New Initiatives Targeting Growth

Segment Strategy

Message from Top Management

Industrial Machinery Business Division

Evolving NSK’s business portfolio to meet new needs as industry undergoes a structural shift

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NSK’s Industrial Machinery Business: Strengths and Value Creation

Ever since NSK’s foundation, our industrial machinery business has helped build a safe, smooth society by supplying high-performance high-quality bearings, linear motion, and mechatronic products to a vast range of sectors that support our modern life—from infrastructure such as steelmaking facilities and railway cars, to machinery used in advanced manufacturing such as machine tools and semiconductor manufacturing equipment, capital goods such as speed reducers, and consumer goods such as washing machines and air conditioners. Meanwhile, through our aftermarket business we have worked to support a wide range of industrial equipment users by delivering maintenance and repair products and technical expertise. By further refining our product development to develop high-precision products to support an advanced technological society, we will work to deliver even more compact, high-efficiency products that contribute to an energy-efficient society.

NSK’s strength lies in our product lineup founded on the Four Core Technologies plus One and the technical support we deliver to our customers. The pioneer spirit that inspired us to create Japan’s first domestically-produced bearings lives on today. The sincere and ongoing efforts of our employees to not only meet but to exceed our customers’ expectations have earned us the strong trust of customers both in Japan and across the world, allowing NSK to maintain a leading position in the industry. Our R&D prowess—which enables us to overcome technological hurdles, our ability to manufacture in optimum global locations, and our delivery framework consisting of not only direct sales but also a strong distributor network have won acclaim from customers and built NSK into a trusted brand around the world. This in turn motivates us to deliver even more advanced engineering and technical services and propose new solutions to our customers.

While we have a strong and balanced global lineup catering to both OEM customers and the aftermarket, NSK is particularly strong in the two core products of precision bearings and precision ball screws, holding the top global share in each. Technical service is another of our strengths, with our engineers working with our customers at the front line of their operations to deliver solutions. NSK’s technical services have also won acclaim outside Japan. We are steadily developing a strong reputation, including recently winning a large maintenance contract in the U.S.

One of the key factors supporting our global industrial machinery business is the diversity of our people. Our locations outside Japan are increasingly overseen by local managers, and our teams work to provide a swift and fine-tuned customer response based on the characteristics and needs of each region. Furthermore, non-Japanese managers, including women, hold key posts at our Industrial Machinery Business Division Headquarters in Japan. The diversity of our personnel is an important base for the development of our business, and we will continue to evolve our organization in this way going forward.
Our Vision for 2026

Industry is currently undergoing a major structural shift. The shift to low-carbon and decarbonized technology is accelerating in response to the common global problems such as population growth and environmental issues. Meanwhile, advances in Internet of Things (IoT) and artificial intelligence (AI) technology are leading to improvements in big data analysis capabilities, which, combined with the spread of 5G technology, is driving a reform in the structure of industry and related economic models. In this environment, NSK’s industrial machinery business must evolve its business portfolio to meet these changing market needs. Although we are already working to focus our resources on areas and sectors that will grow in line with needs related to automation, labor-saving, smart manufacturing, and the environment, one area that I want to place even more emphasis on is increasing the ratio of solution-based services—in addition to our product-based business—that we offer. In other words, we aim to build a business model that spans all phases of the product life cycle. By monitoring the condition of bearings used in manufacturing facilities and visualizing the remaining life, we aim to help our customers achieve zero downtime in their machines and plants. At the same time, we will continue to pay close attention to how NSK products are used, and link this knowledge to R&D ideas for new products, as well as new technical services and improved consulting capabilities. These will be important tasks for us as we work toward 2026.

New Initiatives Targeting Growth

NSK’s industrial machinery business has selected the following five key initiatives targeting sustainable growth in its 6th Mid-Term Management Plan.

The first is to capture demand in growth sectors. As I mentioned previously, we have identified several growth sectors where NSK’s R&D, design, and quality capabilities can be put to use to respond to changes in technology and customer needs. These include clean energy, such as wind power generation, railway cars—which are once again drawing attention as an environmentally-friendly means of mobility, information and communications technology related to 5G, and high-performance energy-efficient appliances utilizing IoT technology.

The second key initiative is to deliver value leveraging NSK’s strength in precision technology. Precision technology is one of NSK’s core technologies, and a source of pride on which our industrial machinery business will not compromise. As the working population shrinks in line with declining birthrates and the need for plant automation and labor-saving technology grows, we will work to further accelerate development of the precision bearings and precision ball screws used in machine tools, semiconductor manufacturing equipment, and robotics to maintain our dominant share of the market and further expand our presence.

Our third key initiative is to establish industrial actuators as a new core product. Industrial actuators are key components that support electrification, and the size of the market is forecast to grow. For example, one application is vibration control actuators that use ball screws and motors in combination to reduce vibration in railway cars. In the new markets that will develop with the advent of electrification, we will utilize NSK’s superior component technology to deliver unit and systemized products, with the aim of developing this product line into a future pillar of the Industrial Machinery Business.

The fourth key initiative is to leverage NSK’s strengths to expand the GAM (global aftermarket) business. We will utilize NSK’s strengths including our brand power and technical service capability to push forward with our key global initiatives, including enhancing sales channel management, developing specialists, strengthening our supply, distribution, and inventory functions, and further promoting IT utilization.

The fifth and final key initiative is to construct a new business utilizing condition monitoring technology. Our condition monitoring system (CMS) technology, which enables the actual usage conditions of NSK products to be visualized and tracked, has won acclaim as among the best of its kind in the industry. In addition to product development, manufacturing, and delivery—the key processes of a traditional manufacturer—we will also focus on developing solution-based business models, such as diagnosing and visualizing the remaining life of a product using CMS technology, helping prevent sudden stoppages in our customers’ machinery.

ESG and SDGs Initiatives

I believe that initiatives by the Industrial Machinery Business can make a particularly important contribution to the environment. Last year NSK positioned “the environment” as one of its core values alongside safety, quality, and compliance, and set a Group-wide target of a 60 percent reduction in its CO2 emissions by the year 2050. We are pushing forward with initiatives toward this goal. For example, we have reduced energy consumption at our NSK Kishu plant (Fukuoka, Japan) by converting air conditioning systems to electric heat pumps, introduced smart manufacturing technology in the form of a new hybrid line in the Kirihara branch of our Fujisawa plant (Kanagawa, Japan), as well as converting heat treatment furnaces to electric technology. We are also working to develop new, energy-efficient heat treatment furnaces. NSK’s products are incorporated in a diverse array of devices, and the contribution our products make to reducing friction and energy loss is immeasurable. In the case of motors, NSK products help improve motor efficiency and reduce energy consumption, while electrifying the hydraulic system in injection molding machines and replacing it with ball screws helps lower CO2 emissions. Additionally, the development and supply of bearings for wind power generation—a key renewable energy source—directly serves to combat global warming. At NSK we are not only committed to reducing CO2 emissions, but are also focusing on doing our part to achieve the SDGs associated with our business. Going forward we aim to contribute to society while continuing to grow as a company.