



NSK

Expect Perfection®

NSK NAKANISHI INC.

HEAD OFFICE & FACTORY
700 Shimohinata, Kanuma, Tochigi 322-8666, Japan
TEL: +81 (0)289-64-3380 FAX: +81 (0)289-62-5636
www.nsk-inc.com

NSK Europe

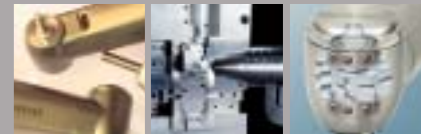
NSK EUROPE GmbH
Westerbachstraße 58 D-60489 Frankfurt, Germany
TEL: +49 (0)69 74 22 99 0 FAX: +49 (0)69 74 22 99 29
www.nsk-europe.de

NSK America

NSK AMERICA Corporation
700 B. Cooper Court, Schaumburg, Illinois 60173, USA
TEL: +1 847-843-7666 FAX: +1 847-843-7622
www.nskamerica.com



NSK COMPANY PROFILE



Perfect Partners®

welcome 3 4 6 8 10 12 14 16 18

OUR PHILOSOPHY

OUR FIELDS OF EXPERTISE

DENTAL

INDUSTRIAL

DEVELOPMENT

PRODUCTION

SALES

ENVIRONMENT

OUR HISTORY

our philosophy

Since our establishment in 1930, our company has focused on the development and production of specialist high speed rotary cutting instrumentation for the field of dentistry and also for industrial application. The particular requirements of our customers has consistently been a priority in our product development programs. We also appreciate the competitive nature of global markets and continue to respond with high quality products and performance, delivered at remarkably competitive values.

Today, NSK delivers products to more than 120 countries around the world.

NSK has the capability to develop, manufacture and market products completely in-house. This allows our company to respond promptly to market demands and to assure the highest level of quality for every NSK manufactured product.

The challenge continues for us to meet the varied demands of the 21st century, and to contribute to the progress of dentistry, and the growth of industrial applications.



NSK CORPORATE PHILOSOPHY

To continually materialize our vision of contributing to the health, wellbeing and progress of people throughout the world, via the application of NSK high quality, advanced performance products, being affordable to all nations.



Eiichi Nakanishi
President & C.O.O.



our fields of expertise

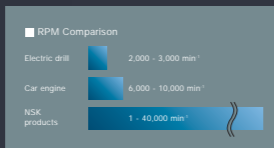
The World's Leader in Ultra-High-Speed Rotational Technology

NSK ... 1 to 400,000 min⁻¹

Since our establishment in 1930, NSK has closely observed market demands and responded with logical solutions. The performance capability of NSK products has continually developed in line with modern micro production technology advancements – many of which have been developed and Patented by NSK.

The NSK factory today operates the most advanced design and micro production technology resulting in quality products with durable, high performance capability and spanning speeds of 1 to 400,000 min⁻¹. Now, in 120 countries, NSK products are confidently used to perform complex medical and dental healthcare procedures. Further, NSK industrial products are installed in high tech production factories throughout the world where micro precision and reliability is an essential production criteria.

In the 21st century NSK is poised to significantly expand its reach as the global demand for precision and reliability in rotary cutting technology expands.



dental

NSK DENTAL PRODUCTS

Beyond rotational technology, clinical hygiene is a special factor in the design and production of NSK dental products. Additional considerations such as instrument sterility, the prevention of contamination between dental patients, operator comfort and product high performance reliability are all of significant importance in the clinical environment.

Ahead of all competitors, in 1997 NSK developed the Clean Head (Internal Contamination Prevention System) and, in 1993, was subsequently awarded the coveted European SITAD Award for Design Excellence. More recently, NSK has developed unique and innovative production technology to enable production of dental handpieces from solid Titanium. This new technology offers Professional Clinicians a range of high and low speed, light weight, durable and sterilizable rotary instruments for all dental treatment procedures. Special Cellular Optic light transferal systems are incorporated for improved work site vision.

In addition to rotary cutting, NSK expertly produces ultrasonic technology for dental treatment application. This technology has particular application for the growing field of professional oral hygiene programs.

In the specialized disciplines of dental implantology and oral surgery, NSK offers a range of particularly user friendly precision surgical micromotors allowing the absolute rotation control required for delicate surgical procedures. The torque and speed capability of NSK micromotors has resulted in a strong demand for NSK products in Dental Laboratories for application with fine ceramics and precious metals.



Solid Titanium Handpieces
"Ti-Max" Series



Multi-Purpose Ultrasonic
System "Varios" Series



Surgical Micromotor
System "Surgic XT"



Laboratory Micromotor
"Ultimate 500" Series



NSK INDUSTRIAL PRODUCTS

In 1982, NSK commenced production of precision rotational products for industry. This was a natural evolution from NSK dental expertise. The high performance characteristics of the NSK industrial products, and subsequent precision results, were quickly recognized and demand for NSK industrial products has expanded enormously throughout nations including Japan, USA and Europe. In this competitive and demanding field, it was necessary for NSK go beyond the performance and value of competitors existing products. NSK introduced hand held micromotors offering unparalleled torque, precision and reliability. Original hand held micromotor production has now expanded to high precision grinders and polishers that are without equal in industries that demand minute and accurate work detail such as die-making, applied arts, and jewellery-making.



Relevant to the growth of the IT industry, NSK micromotors and spindles for machine tool attachments are being used for high-speed milling in the molds of cell phones and micro grinding of vibration chips.



At the 2002 Winter Olympic Games held in Salt Lake City, USA, the NSK "ASTRO-E400" was used in the production of metal molds for medals.



Brushless Motor & Spindle for Machine Attachment "ASTRO-E 6040"



Ultra-Precision Multi-Purpose Micro-Grinder "Electer E-max"

In response to 24-hour 7 day automated factory production, NSK now produces a range of machine tool attachments. NSK machine products are reliable, and are designed especially for application in round-the-clock operation. NSK products can also be installed in general-purpose machinery. It is the intention of NSK to expand development and production activities in the growing industrial market.



industrial



development



LEADING EDGE DEVELOPMENT CAPABILITIES

NSK staff have the specific skills required for the design and development of new technology. This includes production machines, micromotors, electronic circuits, specific software and production procedures, allowing fast track realization of new products and technologies. Design analysis and verification is made at each development stage.

Unrivalled market feedback capability determines product development.

Products sought by markets are those that meet the essential needs on time. NSK has been poised to capture leading market shares in various sectors via an intense focus on information-collection and product development capabilities. NSK learns of emerging global market trends through close communication with Universities, Hospitals, Distributors and at

trade exhibitions. The unique development capabilities of NSK are also substantiated by the company's portfolio of patents registered in countries around the world.

Safety and reliability is a priority

The production of quality medical equipment is stringently regulated with a view to long term operational safety and reliability. The variety of complex electronic equipment, now used in modern clinics, introduces a possible danger to erroneously operate devices by electromagnetic wave emitted from other electronic devices. To overcome this problem, NSK has introduced a special electromagnetic wave measuring facility. All products developed by NSK are designed to minimize the influence of electromagnetic waves in the development process. NSK has satisfied EMC* standard in Europe.



Electromagnetic wave facility – measuring electromagnetic waves radiated from products.



Speedy product development by CAD system.



production

NSK PRODUCTION

A combination of meticulous precision and modern efficiency

The NSK factory is subject to continual production equipment review and upgrading where required. This process ensures that NSK production is maintained at state-of-the-art status, utilizing the most advanced high precision production and inspection equipment to precisely and efficiently produce. More than 85% of the precision machinery components are designed and produced within the NSK factory. Micro motors, with the capability to produce high torque and speed for medical and industrial application, are specifically developed to exceed safety and precision requirements.

NSK believes that quality is created during the manufacturing process. NSK realizes quality assurance on a company-wide basis by continually improving the performance of people skills and production equipment. State-of-the-art computer-controlled equipment has been installed in every production process.

NSK is ISO9001 certified.



Rigorous inspection work



*Electron Microscope.
Checking the configuration
conditions of parts after
hardening. A strict
inspection is carried out for
each process to maintain
100% quality.*



*High-precision circularity
measuring instrument. The
most critical point in high
speed rotary cutting
instruments is concentricity.
This is measured with a
precision of 0.01 mm
(0.00001 mm).*



*Computer-controlled
temperature control allows
even hardening. High
quality is maintained by
carrying out most of the
parts processing within
the Company.*



CNC processing machine - NSK State Of The Art computer-controlled equipment



sales

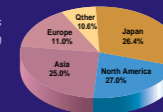
NSK SALES

The NSK Brand is recognized in 120 countries

The NSK quality and performance to price ratio is globally without equal. The goal of NSK is to be recognized as the overall global market leader within its specific fields. NSK derives approximately 70% of its revenue from overseas sales. NSK America Corporation was established in the USA during 1984. NSK Middle East was open in Dubai in the United Arab Emirates (UAE) in 2000 in order to cover Middle East, Central Asia and Africa. NSK established the third subsidiary, NSK Europe GmbH in Frankfurt-Germany, to improve the sales and service activities in European market. Sales to China and Southeast Asia have increased dramatically with local economic growth in 21st century. Future market expansion is expected in these regions.

NSK primarily conducts product awareness promotions through Industry Exhibitions, target advertising, personal sales contact, technical training programs and a Web Site. NSK products are supported by company Sales Engineers. Each NSK Sales Engineer is capable of providing on site technical consultations to distributors, individuals and institutional consumers.

Global Geographic Breakdown of Sales Revenues
(as of February 2003)



NSK EUROPE GmbH

NSK MIDDLE EAST

NSK NAKANISHI INC.
HEAD OFFICE & FACTORY

NSK AMERICA Corporation



NSK Worldwide

NSK Nakanishi Inc.
Kanuma, Japan,
headquarters and
factory



NSK Europe

Frankfurt, Germany.
Opened in 2003 to
meet the increasing
demand for NSK
products in Europe.



NSK America

Corporation (Chicago, U.S.),
which is the base for sales,
service and information
collection on the market in
North America



NSK Middle East

Covers the Near and
Middle East, Central
Asia, India and Africa
(Dubai, UAE)



environment

protecting our

OUR ENVIRONMENT

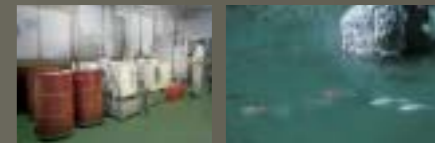
Efforts for a global environment

NSK believes that considering the natural environment is one of the inherent responsibilities in corporate activities. The Company complies with the requirements of ISO 14001 and has declared domestically and internationally that it will continue to develop and maintain environment oriented management. The 21st century is stated to be the age of the environment, and it has become a global standard to estimate corporate value in accordance with efforts in reducing environmental loads. NSK has realized energy savings, waste reductions and resource conservation by making efforts in environmental considerations through all of its corporate activities from the design stage to manufacturing and sales functions.

In September 1999, Dace and Carp (live fish species) living only in a clean stream were released into the adjacent stream where industrial effluents were released to start autonomous water-quality patrol.

History of the NSK environmental protection program

- May 1993: Completely removed trichlene (trichloroethylene), which is a hazardous substance contributing to water pollution and air pollution.
- Jun. 1996: Near completion of the removal of fluorocarbon liquids, which is an ozone depleting substance.
- Jan. 1998: Started Environmental Impact Testing by establishing unique standards on NSK Nakanishi's environmental impact substances. In addition, started company wide action aimed at combating against losses of resources, energy, etc. (Separated collection, lights off during inactivity, paper recycling, etc.)
- Sep. 1998: Maintained numerical values that are far below smoke emission standard values by setting up a new high-combustion "Ace Plaza II Incinerator."
- Oct. 1998: Near completion of the removal of an organic solvent (methylene chloride), which is a hazardous substance contributing to water pollution.
- Nov. 1998: Maintained numerical value that is far below standard values of industrial effluents such as polishing treatment liquids by setting up Coagulation Sedimentation type biological waste water treatment equipment.
- Jan. 1999: Obtained compliance with the requirements of International Environmental Standard. ISO 14001
- Aug. 1999: Set up an Environmental Recycling Center and introduced various recycling equipment. As a result, the recycling rate of factory supplies increased while new purchase quantities and industrial waste disposal volume drastically decreased. Specifically, the recycling rate of cutting oil became 97%, a major contribution to the conservation of resources.



Left : Cutting oil filtration system.
Right: Water used in Nakanishi's factory is completely treated by a purification system before being released into a river via carp-inhabited pond on the factory site.



NSK have achieved ISO 14001 certification (compliance with the requirements of International Environmental Standard).

our history

1930 Keiichi Nakanishi established NSK in Tokyo, to manufacture and sell contra angle dental handpieces.

1945 Factory was closed due to World War II and the production of dental handpieces was forced to cease. Keiichi Nakanishi moved to Tochigi-ken, 100 km north of Tokyo.

1949 Suspended production of dental contra-angles was resumed in Tochigi-ken.

1951 Keiichi Nakanishi re-established NSK in Kanuma-shi, Tochigi-ken.

1953 In addition to contra angle dental handpieces, NSK commenced production of Doriot handpieces for dental use. Concurrent with this business expansion, it also incorporated.

1971 Production of air turbines commenced.

1975 Mass production of air turbine commenced, and the expansion of high precision production equipment was planned. To respond to the dramatic increase in the variety and quantity of products sold, a Tokyo Office was established in Ueno for improved customer service.

1979 Overseas export of NSK brand products commenced by establishing an Overseas Sales Department within the Company.

1982 The Company began manufacturing and selling industrial high speed rotary equipment.

1984 NSK established NSK-America Corp. in Illinois as the base for its U.S. sales and service network.



The current
NSK building in
Kanuma - Japan



1988 Second Plant was built in Shimohinata, Kanuma-shi (Location of current headquarters), to expand production facilities in response to an increase in the variety and quantity of products.

1990 A new building (Current Building) was added to the Shimohinata Plant.

1993 The Patented "Clean Head System" won the SITAD Applied Technology highest award for its significant contribution in the prevention of infection in the field of dental treatment in Europe.

1995 A further new building (Current Building) was added to the Shimohinata Plant to expand the design, development, and production technology departments.

1997 To ensure thorough Quality Control, NSK obtained Certification of Compliance with the ISO9001 International Quality Assurance Standard.

1999 To promote environmentally conscious corporate activities, NSK obtained Certification of Compliance with the ISO14001 International Standard for Environmental Management Systems.

2000 Company went public. Registered stocks with the Japan Securities Dealers Association. To strengthen sales in the Middle East and Central Asia, NSK established an office in Dubai, United Arab Emirates.

2001 A new main building of the headquarters was completed at the site of the Shimohinata Plant to relocate headquarters operations.

2003 NSK established the third subsidiary, NSK Europe GmbH in Frankfurt-Germany, to improve the sales and service activities in European market. Osaka branch is started up to provide better services in the western region of Japan.

