

鑫轩磁业

Zhejiang Dongyang Xinxuan Magnetic Industry Co., Ltd

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01. About Xinxuan Magnetics



Zhejiang Dongyang Xinxuan Magnetic Industry Co., Ltd. was founded in 2022 and is a high-tech enterprise specializing in the R&D, production and sales of high-performance NdFeB permanent magnetic materials. Located in Zhejiang Province, the "Magnet Capital of China", and backed by a deep heritage in rare-earth permanent magnet technology, the company has rapidly grown into a key supplier for NEV core components and consumer electronics. We currently maintain stable production of N35-N52SH, UH and other grades, which can be processed into round, dome, square, tile and other shapes. We provide powerful magnetic support for green mobility worldwide.

Corporate Vision

To become a global leader in NEV magnetic assemblies, leading industry development through outstanding quality and continuous innovation, and building a world-class benchmark brand in magnetic technology.

Corporate Mission

Driven by advanced rare-earth permanent magnet technology, we empower the transformation toward green, intelligent and efficient future mobility, and contribute to global carbon neutrality and sustainable development.

Core Values

We uphold quality first and innovation-driven development; we are always customer-centric and pursue win-win cooperation, creating value and sharing the fruits of growth with our partners.

New Production Base Plan

Official Inauguration

The official inauguration ceremony of the new base is scheduled for September 1, 2026, marking the full launch of the project and its entry into the substantive construction phase.

Phase I Project

A total site area of 61.4 mu (approx. 40,933 m^2) and a total gross floor area of 80,000 m^2, with high-standard modern production workshops and supporting facilities.

Phase II Project

A planned site area of 40.2 mu (approx. 26,800 m^2); the building area and supporting facilities are in detailed design, reserving ample space for future capacity expansion.

Annual Output Value Target

Once fully operational, the base is expected to produce 5,000 tonnes of high-performance NdFeB magnets per year, meeting strong market demand in new energy, high-end manufacturing and other sectors, and helping upgrade the industrial chain.

Planned Start of Production

Production is expected to start in October 2027. The project will introduce fully automated and intelligent production equipment to build an efficient, energy-saving and green smart manufacturing demonstration base.

Development History: Four Years of Leaps and Achievements

2022

Founding and Foundation

Officially registered and established; the first high-performance NdFeB magnet production line was introduced and the initial market layout was completed.

First-year revenue
RMB 40 million

2023

Technology and Expansion

Core products were certified by several mainstream NEV automakers; the customer base expanded rapidly and market share rose steadily.

Revenue growth
RMB 80 million

2024

Scale and Mass Production

Phase II production lines were commissioned, capacity increased significantly, and long-term strategic cooperation was established with several leading automakers.

Revenue exceeded
RMB 180 million

2025

Quality and Brand

The IATF 16949 system was fully implemented, the "Zhejiang Made" certification was obtained, and brand influence rose significantly.

Steady growth
RMB 230 million

2026

Leadership and the Future

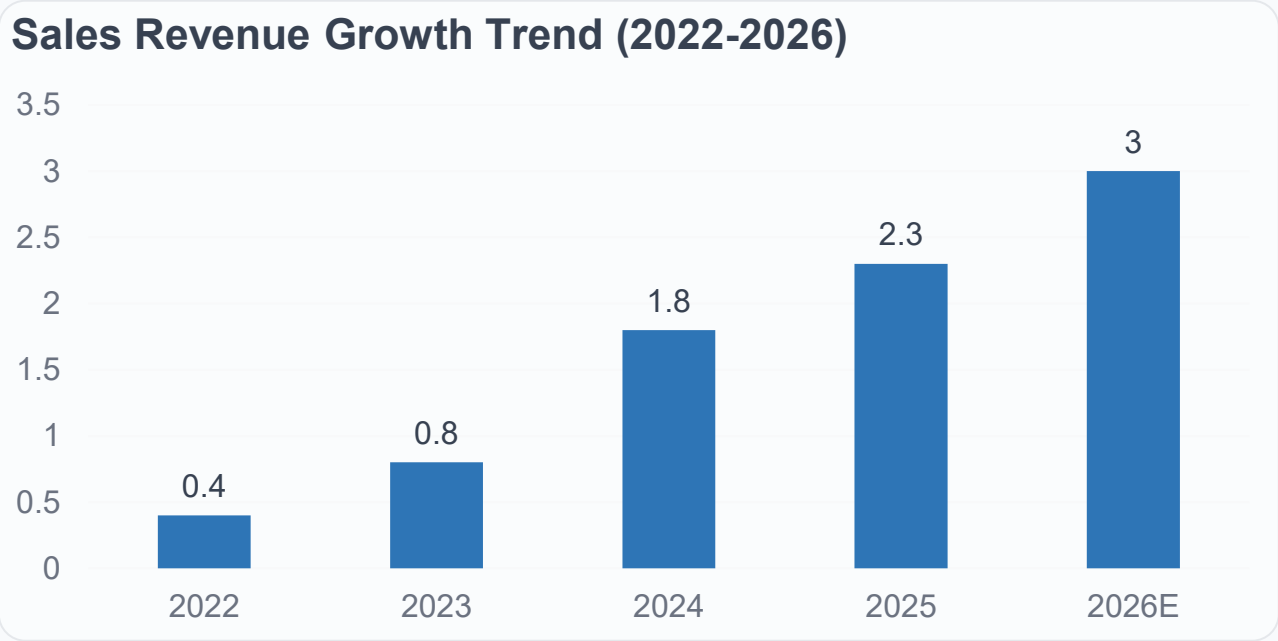
Market share ranks among the industry's top players; forward-looking technology R&D has been launched to build future growth drivers.

Projected revenue
RMB 300 million+

With a four-year compound growth rate of over 40%, we have grown from an industry newcomer to a leading enterprise, always driving high-quality development through technological innovation.

Market and Sales Trends

Since its founding in 2022, Xinxuan Magnetics has achieved rapid year-on-year sales growth on the strength of outstanding product performance and all-round customer service. This steady growth not only confirms the market's strong recognition of our product quality and mass-production capability, but also demonstrates our strong competitiveness and broad prospects in the industry.



Four-Year Compound Annual Growth Rate (CAGR)

40.7%

This ultra-fast growth not only reflects strong market demand for high-performance magnetic materials, but also proves the core competitiveness of our products and the team's efficient execution, laying a solid foundation for continued expansion.

— Continuous innovation drives growth; we create value together with our partners —

02. Core Products and Technologies

Dedicated to magnets for water pumps, motors, speakers, laptops, TVs and other consumer electronics, delivering outstanding quality

We select premium rare-earth raw materials and combine advanced powder metallurgy and precision machining processes with multiple stringent quality inspection steps. Our products offer high energy product, excellent temperature stability and corrosion resistance, ensuring outstanding performance and long service life even under extreme operating conditions.









A Selection of Our Productsg Magn



Ferrite Disc Magnet



Rubber Magnetic Ring / Flexible Magnet Ring



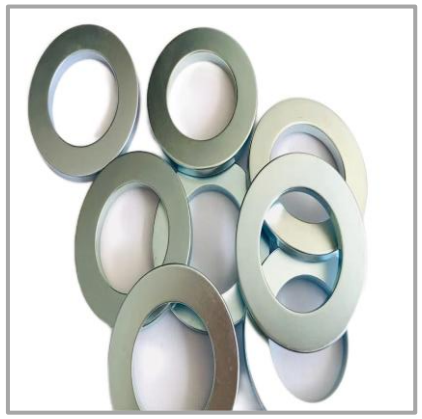
Rectangular NdFeB Magnet / Bar Neodymium Magnet



Small Countersunk / Through-hole NdFeB Disc Magnet



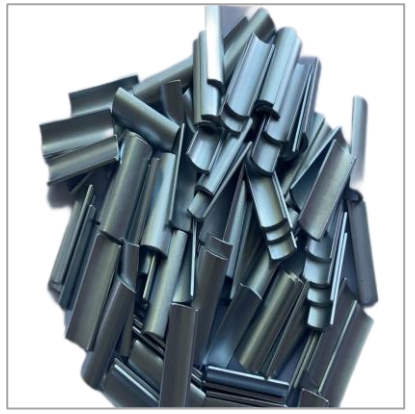
Block NdFeB Magnet / Square Neodymium Magnet



Large Ring NdFeB Magnet



D-hole Special-shaped Ring Magnet



Cylinder NdFeB Magnet / Rod Neodymium Magnet

A Comprehensive Certification System: Dual Assurance of Quality and Management

Xinxuan Magnetics attaches great importance to quality management and sustainable development. Having obtained a series of authoritative international and domestic certifications, we have built a comprehensive quality and management assurance system that ensures every step from R&D to delivery meets stringent standards, giving customers a reliable quality commitment.

ISO 9001

The internationally recognized quality management system standard; standardized processes ensure product consistency and reliability.

IATF 16949

The technical specification certification for the automotive industry; it meets stringent supply chain requirements and supports high-end automotive component supply.

“Zhejiang Made” Certification

A hallmark of high-quality manufacturing and a regional brand benchmark representing high standards, high quality and strong market recognition.

ISO 14001 Environmental Management System

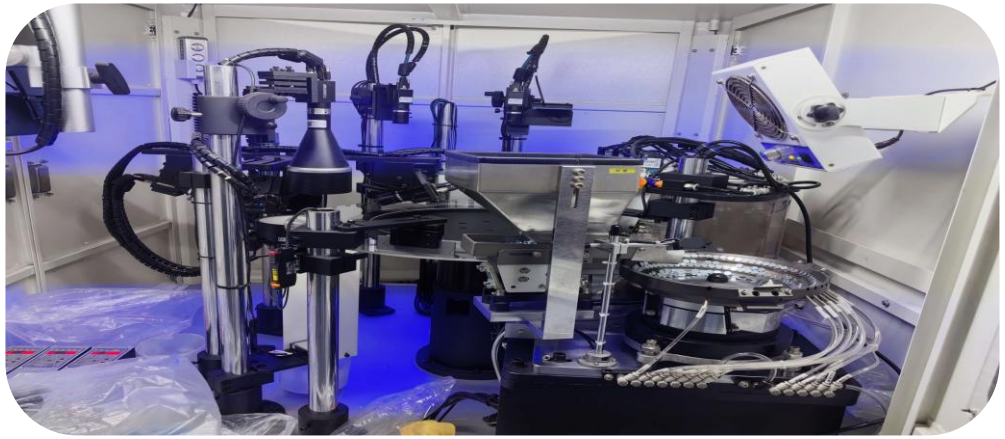
A green production system that puts low-carbon and environmental protection into practice, effectively controls the environmental impact of production and supports sustainable development.

ISO 45001 Occupational Health and Safety Management

A comprehensive protection system that safeguards employee rights and production safety and creates a safe, healthy and modern working environment.

Core Advantages: Outstanding Quality, Leading Cost

Quality Assurance • Good Quality



Yield rate above 99.5%
far exceeding the industry average, with stable delivery quality

IATF 16949 certified
automotive quality system, full-process quality control

Harsh-condition tested
high/low temperature, vibration and salt spray; stable in extreme environments

Cost Advantage • Low Production Cost



Refined management + economies of scale
lean production cost reduction and large-scale procurement leverage

Formulation optimization lowers cost
Dy/Tb diffusion process reduces heavy rare earth usage

Flexible production, fast changeover
multiple lines switch models quickly, cutting changeover costs

Built on outstanding quality and powered by cost advantages, we deliver cost-effective magnetic assembly solutions for our customers

New Process for High-Performance Products — Dy/Tb Diffusion Process

Grain Boundary Diffusion Production Line



Process Principle and Core Value

Grain Boundary Diffusion Technology

Through the grain boundary diffusion process, heavy rare earth elements such as dysprosium (Dy) and terbium (Tb) are precisely enriched at the grain boundaries of the magnet rather than uniformly distributed throughout the magnet body, greatly reducing overall heavy rare earth consumption.

- **Lower material cost — heavy rare earth usage greatly reduced**
- **Maintains high coercivity — grain boundary enrichment effectively pins domain walls**
- **Excellent high-temperature resistance — suited to high-temperature NEV operating conditions**
- **Better cost-effectiveness — no performance loss, lower cost**

Core Advantage: Significantly Lower Material Cost Without Compromising Magnetic Performance

Core Competitive Advantages



Management Cost Advantage

A lean and efficient organizational structure with few management layers keeps operating and management costs significantly lower than those of large listed magnet material companies. A more direct cost transmission mechanism effectively converts cost advantages into price competitiveness, providing customers with more cost-effective solutions.



Formulation Cost Advantage

Continuous R&D investment optimizes raw material formulations and production processes. While strictly ensuring that core national-standard indicators such as magnetic performance, temperature resistance and salt spray corrosion resistance are consistently met, scientific substitution of raw materials and ratio optimization effectively control formulation material costs, significantly improving gross margin and market competitiveness.



High Operational Flexibility

Flexible and diverse order models cover both medium-to-large-volume standardized production and small-batch customized needs, and we respond to customer design changes and delivery schedule adjustments far faster than industry giants. We can also quickly adapt to the development and production of special-shaped magnets for sewing machines, automotive water pump motors and many other categories, meeting diverse market demands.

Product Technical Parameters and Performance Advantages

Energy Product (BH)max

38-48 MGOe

High energy product enables smaller, lighter pumps, delivering stronger magnetic force in the same volume, improving energy efficiency and optimizing system packaging.

Precise Dimensional Control

±0.02 mm machining accuracy

Ensures a perfect fit with pump components, reduces assembly errors, significantly lowers operating noise and vibration, and improves overall vehicle NVH performance.

Coercivity (Hcj)

⩾ 12 kOe (high intrinsic coercivity)

Resists demagnetization at high temperatures and in strong reverse magnetic fields, ensuring stable pump operation under high-load conditions such as hill climbing and fast charging, with high reliability.

Corrosion-Resistant Surface Protection

Epoxy coating / Zinc plating / Ni-Cu-Ni plating

Meets the requirement of ⩾500 hours of salt spray testing, effectively resisting corrosion under complex operating conditions, greatly extending service life and reducing maintenance costs.

Wide-Temperature Operating Stability

-40°C ~ +200°C

Withstands extreme climates from severe cold to intense heat, meeting all-weather NEV requirements and ensuring no performance degradation in any environment.

Magnetic Performance Consistency

Performance deviation ⩽ 3%

Ensures highly uniform performance across pumps, facilitating standardized management and quality control at OEMs and improving production yield and delivery efficiency.

NdFeB Magnet Production Process



01 Batching and Melting

Rare earth metals, pure iron, ferroboron and other raw materials are mixed in precise proportions and melted into alloy strips in a vacuum melting furnace to ensure uniform composition.



02 Jet Milling

After crushing, the alloy strips are jet-milled into micron-level ultrafine powder with tightly controlled particle size distribution to ensure powder uniformity.



03 Magnetic Field Pressing

In a strong magnetic field, the powder is pressed into specific shapes such as tiles or blocks, aligning the magnetic particles and imparting magnetism to the magnet.



04 Vacuum Sintering

High-temperature sintering in a vacuum bonds the powder particles metallurgically into a dense, high-strength permanent magnet — a key step that determines performance.



05 Precision Machining

CNC machining centers perform precision cutting and grinding to ensure dimensional accuracy, surface finish and geometric tolerances meet requirements.



06 Surface Treatment

Processes such as zinc plating, Ni-Cu-Ni plating and electrophoretic coating form a dense protective layer on the magnet surface, significantly improving corrosion resistance and service life.

Product Technical Parameters and Performance Advantages

Performance Parameters

牌号 Grade	剩磁(最小值)		磁感矫顽力(最小值)		内禀矫顽力(最小值)		最大磁能积(范围)		最高工作温度≤
	BR		Hcb		Hcj		(BH) max		
	KGs	T	KGe	KA/m	KOe	KA/m	MGOe	KJ/m³	C°
N54	14.5	1.45	10.5	836	11	875	51~55	406~438	80
N52	14.2	1.42	10.5	836	12	960	49~53	390~422	80
N50	13.9	1.39	10.5	836	12	960	47~51	374~406	80
N48	13.7	1.37	10.5	836	12	960	45~49	358~390	80
N45	13.3	1.33	10.8	860	12	960	43~46	342~366	80
N42	12.9	1.29	10.8	860	12	960	40~43	318~342	80
N40	12.6	1.26	10.8	860	12	960	38~41	302~326	80
N38	12.3	1.23	10.8	860	12	960	36~39	287~310	80
N35	11.8	1.18	10.8	860	12	960	33~36	263~287	80
N52M	14.2	1.42	12.5	995	13	1035	49~53	390~422	100
N50M	13.9	1.39	13.0	1035	14	1114	47~51	374~406	100
N48M	13.7	1.37	12.7	1012	14	1114	45~49	358~390	100
N45M	13.3	1.33	12.2	971	14	1114	43~46	342~366	100
N42M	12.9	1.29	11.8	938	14	1114	40~43	318~342	100
N40M	12.6	1.26	11.4	910	14	1114	38~41	302~326	100
N38M	12.3	1.23	11.0	876	14	1114	36~39	287~310	100
N35M	11.8	1.18	10.8	860	14	1114	33~36	263~287	100
N50H	13.9	1.39	13.0	1035	16	1274	47~51	374~406	120
N48H	13.7	1.37	12.8	1000	16	1274	45~49	358~390	120
N45H	13.3	1.33	12.5	995	17	1353	43~46	342~366	120
N42H	12.9	1.29	12.0	957	17	1353	40~43	318~342	120
N40H	12.6	1.26	11.7	930	17	1353	38~41	302~326	120
N38H	12.3	1.23	11.4	910	17	1353	36~39	287~310	120
N35H	11.8	1.18	11.0	876	17	1353	33~36	263~287	120
N33H	11.4	1.14	10.6	844	17	1353	31~34	247~271	120

1. The maximum continuous operating temperature TW is defined as the temperature corresponding to irreversible loss ≤3% after product Pc=2.0, open-circuit test and 2 h of constant-temperature baking.

2. The temperature interval for calculating the temperature coefficient is defined as: below grade M, ΔT: 20℃~100℃; grade H and above, ΔT: 20℃~150℃

Product Technical Parameters and Performance Advantages

Performance Parameters

牌号 Grade	剩磁(最小值) BR		磁感矫顽力(最小值) Hcb		内禀矫顽力(最小值) Hcj		最大磁能积(范围) (BH) max		最高工作温度≤
	KGs	T	KGe	KA/m	KOe	KA/m	MGOe	KJ/m³	C°
N48SH	13.7	1.37	12.8	1035	19	1512	45~49	358~390	150
N45SH	13.3	1.33	11.8	938	20	1592	43~46	342~366	150
N42SH	12.9	1.29	11.8	938	20	1592	40~43	318~342	150
N40SH	12.6	1.26	11.5	912	20	1592	38~41	302~326	150
N38SH	12.3	1.23	11.1	886	20	1592	36~39	287~310	150
N35SH	11.8	1.18	11.0	876	20	1592	33~36	263~287	150
N33SH	11.4	1.14	10.5	836	20	1592	31~34	247~271	150
N45UH	13.3	1.33	12.2	976	24	1911	43~46	342~366	180
N42UH	12.9	1.29	11.8	938	25	1990	40~43	318~342	180
N40UH	12.6	1.26	11.5	912	25	1990	38~41	302~326	180
N38UH	12.3	1.23	11.1	886	25	1990	36~39	287~310	180
N35UH	11.8	1.18	10.6	845	25	1990	33~36	263~287	180
N33UH	11.4	1.14	10.3	816	25	1990	31~34	247~271	180
N30UH	10.8	1.08	9.5	756	25	1990	28~31	223~247	180
N42EH	12.8	1.28	12.2	971	29	2308	39~43	310~342	200
N40EH	12.5	1.25	11.9	947	30	2388	37~41	295~326	200
N38EH	12.2	1.22	11.6	923	30	2388	35~39	279~310	200
N35EH	11.8	1.18	11.1	883	30	2388	33~36	263~287	200
N33EH	11.4	1.14	10.3	816	30	2388	31~34	247~271	200
N30EH	10.8	1.08	9.5	756	30	2388	28~31	223~247	200
N28EH	10.5	1.05	9.5	756	30	2388	26~29	207~231	200

3. Conversion between SI and CGS unit systems for magnetic properties: 1T=10kGs, 1kOe=79.6kA/m, 1MGOe=7.96kJ/m³

4. The numerical rounding of product magnetic test results shall be carried out in accordance with GB/T 8170.

03. Market Performance

Xinxuan Magnetics has established long-term, stable strategic partnerships with many mainstream domestic NEV brands and well-known automotive component suppliers. Our business network covers core Chinese automotive industry regions such as the Yangtze River Delta and the Pearl River Delta, empowering the upgrading of the NEV industry with high-quality magnetic assemblies.

Tier 1 Supplier Cooperation

We supply high-performance magnets directly to Tier 1 suppliers of leading NEV brands, ensuring a stable supply chain and efficient delivery in support of vehicle manufacturing.

Joint Development Partner

Together with leading automakers and pump manufacturers, we are deeply involved in the R&D and design of next-generation thermal management magnetic assemblies, setting new industry technical standards.

Strategic Supplier

Recognized by several leading customers as a “Preferred Strategic Supplier”, we are deeply involved in future product planning and jointly build a long-term win-win industrial ecosystem.

04. Elite Team and Management



Xinxuan Magnetics has brought together an elite team combining deep industry background with innovative capability. Our management and R&D key members come from leading companies in China's rare-earth permanent magnet sector, and their rich hands-on experience and sharp market insight lay a solid foundation for the company's technological breakthroughs and steady operations.

Our core members come from industry leaders such as DMEGC and Innuovo,
with an average of 15+ years of hands-on experience in the rare-earth permanent magnet industry.

R&D Team: The Engine of Technological Innovation

Led by a former R&D head of an industry leader who has directed multiple national-level research projects. With deep expertise in high-grade NdFeB material development and magnetic circuit design, the team has successfully developed high-temperature, high-stability magnet series suited to the demanding conditions of new energy vehicles, with industry-leading technical indicators.

Management Team: The Guarantee of Efficient Operations

Bringing together seasoned experts in production, quality and sales, the team excels in lean production management and supply chain optimization. It has built an efficient and flexible production and operations system that tightly controls cost and quality, ensures timely and stable product delivery, and supports the company's scaled growth.

05. Advanced Equipment and Quality Control

Xinxuan Magnetics has invested heavily in internationally advanced production and testing equipment to build a fully intelligent production system, providing solid hardware support for outstanding performance, stable quality and consistency, and laying a firm foundation for quality.



Vacuum Sintering Furnace

A high-vacuum, high-temperature environment eliminates material porosity and optimizes grain structure, making this the core process equipment for high energy product and microstructural uniformity in permanent magnets.



Permanent Magnet Material Testing System

Fully automatic, high-precision testing of key indicators such as remanence, coercivity and energy product ensures every batch precisely meets specifications and prevents non-conforming products from leaving the plant.



High/Low Temperature Cycling Test Chamber

Simulates extreme temperature cycling from -40°C to 150°C to verify performance stability and structural reliability under thermal cycling, ensuring suitability for complex operating conditions.



Salt Spray Corrosion Test Chamber

Simulates marine and industrial corrosive environments to test the corrosion resistance of coatings and the magnet body, ensuring durability and safety in long-term outdoor use.

Rigorous Quality Control Commitment: From raw material melting to finished product shipment, every process is equipped with professional testing equipment, achieving full-process quality control where “every production step is inspected and every inspection meets the standard”.

Strict Quality Control Process



Standardized intelligent production workshops equipped with high-precision automated testing equipment provide solid hardware support for full-process quality monitoring, ensuring every process is under precise control.

01 Raw Material Inspection

Incoming rare earth raw materials undergo full chemical and physical testing; control at the source means non-conforming materials are firmly rejected.

02 In-Process Monitoring

Key processes such as mixing, pressing and sintering have monitoring points, with SPC statistical methods used for real-time monitoring to ensure process stability.

03 Finished Product Inspection

Every batch undergoes 100% inspection covering magnetic performance, dimensional accuracy and appearance, ensuring no defective product leaves the plant.

04 Reliability Testing

Regular sampling for high/low temperature cycling, salt spray corrosion, mechanical vibration and other harsh-environment tests verifies stability and durability under extreme conditions.

05 Full-Process Traceability

A one-item-one-code traceability system allows every product to be traced precisely to its raw material batch, production equipment and operator, enabling rapid identification and closed-loop management of quality issues.

06. Future Outlook

Technology R&D Directions

Higher-Performance Magnetic Materials

Develop next-generation NdFeB magnets with high energy product and ultra-high coercivity, pushing beyond current material limits to meet higher power density requirements.

Integrated Magnetic Assemblies

Develop integrated modules combining magnets, sensors and coils to increase system integration and operating efficiency and simplify downstream assembly.

Lightweighting and Cost Optimization

Reduce magnet weight and production cost through new material formulation optimization and precision forming process upgrades, strengthening product competitiveness.

Sustainable Development Technologies

Explore efficient recovery and recycling technologies for rare earth resources, promote green manufacturing and low-carbon production, and support the achievement of the dual carbon goals.

Market Expansion Plan

Deepen Domestic Market Presence

Consolidate strategic cooperation with existing leading automakers, actively develop more NEV manufacturers, continuously expand domestic market share and build industry benchmark cases.

Accelerate International Market Expansion

Launch a global strategic layout, bring high-performance magnetic assemblies to overseas markets such as Europe, the United States and Southeast Asia, compete in international high-end supply chains and enhance brand influence.

Broaden Product Application Boundaries

Extend from core components to drive motors, EPS (electric power steering) and electronic braking systems, explore diversified application scenarios and build a more complete product ecosystem.

“Driving development through innovation, building the future with quality, and creating a new era of green mobility together”