

NSK Founding Spirit



Headquarters and plant of NSK in the early Showa period (circa 1930)

NSK was established in 1916 as Japan's first manufacturer of bearings in Osaki-cho, Ebara-gun, Tokyo (the site of its current headquarters: Osaki, Shinagawa-ku, Tokyo). In the more than 100 years since then, we have been challenging ourselves to develop innovative technologies, contributing to the reduction of energy loss and supporting the development of industries globally through the expansion of our overseas business. Times change, but what has remained consistent is the attitude of "contributing to society through our products and technologies." It is this attitude that has supported our growth.

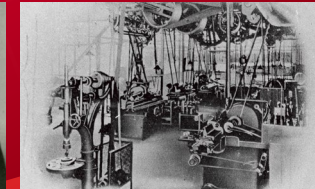
1916

It All Started Here: NSK's Founding Spirit - The Thoughts of Takehiko Yamaguchi, Founder

NSK's founder, Takehiko Yamaguchi, became acutely aware of the difference in technological standards between the Japanese machinery industry and those in Europe and the United States when he traveled to those regions for technical research. He subsequently decided to devote himself to the development of the Japanese precision machinery industry, introducing machinery and technologies from overseas. In 1914, with the aim of domestically manufacturing precision machinery parts, Nippon Seiko Limited Partnership Company was established and several engineers with outstanding mechanical skills were invited to join the company to begin research and development. At a time when there was no such thing as a single specialized machine for manufacturing bearings, we went through a process of trial and error, making full use of the general-purpose machines we had at hand and developing our own equipment based on information from literature and other sources. The following year, in 1915, a prototype bearing was completed, and mass production began in 1916. NSK Ltd. was established at the same time. After the establishment of the company, we conducted joint research with steel manufacturers to improve the quality of materials, attempted to produce steel material domestically, and sought to make bearings in various shapes. This enabled us to produce bearings with 187 model numbers two years after the establishment of the company. The passion poured into the establishment of this untapped bearing industry is the frontier spirit that NSK was founded with.



Takehiko Yamaguchi



Polishing line that we had in our headquarters plant circa 1921

Events where NSK's frontier spirit was demonstrated

Although the expressions have changed with the times, NSK's founding spirit has been passed down to subsequent generations.

1958

Industry-first entry to the U.S. market

In the late 1950s, the United States was the core of the global automotive industry and demand for bearings was about 10 times greater than the Japanese market. At the time, the world's leading overseas bearing manufacturers were competing in the U.S. market, and for Japanese manufacturers entering the U.S. market was a long-held dream. Against this backdrop, NSK entered the market in 1958 when it signed a 15-year long-term export, sales, and technical cooperation agreement with Hoover International Inc., a U.S. bearing manufacturer. Subsequently, Japanese bearing manufacturers

1991

NSK's Mission Statement

MOTION & CONTROL™

NSK contributes to a safer, smoother society and helps protect the global environment through its innovative technology integrating Motion & Control™. As a truly international enterprise, we are working across national boundaries to improve relationships between people throughout the world.

1958

Japan's first development and mass production of ball screw type manual steering systems

We began developing steering gears in the mid-1950s and succeeded in prototype and mass production of ball screw type manual steering systems for automobiles in 1958. This was a first in Japan and second in the world, following a U.S. automaker. Applying this technology, in 1959, the Company developed Japan's first precision ball screw for machine tools. Since then, ball screws have become an integral part of machine tools as a major drive component.

signed export contracts with local bearing manufacturers, as NSK had set an example. Since then, we have been expanding our business locations globally and promoting production in optimal locations.



Signing of contract with Hoover International Inc. of the U.S.

1999

World's first development of half-toroidal continuously variable transmission (CVT)

In response to the important issue of increasing the efficiency of automobiles, we began working in the late 1970s on the development of a continuously variable transmission that does not use gears. One by one, we overcame barriers such as the development of lubricating oil that transmits power while preventing metal contact friction under the harsh environment of high temperature and high pressure, and the development of the highest purity steel material with no impurities that could cause cracking, and succeeded in the world's first practical application of a half-toroidal CVT. Currently, it is being adopted and considered for use in aircraft generators and other applications.



Half-toroidal CVT (continuously variable transmission)

2019

New area development of filter for preventing edible oil degradation

NSK is working in new areas to develop unprecedented products. For example, we interviewed customers in fields with which we had little contact in the past, searched for their needs, and developed a filter to control degradation of edible oil. The starting point of the project was an employee's idea to create something new by utilizing the technology to prevent oxidative deterioration of lubricants that NSK has been using daily. This new product is expected to reduce the workload of food manufacturing plants and contribute to the global environment by reducing oil degradation.



Edible oil deterioration control filter

2016

NSK Vision 2026

SETTING THE FUTURE IN MOTION

We bring motion to life, to enrich lifestyles, and to build a brighter future.

Dedicated to uncovering society's needs, we set ideas in motion to deliver solutions beyond imagination.

We're NSK.

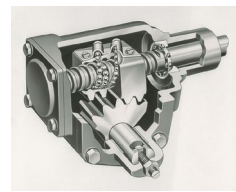
And, we're setting the future in motion.

MTP2026

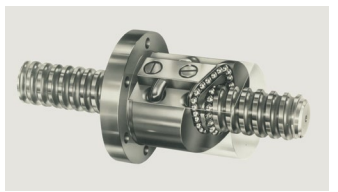
We aim to be a needed and trusted company that contributes to the development of a sustainable society by creating new value through the fusion of tribology and digital technology.

Post 2026

Keep in motion for 100 or even 1,000 years



Ball screw type manual steering systems



Ball screws for machine tools

2021

World's first development of biomass plastic cage for rolling bearings

We have developed the world's first cage made of 100% plant-derived plastic (biomass plastic). Leveraging NSK's know-how cultivated over the past 100 years, this product was created from a new perspective of contributing to the environment from the aspect of materials, showing the frontier spirit of the Company. To achieve carbon neutrality, we will continue to develop environmentally friendly products such as retaining pieces for ball screws made from biomass plastic.



Biomass plastic cage



Biomass plastic retaining piece NSK S1™.