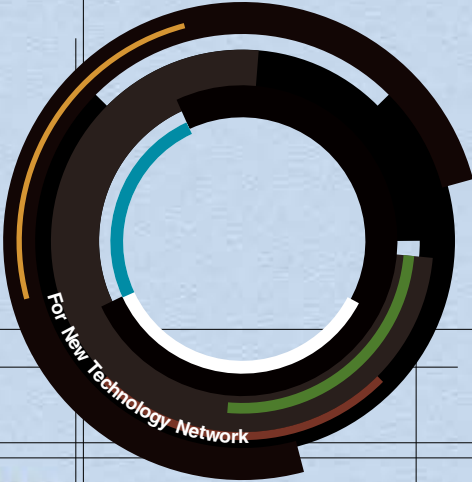


For New Technology Network



Corporate Profile

# Global Network Connecting The World Through New Technology

Globalization, advancement of information communication technology, and rapid technological innovation are transforming daily life, social systems, and global trends. NTN began to globalize business operations in 1961, with a network that now spans the globe. We hope to contribute to the international society by developing new technology, products, and services, sensitive to the epic changes sweeping the globe. We believe creating original technology and promoting globalization will make NTN worthy to be called an international company.

Solution

Global

Ecology

# For New Technology Network

For New Technology Network

**NTN**®



Network

Contribution

Development

High-Quality

### **New Value Through New Technology**

The precision processing technology and exclusive expertise that we have fostered over the years by developing bearings has led us to a wide range of precision equipment.

Continuing this evolution requires that we disseminate our technology around the world. Our motto therefore is "For a New Technology Network: Linking the world with new technology".

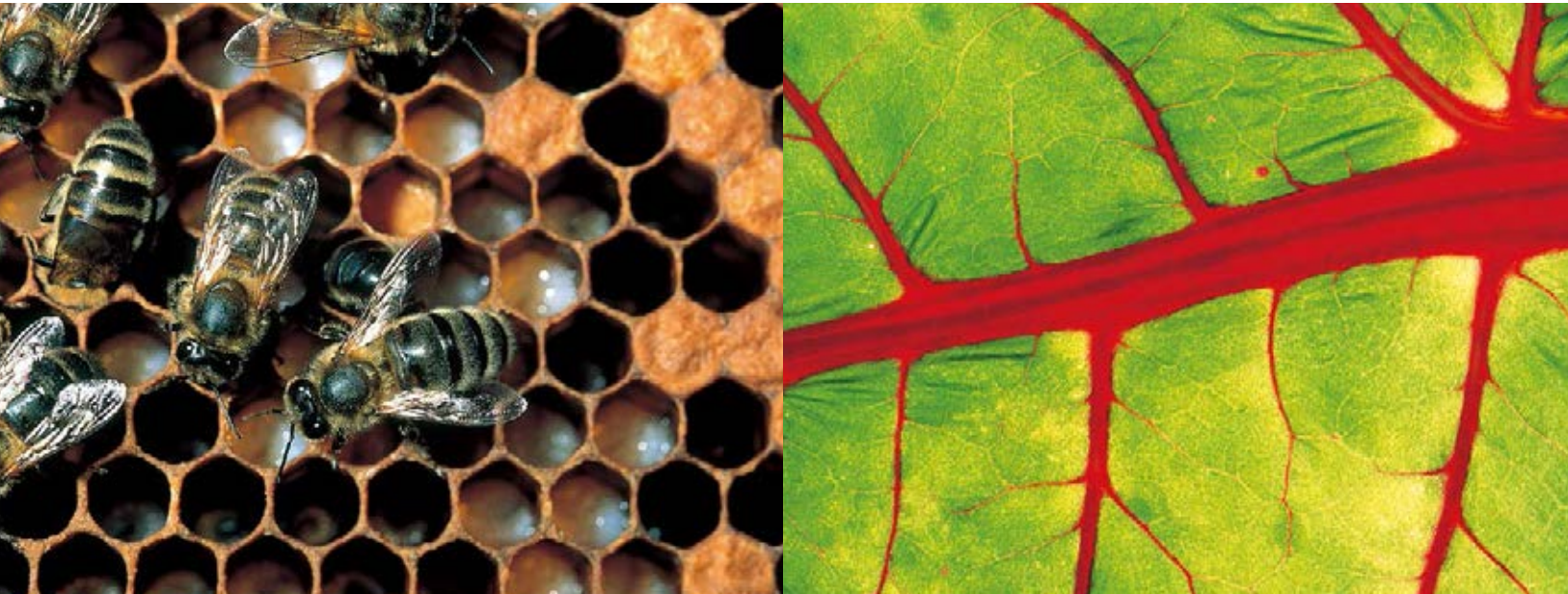
We will move forward as a global manufacturer of precision equipment that meets the standards of a demanding world.

# All divisions work for one to ensure an ever higher level of customer satisfaction

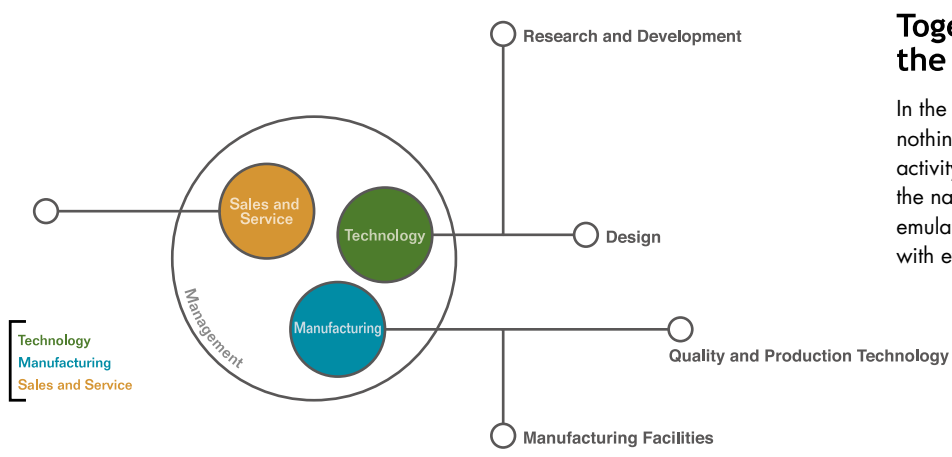
NTN's manufacturing, sales and service, and technology span throughout the world. They are organically linked, which enhances performance while pursuing their fields of specialty.

For example, the technology division forwards its research results to the production and sales divisions to analyze what products to be supplied for what customer in which sector. Also, feedback with production and sales divisions enhances our pinpoint accuracy in supplying products.

One division works for all divisions, and all divisions work for one. The end result is better products for our customers.



Network



### Together, aiming for the ideal organization

In the natural ecosystem of plants and animals nothing is wasted. Every color, shape and activity is invested with meaning. NTN studies the natural world to discern ideal forms to emulate as a company then share our vitality with everyone.



### A solution company with global perspective

NTN combines all of its manufacturing, sales, and technological expertise to create quality products for customers worldwide. NTN is a global organization with sales, engineering, production and service networks throughout Japan, the Americas, Europe, Asia and China. NTN tackles each new challenge with a global perspective.

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# Technology

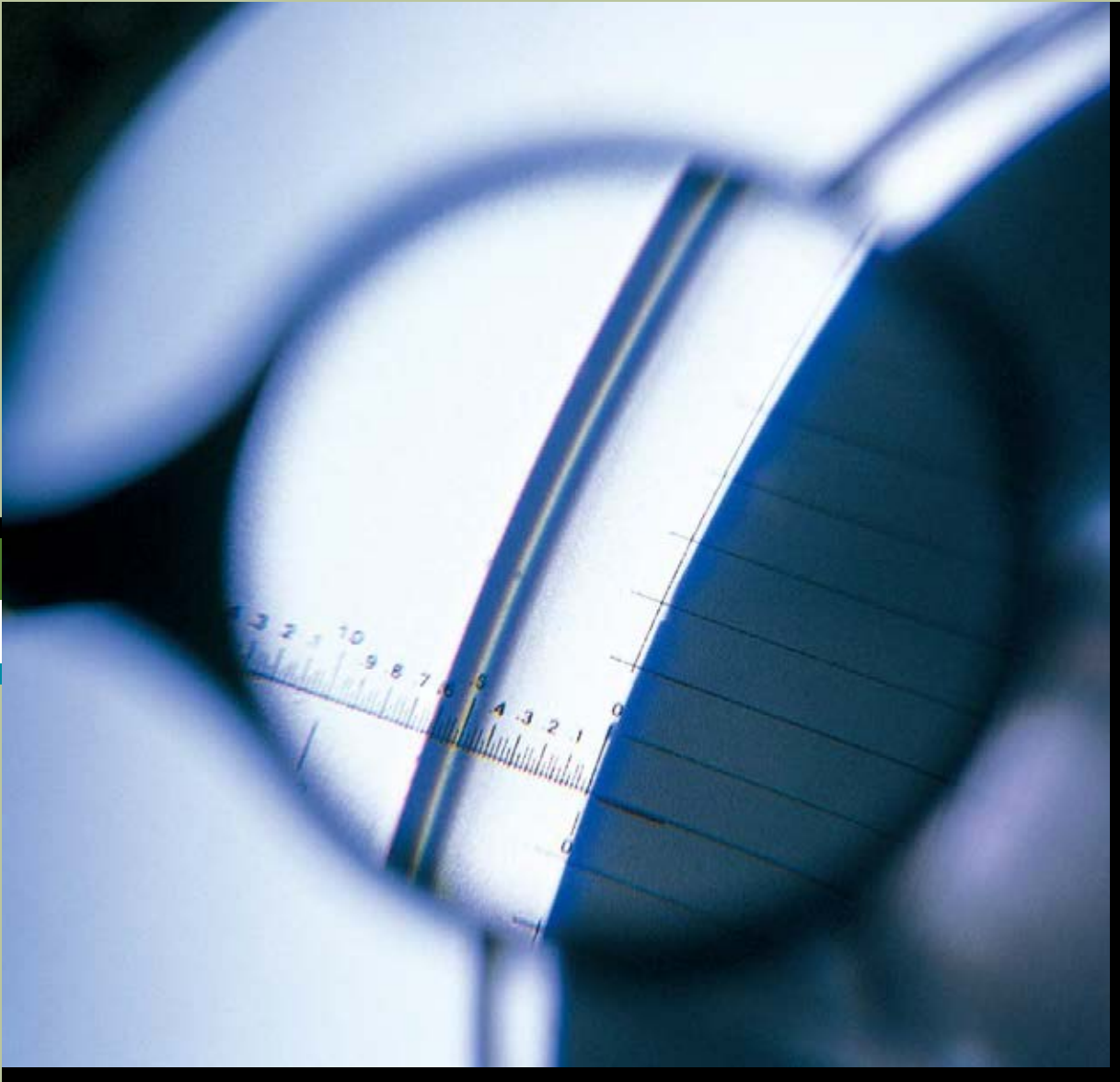
## NTN's diversified research continues to expand its business arena

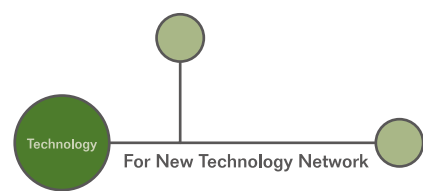
NTN began as a bearing manufacturer. Since our founding in 1918, we have conducted research into tribology, new materials, and the measurement technology, indispensable for the precision processing of bearings.

We have also utilized our basic research results and expertise gained through the years to evolve from a manufacturer of bearings to advanced precision equipment.

In addition, we are conducting research and developing production facilities to create a wide range of precision equipment at home and abroad.

NTN's R&D divisions put out a constant stream of new products to meet customer needs.





**NTN spirit of development tackling new challenges as a leading manufacturer**

NTN's research and development centers do more than merely exchange information and form relationships with other divisions. They actively go outside the company to meet and talk with R&D divisions of customers and conduct joint research with universities. For example, we have solved problems by using needle bearings in extremely narrow spaces where conventional ball bearings cannot be used. We have affirmed our position as the leading manufacturers of needle bearings. We are also involved with new product development and trials conducted by customers, and continually meet new challenges in a wide range of sectors, including automobiles, computers, medical equipment, aerospace, and industrial robots.

**Continually developing new technology in new fields...**

**Original technology drawing intense interest**

Spindle motors employed in computer hard disc drives commonly use conventional ball bearings, but recently the trend has shifted toward the use of more advanced fluid dynamic bearings. In a fluid dynamic bearing, a set of grooves is created along the inner bore and end face of the bearing. Lubricating oil or a similar type of fluid is enclosed between the shaft and the bearing to enable the shaft to rotate without contacting the bearing. As a result, this type of bearing can achieve much steadier and quieter operation than that of a ball bearing. NTN fluid dynamic bearing units are based on an oil-impregnated sintered bearing, which contains lubricating oil within the actual bearing. This prevents sudden seizure and problems that can arise while reading data stored in a hard disc. NTN's product has a competitive advantage over others in this area. Amid a rapid surge in the demand for compact HDDs that can be mounted into mobile telephones, audio players and GPS systems, NTN's fluid dynamic bearing units are establishing a reliable reputation.



Technology

For New Technology Network



# Manufacturing

## NTN continues to strengthen its global manufacturing capabilities

U.S. manufacturers of automobiles, and electric equipment, and parts are forming ties with international companies to produce products in suitable regions for use worldwide.

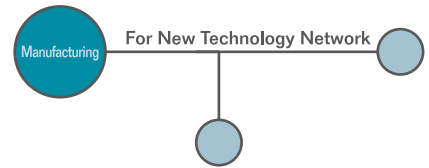
In response to this shift in manufacturing, NTN quickly opened overseas production facilities and enhanced its global production system.

The objective of NTN's production division is to quickly provide needed parts to any location in the world. We will continue to self-assess with a critical eye to assure stable production at the highest level of quality.



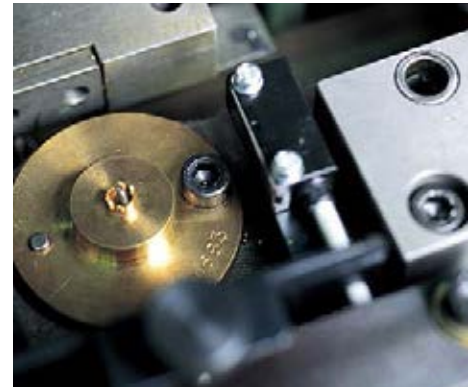


# Manufacturing



## Strengthening competitiveness through a devotion to the fundamentals of manufacturing

The competitiveness and true value of NTN's products are visible strengths. However, this competitiveness is supported by the productivity, quality assurance and production technology of our production facilities. All of our employees are expected to return to the basics and to review their current work practices in order to improve our fundamental manufacturing capabilities. In addition, we have developed and introduced next-generation facilities. Current trends ask for more efficient use of space and investment capital, together with the ability to manufacture small quantities of a wide range of different products. The new facilities assist in meeting these demands, allowing us to cut facility costs by half, cut electrical consumption to one-third, reduce the length of production lines by half, and drastically reduce production line turnover times. By strengthening and accumulating NTN's unique know-how, we have increased skill levels and productivity. With this foundation, we are committed to providing higher added value and establishing NTN as a true world-leader in manufacturing competitiveness.

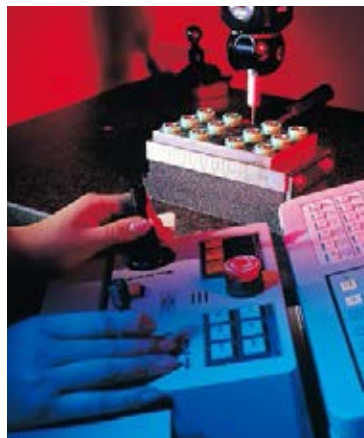


## For New Technology Network

### Technology and system creating high quality products acclaimed around the world

NTN was early in systematizing production lines to strengthen production technology.

Now, most of our production lines are automated, contributing to standardized quality and reduced costs. Our quality control efforts have received ISO9001 International Standard certification, as well as the ISO/TS16949 certifications for the automobile sector. NTN's superior quality products are earning the high acclaim and the trust of customers everywhere.

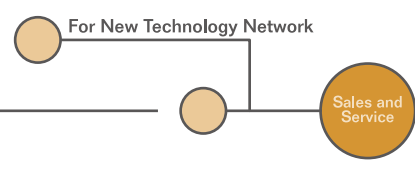


# Sales and Service

## Sales activities that place the customer first have earned us great trust

NTN has established branch offices and distributorships as close as possible to our customers both in Japan and overseas to quickly respond to customer requests. In addition to maintaining relations with our customers, we provide information that will be useful to the customer in the future through regular participation in activities and exhibits closely connected to customer interests, while actively offering proposals for new technology and new products. We offer support to our sales personnel and strive to respond quickly to current trends in the industry as well as customer requests.





# Sales and Service

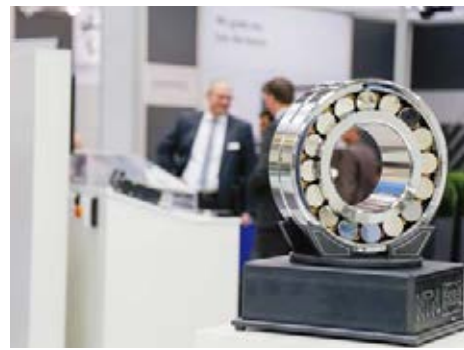
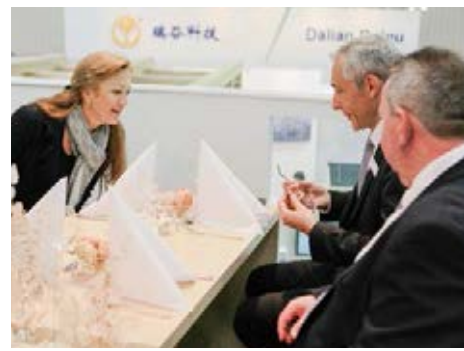
## Quickly responding to our customers' worldwide

NTN is a pioneer in globalization. In an environment that demands effective global sales and marketing, NTN has introduced the "GAM" System to overseas sales by automotive customer group and sales by industrial sector. Efficient use of this system enables us to provide quick solutions to our global customers, while ensuring smooth internal development. We have also established research centers and production facilities closely connected with sales in all major countries to not only promote the efficient transfer of technological know-how and localization of procurement, but also to optimize the entire global organization.

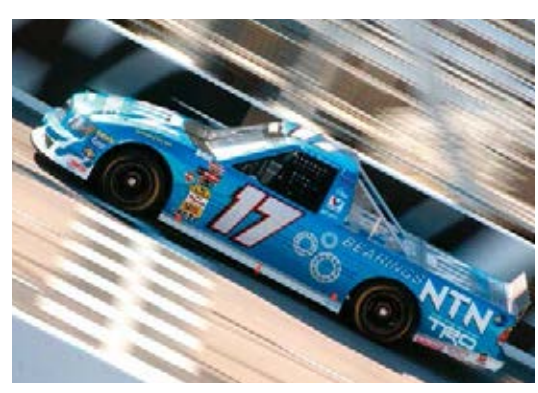
\*GAM: Global Account Manager for automotive product sales  
Global Application Manager for industrial products sales

## Accurately and promptly responding to customer requests

NTN gathers development proposals for new products from a wide range of industries, such as the automobile, office equipment, digital appliance, information technology, construction equipment, aerospace, and railway industries. This is not simply a result of our long history and outstanding record, but of our ceaseless efforts to cater to the needs of our clients through personal attention and efficient responses. Ever more rapid development capabilities are increasingly in demand, and adapting to this challenge is our mission. NTN places much emphasis on assisting customers to develop new products, and expends enormous efforts through finely tuned sales activities to obtain a firm grasp of our customers' future requirements. Our development department operates on a twenty-four hour basis in order to ensure that all requests are dealt with as quickly and expediently as possible.



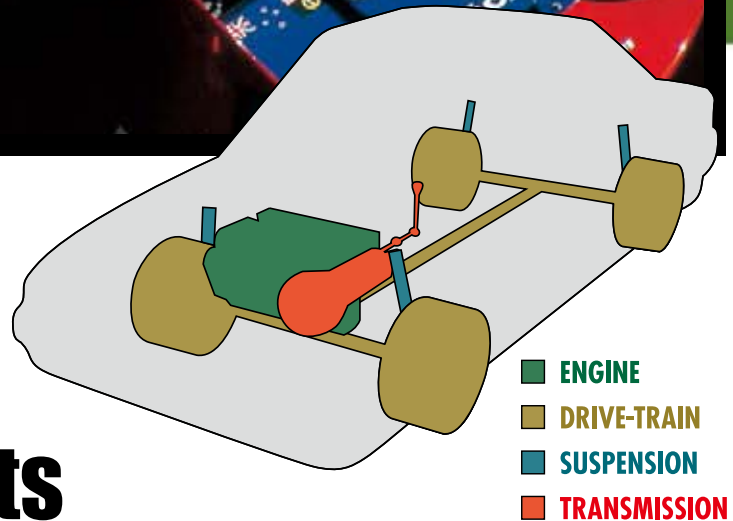
## For New Technology Network



# Automotive Products

## Pushing technology forward for the automobiles of tomorrow

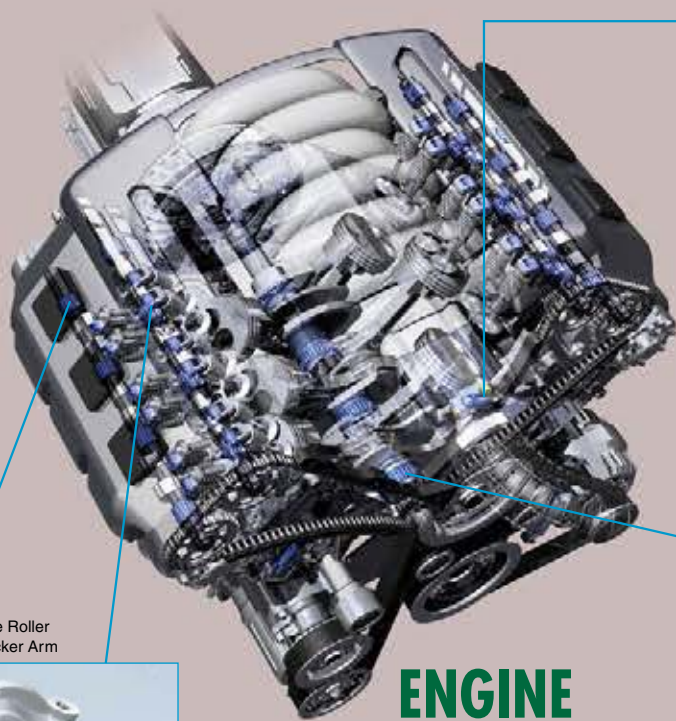
Environmentally sensitive, energy saving, safe, comfortable, high-performance, computer networked...  
Automobiles are advancing down a road that knows no limits.  
NTN is meeting industry demands as a creative axle on the leading edge of tomorrow's breakthroughs.



# Automotive Products

### Earning the praise from automotive companies worldwide

NTN auto parts are highly regarded around the world. In particular, NTN has contributed widely to the spread and development of FWD & 4WD vehicles by constant velocity joints that convey engine torque to the drive axle, and realize high performance and stability for such vehicles. NTN's CVJ cumulative production volume has already become one of the largest in scale globally, while domestically NTN boasts top market share. We are giving full support to the development and the manufacture of an extraordinary array of essential automotive parts from engines to suspension, transmissions, chassis and auxiliary electrical equipment; winning the support of customers everywhere.



Butress Thread Type Chain Tensioner



Split Type Needle Roller Bearings for Crankshaft



Split Type Drawn-cup Needle Roller Bearings for Camshaft



Cageless Needle Roller Bearings for Rocker Arm

## ENGINE

## For New Technology Network



BEAREE Seal Rings



## MANUAL TRANSMISSION



## AUTOMATIC TRANSMISSION



Compact Clutch Release Bearings



Needle Roller Bearings for Idler Gear



Thrust Needle Roller Bearings



Deep Groove Ball Bearings

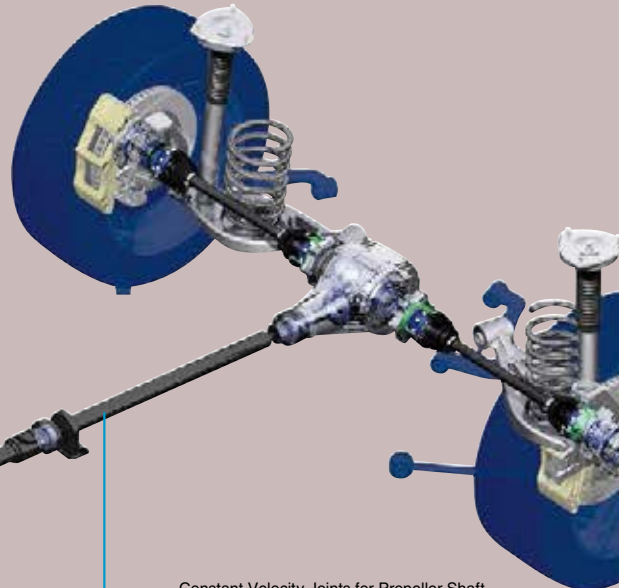
# Automotive Products

## DRIVE-TRAIN

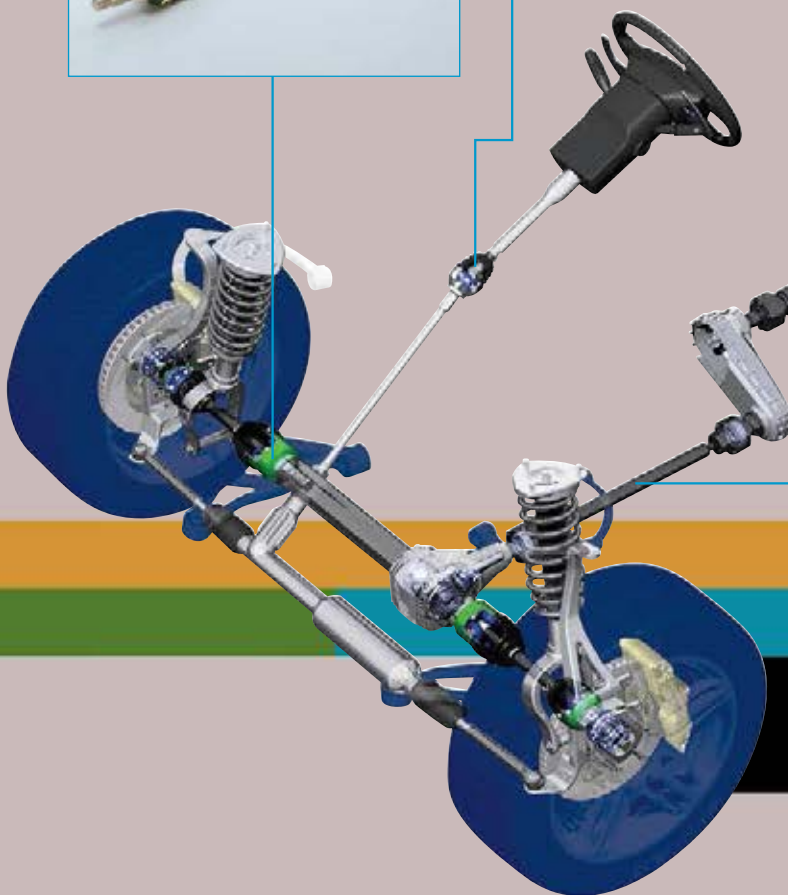
Constant Velocity Joints for Halfshaft



Constant Velocity Joints for Steering



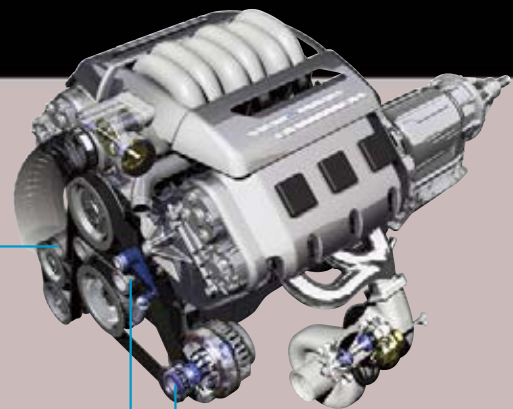
Constant Velocity Joints for Propeller Shaft



## For New Technology Network

### Meeting the demands for next-generation automobiles

It could be said the 21st century is a time to correct the excesses of the previous era. Taking care of the environment is naturally at the top of the list. NTN is actively engaged in the development of automobile parts that will raise driving efficiency and fuel consumption. Given the reality of finite resources and only one world in which to live, we have a vital responsibility to develop environmentally sound systems. To enable automobiles to exist in closer harmony with the environment, we are pouring energy into merging technologies to develop systems that provide high performance, weight savings and new processing techniques. We are also working hard to develop components that will enhance safety and driving comfort.

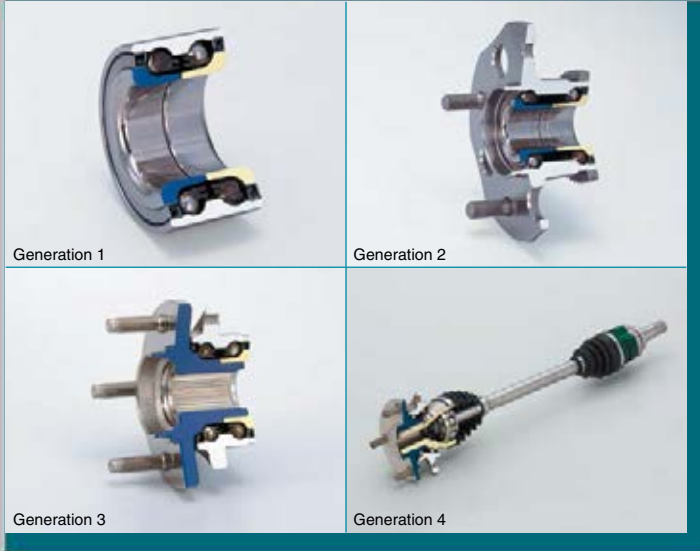


Low Torque Thrust Needle Roller Bearings for Compressor

## ACCESSORY



Short-type Auto Tensioner for Accessory Belt Drive



# AXLE UNITS



# SUSPENSION

Mechanical Clutch Unit (MCU) for Next-generation Steering



# EV SYSTEM



Compact Clutch Integrated Pulley for Alternator



In-wheel Motor System



Electric Motor and Actuator

# Automotive Products

# General Industrial Products

## Precision not limited to bearing technology... Serving industries everywhere

How far can we lower friction coefficients and raise energy efficiency? NTN's bearing technology demands precision measured in nanometers. That is, in a word, only one-millionth of a millimeter wide.

This out-of-sight precision is now finding applications in all manner of industries, from orbiting satellites, aircraft, railway cars and paper making equipment to office equipment and food processing machinery.

# General Industrial Products

Wind Power Generation



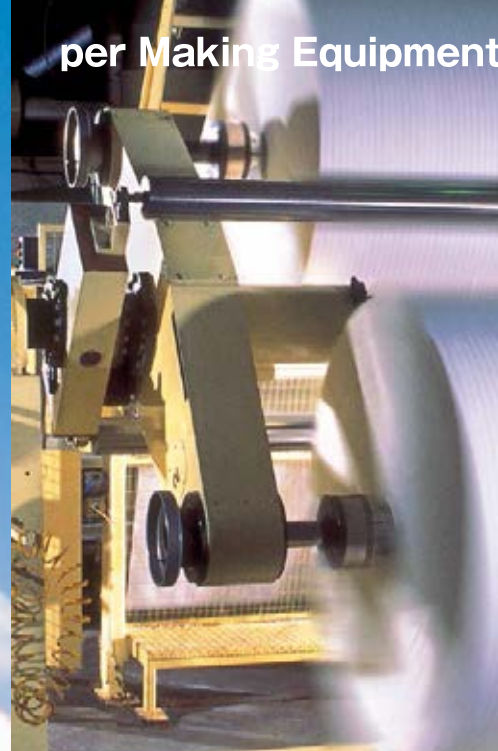
Railways



Aerospace



Paper Making Equipment





## Commanding high precision processing and measurement technology to develop a steady stream of advanced components

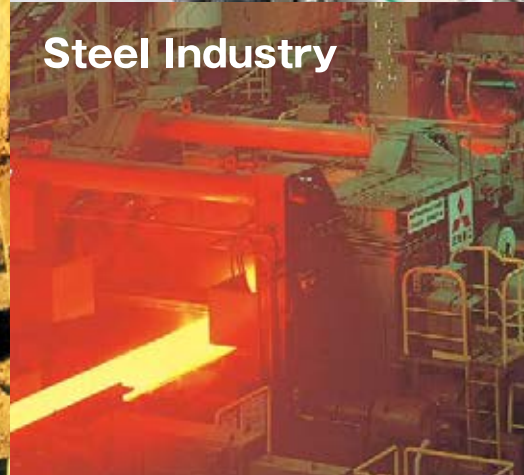
The key to bearing technology usefulness in each industry is summed up by the word "precision". For example, with air bearings the essential factor is how small and uniform the space between the shaft and bearing can be made. The closer the roller cross-section approaches a perfect circle, and the smoother the inner and outer rings that make contact with the roller are, the greater the precision and performance will be. Thus, making components with higher precision translates into products with higher reliability. At NTN we are pursuing high precision processing and measurement technology beyond conventional limits to diligently provide customers with a steady stream of advanced components.



Construction Equipment



Food Machinery



Steel Industry

Machine Tools



### No matter how severe the environment or frequent the use... Responding to the demand for modular units

Ball bearings given added performance can now operate more stable under severe conditions, thus, meeting demands for durability. Demands on bearings have great diversity: from functionality with cryogenic rocket fuel, to the ability to withstand high temperature jet engines, water corrosion from food processing equipment, heat from the drying process of paper making equipment and beyond. At NTN we examine each condition demanded for each area of use and deliver durable bearings that will get the job done. We are also developing modular units that integrate peripheral components, and a clutch unit with a secure lock function that can operate under high temperatures.

# General Industrial Products



Bearings for Special Environments

## Semiconductor Block Processing



Precision Bearings(ULTAGE Series)

## Machine Tools



Main Shaft Bearings of Jet Engine

## Aerospace



Cryogenic Bearings of Rocket Engine



Precision Miniature Ball Bearings



Hydrodynamic BEARPHITE™ Unit

## Information Equipment



Torque Diode™ (reverse-input shutoff clutch)



Bearing Integrated with the Rotation Sensor

## Office Equipment



NCZ One-Way Clutch Units



Torque Limiter Units

## Electrical Equipment



Ball Bearings

# General Industrial Products

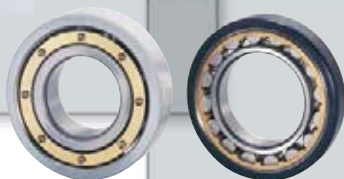


Journal Roller Bearing for Shinkansen

### Railways



RCT Bearings



Insulated Bearings



Extra Large Bearing for Main Shaft

### Wind Power Generation



Full roller type Cylindrical Roller Bearing

### Food Machinery



BEAREE® (precision engineering plastics)



Bearing Units Stainless Series



Thin Section Type Bearing for Construction Machines

### Construction Machines

### Paper Making Equipment



Spherical Roller Bearings EA-EM Type



Extra Large Split Type Roller Bearings



Bearings for Steel Mill Roll Neck



Constant Velocity Joint for Continuous Casting

### Steel Making Equipment

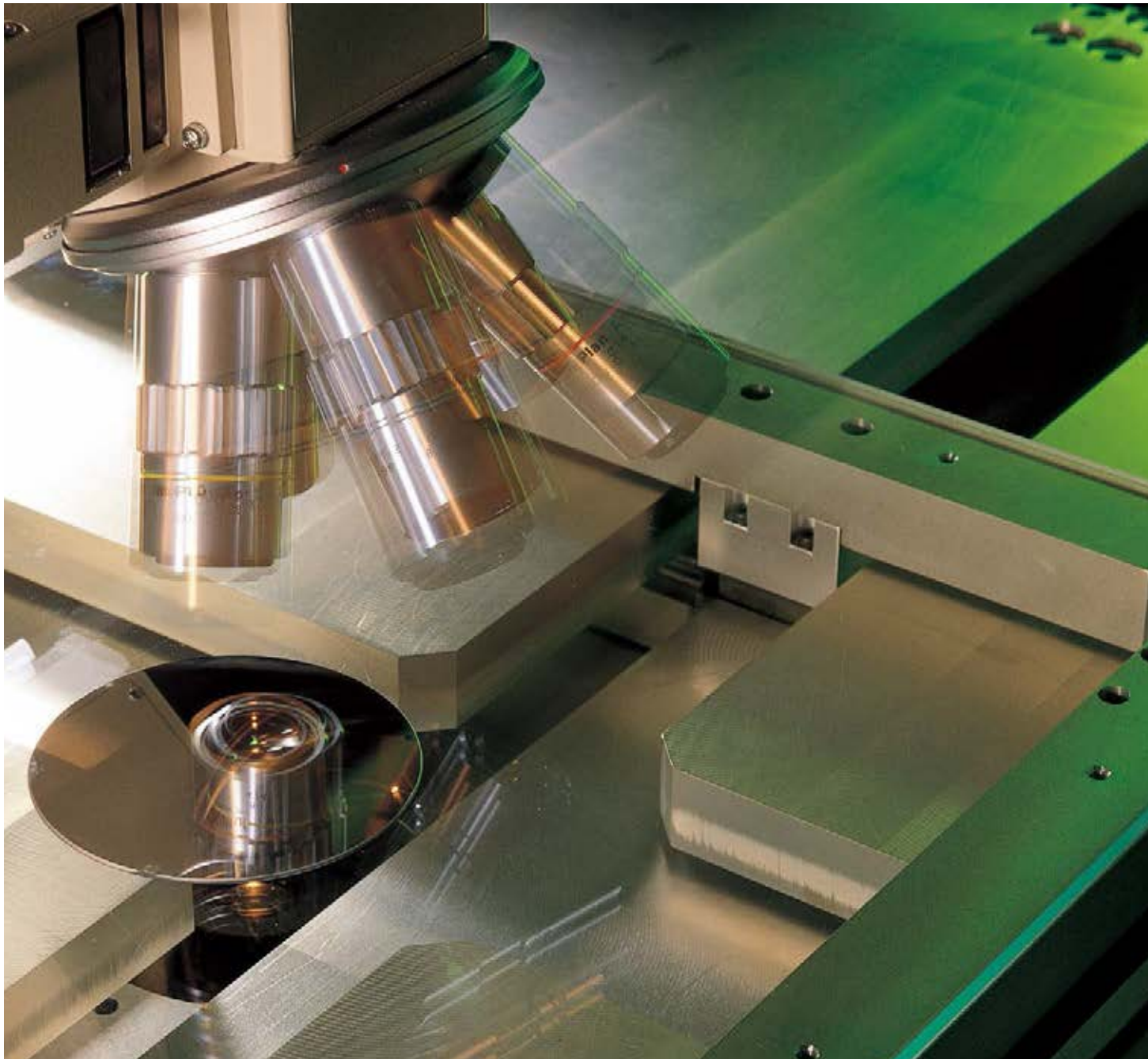


Bearings with Solid Grease



Constant Velocity Joints

# General Industrial Products



## Challenging the state-of-the-art frontiers, bounding into the future

Remarkable advances in hi-tech industries...

At NTN we are using our know-how in precision bearings to pursue precision engineering that can be applied in other fields like electronics, semiconductors and computers.

**Precision Equipment**

## Precision Equipment

### Designed for supplying more varied, diversified work, contributing to automation and energy-saving

The various types of technology and know-how that NTN has developed through the years in the bearing industry are being put to good use in new fields, from automotive parts, precision machinery parts and electronic parts, through to foodstuffs, drugs and medical products. NTN's parts feeder is a key component of a flexible production line and automated assembly system as it is a device that organizes various work pieces and feeds them to automatic machinery, an essential process for achieving automation and energy-saving.

In order to meet the supply needs of a growing variety of sizes and materials, NTN provides an impressive line-up of vibration units, as well as bowls, controllers and other units. These allow organization and feeding of parts to production lines with a high level of energy-efficiency and speed, and low noise.

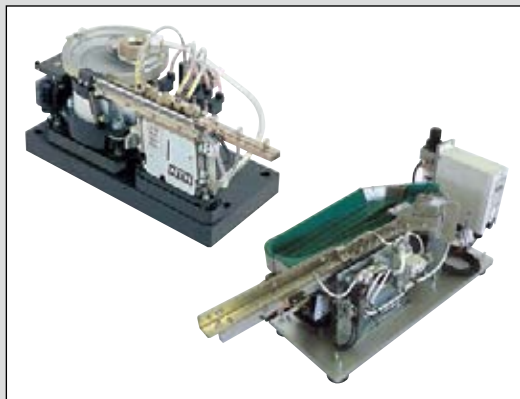


Parts Feeder

### Contributing to a shorter takt time with a diverse lineup

Machinery is being automated and becoming faster at a daily rate with the aim of improving production efficiency and reducing costs in a wide range of industries, including automotive, machinery parts, semiconductors, flat panel displays, foodstuffs and medicine. NTN's linear module series boasts outstanding rigidity and reliability, and offers a high level of performance for transportation systems, positioning units and elevating devices. All this helps to achieve shorter takt times.

NTN has lineup of four modules with different specifications designed to deliver outstanding performance in various industries and applications. High-speed motion of up to 10 m/s, as well as long 10 m strokes are possible as part of solutions that are available to address any development issues that customers may have.



SMD Feeder/Monodrive Two-way Feeder with Spring Separation Mechanism



Linear Modules

# JAPAN



**KUWANA WORKS**  
(Kuwana, Mie Prefecture)



**IWATA WORKS**  
(Iwata, Shizuoka Prefecture)



**OKAYAMA WORKS**  
(Bizen, Okayama Prefecture)



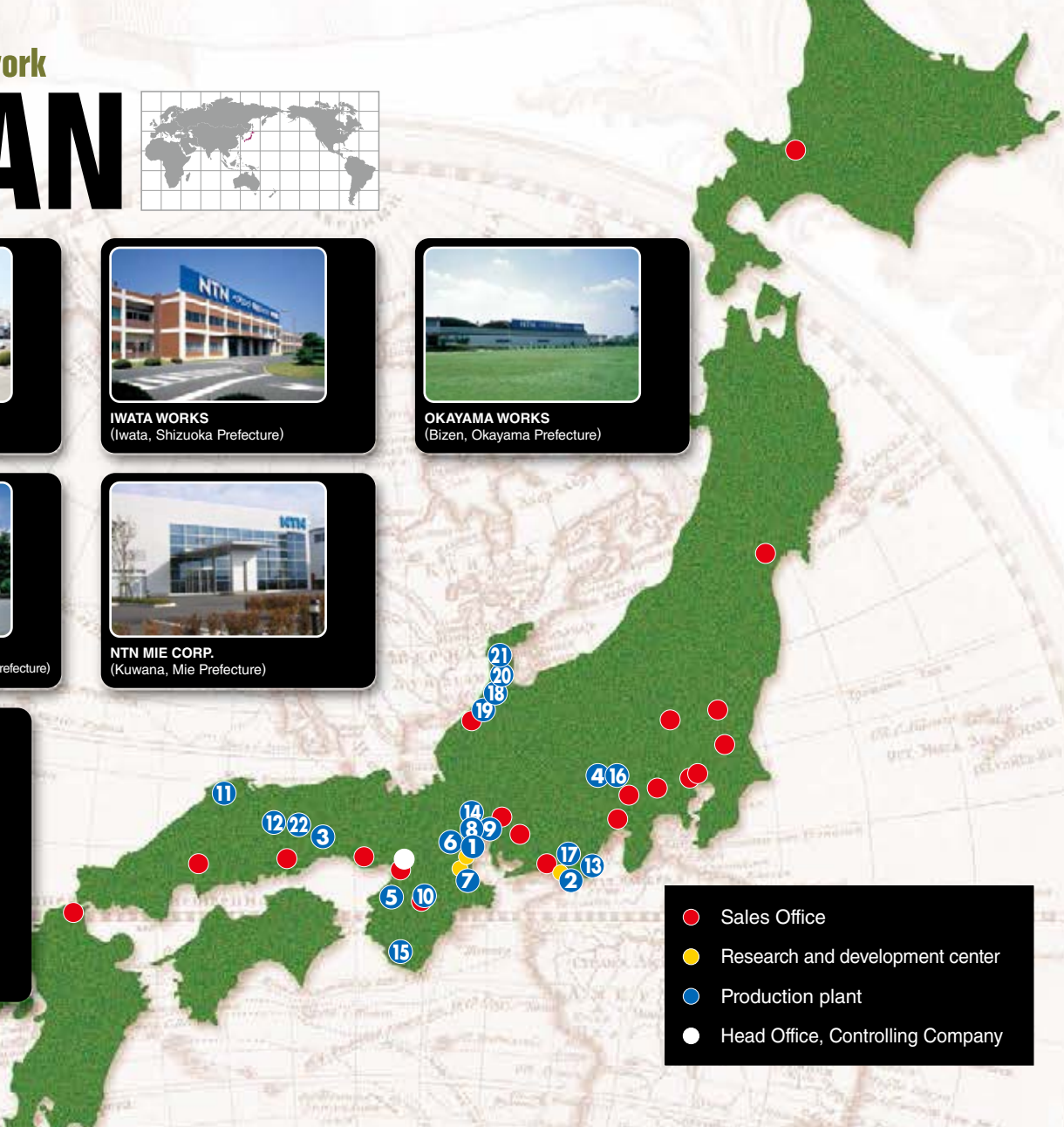
**NAGANO WORKS**  
(Minowa-cho, Kamiina-gun, Nagano Prefecture)



**NTN MIE CORP.**  
(Kuwana, Mie Prefecture)



**NTN Co., Ltd.**  
(Osaka, Osaka Prefecture)



- Sales Office
- Research and development center
- Production plant
- Head Office, Controlling Company

Major Production Facilities			As of end March 2019
Company, Factory Name	Established(*)	Manufactured Products	
<b>NTN Corporation</b>			
① KUWANA WORKS	Nov. 1939	Various type of bearings from small diameter to extra large, Precision bearings	
② IWATA WORKS	Mar. 1960	Small size bearings, Needle roller bearings, Driveshafts, Precision equipments	
③ OKAYAMA WORKS	Dec. 1971	Automotive bearings and unit bearings, Driveshafts	
④ NAGANO WORKS	Feb. 1985	Miniature and small diameter bearings, Automotive parts, Parts Feeders	
⑤ KONGO WORKS	Apr. 1961	Small size bearings, Unit bearings for industrial machinery	
⑥ ENGINEERING PLASTICS WORKS	Mar. 1967	Engineering plastic bearings	
⑦ MIKUMO WORKS	Nov. 1988	Automotive parts, Industrial machinery parts	
<b>Affiliate Company</b>			
⑧ NTN MIE CORP.	Apr. 2004	Small, medium, and large size bearings, Needle roller bearings	
⑨ NTN Advanced Materials Corporation.	Aug. 1966	Oil-impregnated sintered bearings, Sintered machine parts	
⑩ HIKARI SEIKI INDUSTRY CO., LTD.	Jun. 1975	Adaptors, CVJs parts	
⑪ NTN CASTING CORP.	Aug. 1966	Plummer blocks, Unit bearing parts for industrial machinery	
⑫ NTN BIZEN CORP.	Sep. 1968	Bearing turning	
⑬ NTN OMAEZAKI CORP.	Sep. 1966	Needle roller bearings	
⑭ NTN TADO CORP.	Nov. 1961	CVJs parts	
⑮ NTN KINAN CORP.	Jan. 1974	Bearing forging and turning	
⑯ NTN KAMIINA CORP.	Dec. 2005	CVJs parts, Bearing parts	
⑰ NTN FUKUROI CORP.	Jun. 2006	Driveshafts	
⑱ NTN HAKUI CORP.	Mar. 2007	Large size bearing turning	
⑲ NTN HOUDATSU SHIMIZU CORP.	Apr. 2008	Extra large size bearings, Machinery parts	
⑳ NTN SHIKA CORP.	Dec. 2009	Large size bearing forging	
㉑ NTN NOTO CORP.	Dec. 2010	Industrial machinery bearings	
㉒ NTN AKAIWA CORP.	Sep. 2008	Tapered roller bearings	

\*Or date of initial investment

# AMERICAS



**NTN-BOWER CORP.**  
Macomb Plant(Macomb, Illinois)



**NTN DRIVESHAFT, INC.**  
(Columbus, Indiana)



**NTN BEARING CORP. OF AMERICA**



**NTN-BOWER CORP.**  
Hamilton Plant(Hamilton, Alabama)



**AMERICAN NTN BEARING MFG. CORP.**  
Schiller Park Plant(Schiller Park, Illinois)



**NTN BEARING CORP. OF CANADA LTD.**  
Canada Plant(Mississauga, Ontario)

Major Production Facilities As of end March 2019

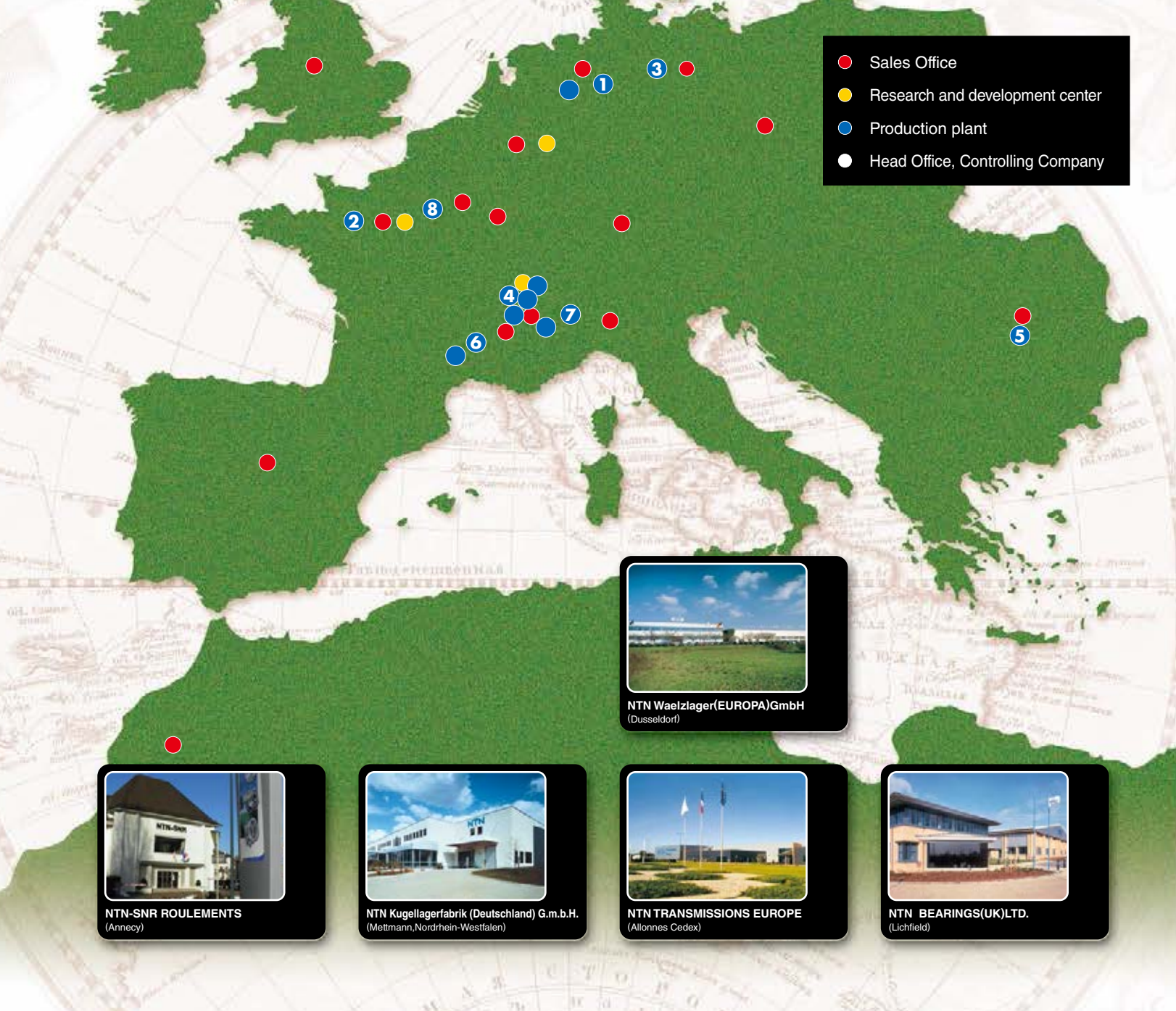
Affiliate Company		Company, Factory Name	Established(*)	Manufactured Products
1 2	America	AMERICAN NTN BEARING MFG. CORP.	Jan. 1971	Small size bearings, Automotive unit bearings
3 4	America	NTN-BOWER CORP.	Oct. 1985	Small, medium and large size bearings, Industrial machinery parts
5	America	NTN DRIVESHAFT, INC.	Apr. 1989	Driveshafts
6	Brazil	SNR ROLAMENTOS DO BRASIL LTDA.	Feb. 1999	GEN1 and GEN3 hub bearings, Strut bearings
7	Brazil	NTN Driveshaft do Brasil	Jul. 2010	Driveshafts
8	Canada	NTN BEARING CORP. OF CANADA LTD.	Mar. 1973	Small size bearings, Automotive bearings
9	America	NTK PRECISION AXLE CORP.	Aug. 2003	Driveshafts, Turning and heat treatment for automotive unit bearing parts
10	America	ASAHI FORGE OF AMERICA CORP.	Oct. 2003	Forging for automotive unit bearing parts
11	America	Seohan-NTN Driveshaft USA CORP.	Mar. 2007	Driveshafts
12	America	NTA PRECISION AXLE CORP.	Dec. 2010	Forging, turning and heat treatment for automotive unit bearing parts
13	Mexico	NTN MANUFACTURING DE MEXICO, S.A. DE C.V.	Apr. 2013	Driveshafts, GEN3 hub Bearings
14	America	NTN DRIVESHAFT ANDERSON, INC.	Jul. 2015	Driveshafts

\*Or date of initial investment

# EUROPE and AFRICA



- Sales Office
- Research and development center
- Production plant
- Head Office, Controlling Company



**NTN Waelzager (EUROPA) GmbH**  
(Düsseldorf)



**NTN-SNR ROULEMENTS**  
(Annecy)



**NTN Kugellagerfabrik (Deutschland) G.m.b.H.**  
(Mettmann, Nordrhein-Westfalen)



**NTN TRANSMISSIONS EUROPE**  
(Allonnes Cedex)



**NTN BEARINGS (UK) LTD.**  
(Lichfield)

Major Production Facilities				As of end March 2019
Affiliate Company		Company, Factory Name	Established(*)	Manufactured Products
①	Germany	NTN Kugellagerfabrik (Deutschland) G.m.b.H.	Dec. 1971	Small size bearings, Automotive unit bearings, Automotive parts
②	France	NTN TRANSMISSIONS EUROPE	Dec. 1998	Driveshafts
③	Germany	NTN Antriebstechnik G.m.b.H	Apr. 2006	Driveshafts
④	France	NTN-SNR ROULEMENTS	Jan. 1960	Various type of automotive bearings, GEN2 and GEN3 hub bearings, Industrial machinery bearings, Small size bearings, Needle roller bearings, CVJs parts, Precision bearings, Aerospace bearings
⑤	Romania	NTN-SNR RULMENTI S.R.L.	Apr. 2003	Small-sized bearings, Driveshafts
⑥	France	SNR CEVENNES	Aug. 1973	GEN1 and GEN2 hub bearings, Hub bearings of the commercial vehicle
⑦	Italy	ICSA INDUSTRIA CUSCINETTI S.P.A.	Jul. 1969	Industrial machinery bearings
⑧	France	NTN TRANSMISSIONS EUROPE CREZANCY	Jun. 2006	CVJs parts

\* Or date of initial investment



# ASIA and OCEANIA



Major Production Facilities As of end March 2019

Affiliate Company		Company, Factory Name	Established(*)	Manufactured Products
①	China	Shanghai NTN Corp.	Aug. 2002	CVJs parts, Automotive unit bearings, Needle roller bearings, Small size bearings
②	China	Guangzhou NTN-Yulon Drivetrain Co., Ltd.	Sep. 2002	Driveshafts
③	China	NTN-RAB (Changzhou) Corp.	Mar. 2007	Needle roller bearings, Automotive unit bearings, Automotive parts
④	China	Shanghai Tung Pei Enterprise Co., Ltd.	Jan. 2000	Small size bearings
⑤	Taiwan	TAIWAY Industry CO.,LTD.	Jun. 1983	Driveshafts
⑥	Taiwan	TUNG PEI INDUSTRIAL CO., LTD.	Aug. 1966	Small size bearings, Needle roller bearings
⑦	China	NTN-LYC (Luoyang) Bearing Corp.	Jan. 2011	Automotive unit bearings, Needle roller bearings
⑧	China	Nanjing NTN Corp.	Sep. 2011	Industrial machinery bearings, machine parts
⑨	China	Beijing NTN-Seohan Driveshaft Co., Ltd.	Sep. 2003	Driveshafts
⑩	China	Xiangyang NTN-Yulon Drivetrain Co., Ltd.	Jan. 2014	Driveshafts, GEN3 hub Bearings
⑪ ⑫	Thailand	NTN MANUFACTURING (THAILAND)CO.,LTD.	May.1998	Driveshafts, Needle roller bearings, Automotive parts, Automotive bearings and unit bearings, Fluid dynamic bearing parts
⑬	India	NTN NEI Manufacturing India Private LTD.	Nov. 2005	Driveshafts, Automotive unit bearings
⑭	Australia	UNIDRIVE PTY LTD.	Feb. 1988	Driveshafts
⑮	Korea	Seohan-NTN Bearing CO.,LTD.	Jan. 2010	Large size bearings for wind turbine
⑰	Thailand	NTPPT CO.,LTD.	Feb. 2012	Automotive forging, turning parts

\* Or date of initial investment



## Saving our irreplaceable global environment to pass on to our descendants

The 21st century has been called “the century of the environment”, and NTN has been enthusiastic in implementing environmental measures on a global scale. We are now expanding our environmental network to include our business partners and encouraging them to strengthen their environmental management systems and achieve ISO 14001 certification.

In the important area of waste reductions, NTN introduced a zero emissions policy in 2002 and by September 2003 all domestic facilities had reached their targets. From now on, to promote responsible use of the earth’s natural resources, NTN will strive to reduce material loss according to the material follow cost method. We hope to work towards a situation where environmental management and profitable operations can co-exist.

Environmental problems on a global scale are messages from the Earth. As one of our top priorities, we need to listen to these messages and work to create solutions. NTN is committed to working hard to create environmental solutions, and protecting our environment for future generations.



### NTN’s environmentally sensitive products

NTN’s product line, centered on bearings, has always been considerably eco-friendly. Now we are developing new energy-saving and resource efficient products, in line with our environmentally conscious policies. The E series constant velocity joint, and the environmental versions of ULTAGE series bearings for construction equipment, are examples of these products.



### Strengthening and expanding environmental management

All of NTN’s domestic and overseas facilities have received ISO 14001 certification. Although this was expected to be difficult for a company engaged in metal casting, we nonetheless succeeded in achieving certification.

Now we are hoping to strengthen and expand our environmental management system by instituting a “NTN Environmental Prize”. The prize is awarded to companies among our business partners whose environmental measures are judged to be outstanding, and several presentations have already been made.



**For New Technology Network**

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NTN corporation

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