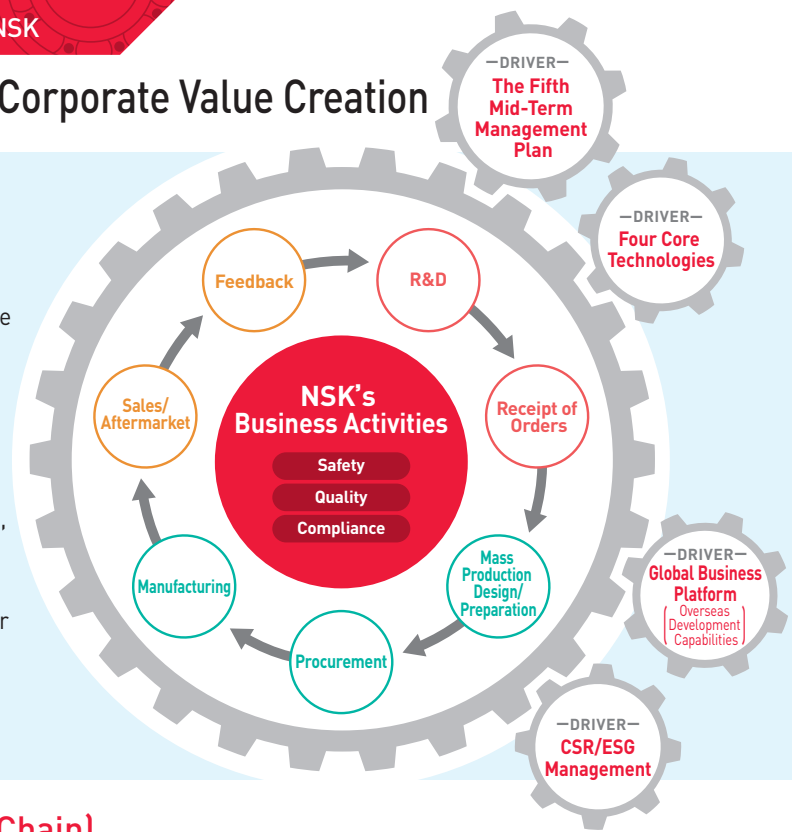


NSK's Business Activities and Corporate Value Creation

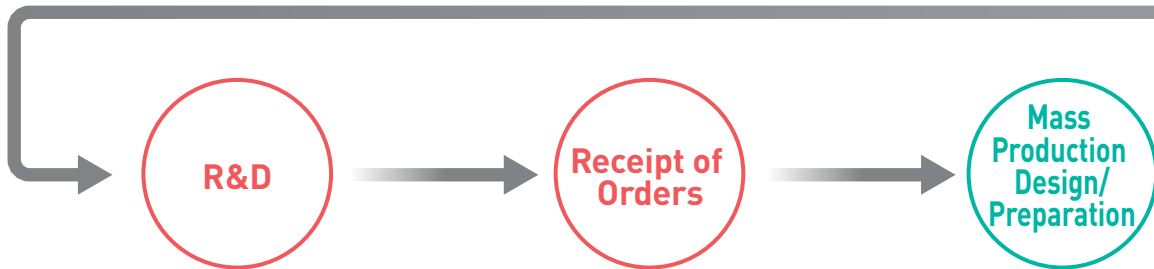
NSK's Business Activities

NSK engages in BtoB operations, with its major customers including automakers and machinery manufacturers. NSK has two business segments, the Industrial Machinery Business and the Automotive Business, which reflect the industries in which the Company's customers operate. The Industrial Machinery Business Division Headquarters and the Automotive Business Division Headquarters oversee these businesses on a global level.

Each business division headquarters maintains its own production, sales and technology units that take responsibility for the entire business value chain, from marketing activities for order receipt to product design, manufacturing, sales, delivery, payment collection and aftermarket services. As shown in the chart on the right, NSK's value chain creates value for its customers through business activities that are focused on safety, quality and compliance, and encompass research and development, manufacturing, sales and feedback to provide lasting value for the Company's customers.



NSK's Business Model (Value Chain)



Our four core technologies are tribology, materials, numerical simulation and mechatronics (see P. 40). In the field of R&D, NSK engages in broad and cross-sectional research and development that is not restricted by business segments, in addition to fundamental research, advanced development, application development and production technologies. NSK's R&D activities lead to the creation of new products, technologies and businesses.

The independent sales divisions of the Industrial Machinery Business and the Automotive Business coordinate with other internal departments to win new orders. The timing of orders received, lead times and other aspects of order-taking activities depend on the customer's business, products and components used. For global products, the sales divisions coordinate with the relevant sites in other countries.

Mass production design entails the design of large-lot products delivered to customers. Mass production includes both newly designed products and standardized products that do not require new designs. Mass production preparation involves the setting up of processes and production equipment at mass production plants once specifications have been finalized. In many cases, customer approval is required for product specifications, equipment and processes.

	R&D	Receipt of Orders	Mass Production Design/Preparation
Key inputs	<ul style="list-style-type: none"> • Technical staff (human capital) • Accumulated technologies, R&D centers (intellectual capital) • R&D structure with external parties (social/relationship capital) • Financial foundation for funding R&D (financial capital), etc. 	<ul style="list-style-type: none"> • Experience and track record in QCDDSM (manufacturing, intellectual and human capital) • Strong relationships of trust with customers (social/relationship capital) • Sales capabilities (human capital) • NSK brand recognition (social/relationship capital), etc. 	<ul style="list-style-type: none"> • Mass production equipment preparation, capital investment (manufacturing capital) • Design engineers (human capital) • Accumulation of a wide variety of technologies (intellectual capital) • Technology centers, R&D sites (intellectual capital) • NIT (intellectual and human capital), etc.
Our strengths in the creation of value	<ul style="list-style-type: none"> • NSK's strengths are in its ability to solve complex technological problems based on our four core technologies, the breadth of talented technical staff and accumulated technologies gained through deep knowledge and experience. • Based on our tight-knit relationships with customers, we can quickly grasp their product- and technology-related needs and guide development to meet those needs. • NSK leverages the collaboration and joint development with our customers, suppliers and external research institutions in its product development (e.g., steel materials, grease, motors, electronic control units [ECUs]). • NSK has a global network of technology centers. • NSK has systematic education programs and educational institutions, including the NSK Institute of Technology (NIT), for the training and strengthening of its technical staff. 	<ul style="list-style-type: none"> • NSK has internal systems that support tight-knit communications between customers and the Company's engineering and sales staff. • NSK's global development and supply capabilities also help to win a variety of orders (e.g., orders for newly developed, improved and existing/standard products). • In the Automotive Business, Global Account Managers (GAMs) and Key Account Managers (KAMs) work together on project requirements. • NSK focuses on high-quality, environmentally friendly products that are trusted by customers. 	<ul style="list-style-type: none"> • Design quality is a key factor in manufacturing quality. Accordingly, accurately understanding the specifications required by customers and reflecting them in product design leads to improvements in product development, design proposals and project management. • NSK develops its own, specialized production equipment, which leads to lower costs for mass-produced products. • Having a framework in place to manage the entire process, from order receipt to the mass production launch, NSK works to improve profitability through timely and cost-conscious preparations, from product design to mass production.



Manufacturing capital



Intellectual capital



Human capital



Financial capital



Social/Relationship capital



Natural capital

Shared Features of the Industrial Machinery Business and the Automotive Business

- ▶ NSK's products are components that enhance the performance of the customer's machinery in which they are incorporated. The product specifications and functional requirements of our customers have an impact on NSK's products and business activities.
- ▶ QCDDSM: Quality, Cost, Delivery, Development, Service and Management play an important role in securing NSK's competitive advantage.
- ▶ Demand conditions in the industries of our customers affect NSK's net sales and profits.
- ▶ The ability to develop business on a global scale affects NSK's competitiveness and growth potential.
- ▶ The ability to propose technological solutions is key to acquiring new projects.
- ▶ In principle, products are manufactured once orders are received, rather than in anticipation of orders.

Procurement

Manufacturing

Sales/
Aftermarket

Feedback

The equipment, materials, parts and production materials required to manufacture mass-produced products are procured from manufacturers and suppliers. NSK's basic procurement policy involves procurement at each production site and procurement at the head office, which determines procurement policies on a company-wide level. Collaboration with suppliers and stable procurement are essential.



- Know-how of each production site (manufacturing, intellectual capital)
- Joint development suppliers (intellectual, social/relationship capital)
- Coordination/collaboration with each supplier (social/relationship capital), etc.

- Favorable and strong relationships with suppliers that enable the stable procurement of raw materials and components, enhanced cost competitiveness and high quality.
- NSK jointly develops materials, parts and grease with suppliers to improve the quality of its products.
- Overseas, NSK is working to reduce costs by improving the local procurement ratio while advancing into markets jointly with existing suppliers or assisting them in their efforts to make inroads independently.
- In equipment procurement, NSK develops its own equipment and has a system for procurement within the Group.
- From the standpoint of CSR procurement, NSK monitors supplier performance based on stringent criteria in its supplier CSR guidelines for human rights, the environment, compliance, and BCP, and suggests improvements to these suppliers as needed. NSK puts into practice green procurement, avoids the use of conflict minerals and ensures compliance with the UK Modern Slavery Act.

The manufacture of products takes place at the NSK Group's manufacturing plants. A wide range of business collaboration, including in manufacturing, quality assurance, manufacturing engineering/equipment management, production control, plant accounting and general affairs work, is necessary to ensure stringent management concerning quality, cost and delivery (QCD). Both the Industrial Machinery Business and the Automotive Business maintain their own manufacturing plants.



- Production plants and facilities (manufacturing capital)
- Various production technologies, accumulated know-how (intellectual capital)
- Production technical skills (human capital)
- Suppliers and local communities (social/relationship capital)
- Steel used as a raw material, components, oil, electric power and water (natural capital, manufacturing capital), etc.

- Operating 20 plants in Japan and 44 plants overseas, NSK possesses a production system able to meet global demand in a timely manner.
- As mother plants, some of the plants both in Japan and overseas have established support systems, such as for launching overseas plants and addressing measures for various tasks.
- Small-group activities (QC circles) are conducted at each plant on an ongoing basis to improve workplace processes. More overseas plants are being operated under the supervision of local staff.
- The NSK Manufacturing Education and Training Center provides hands-on training to engineers from plants around the world with the aim of passing down technical skills and improving technical capabilities.

Sales activities span the delivery of manufactured products to customers and distributors, inspection and acceptance of the delivered products, and final recording of the sale. Aftermarket services entail the maintenance and repair of equipment and machinery for customers and end users. Feedback from customers is reflected in production plan reviews, inventory management, product improvements and the development of new products.



- Human resources to undertake production, sales and inventory (PSI) management (human capital)
- Customers, distributors and sales outlets in aftermarket services (social/relationship capital)
- Production-related survey and analytical data (intellectual capital), etc.

- NSK aims to maintain appropriate levels of inventory and undertakes strict inventory controls with advanced PSI management.
- The bedrock of the aftermarket business is NSK's strong relationship with distributors and sales outlets as well as its extensive network.
- NSK has advanced analysis capabilities and accumulated technologies from access to a wide range of data fields, such as for defects and damage at customers and end users.
- In addition to responding to repair and maintenance demand not only for its own products but also for other companies' products, NSK leverages its advanced network to respond quickly to occasional demand outside of routine maintenance.
- Feedback is used to improve products and propose solutions with new technologies.