

Machined Components

Bearings and Bearing-Related Products

- Miniature ball bearings
- Small-sized ball bearings
- Integrated-shaft ball bearings
- Rod-end bearings
- Spherical bearings
- Roller bearings
- Journal bearings
- Pivot assemblies
- Tape guides
- ROF-type FDB units
- HMF-type FDB units

Other Machined Components

- Aerospace/automotive fasteners
- Special machined components
- Magnetic clutches and brakes

Minebea Up Close

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Electronic Devices and Components

Rotary Components

- HDD spindle motors
- Fan motors
- Hybrid-type stepping motors
- PM-type stepping motors
- DC brushless motors
- DC brushless motors for electric power steering systems
- VR resolvers
- DC brush motors
- Vibration motors

Other Electronic Devices and Components

- PC keyboards
- Speakers
- Electronic devices
 - Magnetic heads for FDDs
 - MOD drive subassemblies
 - Lighting devices for LCDs
- Power electronic components
 - Backlight inverters
- Measuring components
 - Strain gauges
 - Load cells

Note: Fan, hybrid- and PM-type stepping, DC brush and vibration motors are products of Minebea-Matsushita Motor Corporation.

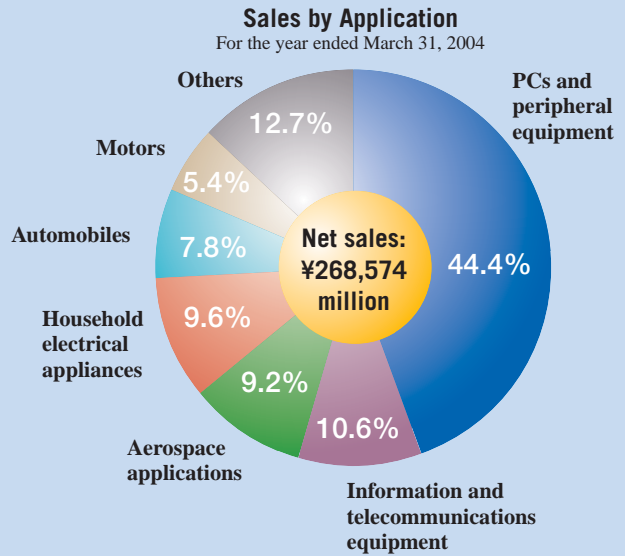
Principal Products

Applications

Minebea is the world's largest manufacturer of small ball bearings, up to 22mm in external diameter, and has a global market share in excess of 60%. The Company also manufactures a broad range of small motors and other electronic components for which it also enjoys a significant competitive advantage.

Bearings, the core product group in Minebea's Machined Components business segment encompasses standard ball bearings; integrated-shaft ball bearings and RO bearings, for high-end applications; and FDBs, which deliver outstanding quietness and robustness. The Company is positioned to respond swiftly and accurately to customers' needs in terms of quality, manufacturing cost, delivery time and supply capabilities for all of these products. Minebea is also a leading global manufacturer of bearings for highly demanding applications, such as rod-end and spherical bearings, which are used primarily by the aerospace industry.

Small motors—the mainstay of Minebea's Electronic Devices and Components business segment—include HDD spindle, fan and stepping motors, which maximize the ultraprecision machining and mass production technologies Minebea has accumulated as a manufacturer of small bearings and have given the Company outstanding competitiveness in the electronics market. This competitiveness is also evident in other products in this segment, including PC keyboards and measuring components.



Miniature and Small-Sized Ball Bearings



Each ball bearing comprises an outer ring, inner ring, balls, retainers, shields and snap rings. Essential to high-precision motors and other rotary components, ball bearings determine rotational accuracy. The average motor contains two ball bearings. Minebea manufactures more than 8,500 different types of miniature and small-sized ball bearings, most of which have external diameters of 22mm or less.

RO Bearings



RO bearings are high-precision bearings developed by Minebea for use in HDD spindle motors. Each RO bearing features two raceways on the inside of the outer ring and one each on the shaft and the inner ring fitted on the shaft, essentially combining the functions of two bearings in one. In addition to preventing misalignment and minimizing Non-Repeatable Run Out (NRRO), RO bearings facilitate more compact motor designs.

FDBs



In an FDB, a thin layer of oil or other lubricant is injected between the shaft and sleeve. The structure of the bearing features a rotating shaft, which generates a hydrodynamic force, causing the shaft to float. The noncontact construction of this bearing makes it particularly suited for improving rotational accuracy and enhancing quietness and robustness. The ultraprecision machining and mass production technologies Minebea has cultivated as a manufacturer of ball bearings also ensure a sharp competitive edge in terms of quality and manufacturing costs of FDBs.

Integrated-Shaft Ball Bearings



An integrated-shaft ball bearing has two raceways on the shaft, allowing the integration of the inner ring and shaft of two ball bearings. This facilitates more precise rotation than is possible with two independent ball bearings, making integrated-shaft ball bearings particularly suited to applications such as cylinder units for video cameras.

Pivot Assemblies



Pivot assemblies are fitted into the base of actuators to position HDD magnetic heads. Minebea enjoys the top share of the global market for these components. Standard pivot assemblies combine one or two ball bearings between a shaft and a graded sleeve.

Journal Bearings



Journal bearings are used in helicopters, primarily in the main rotor axes, and landing gear for fixed wing aircraft.

Rod-End Bearings



Used in aircraft components, such as wing flaps, engine and wing mounts and hatches, rod-end bearings function as joints. These bearings are also used extensively in helicopters, trains and automobiles.

Precision Machined Parts

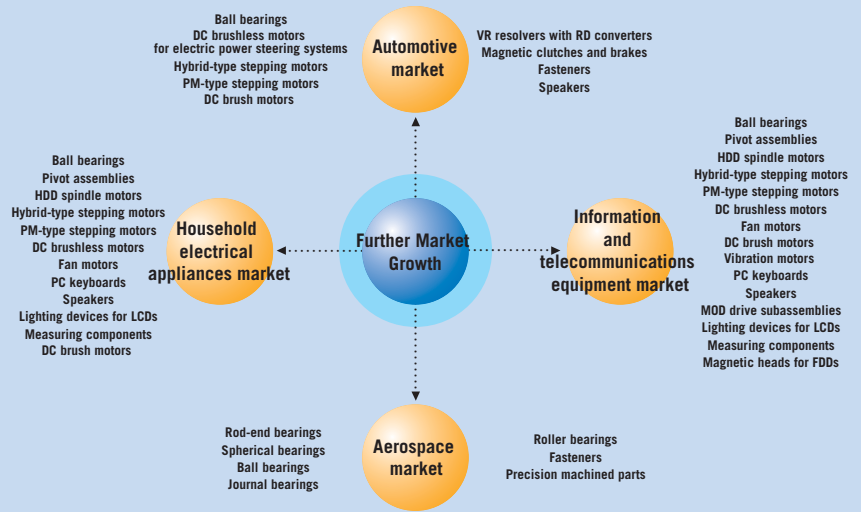


These parts combine bearings and other machined components and are used primarily to join aircraft parts together.

Markets

When Minebea started out, it primarily supplied bearings for use in aircraft instruments and dental handpieces. The advent of the videocassette recorder (VCR) in the 1970s, OA equipment in the 1980s and PCs and information and telecommunications equipment in the 1990s, however, spurred market expansion and demands for ever-higher performance, a trend that boosted demand for Minebea's ball bearings, small motors and other ultraprecision components.

In addition to continued growth, these markets are expected to see demand rise for products that offer increased energy efficiency, safety and convenience. Accordingly, demand for precision motors and control sensors is rising, particularly from manufacturers of automobiles, information and telecommunications equipment—such as cellular phones and mobile devices—and digital household electrical appliances. Accordingly, Minebea expects new opportunities to maximize the competitive edge afforded by its ultraprecision machining and mass production technologies to enhance its responsiveness and cultivate customers in these important markets.



Hybrid-Type Stepping Motors



PM-Type Stepping Motors



These motors rotate at fixed angles by digitally controlled electronic pulses and are used in the paper-feeding devices of printers, copy machines, facsimiles and similar equipment. Hybrid-type stepping motors combine a rotor with a permanent magnet (PM) and a magnetic body and use ball bearings. PM-type stepping motors use a PM as a rotor and contain no ball bearings.

Fan Motors



Fan motors are used to cool the inside of PCs and other OA equipment by directing heat outside.

PC Keyboards



Membrane switches, frames, cases and other principal components are manufactured in-house. Minebea supplies keyboards on an OEM basis to leading global manufacturers of desktop and notebook PCs.

HDD Spindle Motors



FDB Spindle Motors for HDDs



HDD spindle motors are what cause the disks in HDDs to rotate. The precision of HDD spindle motors determines the capacity and speed of HDDs, making these components critical to HDD performance. Accordingly, HDD spindle motors must offer superior performance in terms of rotational speed and low NRRO. Minebea manufactures ball bearings, including RO bearings, and FDBs for HDD spindle motors in-house, giving it a sharp competitive edge in this key market.

Lighting Devices for LCDs



Minebea manufactures lighting devices for LCDs used in cellular telephones, personal digital assistants (PDAs) and other applications. These lighting devices involve front and back lights, both of which comprise white light-emitting diode (LED) chips with micro-order prisms, facilitating unparalleled brightness and quality.

Speakers/Speaker Boxes



Minebea capitalizes on its pressing and plastic injection-molding technologies to manufacture speakers. Speakers are also fitted into speaker boxes and supplied as units to leading global audio equipment manufacturers on an OEM basis.

Minebea's Core Competencies

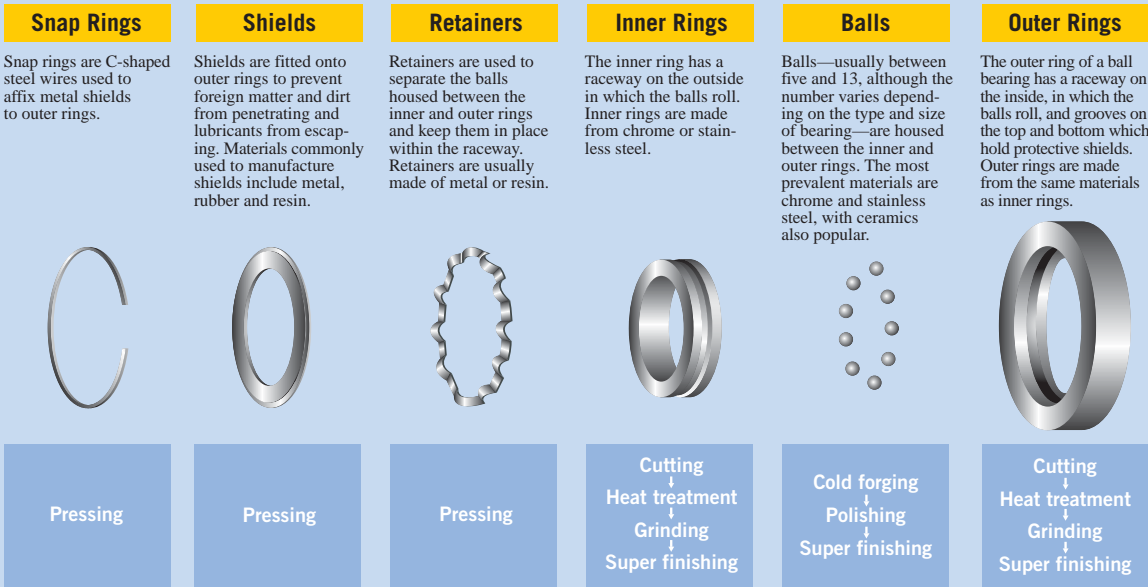
Ultraprecision Machining Technologies

Miniature and Small-Sized Ball Bearings: The Origin of Minebea's Ultraprecision Machining Technologies

The raceway roundness of the inner and outer rings for ultraprecision ball bearings manufactured by Minebea for use in applications requiring high precision, such as VCR cylinders and pivot assemblies for HDDs, is less than 0.05 micron. One micron is

1/1,000th of one millimeter—a particle of cigarette smoke is between 0.01 mm and 1.0 micron. Minebea's ability to mass produce ultraprecision machined products is the root of its competitive advantage.

An approach to production that ensures consistently superior-quality products from Minebea's 10 mass production bases worldwide



Ultraprecision machining technologies and mass production of superior-quality products

The level of precision in each ball bearing production process is an essential factor in determining the quality of the finished

product. Minebea conducts all processes in-house, as well as manufactures the dies, jigs, tools and production and assembly equipment used therein. This ensures consistently superior-quality products from Minebea's 10 mass production bases worldwide.

A global network of ball bearing production facilities



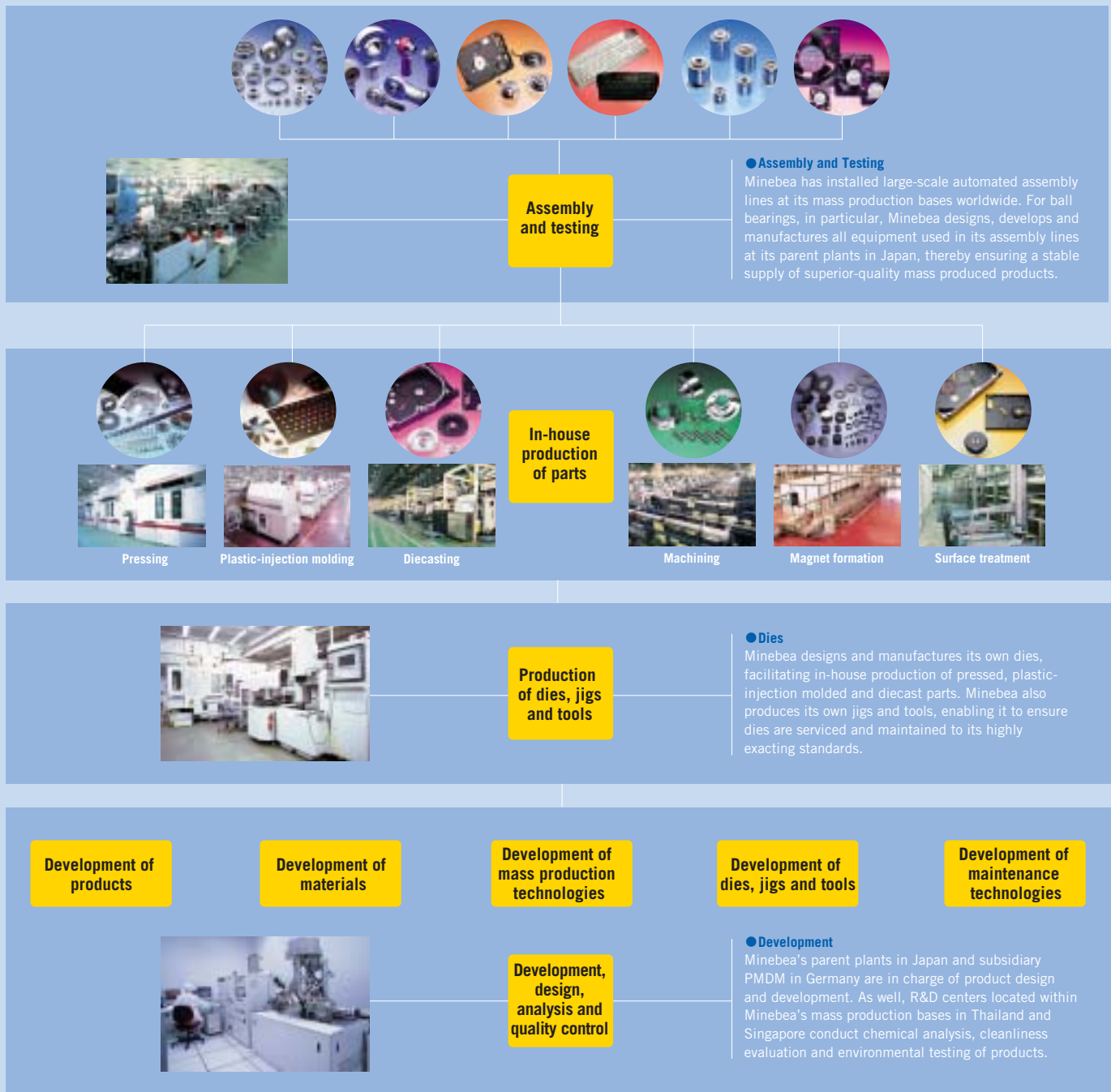
Vertically Integrated Manufacturing System

Minebea's vertically integrated manufacturing system maximizes its ultraprecision machining technologies

The level of precision in each production process is an essential factor in determining the quality of the finished product. Minebea's vertically integrated manufacturing system enables it to conduct all

processes in-house—design and development; manufacture and maintenance of dies; production of pressed, plastic-injection molded, diecast and machined parts and ferrites; and final assembly. This system facilitates mass production of Minebea's ultraprecision components.

Vertically Integrated Manufacturing System



Mass Production Technologies

Minebea's vertically integrated manufacturing system facilitates the use of its mass production technologies

Responding swiftly and effectively to the increasingly diverse needs of customers requires unparalleled superiority in terms of supply capabilities and manufacturing costs. All of Minebea's mass production facilities worldwide operate under the same vertically

integrated manufacturing system. Productive, organic links between facilities—especially those in Thailand, China and Singapore, which account for approximately 80% of the Minebea Group's production—the parent plants in Japan and global R&D bases ensure the effective integration of Minebea's vertically integrated manufacturing system and mass production technologies.



Research and Development

Minebea has established four R&D bases worldwide to, respectively, promote the development of intellectual assets—a key to competitiveness; facilitate the sharing and use of these assets within the Group; enable a smooth transition from development to mass production; and conduct forward-looking R&D. Recently, Minebea absorbed its R&D Headquarters into the newly established Engineering Headquarters, a step that will reinforce technology sharing among Minebea Group companies, encourage forward-looking R&D—contributing to the cultivation of new core competencies—and strengthen coordination between R&D and production groups.



Bearing-Related Products, Small Motors

Precision Motors Deutsche Minebea GmbH (Germany)

HDD spindle motors and other small motors

- Product development
- Engineering
- Production of prototypes
- Quality evaluation



R&D Centers (Thailand and Singapore)

Ball bearings, fluid dynamic bearings, pivot assemblies, HDD spindle motors, hybrid-type stepping motors, fan motors and other products

- Quality evaluation
- Cleanliness evaluation/management
- Development, production and evaluation/management of lubricants



Karuizawa Manufacturing Unit (Japan)

Ball bearings, FDBs, rod-end and spherical bearings, pivot assemblies, HDD spindle motors, hybrid-type stepping motors, fan motors and other products

- Product development
- Engineering
- Development of production technologies (mass production)
- Production of prototypes
- Quality evaluation



NMB Technologies Corporation Technical Center (U.S.A.)

Ball bearings, motors and other products

- Quality evaluation for automotive components



New Hampshire Ball Bearings, Inc. (U.S.A.)

Rod-end and spherical bearings

- Product development
- Engineering
- Quality evaluation



NMB-Minebea UK Ltd. (United Kingdom)

Rod-end and spherical bearings

- Product development
- Engineering
- Quality evaluation



Electronic Components

Hamamatsu Manufacturing Unit (Japan)

PM stepping motors, DC brushless motors, DC spindle motors, MOD drive subassemblies, magnetic heads for FDDs, lighting devices

- Product development
- Development of magnets and other materials
- Engineering
- Development of production technologies (production of prototypes)



PC Keyboards

NMB Technologies Corporation (U.S.A.)

PC keyboards

- Quality evaluation



Mechatronics Division (Japan)

PC keyboards

- Product development
- Engineering
- Quality evaluation



Development of Electronics Technologies and Related Products

Electronics Engineering Center Europe (Germany)



Speakers

Minebea Technologies Taiwan Co., Ltd. (Taiwan, China)

Speaker boxes

- Engineering
- Production of prototypes



Speaker Division (Japan)

Speakers

- Product development
- Engineering
- Quality evaluation



Measuring Components

Measuring Components Division (Japan)

Strain gauges, load cells and other measuring components

- Product development
- Engineering
- Production of prototypes
- Quality evaluation



Fasteners

Fujisawa Manufacturing Unit (Japan)

Fasteners

- Product development
- Engineering
- Quality evaluation



Defense-Related Special Parts

Omori Manufacturing Unit (Japan)

Defense-related special parts

- Product development
- Engineering
- Quality evaluation



A History of Achievements

- 1951 | 7 Nippon Miniature Bearing Co., Ltd., Japan's first specialized manufacturer of miniature ball bearings, is incorporated in Azusawa, Itabashi-ku, Tokyo.
- 1956 | 10 The Company relocates its headquarters to Nihonbashi-Kabuto-cho, Chuo-ku, Tokyo, and its factory to Aoki-cho, Kawaguchi, Saitama.
- 1959 | 6 A new plant is established at Aoki-cho, Kawaguchi, Saitama, to serve as the Company's integrated headquarters and factory.
- 1962 | 11 A representative office is set up in the United States to cultivate the U.S. market.
- 1963 | 3 A factory is established in Karuizawa, Nagano. Some operations are relocated to the Karuizawa Manufacturing Unit.
- 1965 | 7 The Kawaguchi Factory is closed and its equipment is conveyed to Karuizawa. The Company's headquarters is shifted from Kawaguchi, Saitama, to Miyota-machi, Kitasaku-gun, Nagano.
- 1967 | 3 A representative office is set up in London to promote business in Europe.
- 1968 | 9 Subsidiary Nippon Miniature Bearing Corporation (the present NMB Technologies Corporation) is established in Los Angeles, California.
- 1971 | 4 Sales subsidiary NMB (U.K.) Ltd. is established in the United Kingdom.
- | 5 The Company's stock is listed on the first sections of the Osaka and Nagoya stock exchanges.
- | 9 The Company acquires the U.S. firm Reed Instrument Corp. (the present Chatsworth Plant of New Hampshire Ball Bearings, Inc.) from SKF, Inc., of Sweden and commences production in the United States.
- 1972 | 2 Manufacturing subsidiary NMB Singapore Ltd. is established in Singapore. (Production begins in 1973.)
- 1974 | 9 The Company acquires Shinko Communication Industry Co., Ltd., a major strain gauge manufacturer listed on the Second Section of the Tokyo Stock Exchange.
- 1975 | 1 The Company acquires U.S. company IMC Magnetics Corp., a listed manufacturer of small precision motors.
- | 7 The Company acquires a leading fastener producer, Tokyo Screw Co., Ltd. (the present Fujisawa Manufacturing Unit), and an electro-magnetic clutch manufacturer, Shin Chuo Kogyo Co., Ltd. (the present Omori Manufacturing Unit), both of which are listed on the Second Section of the Tokyo Stock Exchange.
- 1977 | 9 The Company acquires Hansen Manufacturing Co., Inc. (the present Hansen Corporation), which is, at the time, the motor manufacturing division of Mallory Corp., a U.S. multinational.
- | 10 Sales subsidiary Nippon Miniature Bearing GmbH (the present NMB-Minebea-GmbH) is established in Germany.
- 1980 | 3 The Company acquires the Singapore factory of Koyo Seiko Co., Ltd., and establishes Pelmeq Industries (Pte.) Ltd. to manufacture small-sized ball bearings.
- | 8 Manufacturing subsidiary NMB Thai Ltd. is established in Thailand. (Production begins in 1982.)
- 1981 | 1 The marketing division of the Company is spun off as subsidiary NMB (Japan) Corporation, which is charged with integrating marketing operations for all manufacturing companies in the Minebea Group.
- | 10 The Company absorbs four of its manufacturing affiliates—Tokyo Screw Co., Ltd., Shinko Communication Industry Co., Ltd., Shin Chuo Kogyo Co., Ltd., and Osaka Motor Wheel Co., Ltd.—and changes its name to Minebea Co., Ltd.
- 1982 | 9 Sales subsidiary NMB Italia S.r.L. is established in Italy.
- 1983 | 3 The Company acquires a cooling fan manufacturer, Kondo Electric Works Ltd. (the present NMB Electro Precision, Inc.).

Minebea is Incorporated as a Small Factory in Tokyo

Minebea was incorporated in Itabashi-ku, Tokyo, in 1951, as Nippon Miniature Bearing Co., Ltd.—Japan's first specialized manufacturer of miniature ball bearings. Initially, the Company had 10 employees. In 1956, Minebea relocated to Saitama. With the aim of substantially expanding its production capacity, in 1963 the Company built a new, large-scale factory in Karuizawa, Nagano, that later became the Karuizawa Manufacturing Unit. In 1965, the Company shifted all production to the Karuizawa Factory. In subsequent years, the Company's operations expanded rapidly, reflecting rising demand and the increasing diversification of its product lineup. Because most production processes were still manual, the Company's payroll increased significantly. Prompted by the realization that it would be unable to secure employees in Japan—a consequence of rapid growth in Japan's manufacturing sector and its own relatively low profile—Minebea decided to build its first overseas factory, in Asia.

First Overseas Production Base is Established through U.S. Acquisition

In the latter half of the 1960s, approximately 70% of the ball bearings manufactured at the Karuizawa Factory were exported to the U.S. aerospace market and accounted for approximately 40% of the U.S. market for aerospace-use ball bearings. With the aim of protecting domestic bearing manufacturers, the U.S. government introduced legislation prohibiting overseas firms from supplying defense-related products. In response, in 1971 Minebea acquired a local subsidiary of Sweden's SKF—the world's largest bearing maker—and launched production in the United States.

Mass Production is Launched in Singapore

Singapore's ample labor force, status as an English-speaking country and official efforts to encourage foreign investment prompted Minebea to choose the country in 1972 for its first overseas mass production facility. The Singapore Factory began operating in 1973 and continued to serve as Minebea's principal facility for main-stay products until late in the 1970s, when the flood of foreign firms operating in the country and the imposition of restrictions on the use of non-Singaporean laborers again prompted concern over securing employees and the hunt for another country in which to establish a mass production base.

- 1984 | 8 Two manufacturing subsidiaries, Minebea Thai Ltd. and Pelmec Thai Ltd., are established in Thailand.
- 1985 | 3 The Company acquires New Hampshire Ball Bearings, Inc., a listed U.S. ball bearing manufacturer.
- | 9 The Company acquires the Miami Lakes operations of Harris Corporation, a U.S. manufacturer of switching power supplies.
- 1986 | 5 The R&D center and subsidiary Minebea Electronics Co., Ltd., are established in Asaba-cho, Iwata-gun, Shizuoka.
- 1987 | 5 Manufacturing joint venture Thai Ferrite Co., Ltd. (the present Power Electronics of Minebea Co., Ltd.), is established in Thailand.
- 1988 | 2 The Company acquires Rose Bearings Ltd., (the present NMB-Minebea UK Ltd.) a U.K. manufacturer of rod-end and spherical bearings.
- | 3 Sales subsidiary NMB Technologies, Inc. (the present NMB Technologies Corporation), is established in the United States to coordinate sales and marketing of Minebea's electronic devices.
- Manufacturing joint venture Minebea Electronics (Thailand) Co., Ltd., is established.
- | 12 Manufacturing subsidiaries NMB Hi-Tech Bearings Ltd. and NMB Precision Balls Ltd. are established in Thailand.
- 1989 | 1 Marketing subsidiary NMB France S.a.r.l. (the present NMB Minebea S.a.r.l.) is established.
- 1990 | 10 Papst-Minebea-Disc-Motor GmbH (the present Precision Motors Deutsche Minebea GmbH), a joint venture with Papst-Motoren GmbH & Co. KG, is established in Germany to manufacture HDD spindle motors.
- | 11 Rose Bearings Ltd., (the present NMB-Minebea UK Ltd.) in the United Kingdom, commences production of ball bearings at its Skegness plant.
- 1992 | 2 The Company absorbs Sorensen Ltd. and reestablishes it as Minebea Electronics (UK) Ltd., a manufacturer of switching power supplies in Scotland.
- 1993 | 8 Joint venture agreement with Papst-Motoren GmbH & Co. KG of Germany is cancelled. The Company acquires all outstanding shares in Papst-Minebea-Disc-Motor GmbH and changes the company's name to Precision Motors Deutsche Minebea GmbH (PMDM).
- | 10 Sales and R&D subsidiary Minebea Trading Pte. Ltd. (the present Minebea Technologies Pte. Ltd.) is established in Singapore.
- 1994 | 4 Manufacturing subsidiary Minebea Electronics & Hi-Tech Components (Shanghai) Ltd. is established in China.
- 1996 | 8 A vertically integrated ball bearing production facility—Minebea's largest to date—commences operations in Shanghai.
- | 10 U.K. subsidiary NMB (U.K.) Ltd. establishes a new plant in Inchinnan, Scotland.
- 1999 | 3 The Company commences quality evaluation and testing at the NMB Corporation Technical Center in the United States.
- | 7 U.S. subsidiaries NMB Corporation and NMB Technologies, Inc., merge to form NMB Technologies Corporation.
- 2000 | 3 The Company acquires Kuen Dar (M) Sdn. Bhd., a Malaysian speaker box manufacturer.
- 2001 | 2 A controlling interest in Actus Corporation, a furniture and interior decor product sales subsidiary, is sold to TRS Co., Ltd.
- 2002 | 8 Huan Hsin Holdings Ltd., of Singapore, and Shen Ding Pte. Ltd.—a joint venture between Minebea and Huan Hsin—establishes PC keyboard manufacturing subsidiary Shanghai Shun Ding Technologies Ltd. in China.
- Minebea establishes sales company Minebea (Hong Kong) Ltd. in China.
- | 9 Minebea establishes sales companies Minebea (Shenzhen) Ltd. and Minebea Trading (Shanghai) Ltd. in China.
- 2004 | 4 Minebea establishes joint venture Minebea–Matsushita Motor Corporation with Matsushita Electric Industrial Co., Ltd., with the aim of integrating the fan motor, stepping motor, vibration motor and DC brush motor businesses of the two parent companies.

Production in Thailand

Minebea's reasons for selecting Thailand for its second overseas mass production base included the country's abundant supply of workers, the professionalism of Thai employees at its Singapore Factory, the Thai government's efforts to attract component manufacturers and its Buddhist traditions and history of friendly relations with Japan. Realizing that if it took the same approach in Thailand as it had in Japan and Singapore, it would eventually face the same problems securing employees and expanding production capacity, Minebea chose to locate initially in rural Ayutthaya. Since then, the Company has established three additional plants in rural areas. Thailand is currently Minebea's largest mass production base, accounting for approximately 60% of Group production.

Minebea's Thai Operations

Net sales:	(Year ended March 31, 2004)	¥156,745 million
	(As of March 31, 2004)	
Cumulative investment:		¥163,670 million
Total site space:		1,466,032 meters ²
Total factory floor space:		372,309 meters ²

Operations in China: The Market of the Future

To expand its production capacity and take advantage of the growing Chinese market, in 1994 Minebea established and commenced operations at subsidiary Minebea Electronics & Hi-Tech Components (Shanghai) Ltd., in Shanghai. Building on expertise accumulated through operations in five countries, in 1996 the Company completed a state-of-the-art facility that is the world's largest vertically integrated production facility for miniature and small-sized ball bearings and Minebea's second largest mass production base.

In 2002, Minebea established Shen Ding Pte. Ltd., a joint venture with Huan Hsin Holdings Ltd., of Singapore, and Shanghai Shanghai Shun Ding Technologies Ltd., a PC keyboard manufacturing subsidiary of Shen Ding. Production at Shanghai Shun Ding Technologies commenced in August 2003. By March 2005, Minebea plans to shift PC keyboard manufacturing operations currently in Thailand to Shanghai Shun Ding Technologies.

Minebea's China Operations

Net sales:	(Year ended March 31, 2004)	¥34,854 million
	(As of March 31, 2004)	
Cumulative investment:		¥50,723 million

	Minebea Electronics & Hi-Tech Components (Shanghai) Ltd.	Shanghai Shun Ding Technologies Ltd.
Total site space:	495,834 meters ²	47,425 meters ²
Total factory floor space:	89,299 meters ²	45,300 meters ²

Directors, Auditors and Executive Officers

Representative Director, President and Chief Executive Officer



Tsugio Yamamoto

Directors and Senior Managing Executive Officers



Yoshihisa Kainuma

Director, Senior Managing Executive Officer
Member of the Tokyo Head Office Administration Executive Council, in charge of Personnel & General Affairs, Logistics and Procurement



Takayuki Yamagishi

Director, Senior Managing Executive Officer
General Manager of Engineering Headquarters



Rikuro Obara

Director, Senior Managing Executive Officer
General Manager of Manufacturing Headquarters and Karuizawa Manufacturing Unit



Ryusuke Mizukami

Director, Senior Managing Executive Officer
Member of the Tokyo Head Office Administration Executive Council, in charge of Corporate Planning, Information Systems and Environmental Preservation



Kenji Senoue

Director, Senior Managing Executive Officer
Member of the Tokyo Head Office Administration Executive Council, in charge of Strategy Planning



Tosei Takenaka

Representative Director and President, Minebea-Matsushita Motor Corporation

Director and Managing Executive Officer



Koichi Dosho

Director, Managing Executive Officer
General Manager of Sales Headquarters, European and American Regional Sales Headquarters, European Region Operations

Directors



Atsushi Matsuoka

Chairman and Director, Kelaisha Co., Ltd.



Chanchai Leetavorn

Chairman, Asia Credit Plc.

Standing Corporate Auditors

Shinichi Mori
Yoshinori Amano
Tukasa Oshima

Auditor

Isao Hiraide

Managing Executive Officers

Takashi Yamaguchi
Member of the Tokyo Head Office Administration Executive Council, in charge of Finance and Accounting

Yukio Shimizu

Deputy General Manager of Sales Headquarters (in charge of Japan and Asian Region) and General Manager of Japan and Asian Regional Sales Headquarters

Hiroharu Katogi

In charge of Business Administration and Investor Relations

Susumu Fujisawa

In charge of China Operations

Akio Okamiya

General Manager of R&D Center of Karuizawa Manufacturing Unit and General Manager of Chemical Integration Lab

Hiroyuki Yajima

General Manager of Bearing Division and Bearing Manufacturing Dept. of Karuizawa Manufacturing Unit

Executive Officers

Sadao Sawamura

General Manager of Information Systems Dept.

Akihiro Hirao

General Manager of Omori Manufacturing Unit

Sadahiko Oki

In charge of Internal Auditing Office

Takuya Naka

In charge of Legal Affairs and General Manager of Legal Dept.

Masayoshi Yamanaka

In charge of Asian Region Operations

Shunji Mase

General Manager of Personnel & General Affairs Dept. and Secretary of Office of Tokyo Head Office Administration Executive Council

Masamitsu Osada

General Manager of Mechatronics Division

Eiichi Kobayashi

General Manager of Production Technology Center and Tool & Die Dept. of Karuizawa Manufacturing Unit

Motoyuki Niijima

General Manager of Measuring Components Division

Tadahiko Mori

General Manager of Logistics Dept.

Masao Iwasa

General Manager of Administration Office of Karuizawa Manufacturing Unit

Hiroataka Fujita

General Manager of Hamamatsu Manufacturing Unit, Lighting Devices Dept. and Visual Electronics Components Dept.

Junio Shimba

General Manager of Global Storage Component Product Management

Junichi Mochizuki

General Manager of Global Bearing Product Management

Morihiro Iijima

General Manager of Strategy Planning Dept.

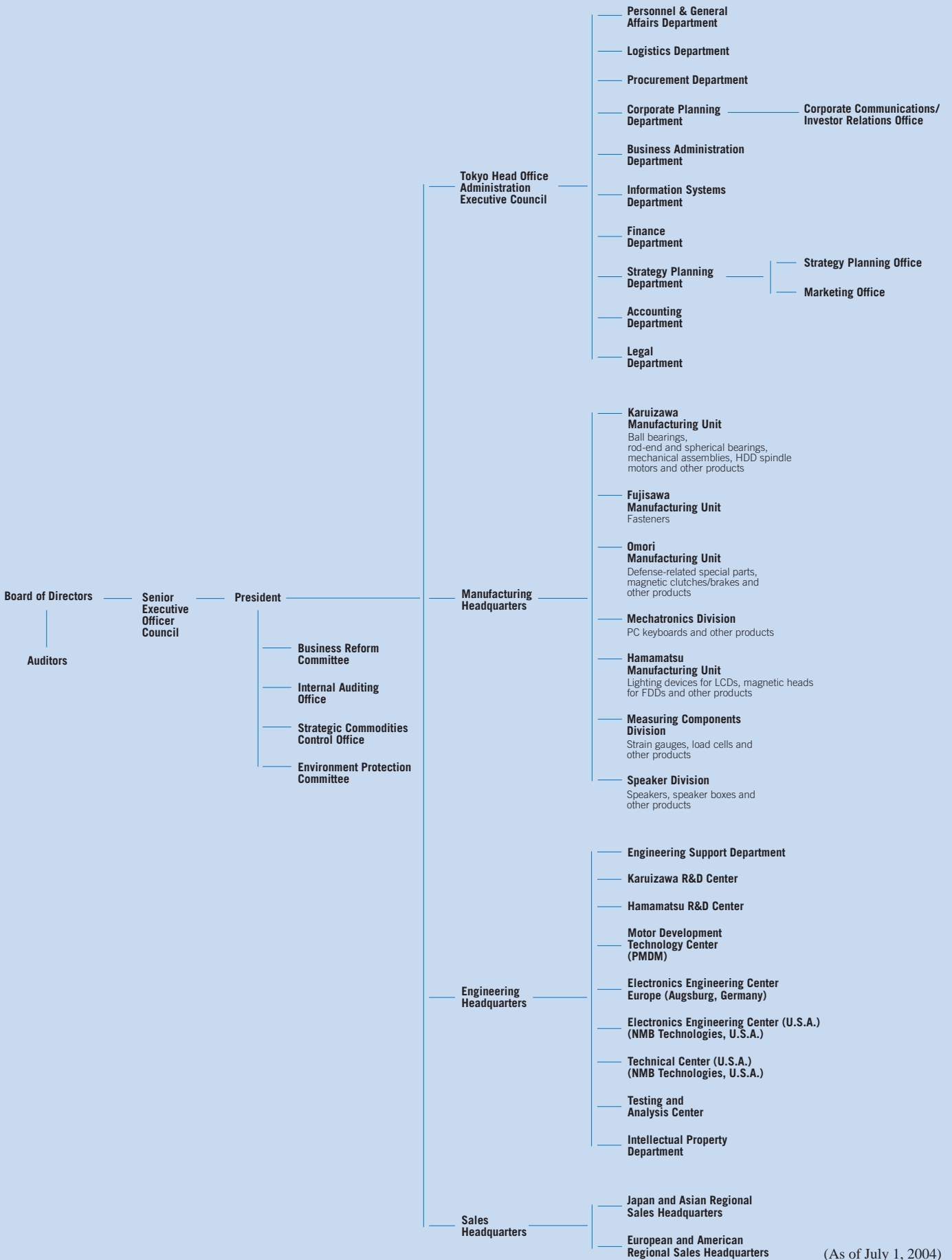
Toshisada Koyama

General Manager of Precision Motor Division and Automotive Motor Manufacturing Dept. of Karuizawa Manufacturing Unit

Note: Messrs. Atsushi Matsuoka and Chanchai Leetavorn are external directors as required under Article 188, Paragraph 2, item 7-2 of the Japanese Commercial Code.

Messrs. Tukasa Oshima and Isao Hiraide are external corporate auditors as required under Article 18, Paragraph 1, of the Law For Special Exceptions to the Commercial Code concerning Audit, etc., of Corporations.

Organization



(As of July 1, 2004)