization

Traditional Segmented Magnets

Air gap magnetic field distortion, high torque ripple.



Radial Ring

Torque ripple reduced by $\downarrow 10\%$, motor efficiency improved by $\uparrow 5-8\%$.

Assembly Simplicity

Traditional Segmented Magnets

Multi-piece assembly, cumulative tolerances.



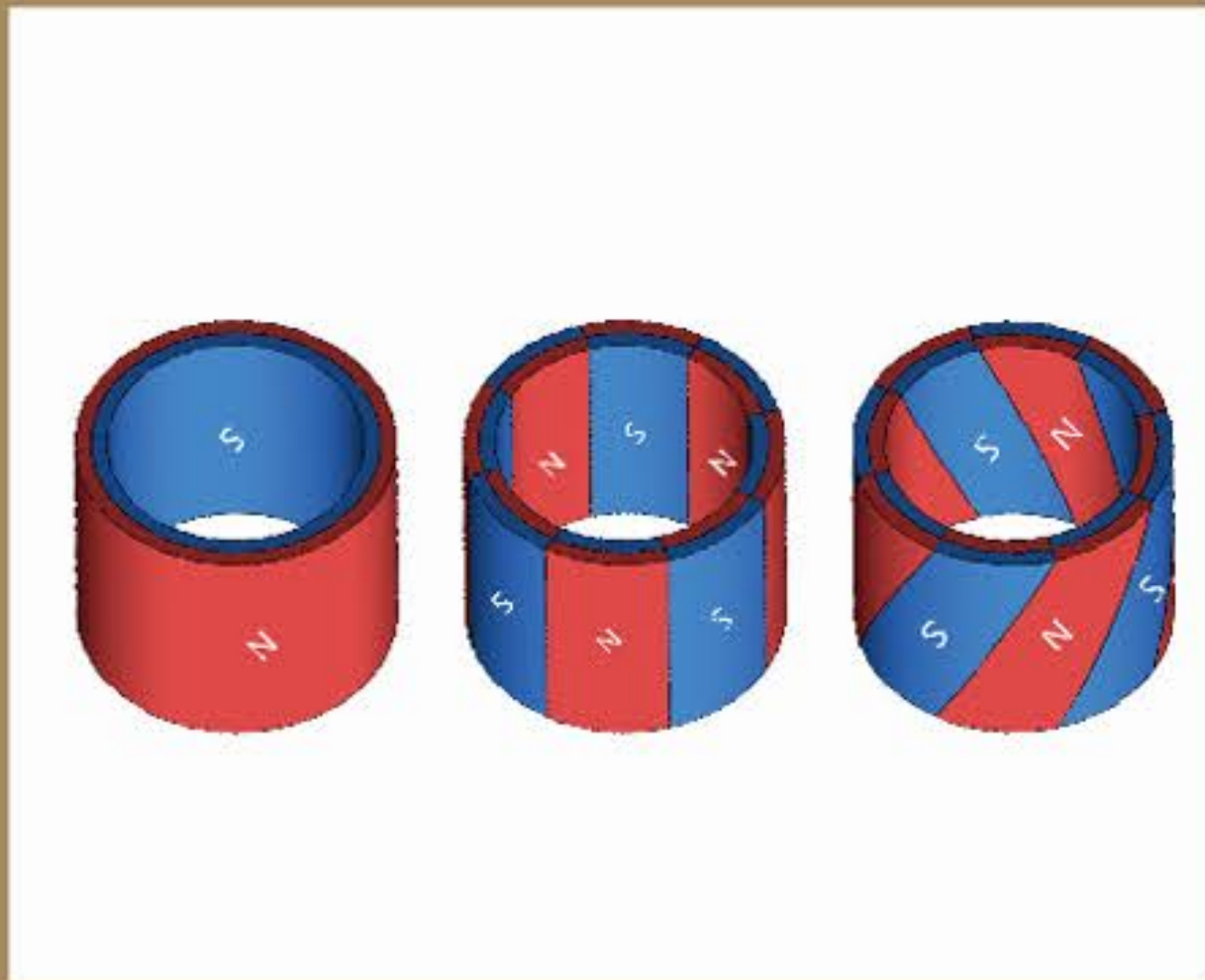
Radial Ring

Assembly efficiency improved by $\uparrow 40\%$, outer diameter tolerance achievable to 0.03mm .

Magnetization Flexibility

Traditional Segmented Magnets

Only straight magnetization possible; no skew magnetization.



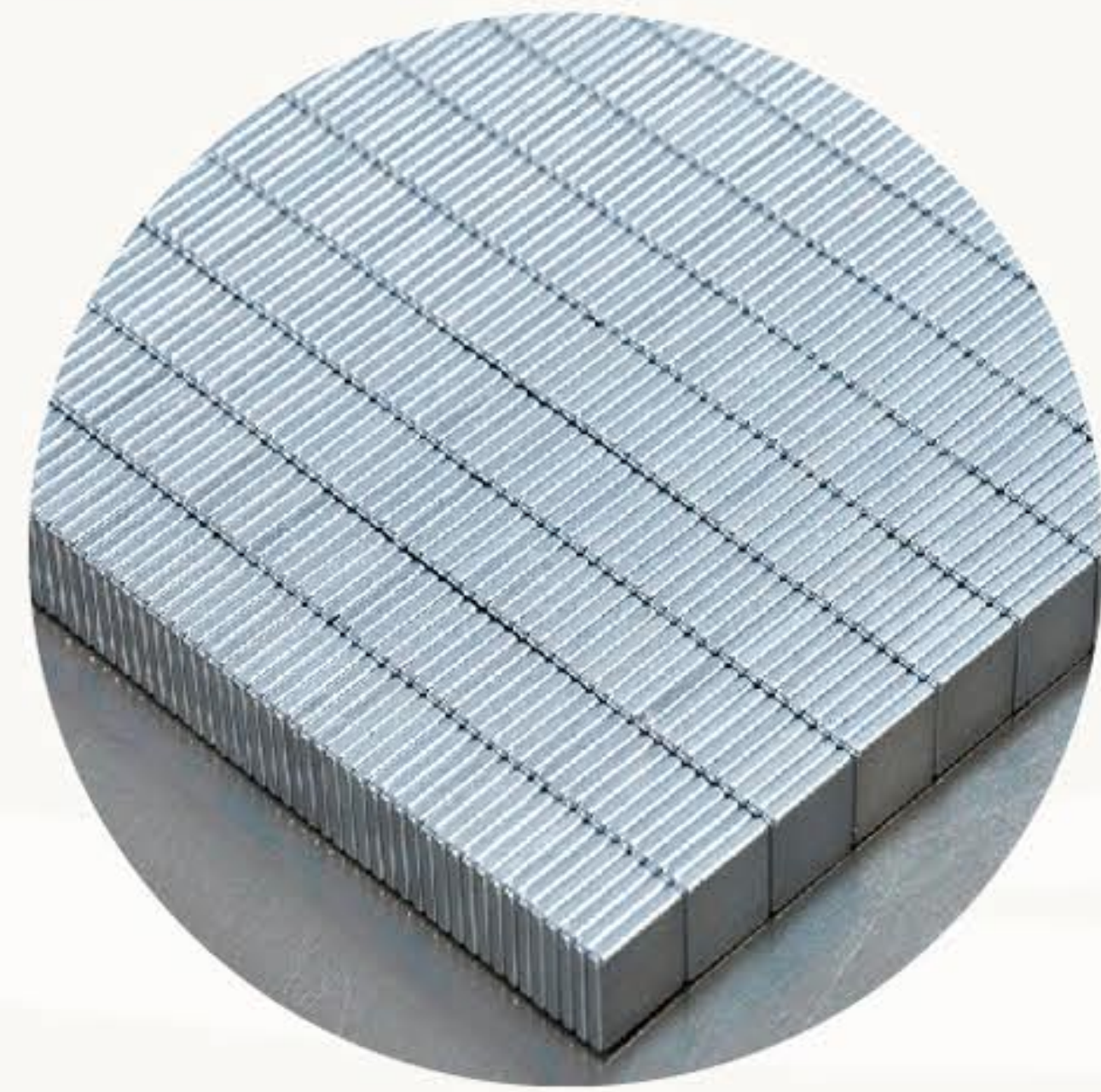
Radial Ring

Supports single-pole, 4-pole, 8-pole, 32-pole, and other pole counts, as well as skew magnetization to reduce cogging torque.

Dimensional Range of Magnetic Rings (Unit: mm)

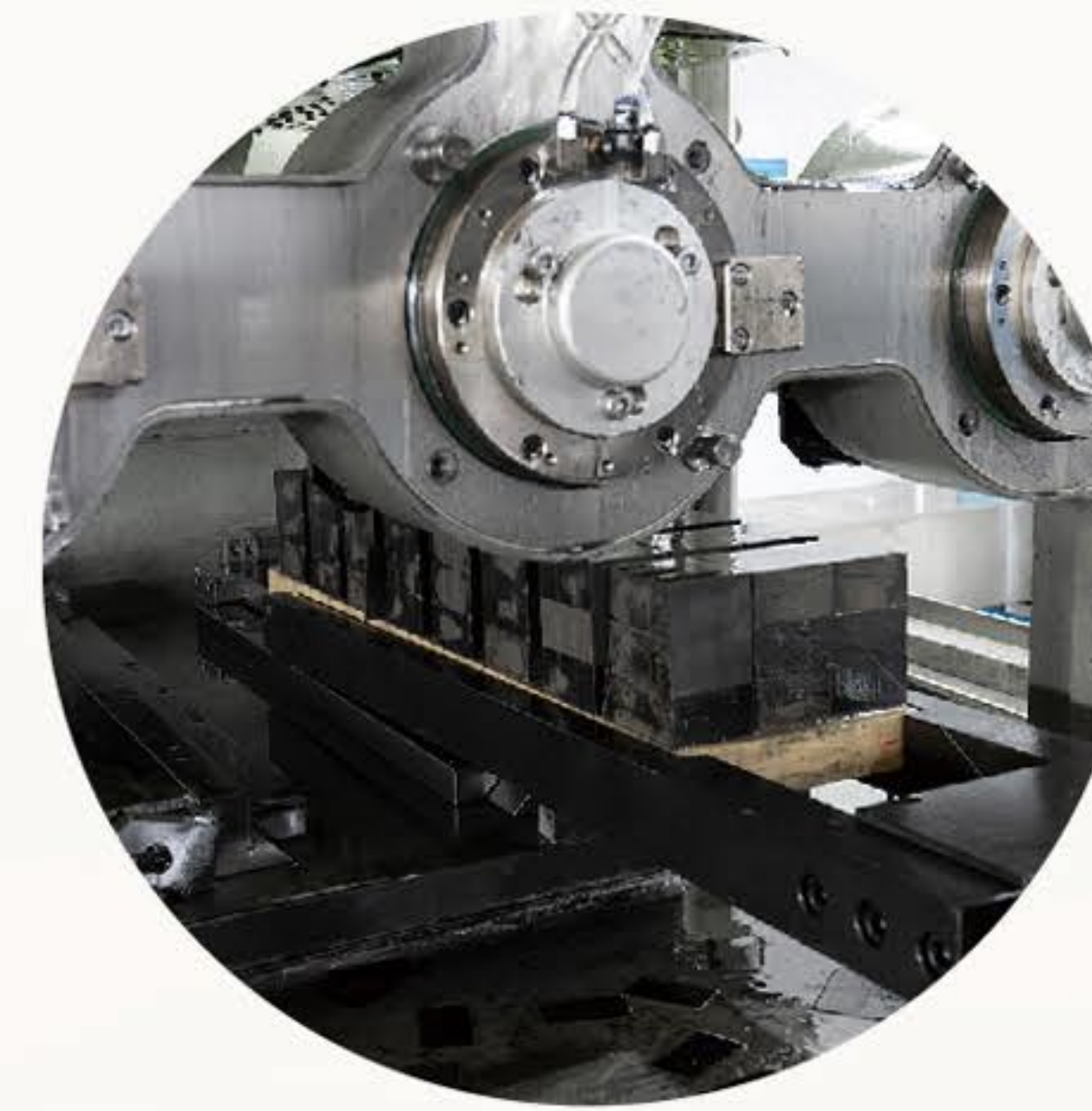
Magnetic Ring Type	Outer Diameter(OD)	Inner Diameter(ID)	Height(H)
Multi-pole Ring(Magnet)	D3~D20	ID/OD=0.7~0.9, Wall Thickness ≥ 1.5	3~30
Radial Ring(Magnet)	D20~D70	ID/OD=0.7~0.9, Wall Thickness ≥ 2	5~50

The Four Core Strengths



Stable Performance, Industry-Leading Batch Consistency

- Magnetic performance batch fluctuation controlled within $\pm 2\%$
- Key dimensional pass rate $\geq 99.5\%$
- Annual stable supply capacity: **8,000** tons
- Long-term client repurchase rate $\geq 85\%$



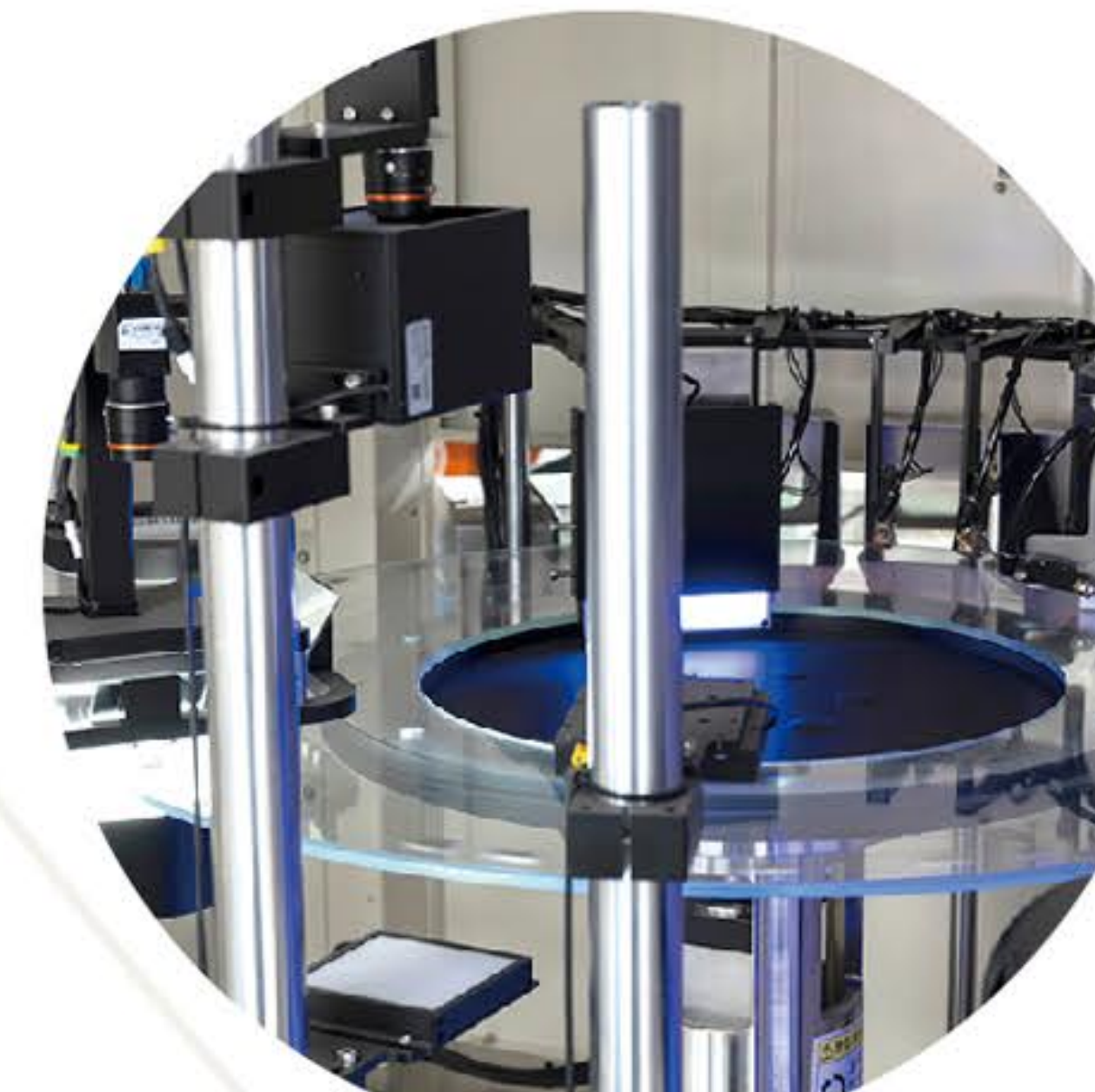
Strong Precision Machining Capability, Controllable Tolerances

- Achievable dimensional accuracy: $\pm 0.01\text{mm}$
- Flatness and parallelism up to **0.03mm**
- One-stop machining for complex shapes, segments, and multi-step structures



Strong R&D and Customization Capabilities

- Standard first sample delivery ≤ 7 days, shortening your development cycle by over **30%**;
- Serving **3000+** global clients, accumulatively delivered **10000+** custom projects;
- Custom solution mass-production conversion rate $> 95\%$, mass production CPK ≥ 1.67

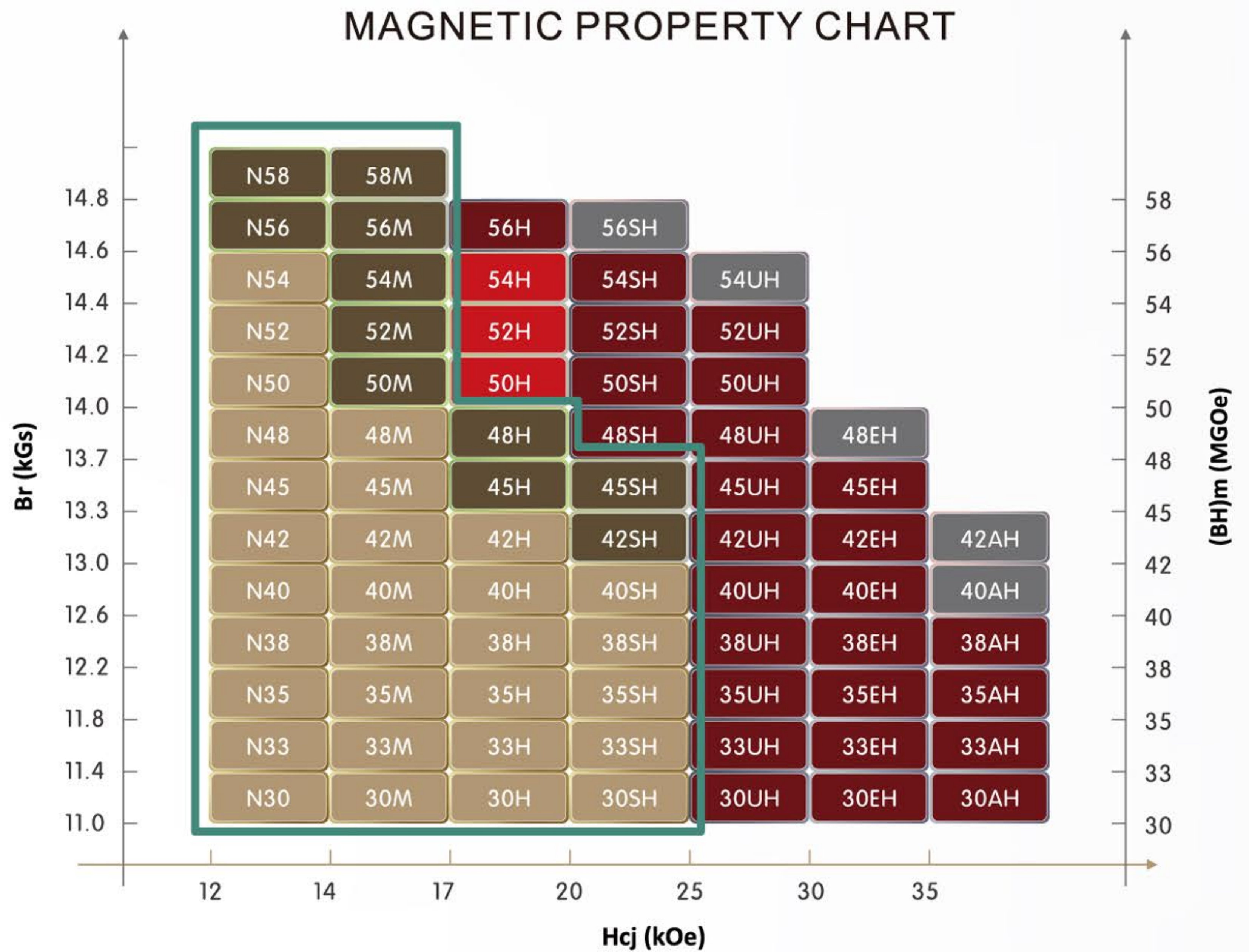


Comprehensive Process Quality Control & Traceability System

- 12 key quality control points from incoming raw material inspection, in-process inspection, to final product inspection
- Each batch comes with complete magnetic performance, dimensional, and salt spray test reports
- Full-process batch traceability from raw materials to finished products
- Outgoing defect rate controlled within 0.3%

1 High-Performance Heavy-Rare-Earth-Free Formula

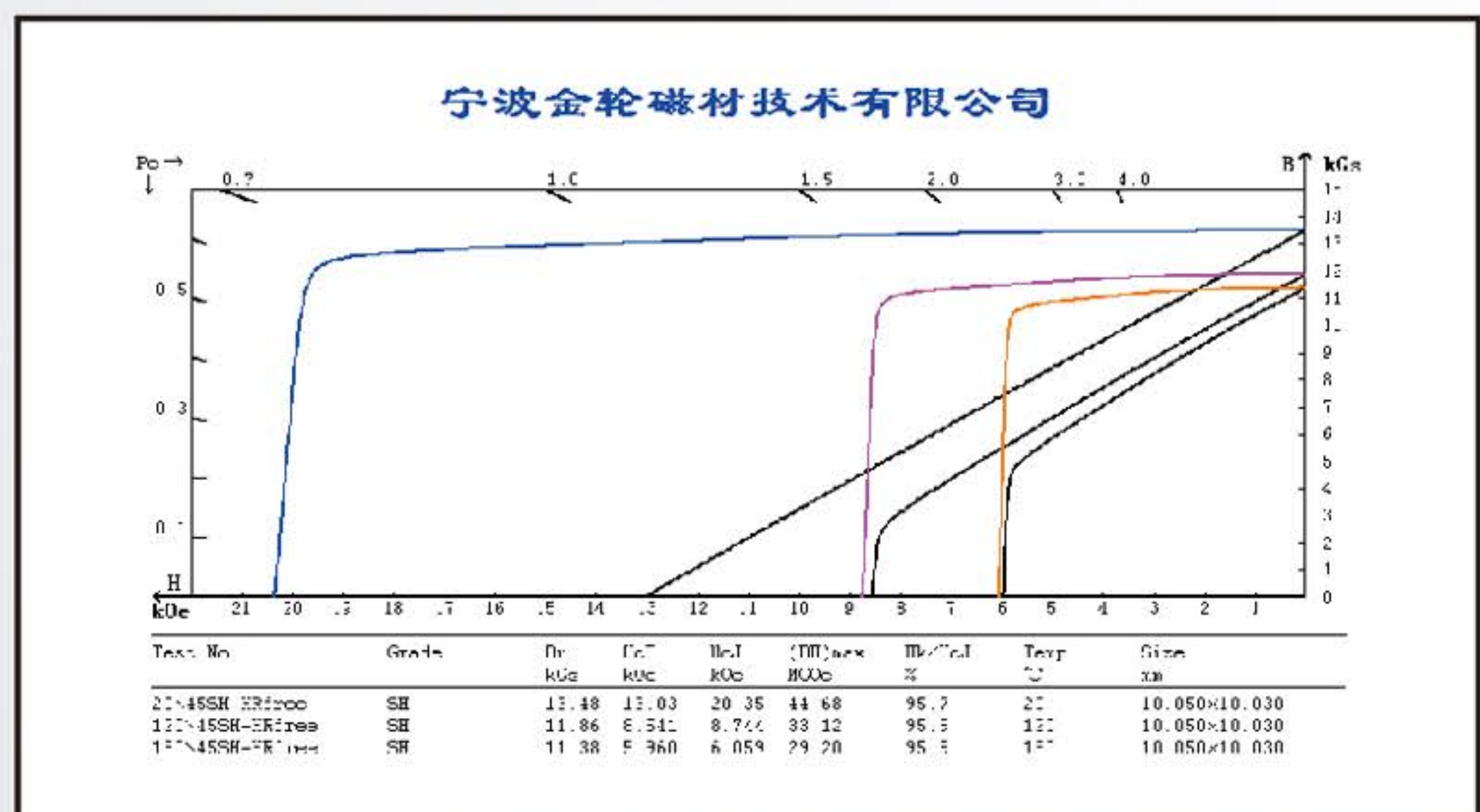
- Maintains high coercivity and magnetic energy with **<0.1%** heavy rare earths, stable from **-50°C to 150°C**.



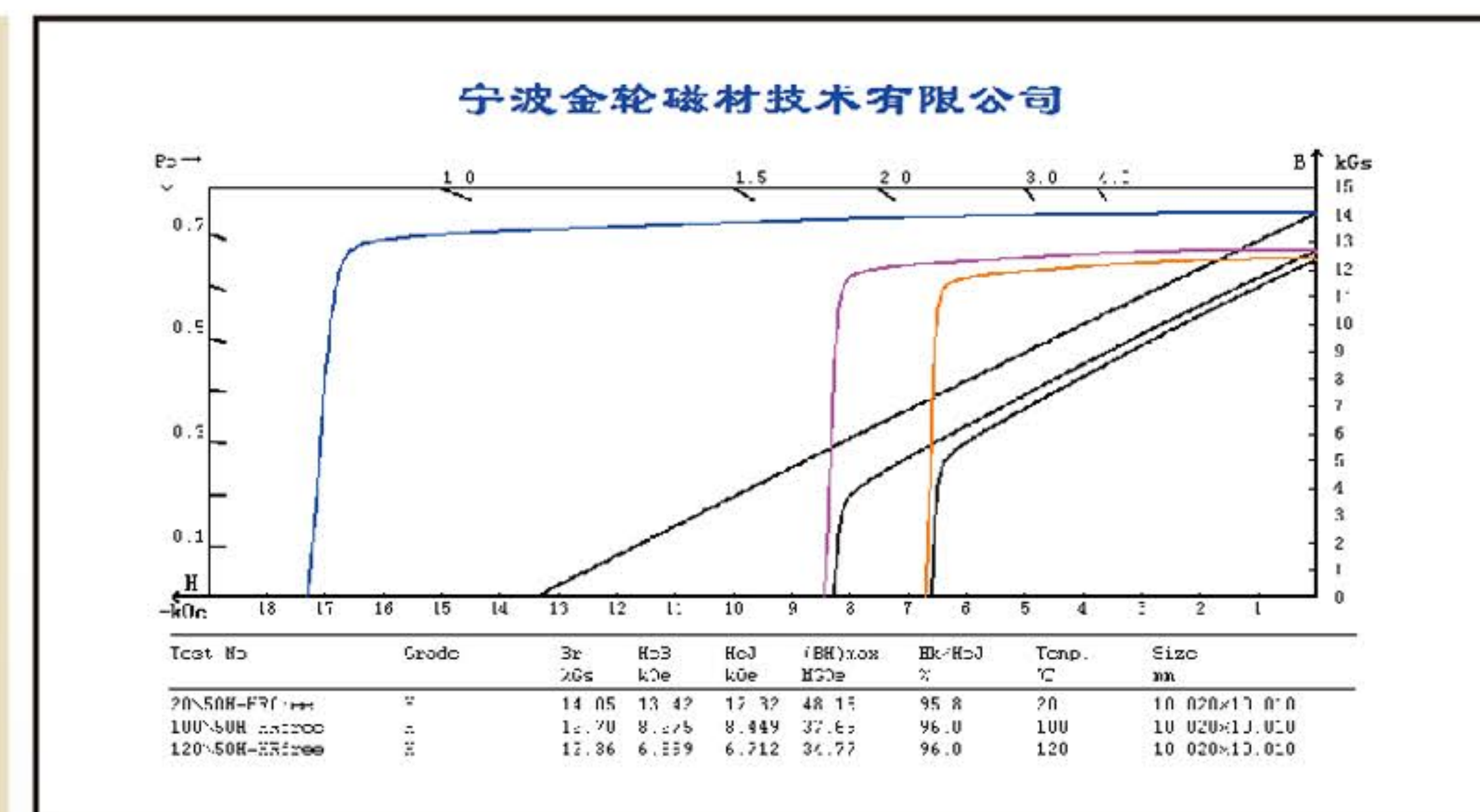
(R,Ce)-Fe-B HR Free Low HR GBD Under Development

Control Element=0
(Sm/Gd/Tb/Dy/Lu/Sc/Y)

45SH-HR

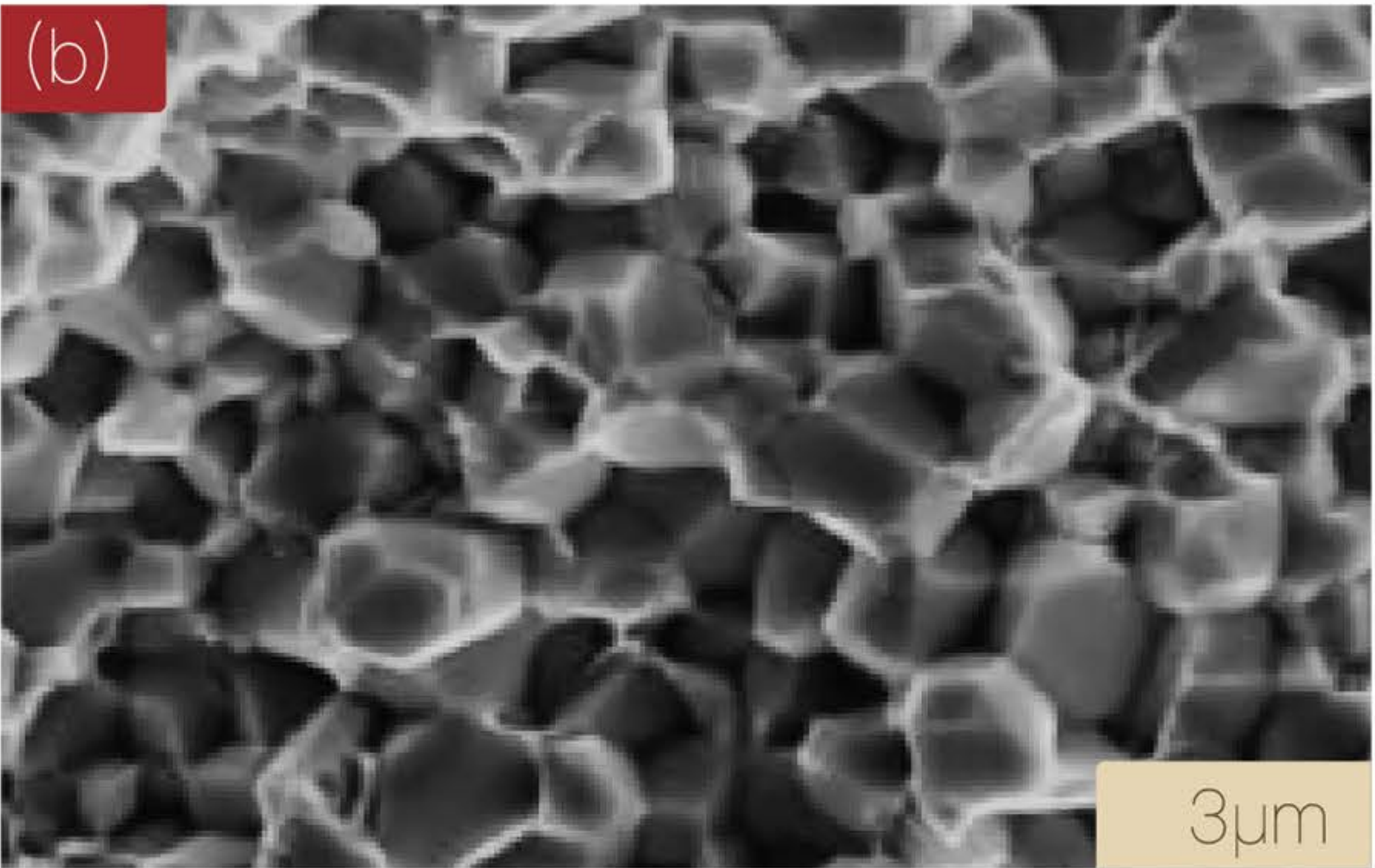
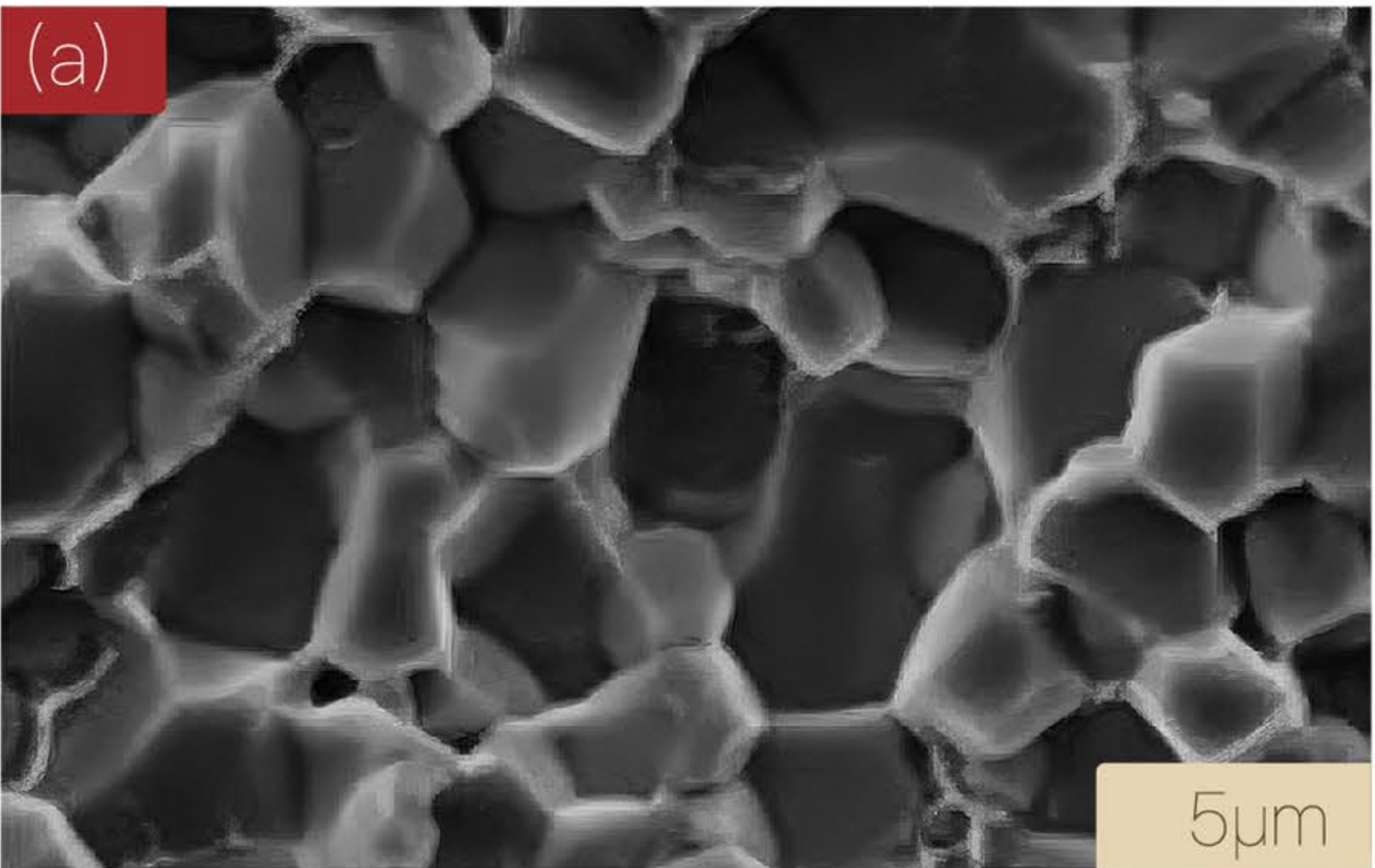
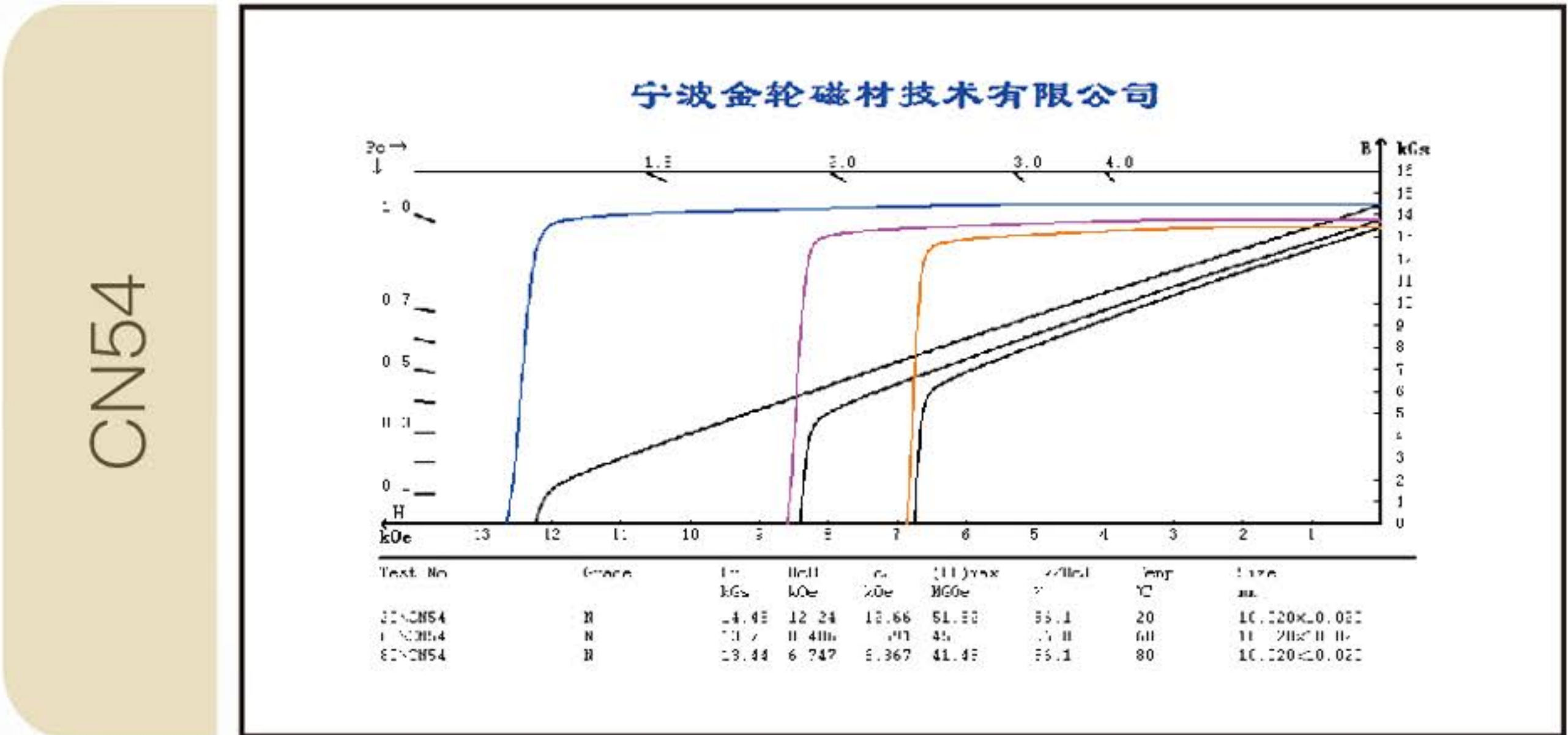
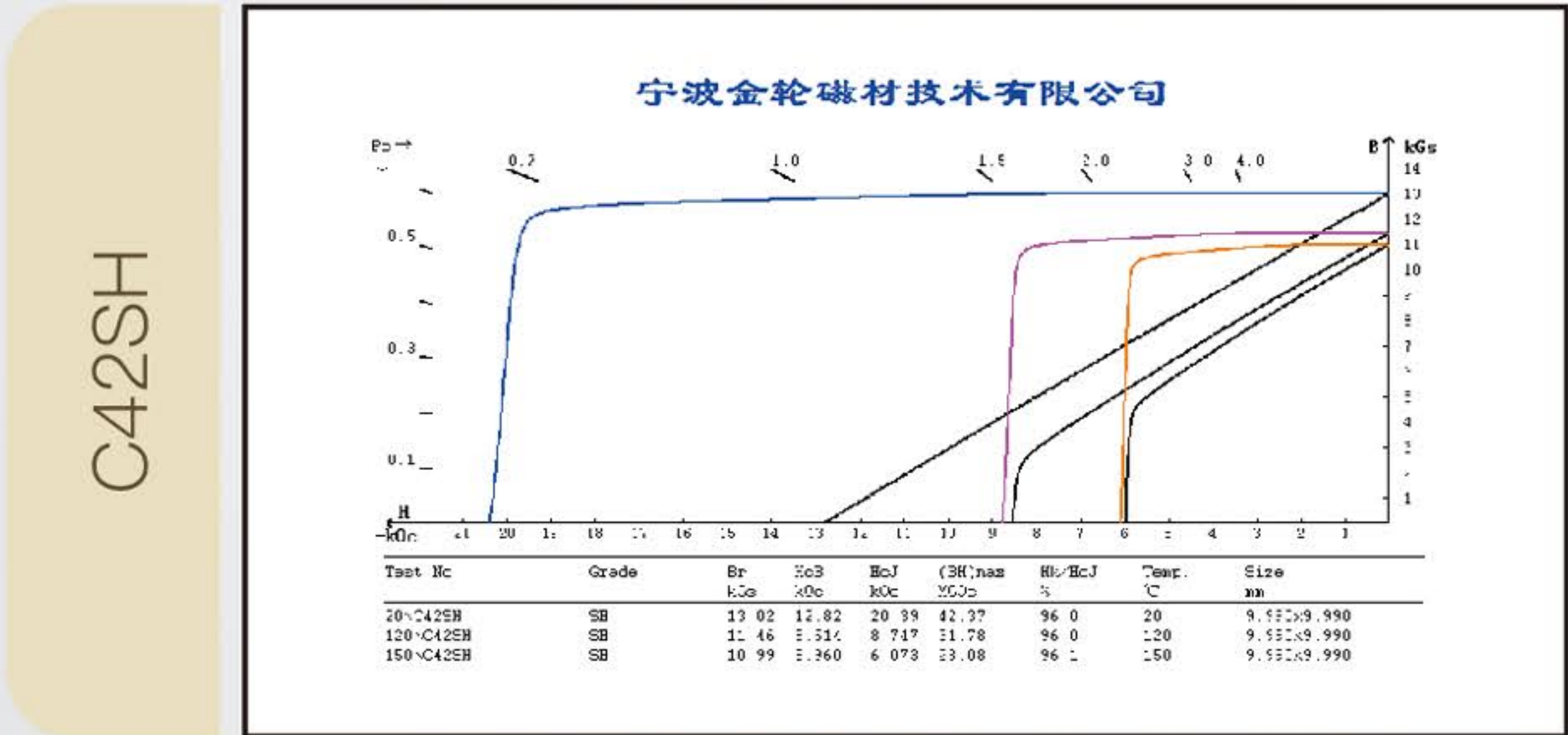


50H-HR



2 High-Performance CeFeB Hybrid Rare-Earth Technology

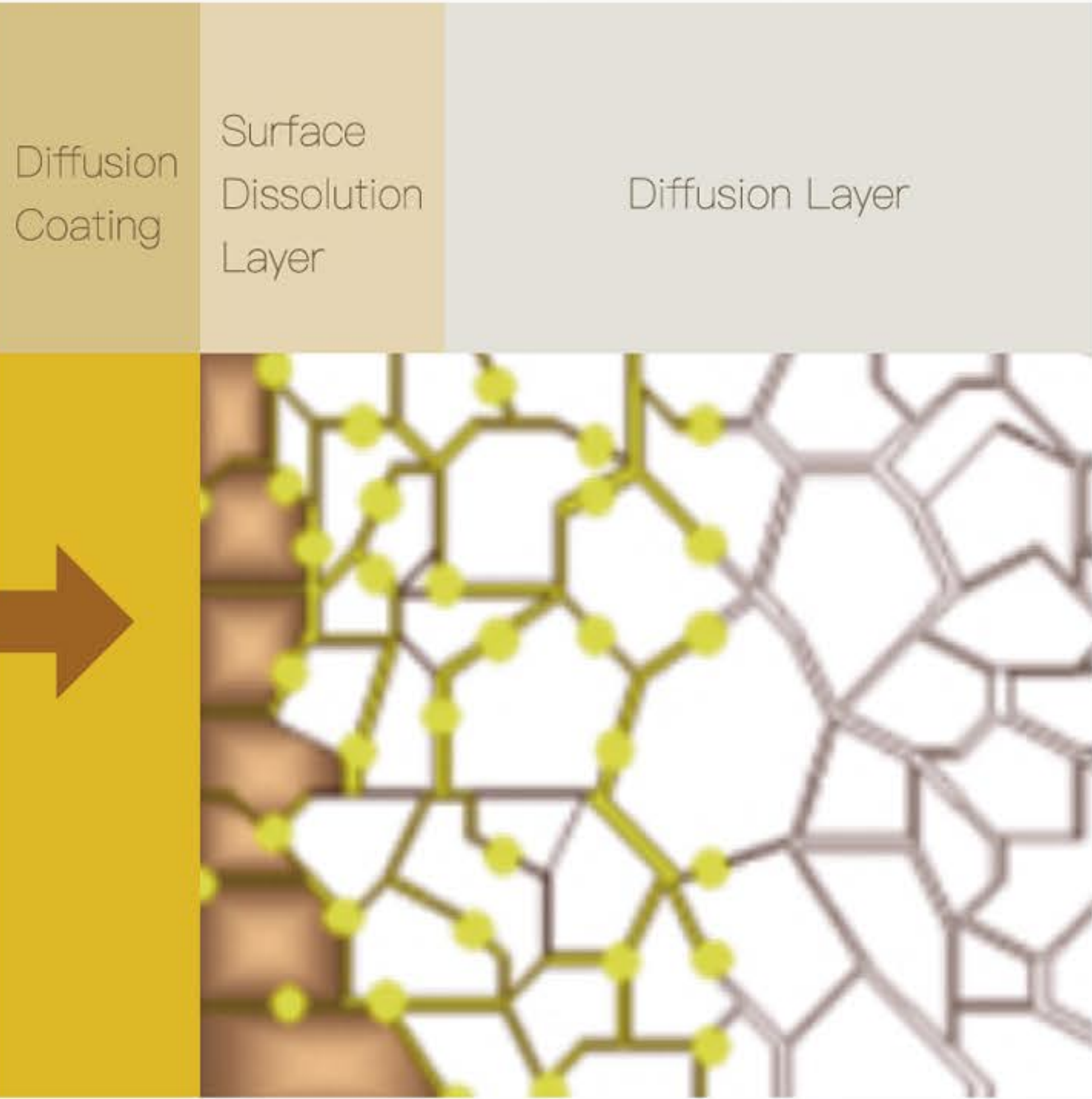
- Saves 30-50% critical rare earths via precise Ce/Pr/Nd ratios, achieving 54 MGOe and high performance with lower cost.



3 Grain Boundary Diffusion with Low Heavy Rare Earth

- Enhances coercivity by **5–10 kOe** via surface diffusion, using less than **0.6wt%** heavy rare earths for **200°C** applications.

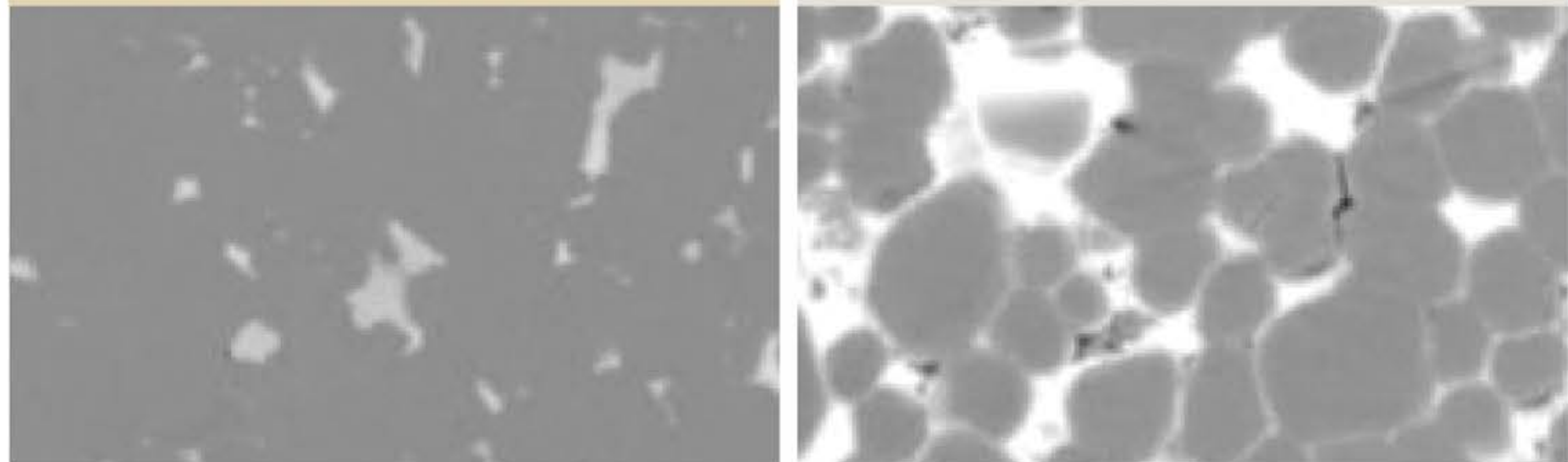
≤0.6wt% Dy/Tb



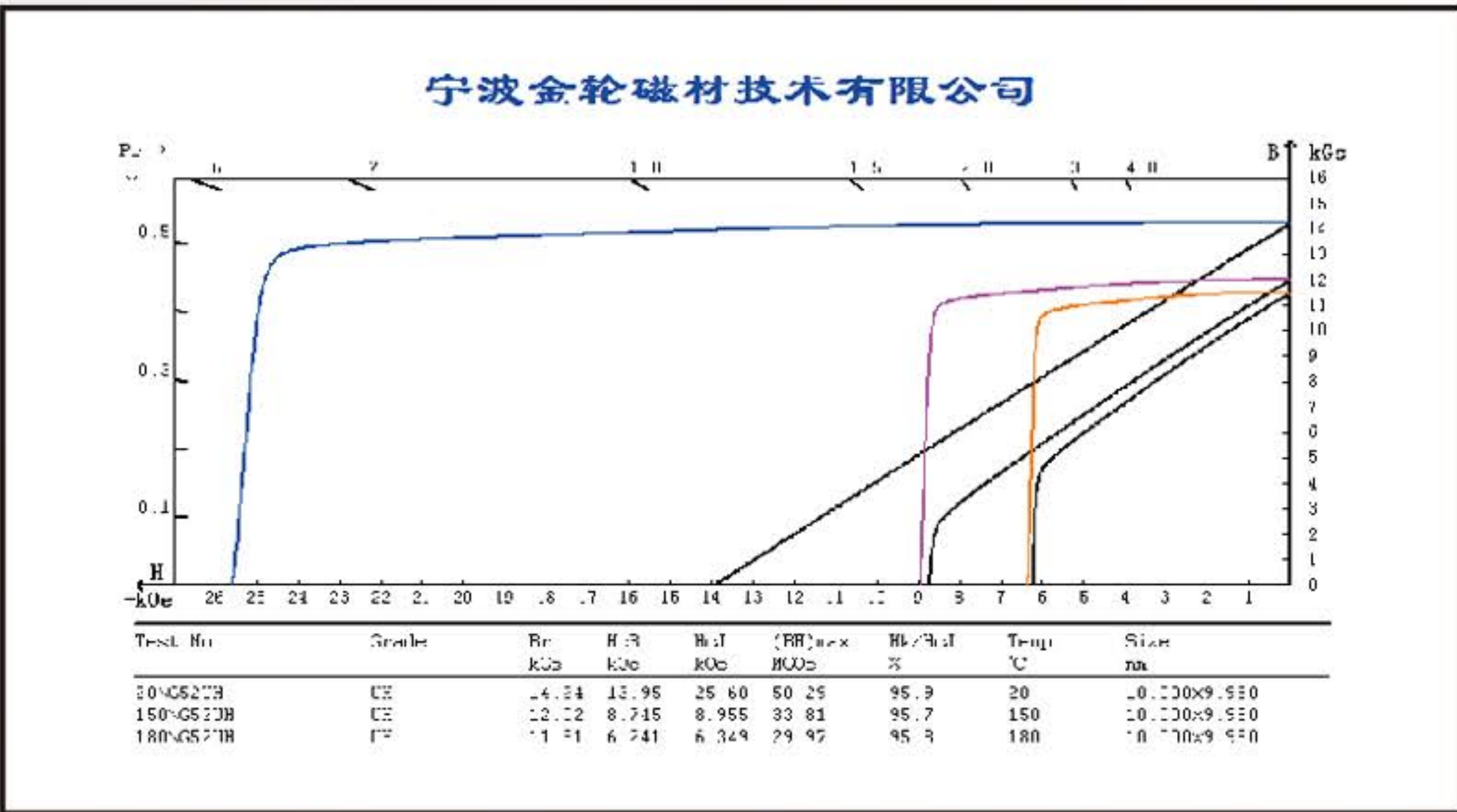
Grain Boundary Diffusion

Before

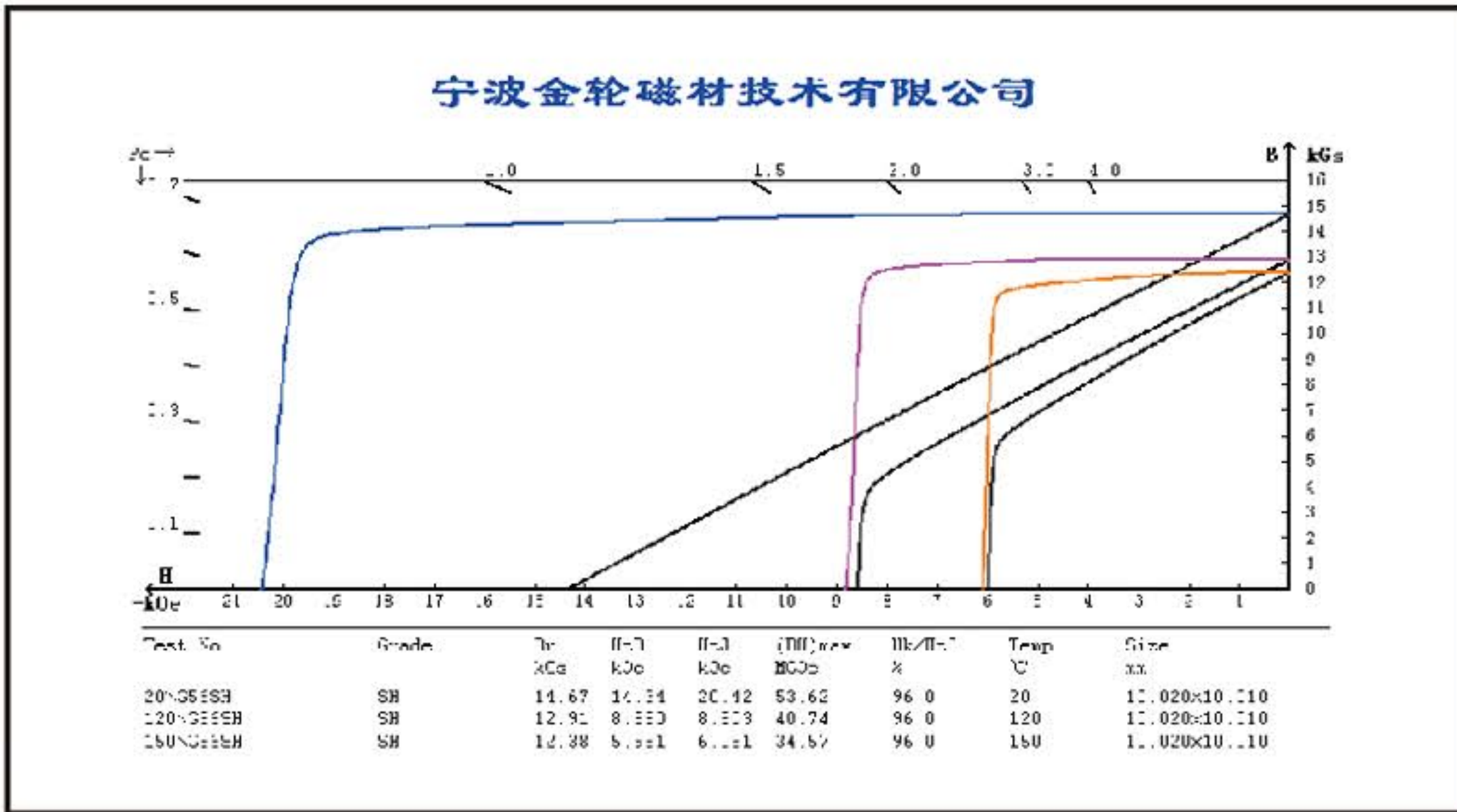
After



G52UH

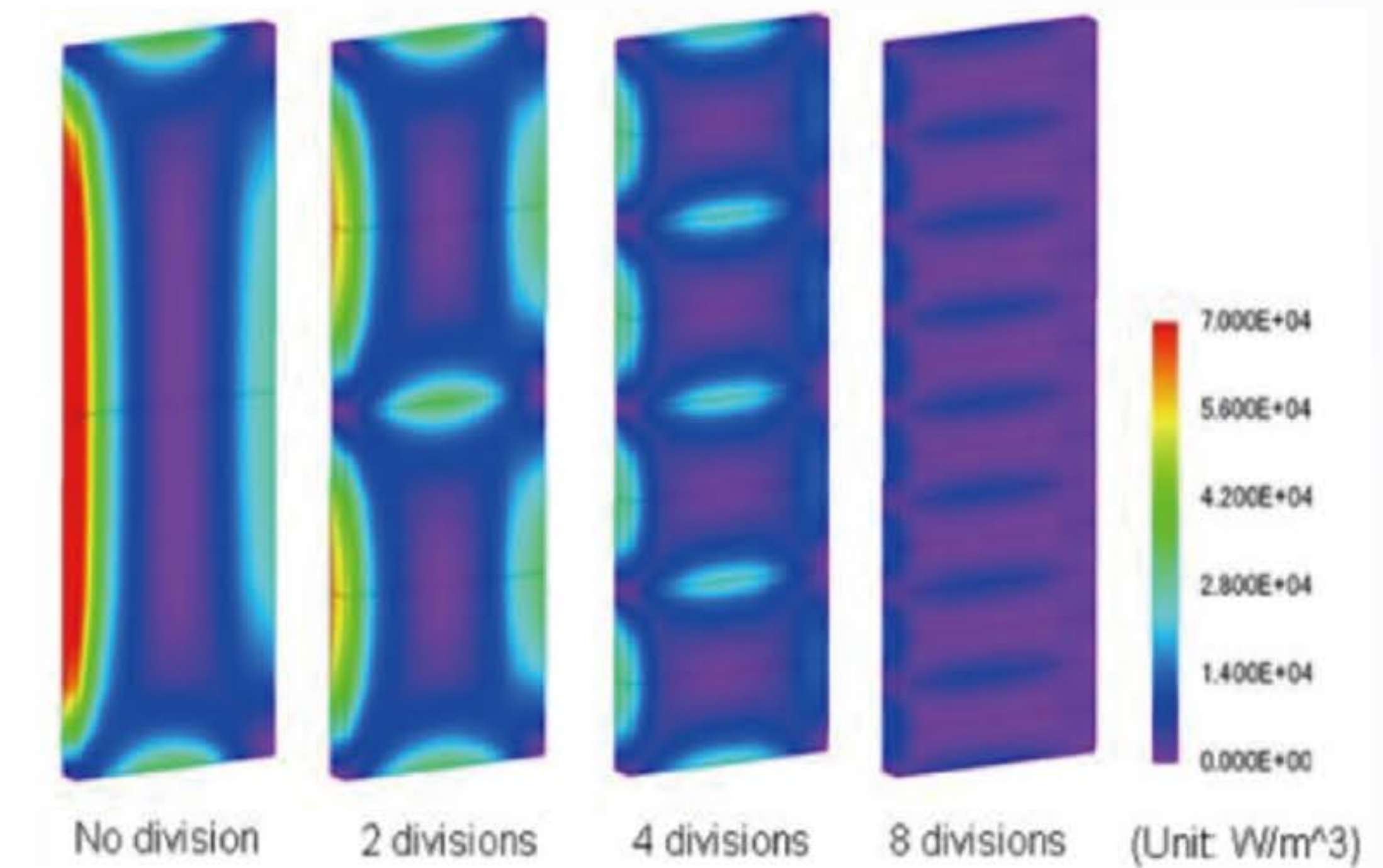
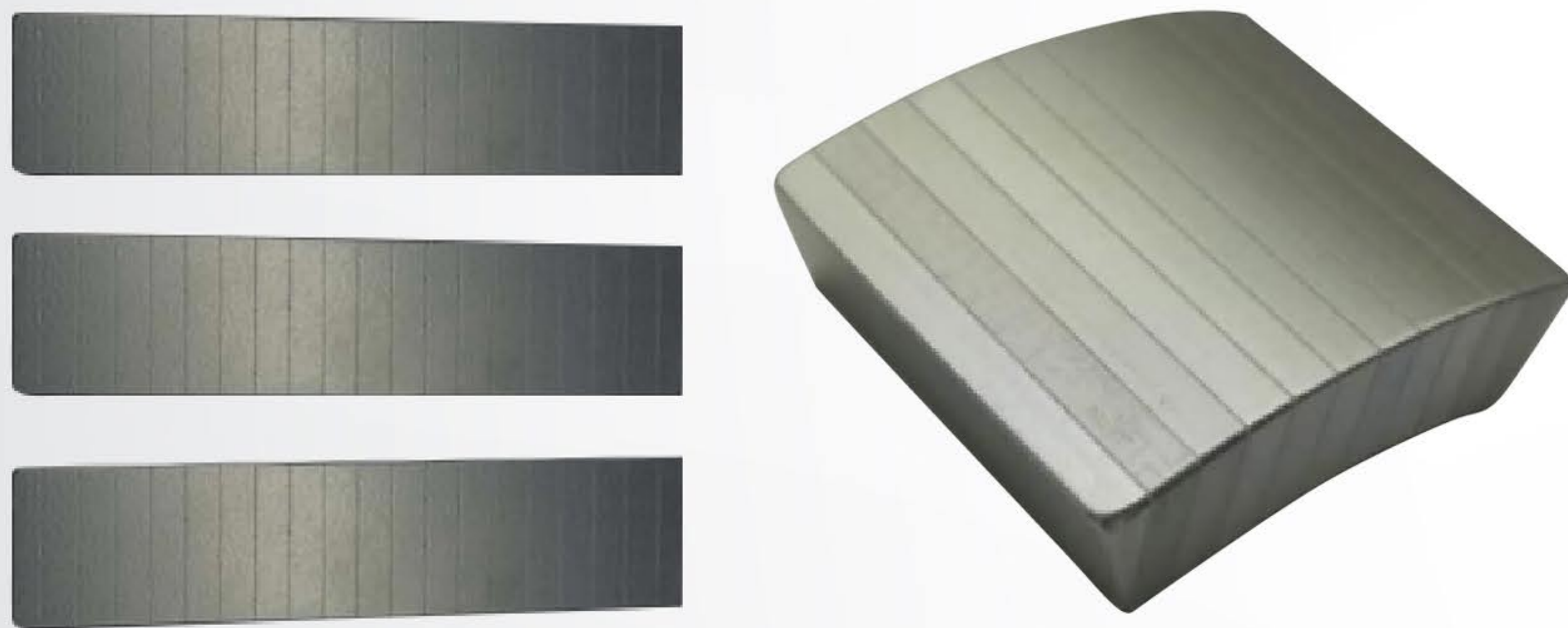


G56SH

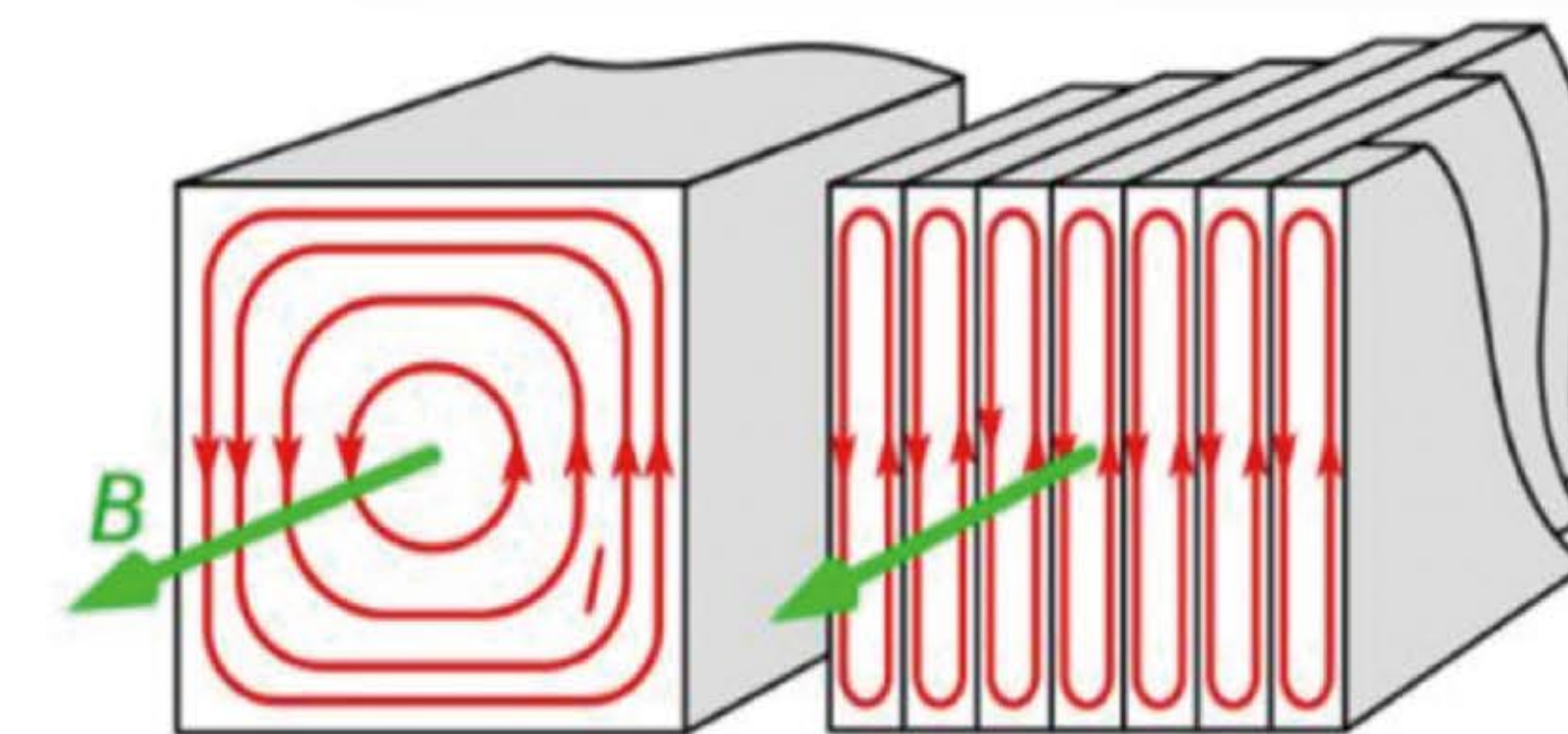


4 Laminated NdFeB Technology

- Laminated NdFeB magnets can reduce eddy current losses by **40% to 60%** and increase the magnet's heat resistance by **20°C to 30°C**.

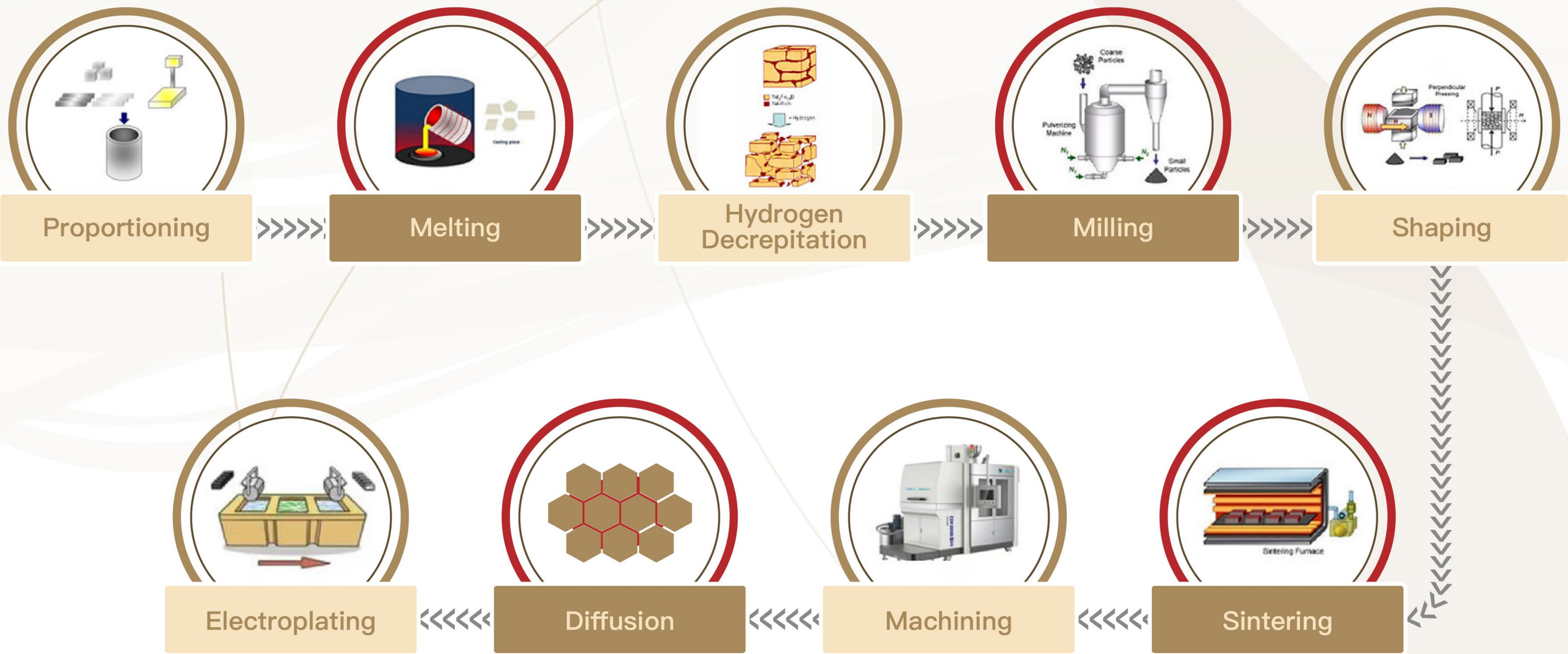


Eddy Current Loss Distribution Comparison
(Laminated Magnets)



Magnetic Circuit Principle:
How Lamination Blocks Eddy Currents

Processing Techniques



TOP 6 Recommended Coatings
for Universal Industry

Recommended Coating	Overall Protection (Corrosion/Wear Resistance)	Cost-effectiveness (Value for Money)	Appearance Acceptance	Adhesion
Black Oxide	★★	★★★★★+	★★	★★★★★
Phosphating	★★	★★★★★+	★★	★★★★★
Color Zinc	★★★★	★★★★★	★★★★☆	★★★★★
Nickel-Copper-Nickel	★★★★★	★★★★	★★★★★	★★★★
Chemical Ni	★★★★☆	★★★☆	★★★★★	★★★★
Black/Gray Epoxy Resin	★★★★★	★★	★★★★	★★★★



Bright NiCuNi



Matte NiCuNi



Single-layer bright Ni



Chemical Ni



Blue white Zn



Color Zn



Black epoxy resin



Grey epoxy resin



Everlube



Parylene



Teflon



Phosphating

Four Major Production Bases



Jinlun First Factory

No.1658 North Third Ring Road West, Cixi, Zhejiang Province

Main Products



Core Positioning

- Intelligent Equipment
- Advanced Technology
- Automated Production



Zhejiang Headquarter (Jinlun No.2 Factory)

No.330 Xinxing First Road, Emerging Industrial Park, Zonghan Street, Cixi, Zhejiang Province

Main Products



Core Positioning

- High-Precision R&D
- Automated Production
- Smart & Eco-friendly
- Product Display
- Advanced Equipment



Jinlun Machining Center

No. 1559, North Third Ring Road West, Cixi, Zhejiang Province

Main Processes



Core Positioning

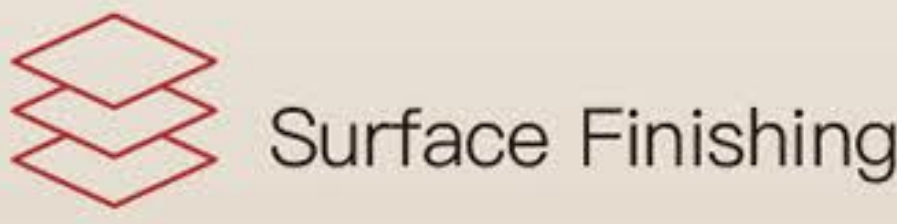
- Complete Processing Procedures
- Automated Production



Jinlun Electroplating Center

No. 1299, Lianfa Road, Cixi, Zhejiang Province

Main Processes



Core Positioning

- Smart & Eco-friendly
- Advanced Equipment
- Automated Production

Professional Engineering Technology Center

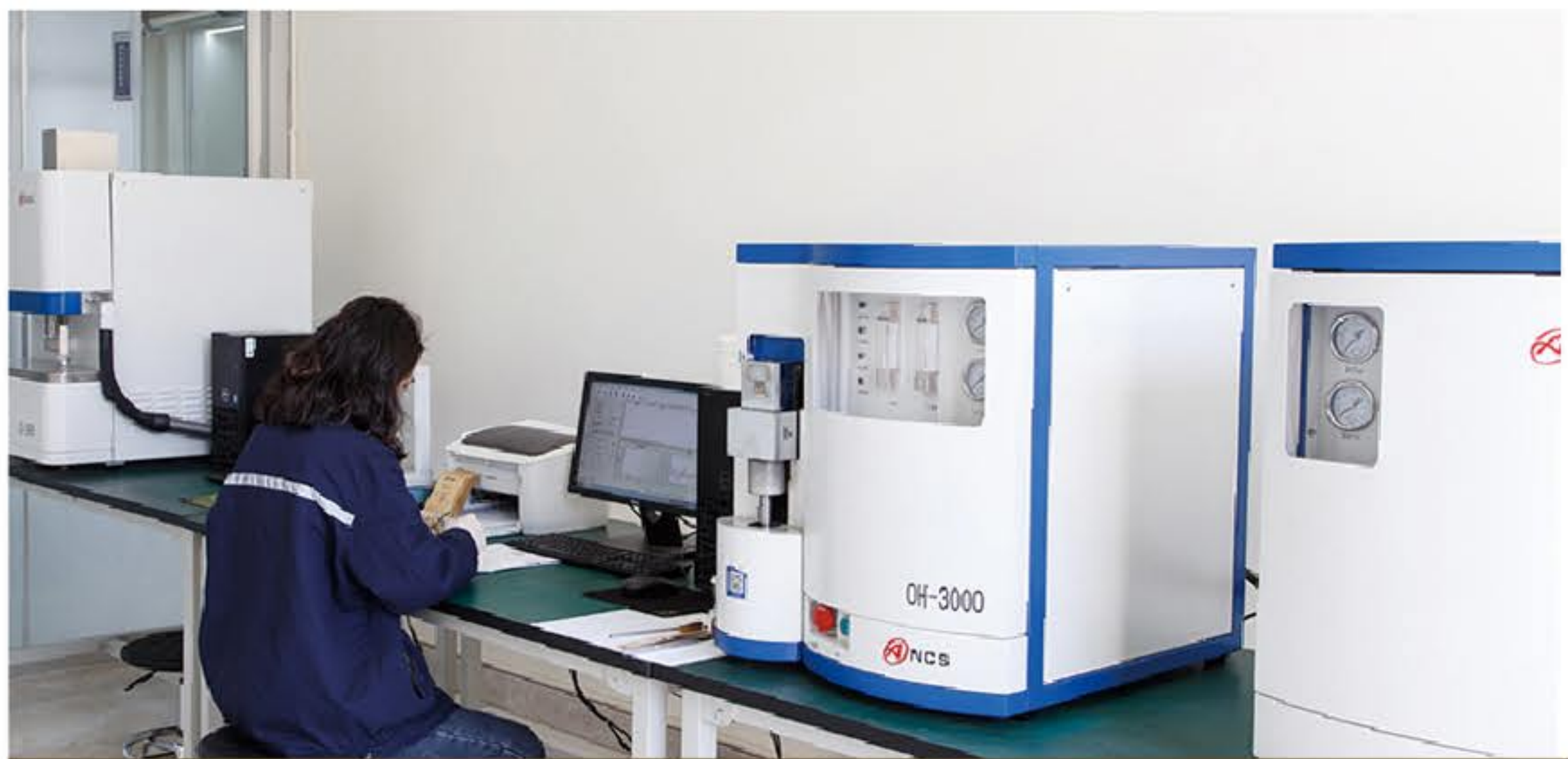
Our company has established a municipal-level engineering technology center, certified as a provincial-level laboratory. Equipped with comprehensive R&D facilities and a strong team of technical talent, we ensure continuous technological innovation.



ICP Tester



Image Dimension Measurement System



H.O.C.S. Analysis



Matallographic Analysis



Salt Spray Test



Permanent Maget Material Analysis



High & Low Temperature Humidity Test



Mechanical Property Testing of Materials

Advanced Manufacturing Equipment



The company operates with internationally standardized production steps and refined processes, encompassing batching, blank manufacturing, machining, electroplating, testing, and finished product workshops.

Equipped with complete modern laboratory hardware and software, as well as over 300 sets of domestic and imported production and inspection machinery, it can simulate various extreme environments to ensure long-term product reliability and stability.



Hydrogen Decrepitation Workshop



Finished Product Workshop



Jet Milling Workshop



H.O.C.S. Analysis



Laser Marking Workshop



Melting Workshop



Shaping Workshop



Automated Final Inspection



Sintering Workshop

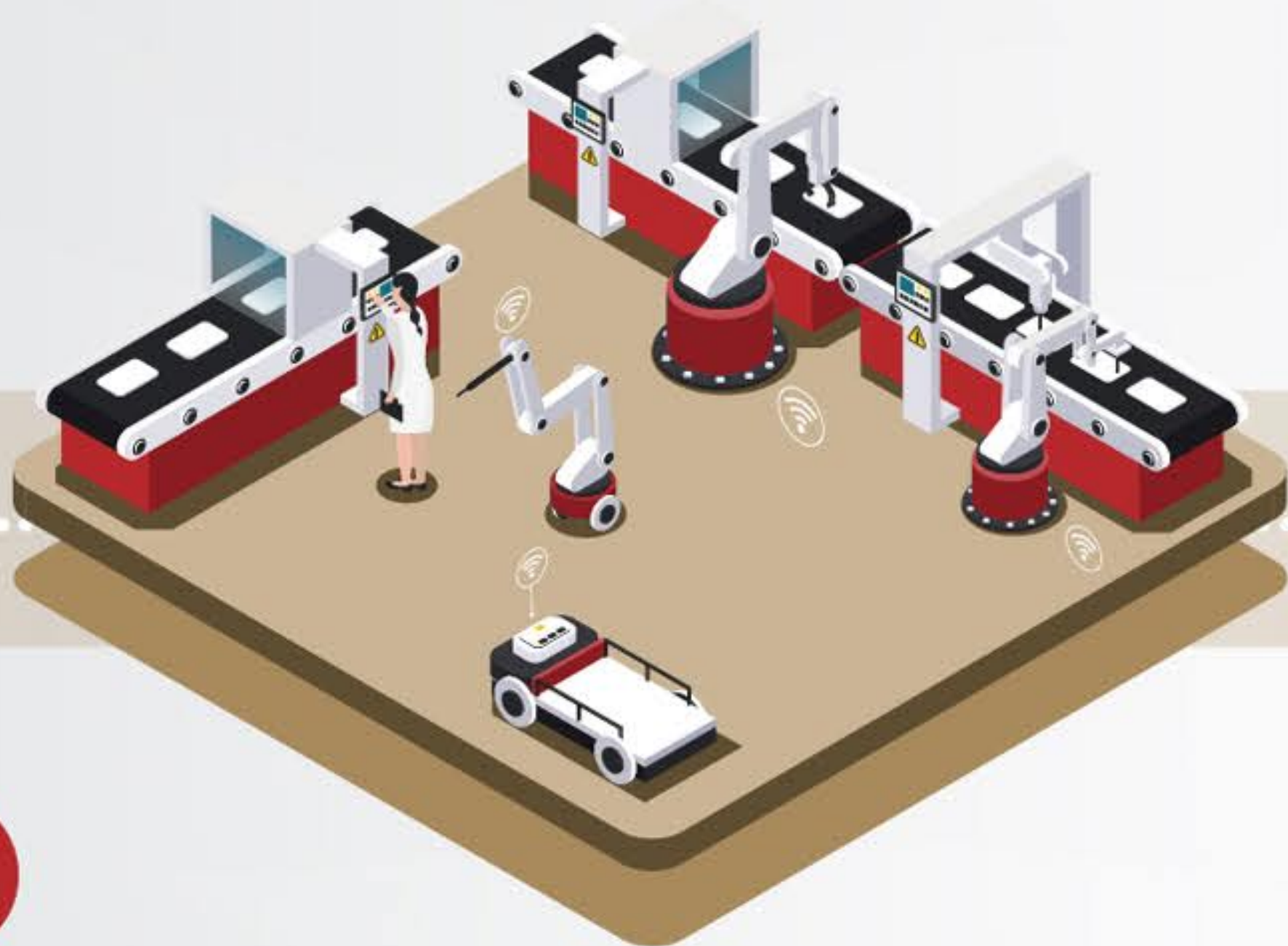
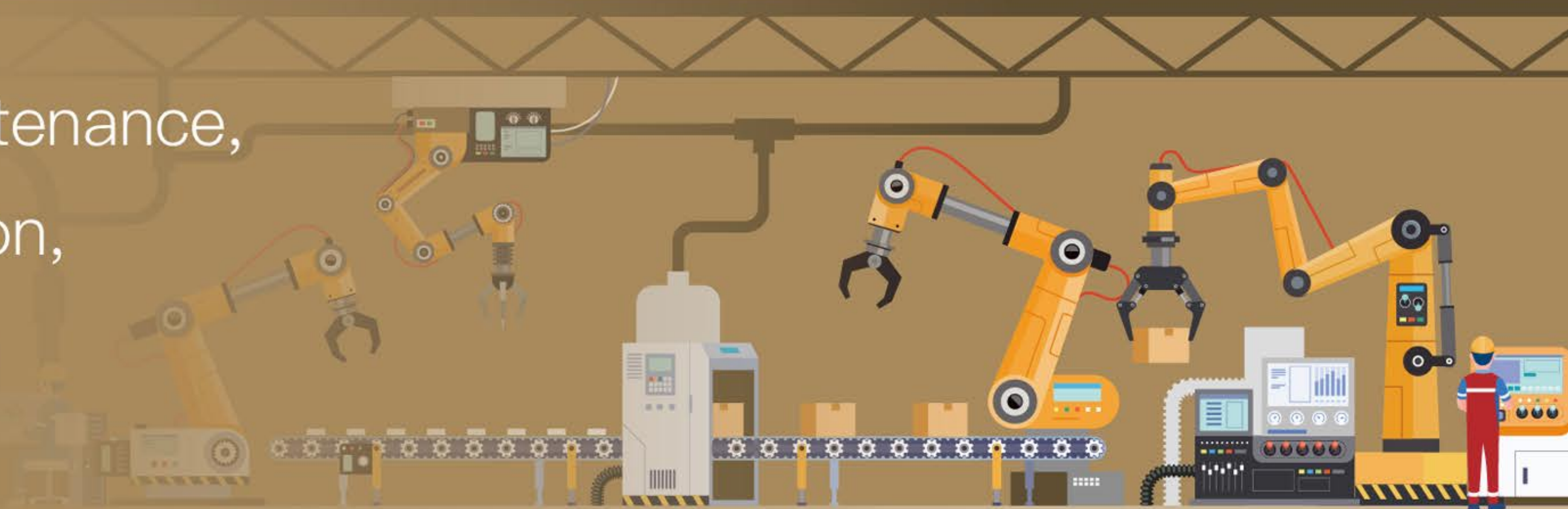


Image Dimension Measurement System

Intelligent full-process Management

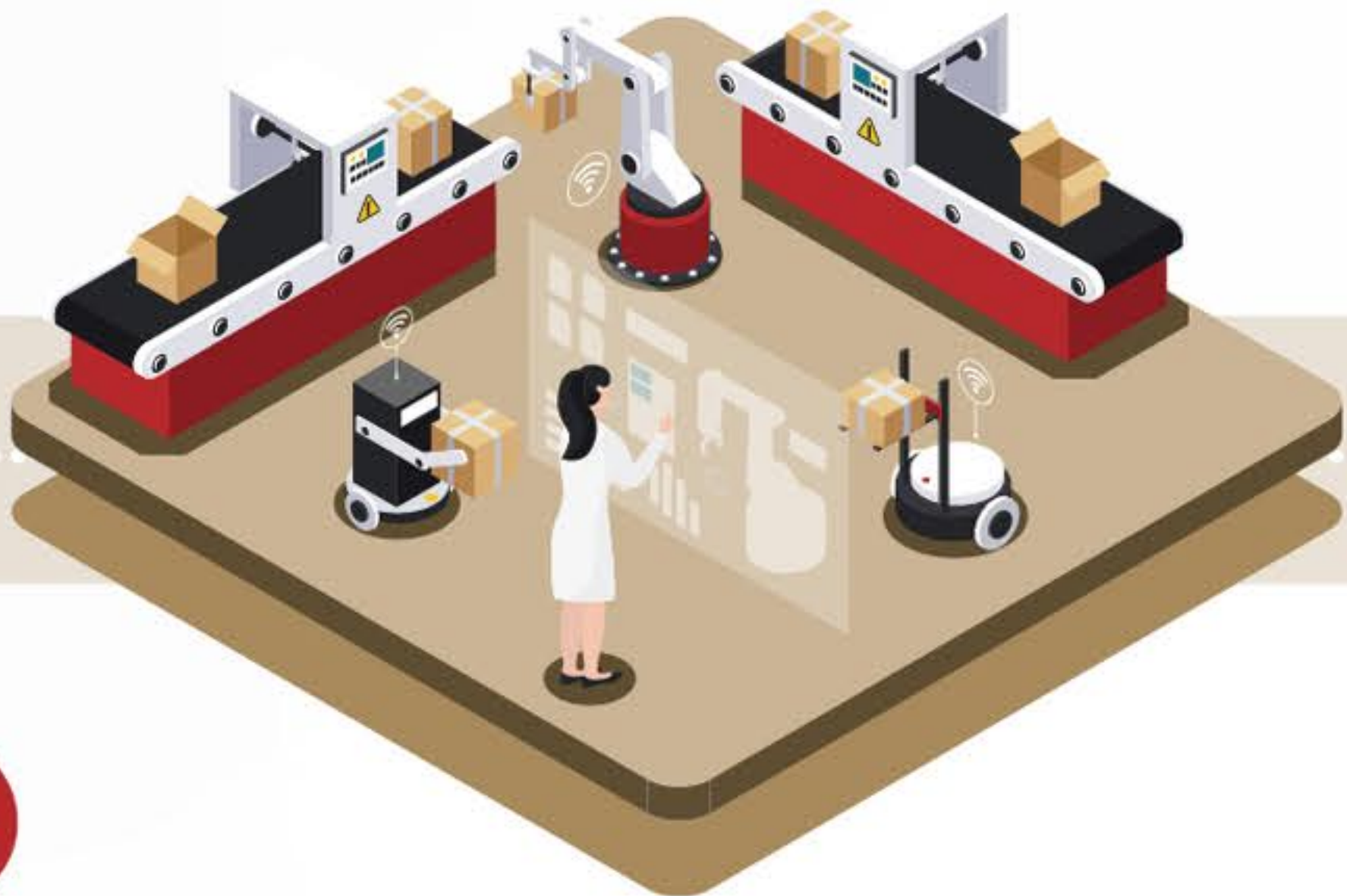


Covering production planning, data collection, quality management, equipment maintenance, and material management, we achieve integrated automation, intelligence, digitization, and streamlined production processes to enhance the quality and efficiency of magnetic material products.



Automated Equipment Integration

- Core processes are fully automated, integrated with AGV smart logistics for unmanned material flow. A 100% unmanned rate in key processes ensures production efficiency and batch consistency.



Digital Management Platform

- Deep integration of MES/ERP/WMS systems enables real-time production decisions via data dashboards. AI-driven analysis continuously optimizes processes, maximizing flexible production and resource efficiency.



Intelligent Quality Inspection

- Machine vision and sensor technology enable 100% online inspection with $\pm 0.01\text{mm}$ accuracy. AI provides real-time alerts for quality deviations, shifting control from post-event checking to proactive prevention.



End-to-End Traceability Management

- Through a "one item, one code" system, we achieve transparent management from raw materials to finished products. This fulfills customers' highest demands for quality traceability and supply chain transparency.

Certification & Honors





National
High-Tech Enterprise



National-Level
"Little Giant" Enterprise



Four-Star
Green Factory



Key Cultivation Enterprise for
Ningbo Manufacturing Single Champion



30⁺ 项
30+ honors
and awards



10⁺ 项
10+ industry-specific
certifications



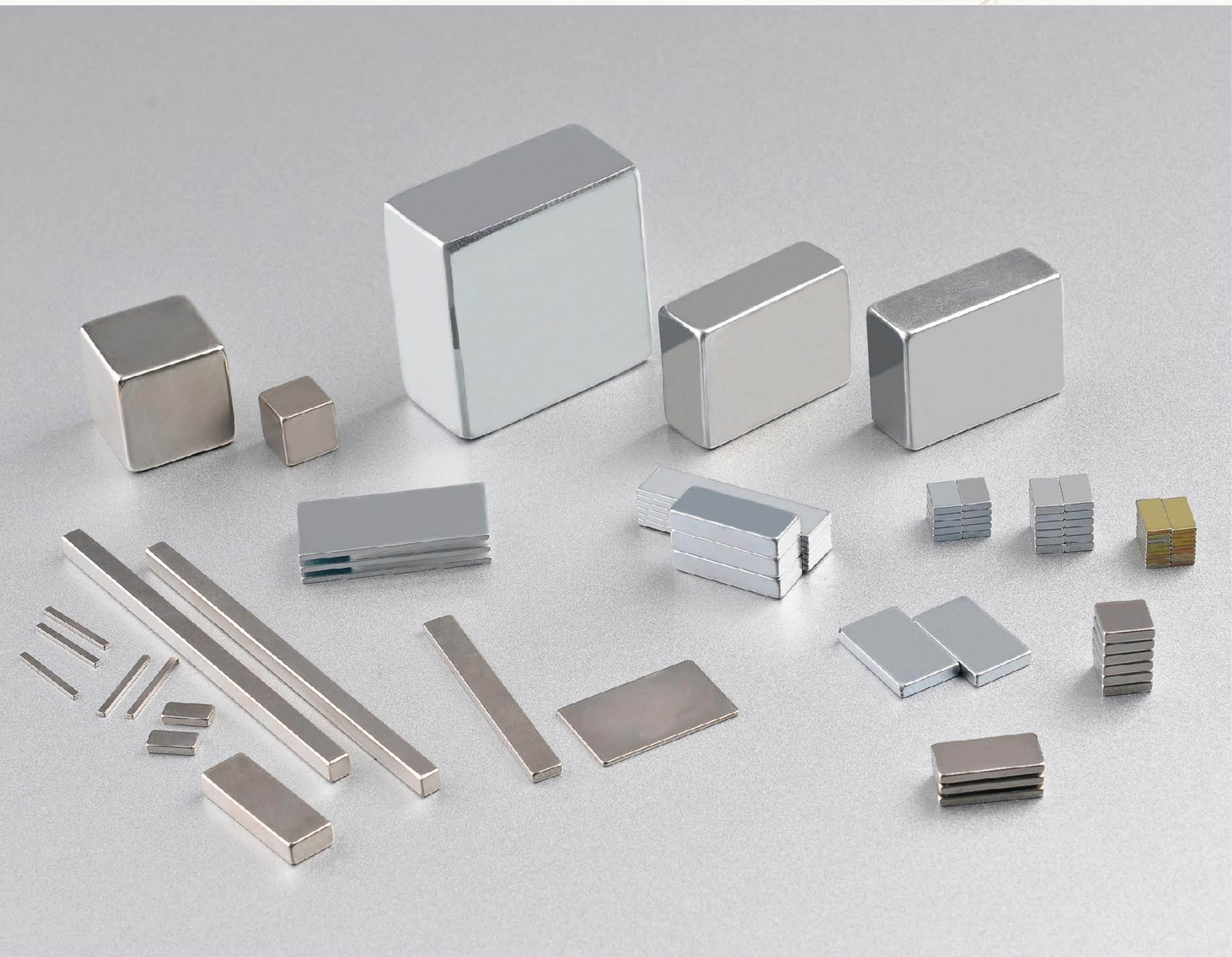
60⁺ 项
60+ items Publication of
invention and utility model patents



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Product Series

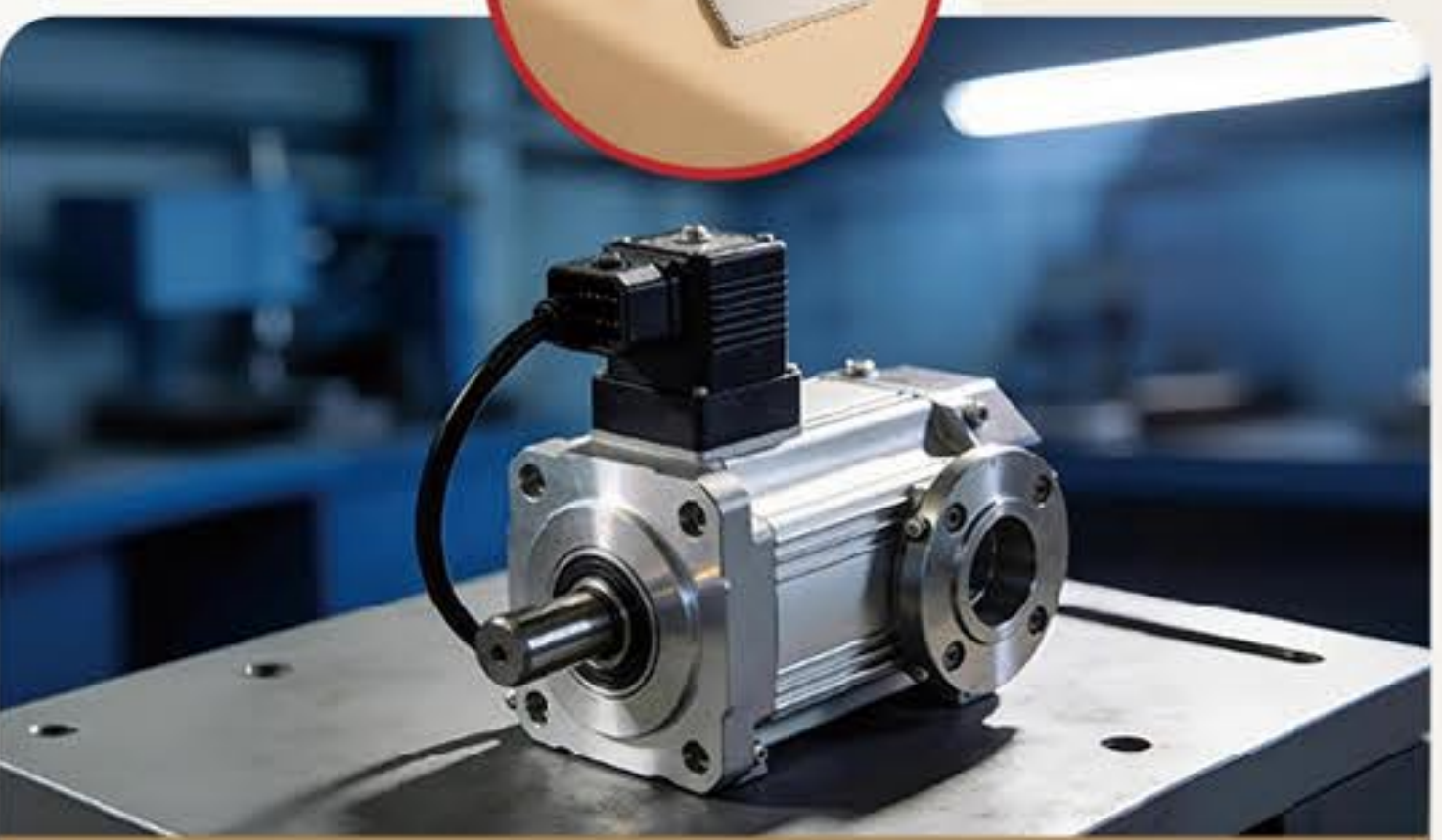


Block Magnet

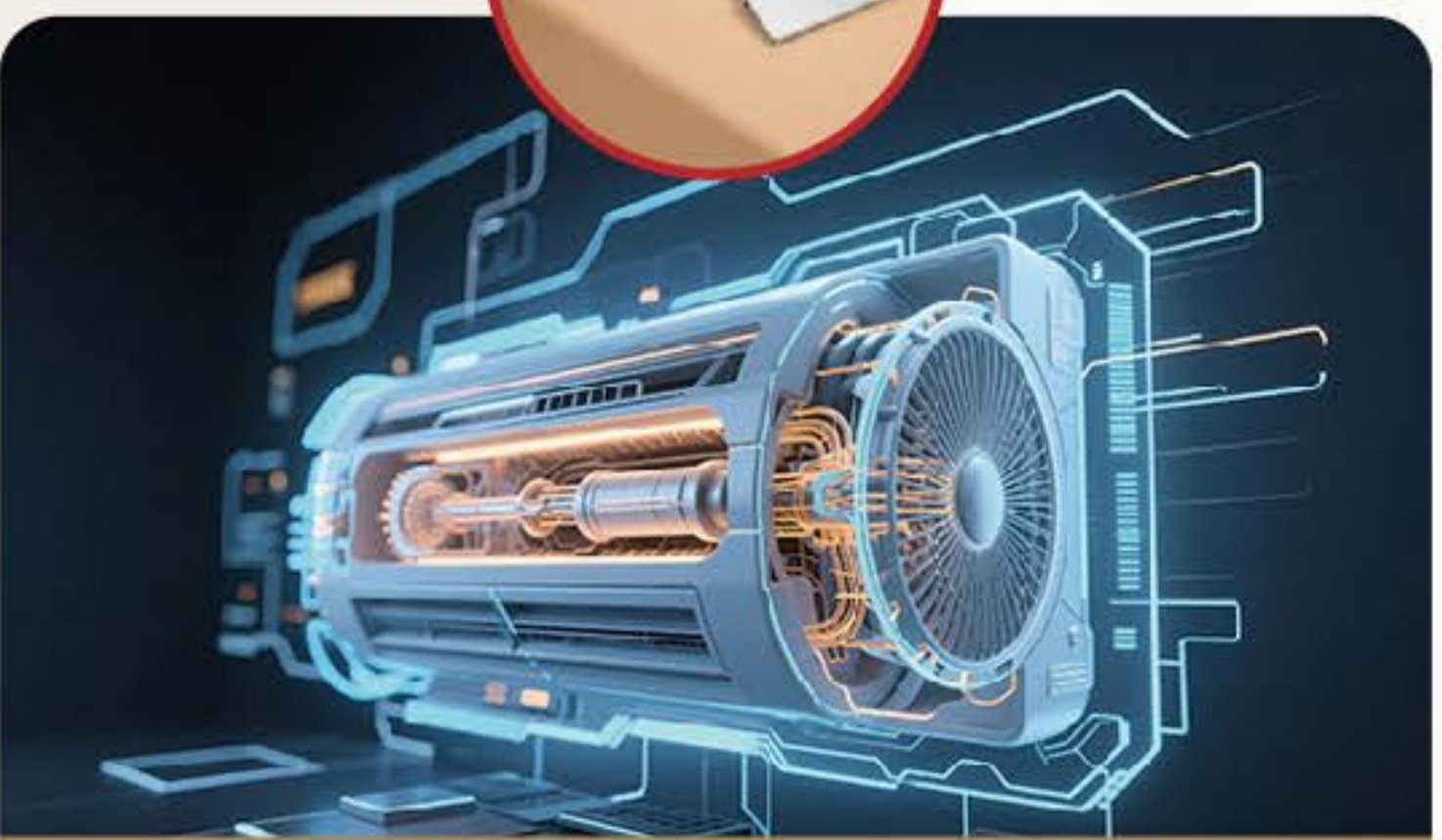
• Main products: 48M、48H、42SH、45SH、52UH



New Energy
Drive Motor



Servo Motor



Compressor Variable
Frequency Motor



Linear Motor



Wind Turbine



Power Tool Motor

Product Series



Disc Magnet

- Main products: N35, N42、N52、52M



Speaker Components



Magnetic Sensor



Magnetic Suction Accessories

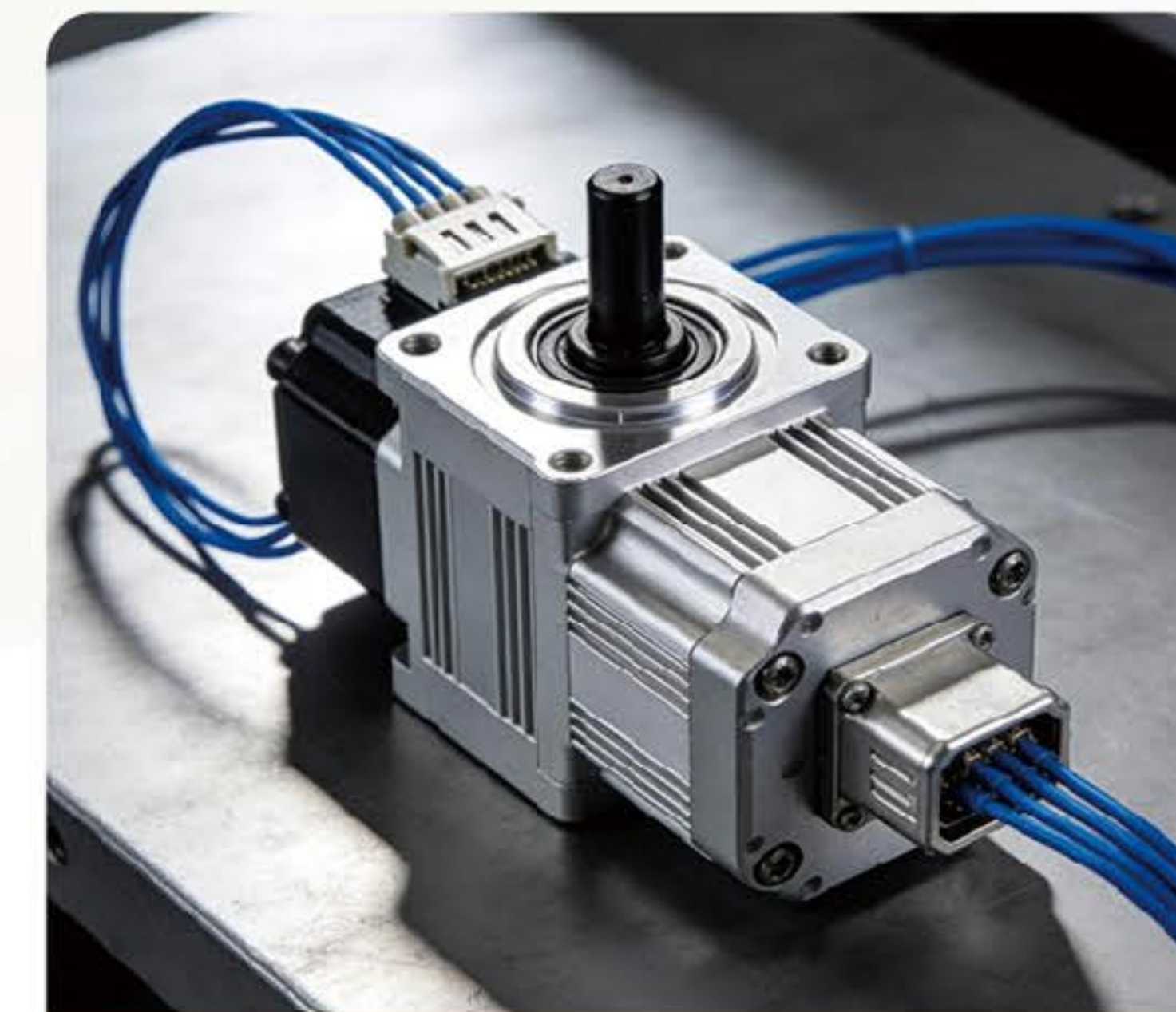


Product Series

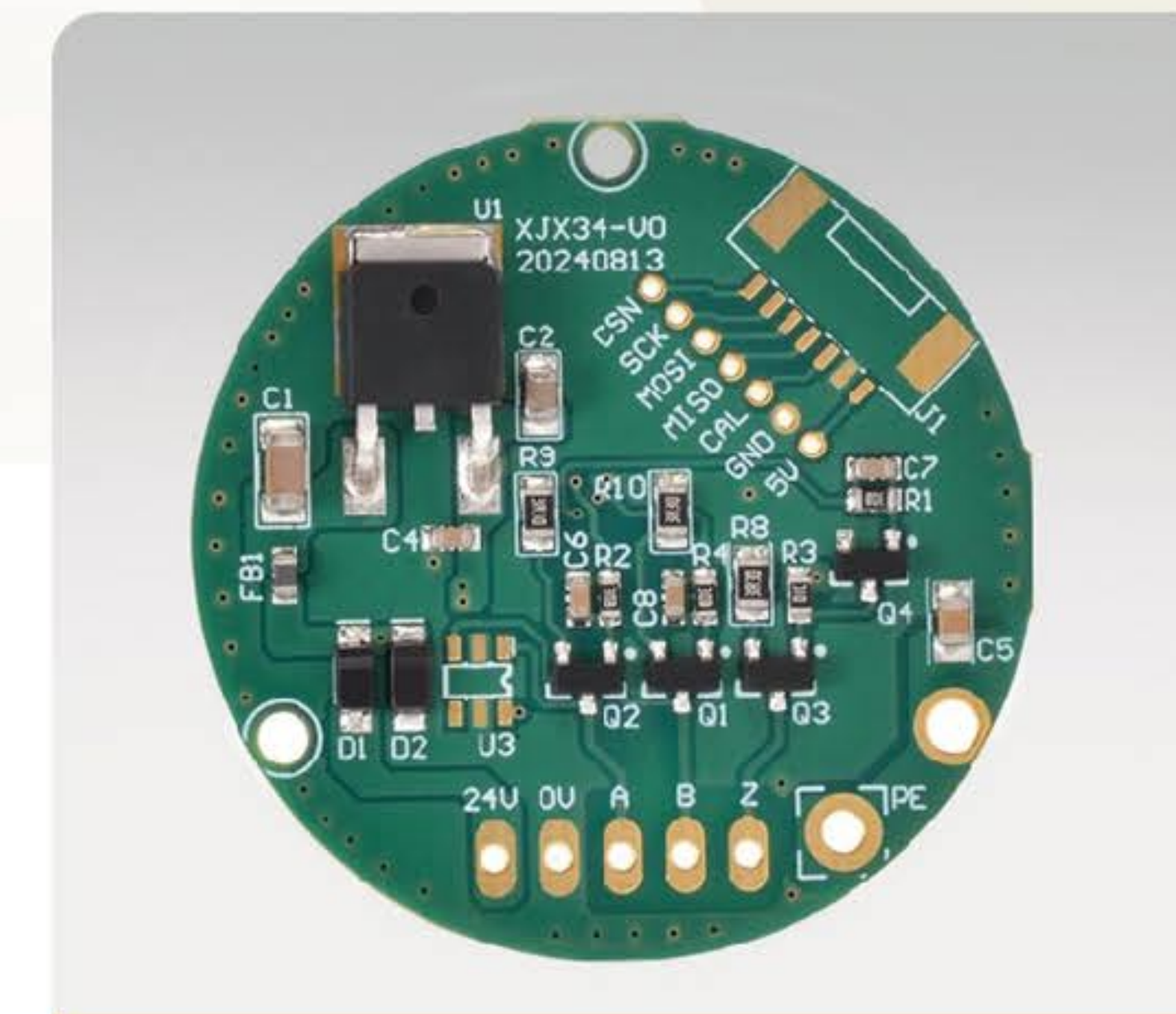


Ring Magnet

- Main products: 35M、38SH、45SH、52SH



Stepper Motor



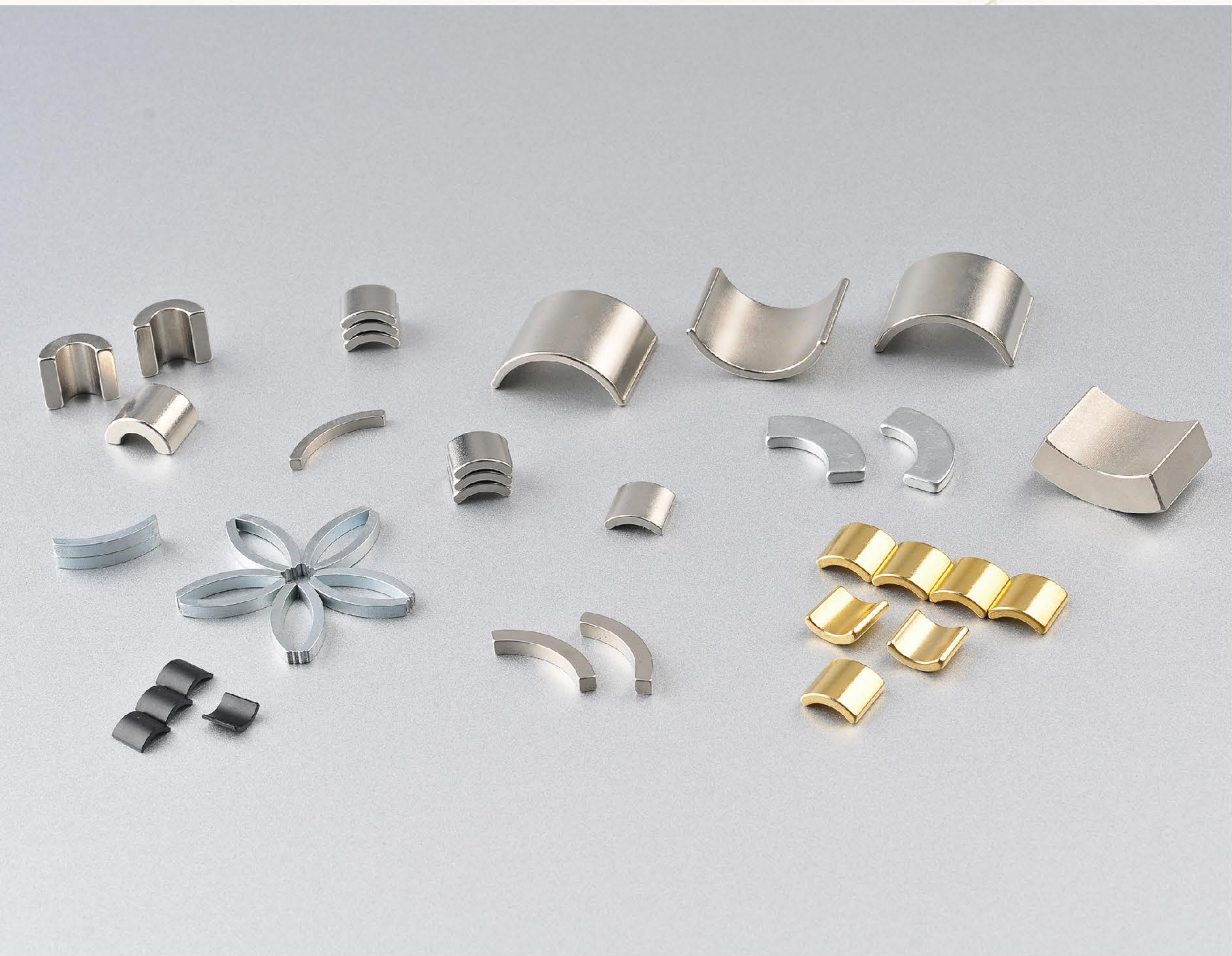
Magnetic Encoder



High-end Loudspeaker Components

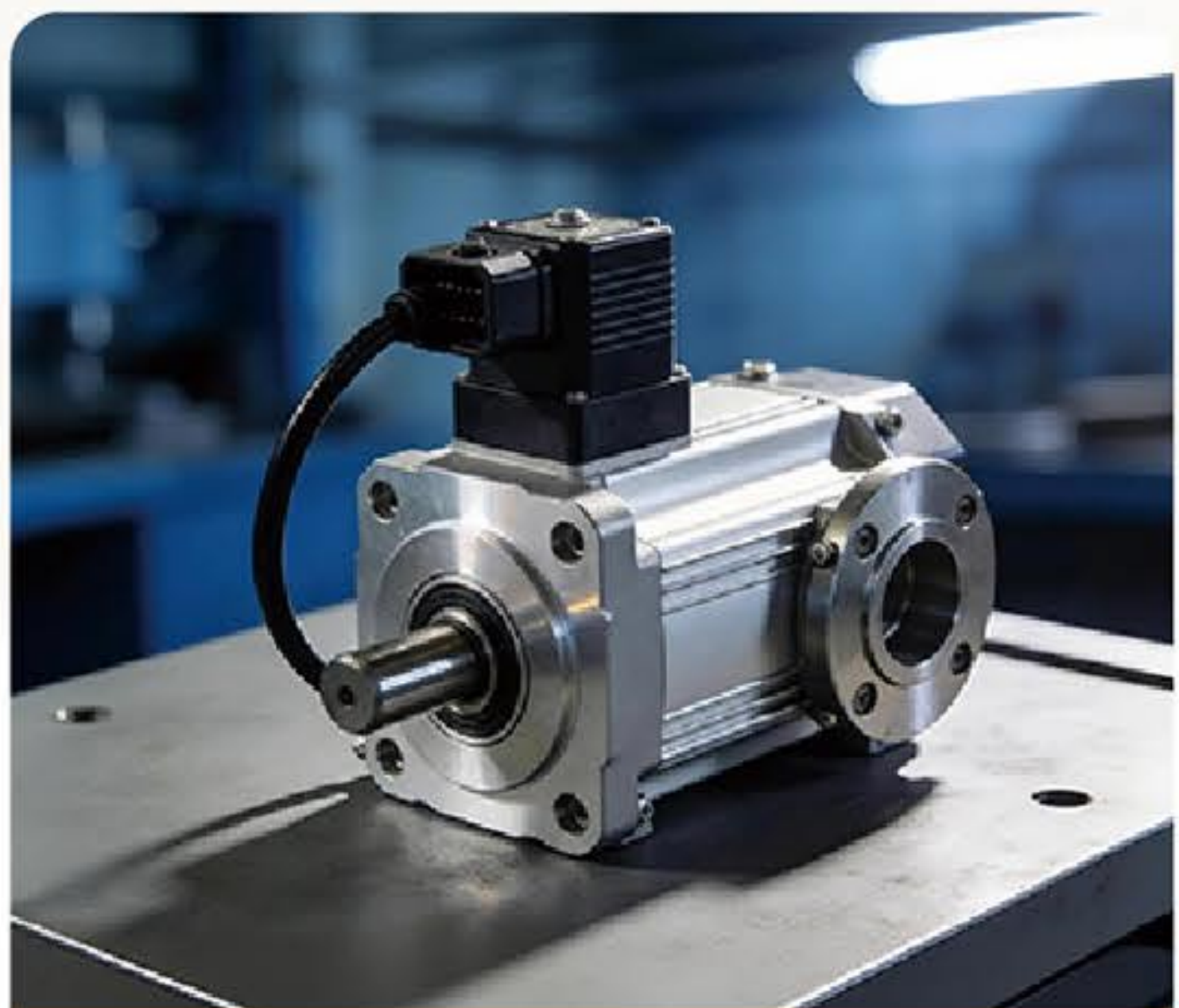


Product Series

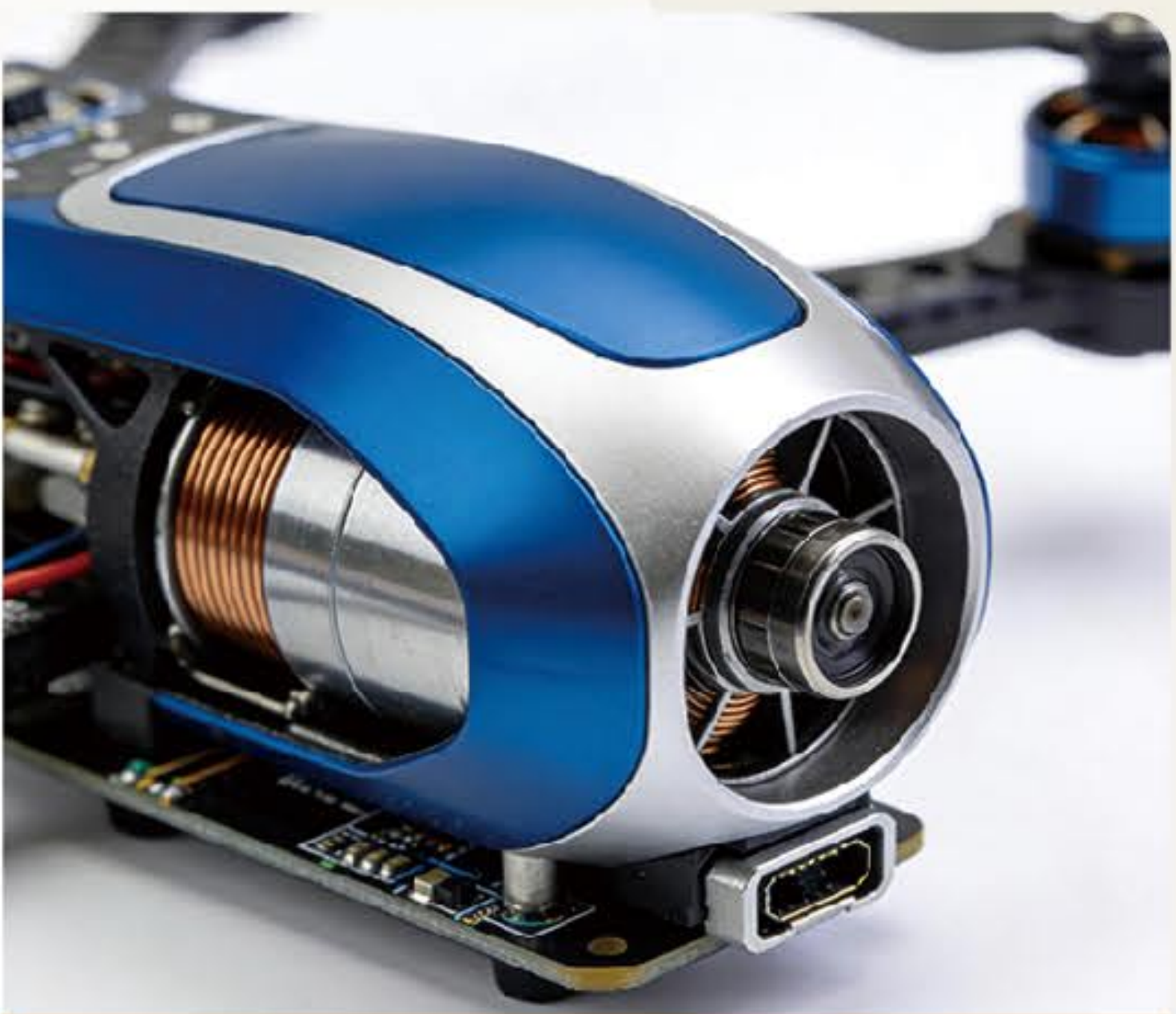


Arc Magnet

- Main products: 38SH、45SH、48SH、38UH



Servo Motor

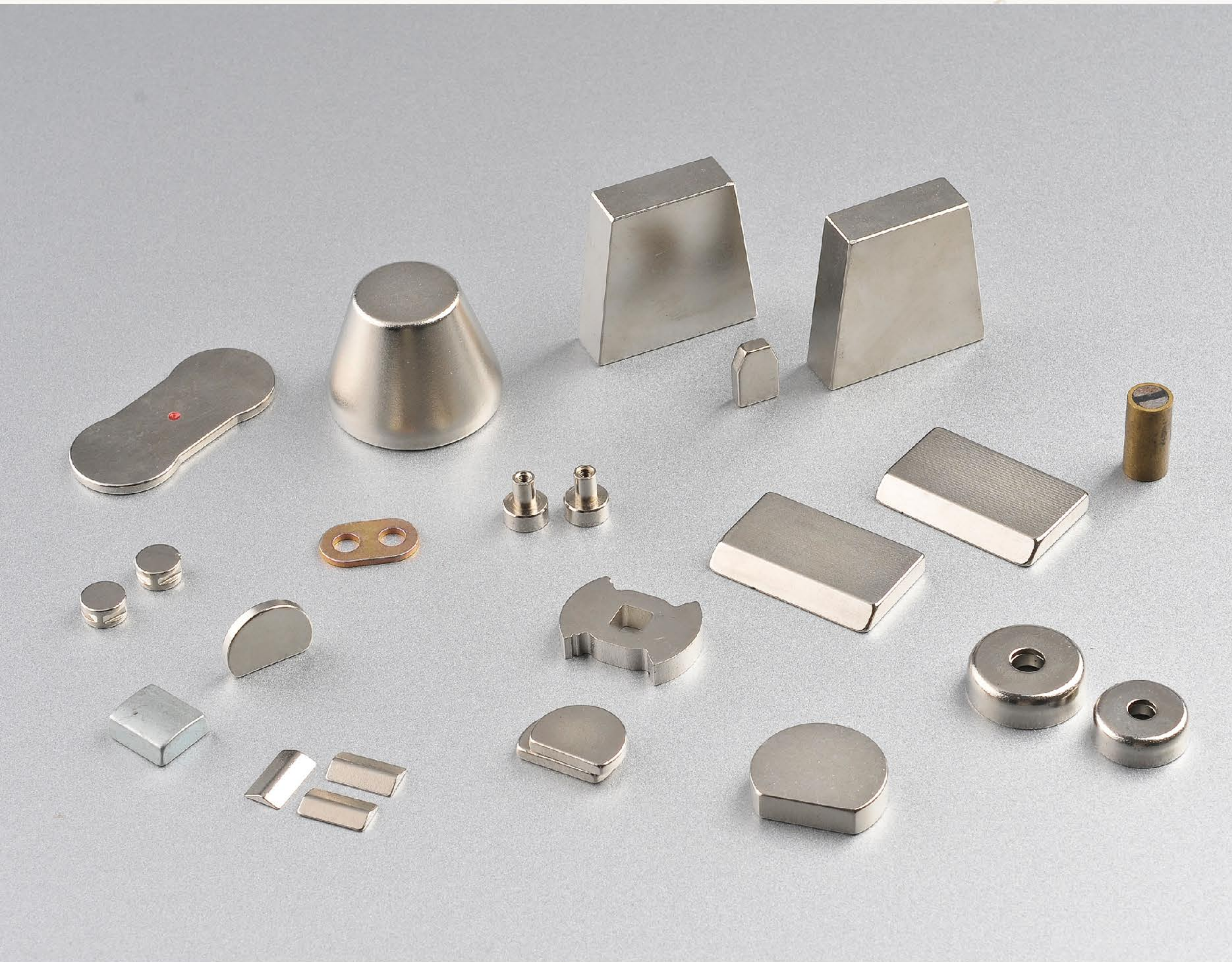


Unmanned Aerial
Vehicle Motor



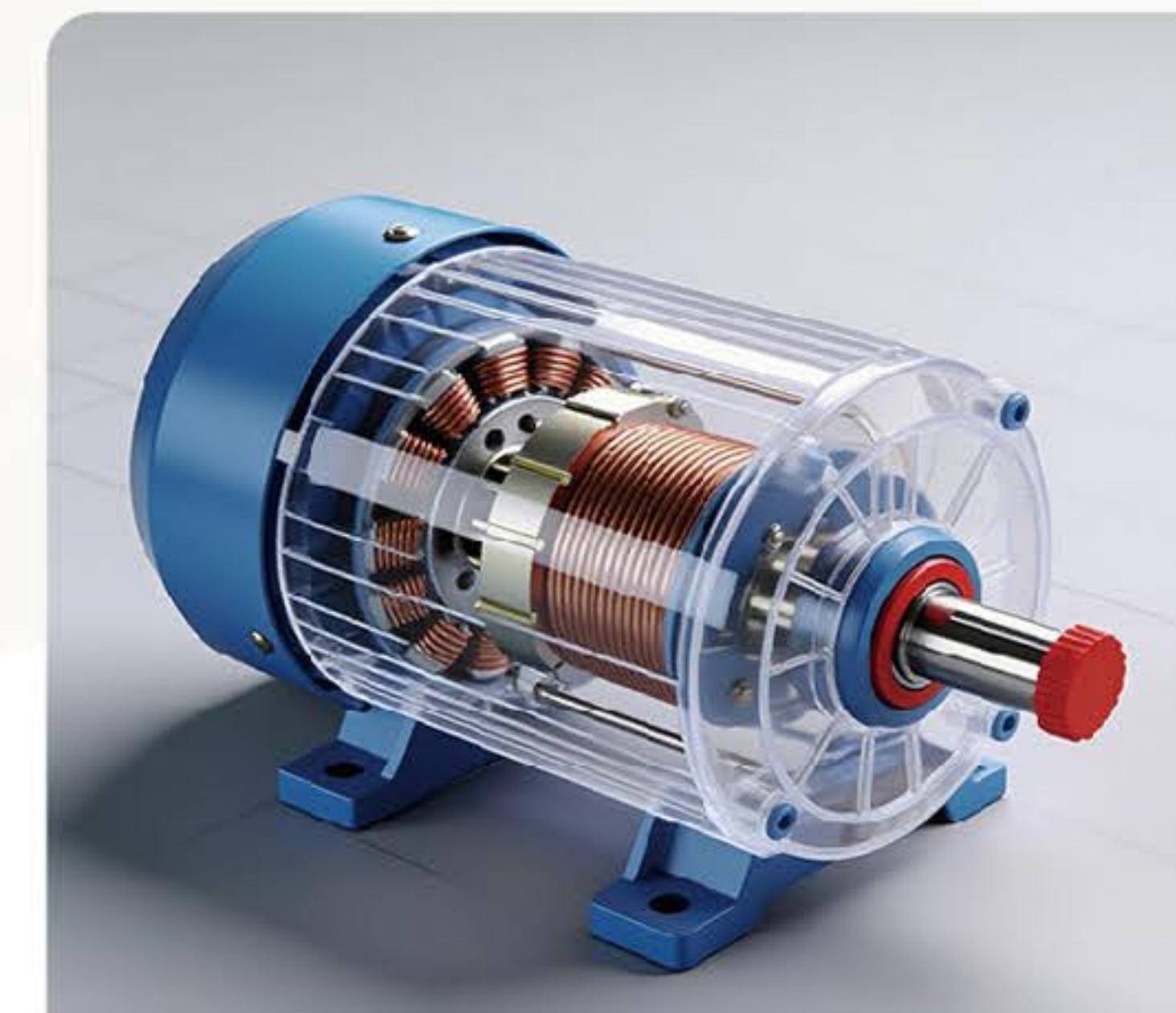
Traction Motor





Irregular Shape Magnet

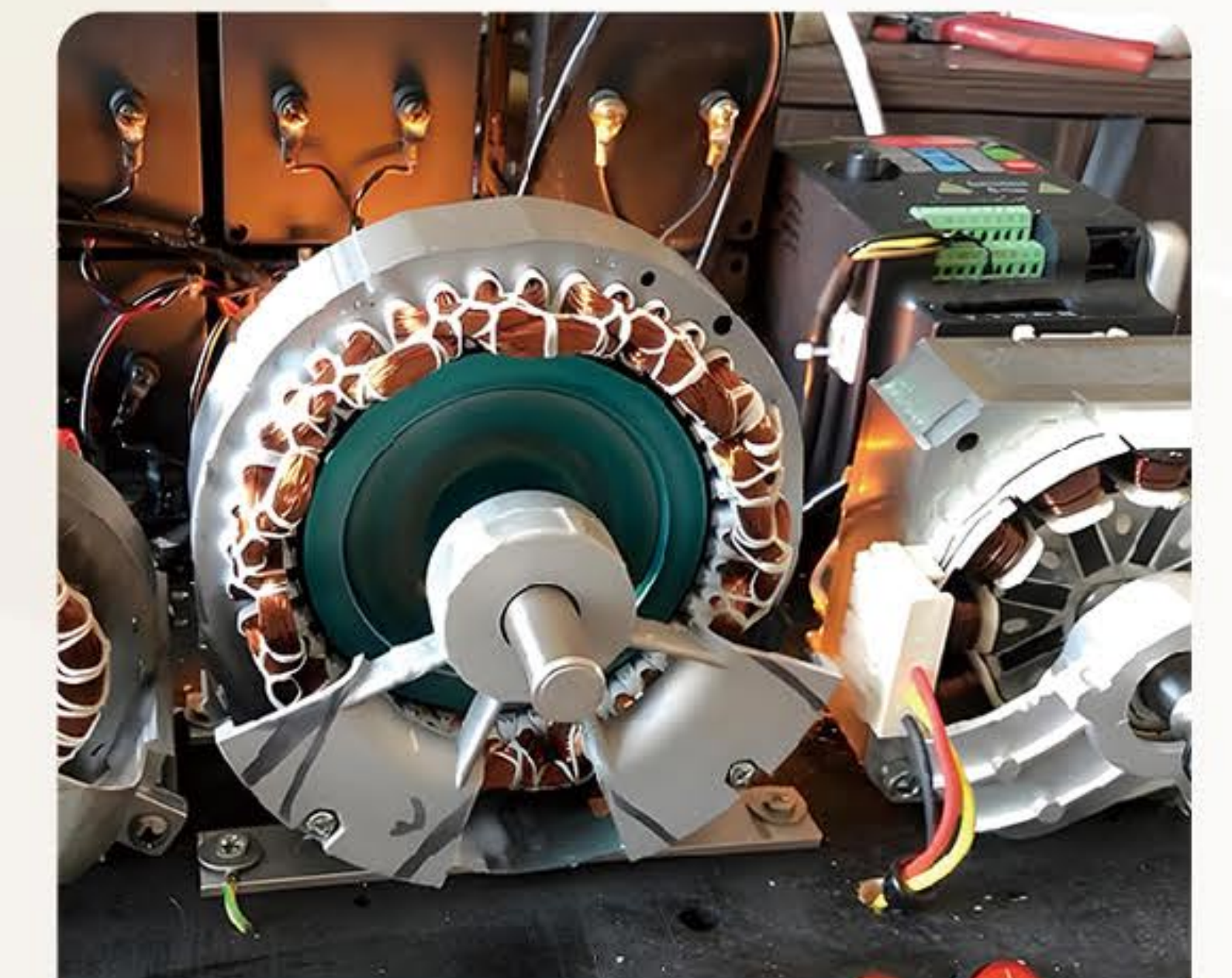
- Main products: N52、N58、48SH、56SH



EPS Motor



Axial Flux Motor
For Robots

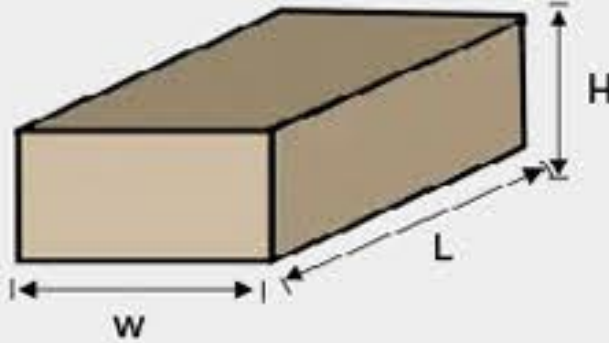
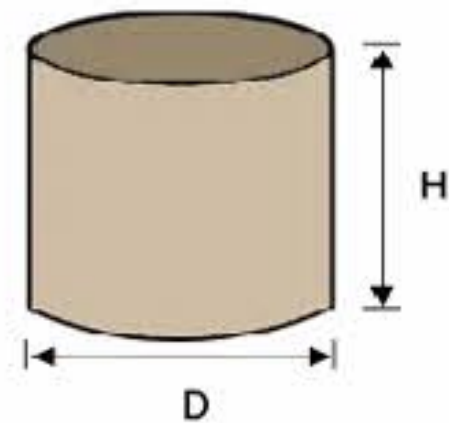
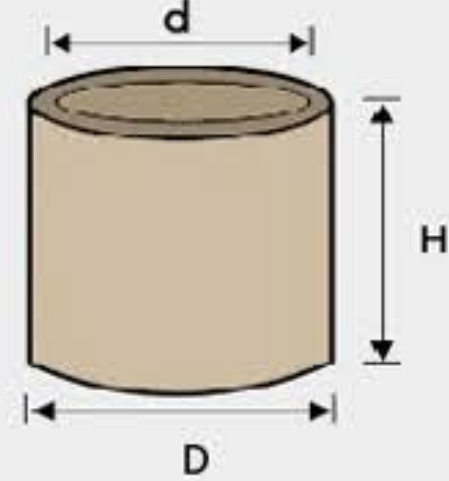
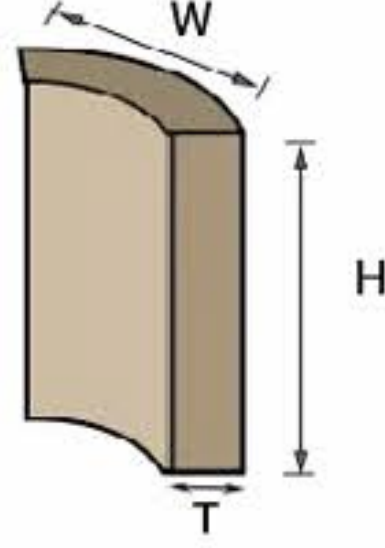


Customized Magnetic
Application Products



Size range/Dimensional tolerance&Geometric deviation

Size range (unit: mm)

Shape	Schematic	Size (mm)	
		Blank	Finished product
Block		30≤L≤120 15≤W≤80 20≤H≤60	30≤L≤120 10≤W≤50 1≤H≤10
Disk		6≤D≤8; 20≤H≤32 8≤D≤9.5; 20≤H≤35 9.5≤D≤32; 20≤H≤36 32≤D≤250; 20≤H≤50	3≤D≤90; 1≤H≤30
Ring		32≤D≤250 8≤Thickness≤15 25≤H≤40	3≤D≤60 1≤Thickness≤15 1≤H≤40
Arc		25≤W≤55; 15≤T≤40; 25≤H≤55;	5≤W≤55 1≤T≤15 10≤H≤100

Dimensional tolerance (unit: mm)

Product Type	Tolerance range
Block	L±0.02, W±0.02, T±0.02, ⊥0.03, //0.03
Disk	OD±0.01, T±0.02, Roundness 0.02
Ring	OD±0.01, ID±0.02, T±0.02, Concentricity 0.02, Runout 0.02
Arc	OR±0.1, IR±0.1, L±0.03, W±0.03, T±0.02

Geometric deviation (unit: mm)

Types of Tolerances	Basic Dimension	Geometric Deviation
// Parallelism	10~100	≤0.05
	≤30	90°±0.1°
⊥ Perpendicularity	30~50	90°±0.15°
	50~100	90°±0.2°
◎ Concentricity	≤D14	0.02
	D14~D24	0.03
	D24~D40	0.05
	D40~D60	0.06
	D60~D80	0.08

Significant Cost Reduction & Efficiency Improvement

Innovative processes lower TCO and boost product competitiveness.



Stable and Reliable Quality

Full-process traceable QC ensures stable production and end-product reliability.



Agile Response and Delivery

From co-design to rapid mass production, shortening cycles and speeding time-to-market.



Collaborative Technical Breakthroughs

Deep collaboration to tackle magnetic and engineering challenges, building technical moats.



JLMAGNET

WE ARE THE MAGNETIC TECHNOLOGY FOUNDATION
FOR YOUR INNOVATIVE PRODUCTS,
BUILDING SUPERIOR PERFORMANCE WITH YOU.



Address: No.330 Xinxing First Road, Emerging Industrial Park,
Zonghan Street, Cixi, Zhejiang

Sales Tel: +86-574-63212222

Fax: +86-574-63248818

HR: +86-574-63219819

Email: Official_Sales@JLmagnet.com



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