

INDUSTRY OVERVIEW

The information and statistics set out in this section and other sections of this Document were extracted from the Frost & Sullivan Report, which was commissioned by the Company, and from various official government publications and available resources from public market research. The Company engaged Frost & Sullivan to prepare the Frost & Sullivan Report in connection with the [REDACTED]. The information from official government sources has not been independently verified by any of the Sole Sponsor, [REDACTED], any of their respective directors and advisers, or any other persons or parties involved in the [REDACTED] and no representation is given as to its accuracy. For discussion of risks related to the Group’s industry, see “Risk Factors — Risks Relating to Our Business and Industry.” in this Document.

SOURCE OF INFORMATION

We engaged Frost & Sullivan to conduct market research on the new energy industry and the mica product market within the new energy value chain and the transmission module in embodied intelligence market and to prepare the Frost & Sullivan Report. Frost & Sullivan is an independent global consulting firm founded in 1961 and headquartered in New York that provides industry research and market strategy services. We have agreed to pay a fee of RMB600,000 to Frost & Sullivan for the preparation of this report.

In preparing the Frost & Sullivan Report, Frost & Sullivan carried out detailed primary research, including discussions with leading industry participants on the current status and development trends of the new energy industry, covering new energy vehicles, power batteries, energy storage batteries, as well as the demand for and application of mica products in these fields, and conducted interviews with relevant parties. Frost & Sullivan also conducted secondary research, which included reviewing company reports, independent research reports, and data from its own research database. By analyzing historical data and combining it with macroeconomic data, Frost & Sullivan obtained estimated market size figures and considered key industry drivers such as policy incentives, technological breakthroughs, and market demand growth.

Frost & Sullivan exercised due care in collecting and reviewing relevant information. In preparing and compiling the relevant research, Frost & Sullivan assumed that the social, economic, and political environment of the relevant market would likely remain stable during the forecast period. Our Directors confirm that, after making reasonable inquiries, there has been no adverse change in the market information since the date of the Frost & Sullivan Report that would affect, contradict, or have a material impact on the information.

DEVELOPMENT OF THE NEW ENERGY SECTOR

Development states of the new energy sector

The new energy sector refers to a comprehensive sector centered on clean and renewable energy resources including solar power and wind power, replacing traditional fossil fuels. NEVs, power batteries and energy storage batteries are the fundamental prongs of the new energy sector, driving coordinated development and the global transition to new energy.

With continuous policy incentives and technological iteration, the penetration rate of NEVs will continue to increase. According to Frost & Sullivan, the global sale volume of passenger NEVs grew from 6.2 million units in 2021 to 17.1 million units in 2024, with a CAGR of 40.2%. In 2025, the global sales volume of passenger NEVs was over 20 million units. In the future, the global sale volume of passenger NEVs is expected to maintain the

INDUSTRY OVERVIEW

growth trend with a CAGR over 20% from 2026 to 2030. China sale volume of passenger NEVs grew from 3 million units in 2021 to 11.1 million units in 2024, with a CAGR of 54.7%. In 2025, China sales volume of passenger NEVs was over 12 million units. The CAGR of China sale volume of passenger NEVs from 2026 to 2030 is expected to surpass 15%.

Power batteries are energy storage units, providing power for electric vehicles and other transportation vehicles, as one of the core modules in vehicle manufacturing. With the global green transformation and the increasing penetration of NEVs, the market demand for power batteries is rapidly expanding. The global and China power batteries in electric vehicles, also known as EV batteries, experienced a rapid growth. According to Frost & Sullivan, the global shipment volume increased from 386.9 GWh in 2021 to approximately 1,500 GWh in 2025, and is expected to further increase at a CAGR over 28% from 2026 to 2030. In 2021, the China shipment volume of EV battery was 208.9 GWh, surging to approximately 1,200 GWh in 2025. By 2030, the China shipment volume is forecasted to surpass 2,500 GWh, growing at a CAGR over 25% from 2026 to 2030.

Energy storage batteries refer to devices that convert electrical energy into chemical energy for storage and release it when needed. The increasing demand for charging from end users has further driven the willingness to purchase energy storage systems at the household level, thereby directly driving the sales of energy storage batteries in various market segments. According to Frost & Sullivan, the global shipment volume of energy storage batteries increased from 39.8 GWh in 2021 to over 600 GWh in 2025. It is expected to reach over 2,000 GWh in 2030, with a CAGR over 25%. China energy storage battery shipment volume increased from 7.6 GWh in 2021 to about 500 GWh in 2025. It is projected China energy storage battery shipment volume will increase to over 1,000 GWh in 2030, with a CAGR over 20%.

Pain points of the new energy sector

Safety and stability are the focusing pain points of the new energy sector. With the rapid iteration of new energy technologies, the energy density of energy storage units including power batteries and energy storage batteries, continues to increase. Rising energy density leads to lower thermal stability, increasing safety risks of thermal runaway and placing stringent requirements on thermal management and electrical isolation capabilities.

Heat-resistant and insulating materials are critical for NEV and battery safety. Mica products possess excellent high-temperature resistance and electrical insulation properties, maintaining structural stability in extreme high-temperature environments leading to thermal runaway. Mica products can effectively block heat transfer, ensuring the long-term stable operation of NEVs, power batteries and energy storage batteries. Currently, the application scenarios of mica products in other industrial and home appliance sectors are gradually expanding.

INDUSTRY OVERVIEW

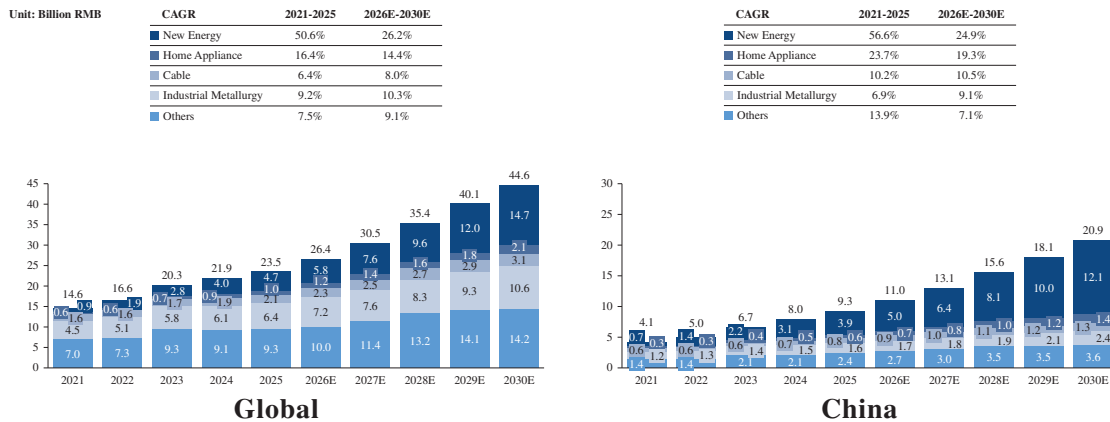
OVERVIEW OF THE MICA PRODUCT MARKET IN THE NEW ENERGY SECTOR

Definition of mica products

Mica products refer to functional products primarily made of mica materials, processed into sheets, strips, or plates using high-temperature binders. These materials exhibit stable electrical insulation properties and high fire retardancy and heat resistance, maintaining reliable performance even at high temperatures. They are widely used in electrical, mechanical and industrial environments, including in new energy (primarily NEVs, power batteries, energy storage batteries, etc.), cables, home appliances and other sectors.

The application scenarios of mica products mainly include industrial metallurgy sector, new energy sector, electric wire and cable sector, home appliance sector and others such as transportation, nuclear planting and aerospace. In 2025, the global market size of mica product reached RMB23.5 billion, while the global market sizes of mica product in industrial metallurgy sector, new energy sector, cable sector, home appliance sector and others were RMB6.4 billion, RMB4.7 billion, RMB2.1 billion, RMB1.0 billion and RMB9.3 billion, respectively. In 2025, the China’s market size of mica product reached RMB9.3 billion, while the China’s market sizes of mica product in industrial metallurgy sector, new energy sector, wire and cable sector, home appliance sector and others were RMB1.6 billion, RMB3.9 billion, RMB0.8 billion, RMB0.6 billion and RMB2.4 billion, respectively.

Market Size of Global and China Mica Product, by Revenue, 2021-2030E



Source: The Association of China Refractories Industry, Frost & Sullivan

Value chain of mica products

The value chain of mica products encompasses upstream raw materials, midstream manufacturing processing and downstream application areas. Upstream primarily involve the supply of mica ore, adhesive tapes and foams, glass fibers and others. In the midstream, manufacturers convert mica ore into mica powder and further process it into mica paper through processes including pulping, sheet forming and drying. Mica paper serves as the core material for various mica products, including mica structural parts, mica tapes, mica boards and mica tubes and mica rolls, which are primarily manufactured through processes including lamination, curing, cutting and stamping. In the downstream, these products are applied in multiple sectors, including new energy (primarily NEVs, power batteries and energy storage batteries), as well as cables, home appliances and other sectors.

INDUSTRY OVERVIEW

Regulatory and technical requirements for fire retardancy and heat resistance materials in the new energy sector

Fire retardancy and heat resistance materials are technically important in NEVs, power batteries and energy storage batteries. Thermal runaway and subsequent fire hazards represent key safety risks during the operation of battery systems. Relevant regulations and standards generally impose performance based safety requirements, such as no fire or explosion, electrical safety, thermal safety and thermal runaway propagation control, rather than mandating the use of one specific material category. Accordingly, manufacturers may adopt mica products, aerogel felt, ceramicized silicone rubber, flame-retardant foams and other suitable material or structural solutions to meet applicable safety requirements, depending on battery system design, product specifications, performance requirements and cost considerations. The following is the main contents of the relevant regulations and requirements:

GB 38031-2025 Electric Vehicles Traction Battery Safety Requirements: This standard specifies safety requirements and test methods for traction battery cells, battery packs and battery systems used in electric vehicles. It requires no fire or explosion under key safety test conditions, and strengthens requirements relating to thermal runaway protection, electrical insulation and thermal barrier solutions within battery systems. It was issued by SAMR and SAC, and is administered by the Ministry of Industry and Information Technology (MIIT) of China.

GB/T 36276-2023 Lithium Ion Battery for Electrical Energy Storage: This standard specifies technical requirements and test methods for lithium-ion batteries used in electrical energy storage applications. It covers electrical safety, mechanical safety, environmental safety and thermal safety, including thermal runaway performance and thermal runaway propagation performance. It was issued by SAMR and SAC, and is administered by the China Electricity Council (CEC).

IEC 60371 Series Specifications for Mica-based Insulating Materials for Electrical Purposes: This series provides specifications and test methods for mica-based insulating materials for electrical purposes. It covers general requirements, test methods and product-specific requirements for different mica-based insulating materials, and provides reference points for evaluating electrical insulation, thermal stability, mechanical performance and long-term reliability of mica-based materials. It was issued by the International Electrotechnical Commission (IEC).

Regulation (EU) 2023/1542 Concerning Batteries and Waste Batteries: This regulation establishes a regulatory framework for batteries placed on the EU market. It covers sustainability, performance, durability, labelling, conformity assessment and safety requirements, and includes safety considerations for stationary battery energy storage systems. It also supports the adoption of appropriate material and structural solutions to reduce safety risks relating to electrical faults, mechanical damage, environmental stress and thermal runaway. It was issued by the European Parliament and the Council of the European Union.

Source: Standardization Administration of China, State Administration for Market Regulation of China International Electrotechnical Commission, Official Journal of the European Union, Frost & Sullivan

INDUSTRY OVERVIEW

A well-established regulatory and standardization system for fire retardant and heat resistant materials has been formed in the new energy vehicle (NEV), traction battery and energy storage battery sectors. In addition to battery safety standards such as GB 38031-2025 and GB/T 36276-2023, mica-based insulating materials are also covered by dedicated product standards, including GB/T 5019.5-2023 for rigid mica materials for heating equipment and GB/T 5019.10-2022 for mica paper tapes for flame-resistant security cables. These standards provide technical requirements for certain mica-based insulating materials, including electrical insulation, heat resistance and mechanical performance.

Product Category	Temperature Resistance	Thermal Runaway Protection Capability	Electrical Insulation Performance	Cost Level
Mica Products	Short-term high-temperature resistance; able to maintain relatively good structural stability under high temperature and flame exposure	Strong; can provide both thermal barrier and blocking functions, suitable for thermal propagation protection scenarios	Strong; can simultaneously provide good high-temperature electrical insulation performance	Medium
Ceramicized Silicone Rubber	Good heat resistance; can form a ceramicized protective layer at high temperatures, with actual performance depending on formulation	Medium to strong; suitable for applications requiring flexible processing and fire protection, and is usually used together with other structures	Good	Relatively High
Aerogel Felt	Excellent thermal insulation performance; good adaptability to high temperatures, with the specific upper limit depending on the material system	Strong; outstanding thermal insulation effect, but relatively limited mechanical strength, and is usually used in composite structures	Good to Excellent	High
Flame-Retardant Foam	Relatively limited heat resistance; more suitable for medium- and low-temperature auxiliary insulation, sealing and cushioning applications	Relatively weak; usually not used as the primary barrier material for demanding thermal runaway protection scenarios	Fair to Good	Low

In general, fire retardancy and heat resistance materials are important technical components for meeting battery safety requirements in NEVs, power batteries and energy storage batteries. Material selection is usually determined by the overall battery system design and the required balance among heat resistance, electrical insulation, mechanical strength, weight, processability and cost. Mica products are commonly adopted in scenarios requiring both thermal barrier performance and electrical insulation, while aerogel felt, ceramicized silicone rubber, flame-retardant foams and other materials may be used independently or in combination for different functional positions within battery systems.

INDUSTRY OVERVIEW

Application of mica products in the new energy sector

Mica products are increasingly applied in the new energy sector, particularly in NEVs, power batteries and energy storage batteries. In NEVs, mica products are utilized for high-voltage insulation, thermal insulation and fire protection around battery packs, busbars and other critical electrical components, enhancing system safety and reliability under high temperature and high voltage conditions. In power batteries, mica tapes are typically arranged between battery cells, modules and battery pack structures to provide thermal insulation, fire retardancy, and electrical insulation, thereby reducing the risk of thermal runaway propagation. In energy storage systems, mica products offer electrical insulation, fire retardancy and heat resistance, supporting the long-term and safe operation of batteries.

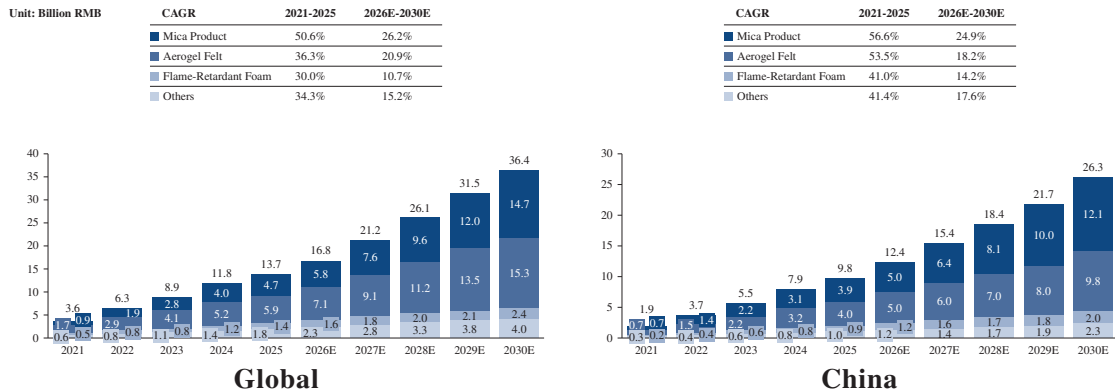
Apart from mica products, other fire retardancy and heat resistance materials mainly include flame-retardant foam, aerogel felt and others:

- Mica products: Possess excellent high-temperature resistance, electrical insulation properties and impact resistance. They can be processed into various shapes and are mainly used for sealing between modules and battery packs. Their application in flame-retardant insulation protection is relatively mature. The cost level of mica products is fair.
- Flame-retardant foam: Possesses low hardness and high resilience, and offers high flexibility in size design. However, its heat resistance is relatively limited, and it may deform under high-temperature conditions. It is mainly applied between modules, for battery pack sealing, and between battery cells in entry-level vehicle models. Its cost level is relatively low.
- Aerogel felt: possesses excellent thermal insulation properties. However, it is relatively expensive and has relatively limited impact resistance. It is mainly used between battery cells, with limited applications between modules. Its cost level is relatively high.
- Others: Other materials mainly include ceramicized silicone rubber. Ceramicized silicone rubber exhibits excellent heat resistance and maintains structural integrity at high temperatures, with relatively high price and needs to be compounded with other reinforcing materials for use.

All the above materials are insulating and heat-resistant, but mica materials, flame-retardant foam, aerogel felt and ceramicized silicone rubber differ significantly in performance and application scenarios. They cannot be directly substituted for each other, but can be combined to form a complementary integrated flame-retardant and insulation solution based on the performance requirements of different application scenarios. The following chart shows the market size of global and China fire retardancy and heat resistance materials in the new energy sector.

INDUSTRY OVERVIEW

Market Size of Global and China Fire Retardancy and Heat Resistance Materials in the New Energy Sector, by revenue, 2021-2030E



Source: China Association of Automobile Manufacturers, China Battery Industry Association, Frost & Sullivan

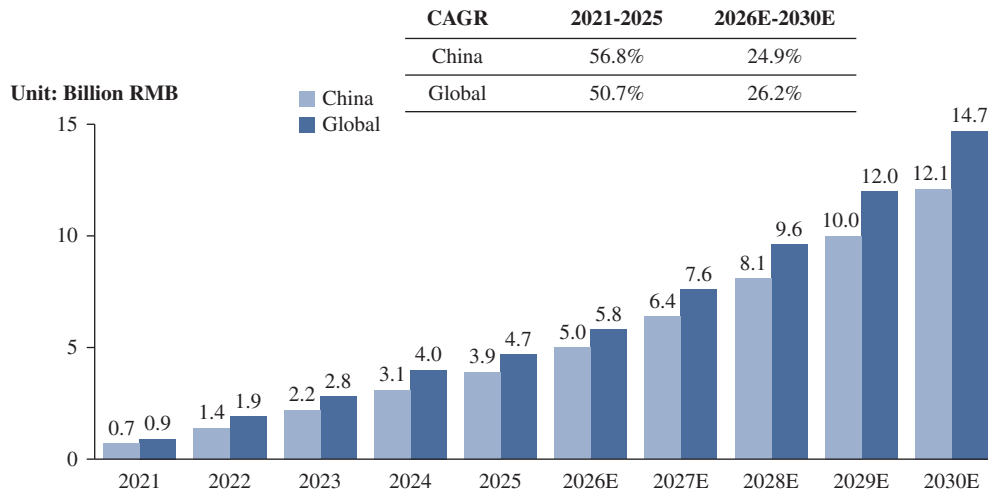
Market size of mica products in the new energy sector

Driven by the expanding new energy applications, the demand for mica products in the new energy sector has grown rapidly. According to Frost & Sullivan, the market size of mica products in the global and China new energy sectors increased from RMB0.9 billion and RMB0.7 billion in 2021 to RMB4.7 billion and RMB3.9 billion in 2025, representing CAGRs of 50.7% and 56.8%, respectively. In 2025, the global market sizes of mica products in power battery and energy storage were RMB4.0 billion and RMB0.7 billion, and the China's market sizes of mica products in power battery and energy storage were RMB3.2 billion and RMB0.7 billion.

Looking ahead, supported by continuous growth in new energy vehicle and energy storage installations and rising safety and reliability requirements for battery systems, the application of mica products in the new energy sector is expected to further increase, sustaining strong market expansion. The global and China market sizes are expected to reach RMB5.8 billion and RMB5.0 billion in 2026, respectively, and further grow to RMB14.7 billion and RMB12.1 billion in 2030, representing CAGRs of 26.2% and 24.9% from 2026 to 2030, respectively. In 2030, the global market sizes of mica products in power battery and energy storage were RMB11.8 billion and RMB2.9 billion, and the China's market sizes of mica products in power battery and energy storage were RMB9.0 billion and RMB3.1 billion.

INDUSTRY OVERVIEW

Global and China Mica Product Market in the New Energy Sector, by revenue, 2021-2030E



Source: China Association of Automotive Manufacturers, Frost & Sullivan

Competitive landscape of mica product market in the new energy sector

In 2025, the global mica product market in the new energy sector accounted for RMB4.7 billion, representing 19.9% of the global mica product market, and remained relatively fragmented with more than 500 market players. Chinese companies occupy a dominant position. We ranked first in terms of revenue in 2025, with a market share of 22.7%. The table below illustrates the ranking of global players in the mica product market for the new energy sector by revenue in 2025.

Ranking ⁽¹⁾⁽²⁾	Company	Country	Market share, 2025	Related Revenue (RMB billion)
1	The Company	China	22.7%	1.1
2	Company A ⁽³⁾	China	15.4%	~0.7
3	Company B ⁽⁴⁾	China	5.7%	~0.3
4	Company C ⁽⁵⁾	South Korea	4.5%	~0.2
5	Company D ⁽⁶⁾	Switzerland	4.2%	~0.2

Source: Annual reports of related companies, Frost & Sullivan

Notes:

- (1) The revenue data of Company A to D is based on estimation calculated by unit sales and other available public information, cross-checked with industry participants and experts on best effort, thus may be different from the auditing data from the above players.
- (2) Available public information includes financial reports of listed companies and publicly available industry reports, etc.
- (3) Company A was established in 2008 and is headquartered in Jiangsu, China. The company's main business covers the research and development, production and sales of thermal protection components for new energy vehicle power batteries, as well as insulation products for power and electrical engineering. It is listed on the Shenzhen Stock Exchange.
- (4) Company B was established in 2015 and is headquartered in Hubei, China, and it is listed on the Shenzhen Stock Exchange. The company's main products include mica insulation materials, fiberglass cloth and insulation materials for new energy applications. It is listed on the Shenzhen Stock Exchange.
- (5) Company C was established in 1974 and is headquartered in South Korea. The company's main products include mica plates, mica tapes, inorganic mica paper and other products. It is a private company.

INDUSTRY OVERVIEW

- (6) Company D was established in 1823 and is headquartered in Switzerland. The company’s core business focuses on electrical insulation and materials technology, primarily producing insulation materials, mica products and composite materials used in motors, generators and transformers. It is a private company.

In 2025, the China mica product market in the new energy sector accounted for RMB3.9 billion, representing 42.2% of the China mica product market, and remained relatively fragmented with more than 300 market players. The Company occupied a dominant position. We ranked first in terms of revenue in 2025, with a market share of 12.7%. The table below illustrates the ranking of China mica product market participants in the new energy sector by revenue in 2025.

Ranking ⁽¹⁾⁽²⁾	Company	Market share, 2025	Related Revenue (RMB billion)
1	The Company	12.7%	0.5
2	Company A	6.4%	~0.3
3	Company B	5.6%	~0.2
4	Company E ⁽³⁾	2.8%	~0.1
5	Company F ⁽⁴⁾	1.8%	~0.1

Source: Annual reports of related companies, Frost & Sullivan

Notes:

- (1) The revenue data of Company A to F is based on estimation calculated by unit sales and other available public information, cross-checked with industry participants and experts on best effort, thus may be different from the auditing data from the above players.
- (2) Available public information includes financial reports of listed companies and publicly available industry reports, etc.
- (3) Company E was established in 2003 and is headquartered in Beijing, China. The company is mainly engaged in the research and development, production, sales and related services of refractory mica materials, high-cleanliness materials and flame-retardant materials. It is a private company.
- (4) Company F was established in 2015 and is headquartered in Hunan, China. The company’s main products include mica paper, mica boards, mica tapes, mica rolls, mica tubes, mica heating films and mica processed components. It is a private company.

The global mica product market is relatively fragmented, due to the fact that different applications have varying requirements for the craftsmanship and product form of mica products. In 2025, the top three companies of the global mica product market captured the market share of 31.8% in total, in terms of revenue, which are all overseas companies. We captured a market share of 5.2% in terms of revenue in 2025. In the China mica product market in 2025, we ranked first with a market share of 6.9% in terms of revenue. The rest of major competitors in China mica product market mainly include Company A and Company B.

Drivers and trends of the mica product market in the new energy sector

Policy support and enhancement of safety standards

Global governments have tightened NEV and battery safety regulations, raising standards for insulation and thermal protection and driving demand for high-performance materials like mica products. For instance, the EU’s Regulation (EU) 2023/1542 incorporates batteries into a safety compliance framework covering their entire lifecycle. Meanwhile, China GB 38031 series of standards impose stricter requirements on the thermal safety of power batteries, including early warning of thermal events and suppression of fire and explosion, with the latest revision further requiring battery packs to remain non-flammable and non-explosive for at least two hours after thermal runaway triggering and mandating that monitoring points be maintained below 60 °C. The updated standard also introduces additional safety verification

INDUSTRY OVERVIEW

tests, including 150J bottom impact resistance and validation under 300 fast-charging cycles, collectively enhancing the demand for electrical insulation and fire-retardant heat-resistant products like those made from mica. The latest regulations and industry standards are as follows.

Domestic regulations and industry standards:

- GB 38031-2025 *Electric Vehicles Traction Battery Safety Requirements* 《電動汽車用動力蓄電池安全要求》 and GB/T 36276-2023 *Lithium Ion Battery for Electrical Energy Storage* 《電力儲能用鋰離子電池》 set safety requirements and test methods for traction batteries used in electric vehicles and lithium-ion batteries used in electrical energy storage applications, respectively. These standards cover key safety aspects such as electrical safety, mechanical safety, thermal safety, thermal runaway performance and thermal runaway propagation performance, supporting the adoption of appropriate thermal protection, electrical insulation and thermal barrier solutions in battery systems. Both standards were issued by SAMR and SAC, with GB 38031-2025 published in 2025 and GB/T 36276-2023 published in 2023.

International regulations and industry standards:

- *FMVSS 305a: Electric-Powered Vehicles: Electric Powertrain Integrity*. This regulation expands electric powertrain safety requirements for electric vehicles, with a focus on propulsion battery integrity, high-voltage electric shock protection and rechargeable energy storage systems. It was issued by the National Highway Traffic Safety Administration (NHTSA) under the U.S. Department of Transportation and published in 2024.
- *UN R100 05: 05 Series of Amendments to UN Regulation No. 100*. This regulation enhances safety requirements relating to thermal propagation risks for electric-powered vehicles and rechargeable energy storage systems, supporting thermal runaway control and thermal propagation mitigation. It was issued under the UNECE/WP.29 framework. The proposal document was published in 2024 and adopted by WP.29 in 2025.
- *Regulation (EU) 2023/1542 Concerning Batteries and Waste Batteries*. This regulation establishes the European Union regulatory framework for batteries placed on the EU market, including electric vehicle batteries and stationary battery energy storage systems. It covers sustainability, performance, conformity assessment and safety requirements, and supports battery thermal risk management. It was issued by the European Parliament and the Council of the European Union, adopted in 2023.

Rising downstream safety concerns

NEV and battery manufacturers increasingly focus on battery system stability, raising requirements for heat resistance and insulation. Mica products, with outperforming properties of electrical insulation, fire retardancy and heat resistance, can effectively support the safe operation of battery systems under complex working conditions, whose demand will continue to expand.

The continuously rising energy density of power and energy storage batteries, coupled with the restricted installation space within battery packs, has imposed more stringent requirements for thermal runaway protection. Concurrently, driven by an industry-wide focus on cost optimization and operational efficiency, end-users have exhibited a robust demand for

INDUSTRY OVERVIEW

physical safety barriers that combine ultra-thin spatial adaptability, reliable insulation and fire retardancy, and high cost-effectiveness. Consequently, the application of mica products in the new energy sector is expected to expand significantly.

Product technology improvement

With the improvement of manufacturing processes and quality control standards, mica products have undergone continuous optimization in terms of thickness control, electrical insulation, fire retardancy and heat resistance, enabling them to achieve superior performance in diversified scenarios of the new energy sector.

Developing global layout

Global NEV penetration expands mica demand to major auto markets. The mica supply chain is globalizing with overseas customers, localized supply, cross-regional standard alignment. The acceleration of mica products global production and supply to support the development of the new energy sector.

Entry barriers in the mica product market in the new energy sector

Customer resource barriers: NEV and battery manufacturers conduct lengthy supplier verification; once qualified, they rarely switch suppliers for safety and stability, creating barriers for new entrants lacking experience.

Technical barriers: High-performance mica requires specialized design, manufacturing expertise and long-term process accumulation; new entrants without such capabilities struggle to meet NEV and battery requirements.

Certification and compliance barriers: Mica products for batteries/energy storage need extensive safety tests, with long cycles, high costs and strict thresholds, forming compliance barriers.

Threats and challenges in the mica product market in the new energy sector

The mica product market in the new energy sector is characterized by rapid technological advancements in power battery and energy storage systems and increasingly stringent thermal management and safety standards. The continuous need to develop high-performance mica composite materials capable of withstanding extreme voltage and temperature conditions presents ongoing industry-wide technical challenges.

OVERVIEW OF MICA PRODUCT MARKETS IN OTHER SECTORS

Applications of mica products in other sectors

Beyond the new energy sector, mica products are widely applied in other sectors including home appliances and cables, with reliable electrical insulation, fire retardancy and heat resistance.

Mica products are primarily applied in the home appliance sector, providing functions of electrical insulation, fire retardancy and heat resistance for home appliances including microwave ovens, hair dryers, heaters and smart toilets. Mica products can effectively block the fire risk incurred by electrical leakage and heating in home appliances, providing electrical insulation, fire retardancy, heat resistance and other protective functions. Mica products can

INDUSTRY OVERVIEW

reduce heat loss, enhancing the heating efficiency of home appliances. Meanwhile, mica’s lightweight and highly moldable characteristics make its products adaptive to the compact design of home appliances. The application value of mica products in the home appliance sector mainly includes:

- **Safety protection:** Mica products can effectively block the fire risk incurred by electrical leakage and heating in home appliances, providing electrical insulation, fire retardancy, heat resistance and other protective functions. Mica products can also effectively prevent burns, fully meeting the safety standards thresholds for home appliances.
- **Lifespan extension:** Mica products can extend the lifespan of home appliances, reducing the aging and wear of core components including circuits and motors due to high temperatures, humidity and other environmental factors.
- **Performance optimization:** Mica products can reduce heat loss with the advantages of low thermal conductivity, enhancing the heating efficiency of home appliances. Meanwhile, mica’s lightweight and highly moldable characteristics make its products adaptive to the compact design of home appliances.

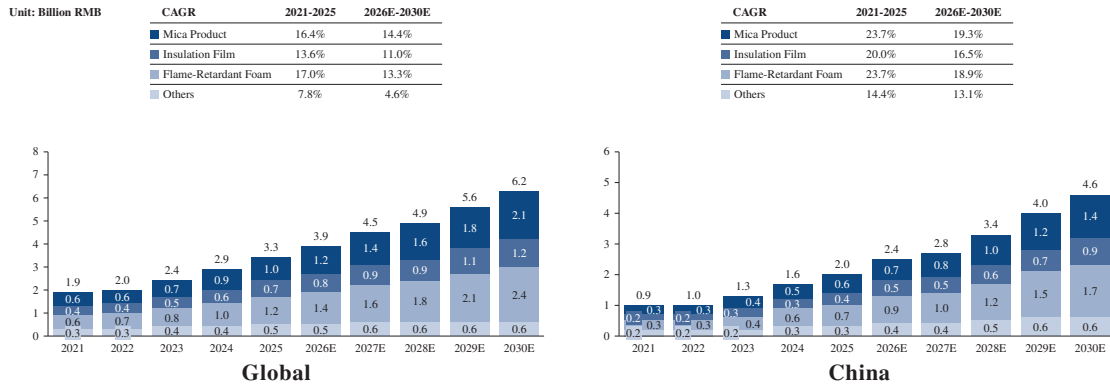
Apart from mica products, other fire retardancy and heat resistance materials in home appliance sector mainly include flame-retardant foam, insulation film, and others. According to different material properties, these materials are respectively applied to the core heating elements, the body and the shell of home appliances, collectively providing insulation and flame retardant functions for household appliances:

- **Mica products:** Provide high-temperature insulation, thermal protection and structural support. They can block heat transfer between the heating element and the shell, and are mainly applied in the core heating components of home appliances. The cost level of mica products is fair.
- **Insulation film:** Provide electrical insulation, moisture resistance and corrosion resistance. They also support circuit isolation and component insulation, and are mainly applied between components and cavities, as well as between the entire machine and casing. Their cost level is relatively low.
- **Flame-retardant foams:** Provide shock absorption, sealing and insulation functions, as well as basic flame retardancy. They support component fixation, gap filling and noise reduction, and are mainly applied between the heating chamber and the shell, as well as in component clearances. Their cost level is relatively low.
- **Others:** Other materials mainly include ceramicize silicone rubber. Ceramicized silicone rubber exhibits excellent heat resistance and maintains structural integrity at high temperatures, with relatively high price and needs to be compounded with other reinforcing materials for use.

Mica products, insulation film, flame-retardant foam and other materials have application in various modules of home appliances. Overall, mica products serve as insulating and flame-retardant components for core heating elements. Insulation film acts as an insulating and flame-retardant barrier between components and cavities. Flame-retardant foam is used as a filler material between the heating chamber and the shell. These material constitute the comprehensive system for home appliance’s fire retardancy and heat resistance. The following chart shows the market size of global and China fire retardancy and heat resistance materials in the home appliance sector.

INDUSTRY OVERVIEW

Market Size of Global and China Fire Retardancy and Heat Resistance Materials in the Home Appliance Sector, by revenue, 2021-2030E



Source: China Household Electrical Appliances Association, Frost & Sullivan

Mica products are primarily applied in the cable sector, providing functions of electrical insulation, fire retardancy and heat resistance. Mica products can enhance the operational safety and environmental resilience of cable, offering fire retardancy for conductors and insulation layers of cables, widely applied in various cable types including power transmission, communication, industrial equipment, rail transit and building wiring. Mica products can reduce heat accumulation in the operation of cables, prevent the insulation layer from aging at high temperatures and ensure the long-term stable transmission efficiency of cables. The application value of mica products in the cable sector mainly includes:

- **Safety assurance:** Mica products possess reliable characteristics including electrical insulation, fire retardancy and heat resistance, effectively mitigating the risk of arc breakdown in cables due to overload and short circuit. Mica products can maintain insulation integrity in various extreme scenarios including fires and other high-temperature environments.
- **Environmental adaptability enhancement:** Mica products possess characteristics including high-temperature resistance, moisture resistance, chemical corrosion resistance and mechanical resistance, reducing the erosion of wire and cable conductors and insulation layers incurred by high temperatures, high humidity, acid-base environments and external force impacts. Mica products can extend the lifespan and operational reliability of cables.
- **Transmission efficiency optimization:** Mica products can reduce heat accumulation in the operation of cables, prevent the insulation layer from aging at high temperatures and ensure the long-term stable transmission efficiency of cables.

Apart from mica products, other fire retardancy and heat resistance materials in the cable sector mainly include flame-retardant foam, insulation film and others. According to different material properties, these materials are respectively applied in different types of cables and different modules of cables:

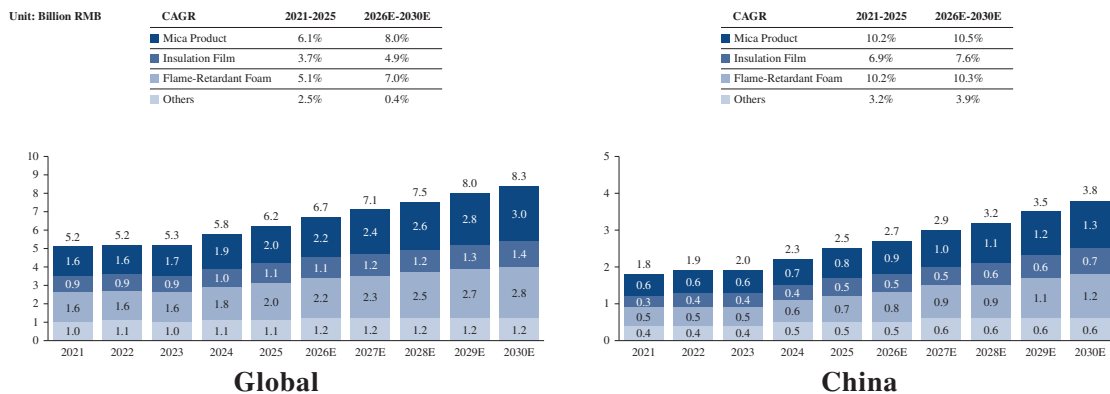
- **Mica products:** Have advantages in high-temperature resistance and electrical insulation. They are mainly applied in the core protection of fire-resistant cables and high-voltage cables. The cost level of mica products is fair.

INDUSTRY OVERVIEW

- **Insulation films:** Provide electrical insulation, moisture resistance and corrosion resistance. They are widely used in control cables, communication cables and low-voltage cables. Their cost level is relatively low.
- **Flame-retardant foams:** Provide heat insulation and lightweight properties. They are widely used for filling, sealing and cushioning in various cables. Their cost level is relatively low.
- **Others:** Other materials mainly include ceramicized silicone rubber. Ceramicized silicone rubber mainly provide protections for cable intermediate joints and terminal heads. Fiberglass is mainly applied in cable tray and tunnel fireproof lining.

Mica products, insulation film, flame-retardant foam and other materials have application in various types of cables. Overall, mica products are primarily applied on fire-resistant cables and high-voltage cables with relatively high requirement. Insulation film is widely used in control cables, communication cables, and low-voltage cables with relatively average requirement. With high morphological flexibility and lightweight advantages, flame-retardant foam is widely applied in filling, sealing, and cushioning of various cables. The following chart shows the market size of global and China fire retardancy and heat resistance materials in the cable sector.

Market Size of Global and China Fire Retardancy and Heat Resistance Materials in the Cable Sector, by revenue, 2021-2030E



Source: China Electrical Equipment Industrial Association, Frost & Sullivan

Market size of mica products in other sectors

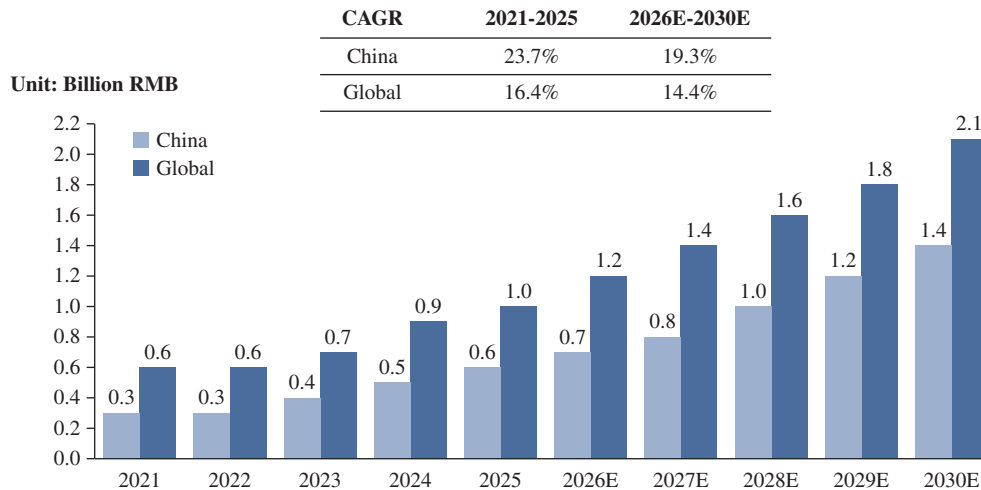
Mica products, with reliable electrical insulation, fire retardancy and heat resistance as well as ductility, are increasingly applied in home appliances, and the penetration rate in home appliances is gradually increasing. According to Frost & Sullivan, in 2025, the global market size of mica products in the home appliance sector reached RMB1.0 billion in revenue, while China market size of mica products in the home appliance sector reached RMB0.6 billion in revenue. From 2021 to 2025, the CAGRs of the global and China mica products in the home appliance sectors were 16.4% and 23.7%, respectively.

With the emergence of more diversified home appliances and the increase in electric power usage, the demand for mica products is rapidly increasing. According to Frost & Sullivan, by 2030, the global market size of mica products in the home appliance sector is expected to reach RMB2.1 billion in revenue, with a CAGR of 14.4% from 2026 to 2030. As

INDUSTRY OVERVIEW

a major consumer and exporter of home appliances, China demand for mica products in the home appliance sector will grow rapidly. According to Frost & Sullivan, by 2030, China market size of mica products in the home appliance sector is expected to reach RMB1.4 billion in revenue, with a CAGR of 19.3% from 2026 to 2030.

Market Size of Global and China Mica Products in the Home Appliance Sector, by revenue, 2021-2030E



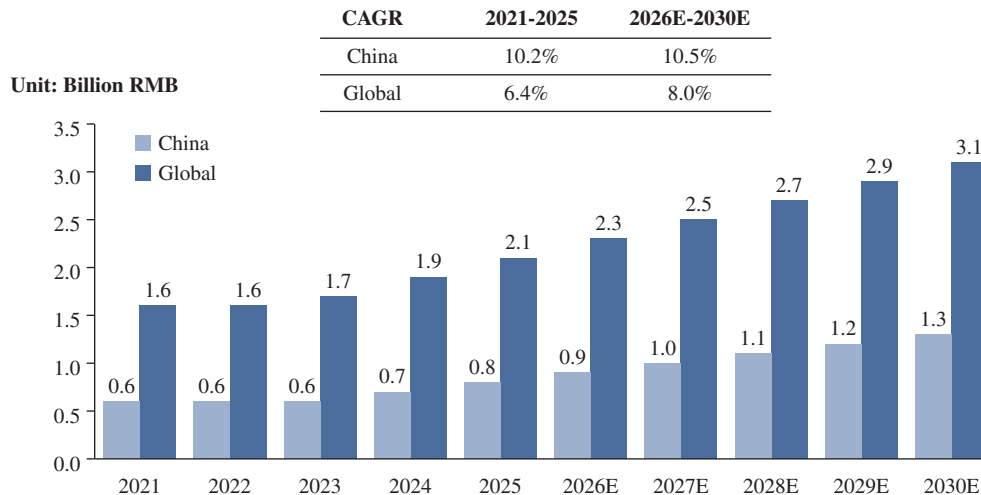
Source: General Administration of Customs of China, relevant company annual reports, Frost & Sullivan

With the gradual expansion of electrification, the application scale of mica products in the cables is also increasing. According to Frost & Sullivan, in 2025, the global market size of mica products in the cable sector reached RMB2.1 billion in revenue, while China market size of mica products in the cable sectors reached RMB0.8 billion. The CAGRs of the global and China mica products in the cable sector from 2021 to 2025 were 6.4% and 10.2%, respectively.

As an indispensable safety component, the application of mica products in cable sector will further increase with the rise of operating voltage and the lighter weight of cables. According to Frost & Sullivan, in 2030, the global market size of mica products in the cable sector will reach RMB3.1 billion in revenue, with a CAGR of 8.0% from 2026 to 2030. China market size of mica products in the cable sector will reach RMB1.3 billion in 2030, with a CAGR of 10.5% from 2026 to 2030.

INDUSTRY OVERVIEW

Market Size of Global and China Mica Products in the Cable Sector, by revenue, 2021-2030E



Source: Relevant company annual reports, Frost & Sullivan

Competitive landscape of mica products market in other sectors

In 2025, the global mica product market in the home appliance sector accounted for RMB1.0 billion, representing 4.3% of the global mica product market with more than 300 market players. The global mica product market in the home appliance sector is dominated by overseas companies with more than 300 market players. In 2025, the top three companies of the global mica product market captured the market share of 52.6% in total, in terms of revenue. We captured a market share of 10.4% in terms of revenue in 2025. In 2025, the China mica product market in the home appliance sector accounted for RMB0.6 billion, representing 6.3% of the China mica product market with more than 100 market players. In 2025, we ranked third with a market share of 15.1% in terms of revenue. The rest of major competitors in China mica product market mainly include Company D and Company G.

Company G was established in 1949 and is headquartered in Wiener, Austria. The company is mainly engaged in the research and development, production, sales and related services of electrical insulation products and composite materials. It is a private company.

In 2025, the global mica product market in the cable sector reached RMB2.1 billion, representing 8.8% of the global mica product market, and was dominated by overseas companies with more than 300 market players. In 2025, the top three companies of the global mica product market captured the market share of 58.7% in total, in terms of revenue. We captured a market share of 2.9% in terms of revenue in 2025. In 2025, the China mica product market in the cable sector reached RMB0.8 billion, representing 8.7% of the China mica product market, and was dominated by overseas companies with more than 100 market players. In the China mica product market in the cable sector in 2025, we captured a market share of 5.3% in terms of revenue. The rest of leading companies in China mica product market mainly include Company D, Company G and Company B.

INDUSTRY OVERVIEW

Drivers and trends of mica products market in other sectors

Rising market demand

The application scale of electric heating elements in home appliances is increasing simultaneously. Electric heating components in home appliances have a requirement for insulation and heat resistance protection, leading to the expanding demand for mica products in the home appliance sector. The demands for specialized cables in areas including high-voltage power grids and offshore wind power increase significantly, driving the steady expansion of the market size of mica products and the continuous expansion of mica products' application scenarios.

Upgrading product design

The design of home appliances is gradually evolving. Small home appliances, in particular, are moving towards lightweight and miniaturization, fostering higher demands on the spatial utilization and operational stability of components. Mica products can satisfy the requirements for miniaturization and the high-density layout of home appliance components. The cable sector is upgrading towards higher voltage, lightweight and green technologies, imposing higher demands on material performance compatibility and spatial adaptability, represented by mica products.

Increasing regulatory and certification requirements

Safety regulations and certification standards for home appliances are becoming increasingly stringent globally. As a key component providing insulation and thermal protection, the irreplaceability of mica products significantly increase. In the cable sector, mica products do not release toxic gases when burned and pass authoritative certifications of UL (Underwriters Laboratories, an authoritative certification institute in US) and TÜV (Technischer Überwachungsverein, an authoritative certification institute in German), increasing the demand for mica products.

Entry barriers for mica products in other sectors

Technical barrier: Mica products require precise formulation, process control and customization for home appliances and cables, whose core technologies rely on long-term accumulation, making it hard for new entrants to break through.

Ecological barrier: Mica product manufacturers need stable raw material procurement and long-term partnerships with leading home appliance and cable companies. New entrants struggle to integrate into the supply chain quickly.

Regulatory and certification barrier: Mica products must meet strict international/domestic safety, environmental and performance standards; new entrants cannot satisfy these requirements in a short time.

INDUSTRY OVERVIEW

Threats and challenges for mica products in other sectors

The mica product market in the home appliance sector is marked by intense competition driven by the proliferation of low-cost alternatives in small home appliances and electrical components. The need to balance product performance with price competitiveness, alongside evolving safety certifications and environmental regulations for household electrical products, presents significant industry challenges.

OVERVIEW OF THE TRANSMISSION MODULE MARKET IN EMBODIED INTELLIGENCE

Overview of the Embodied Intelligence Market

Industry 4.0 adoption and growing digital transformation demand drive the rapid development of the embodied intelligence industry, which enables perception, decision-making and execution via dynamic interaction between AI entities and the environment. Its application scenarios have expanded from traditional industrial sectors to services and diversified fields (e.g., commercial cleaning, household services), boosting production automation, precision, efficiency, safety and cost-effectiveness while mitigating labor shortages.

A key direction of embodied intelligence, humanoid robots have human-like appearance and movement capabilities, with autonomous perception and task execution abilities, gradually moving towards large-scale commercialization in multiple sectors as a new general-purpose platform.

Overview of the transmission module market in embodied intelligence

Embodied Intelligence constitutes a comprehensive system which integrates physical entities, sensing systems, and intelligent algorithms to facilitate autonomous interaction and decision-making. As a major part of embodied intelligence, the transmission module, with load-bearing capacity and durability, effectively addresses the pain point of humanoid robots and other embodied intelligent agents in maintaining precise positioning when bearing heavy loads. The transmission module in embodied intelligence are consisted of key precision structural components and related products, including motors, micro drives, reducers, ball/planetary screws and other micro precision high-performance composite component, etc. The quality of the transmission module influences the motion sensitivity, load-bearing capacity and lifespan of humanoid robots and other embodied intelligent agents. The Group manufactures precision structural components and related products for key robotic fields, including ball/planetary screws, micro drives, reducers and motors, all of which fall under the category of transmission module products in the embodied intelligence field.

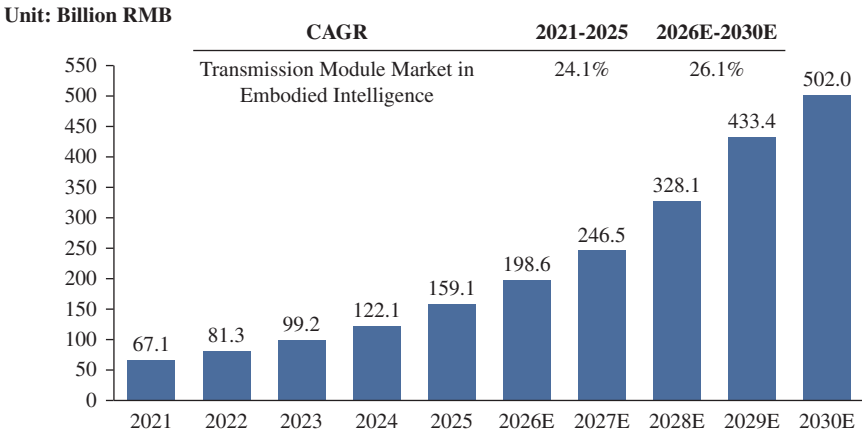
Market size of transmission modules in embodied intelligence

The transmission modules is an important part of embodied intelligence, which act as the core execution module. The collaboration of perception, decision-making, execution and energy modules ensure the operational stability of embodied intelligence. Driven by the continuous breakthrough of core technologies such as perception algorithms and execution mechanisms, and the increasing layout of major enterprises in the field of embodied intelligence, the global market size of embodied intelligence will achieve rapid growth. According to Frost & Sullivan, the global market size of transmission modules in the embodied intelligence sector will reach RMB159.1 billion in 2025, with a CAGR of 24.1% from 2021 to 2025. With the further development and large-scale commercial application of embodied intelligence, humanoid robots are expected to accelerate into mass production, leading to a

INDUSTRY OVERVIEW

steady increase in the demand for transmission modules on a large scale. According to Frost & Sullivan, the global market size of transmission modules in the embodied intelligence sector will reach RMB502.0 billion in 2030, with a CAGR of 26.1% from 2026 to 2030.

Global Transmission Module Market in Embodied Intelligence, by revenue, 2021-2030E



Source: International Federation of Robotics, Frost & Sullivan

Competitive landscape of the transmission module market in embodied intelligence

In the global transmission module market in embodied intelligence, overseas companies capture the majority of the market shares with over 500 market players. In 2025, the top five players captured the market share of over 25% by revenue in the global transmission module market in embodied intelligence market, while the Company’s market share was less than 0.1% in 2025.

Drivers and trends of the transmission module market in embodied intelligence

Market demand increases

Driven by labor shortages and intelligent manufacturing upgrading, humanoid robots and embodied intelligent agents see robust demand. As the core transmission module for precise linear motion, it directly impacts motion control accuracy and load stability; their technological advancement and robot iteration drive a sharp rise in transmission module demand.

Technological upgrading and iteration

With embodied intelligence expanding to healthcare, consumer services and beyond, transmission modules face higher requirements for motion stability and precision. Manufacturers enhance such performance via breakthroughs in thread grinding precision and material heat treatment, strengthening environmental adaptability and task execution capabilities.

INDUSTRY OVERVIEW

Rising localization rate

Leading domestic transmission module manufacturers have broken through key processes, with core indicators (micron-level positioning accuracy, long-term stability) approaching international levels. Mature local supply chains and large-scale production bring cost advantages, driving downstream shifts to domestic manufacturers and boosting domestic substitution.

Entry barriers for transmission modules in embodied intelligence

Technological R&D barrier: Embodied intelligence requires transmission modules with high motion control precision and durability, involving interdisciplinary integration; new entrants struggle to break through quickly due to the need for high-precision design and customization experience.

Capital investment barrier: Transmission module production relies on expensive imported precision equipment and high-standard workshops. The long cycle from R&D to mass-production and high capital input form entry thresholds for new entrants.

Supply chain and customer certification barrier: As a core component, transmission modules face strict, time-consuming customer verification. New entrants find it hard to build mature supply chains and obtain downstream certification quickly.

Threats and challenges for transmission modules in embodied intelligence

The transmission module market in embodied intelligence is characterized by rapid technological iteration and highly diverse operational requirements across various humanoid and robotic form factors. Achieving extreme miniaturization, high torque density, and precise motion control simultaneously presents substantial technical challenges for systemic hardware integration. Moreover, the industry faces ongoing difficulties in transitioning from early-stage prototype development to scalable mass production, while maintaining consistent manufacturing precision and mitigating the high costs of core mechanical components.

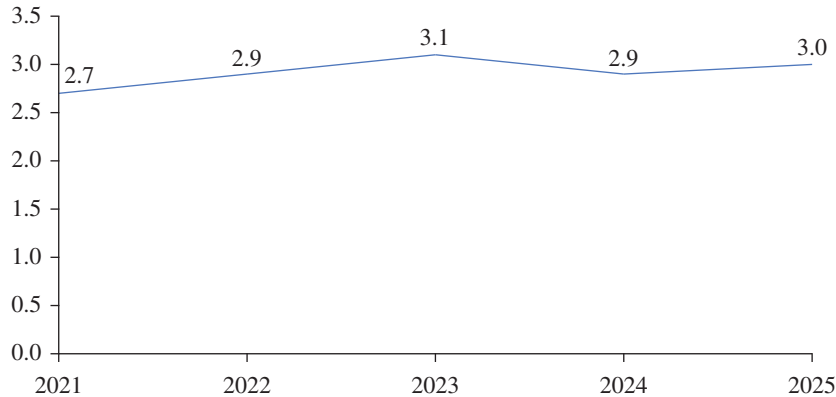
HISTORICAL PRICE OF RAW MATERIALS

Mica ore is one of the raw materials for mica products. From 2021 to 2023, there has been a slight increase in the price of Mica ore, ranging from RMB2.7 thousand per ton to RMB3.1 thousand per ton. In 2024, with the release of updated production capacity, the price of natural mica ore fall back to RMB2.9 thousand per ton. In 2025, the price of mica ore slightly rose to 3.0 thousand per ton. Overall, the price of mica ore shows stability and is expected to remain stable in the future.

INDUSTRY OVERVIEW

Historical Price of Mica Ore, 2021-2025

Unit: Thousand RMB per Ton



Source: China Non-Metallic Minerals Industry Association, Frost & Sullivan

Availability of mica ore in the world

India accounted for approximately 40% of the total global natural mica ore production in 2025, as the largest exporter of natural mica ore globally. Its policy focuses on promoting localization in the processing stage and strengthening product compliance control, with strict inspections on the thermal stability and dielectric strength of exported products.

China accounted for approximately 25% of the total global natural mica ore production in 2025, as the second largest exporter of natural mica ore globally. China doesn't have export constraints on the export of mica ore, only implementing export licensing control for special high-performance mica raw materials used in military, nuclear industry, and aerospace.

Madagascar accounted for approximately 15% of the total global natural mica ore production in 2025, as the third largest exporter of natural mica ore globally. Madagascar doesn't have export constraints on the export of mica ore, only requiring export enterprises for operational qualifications and export licenses.