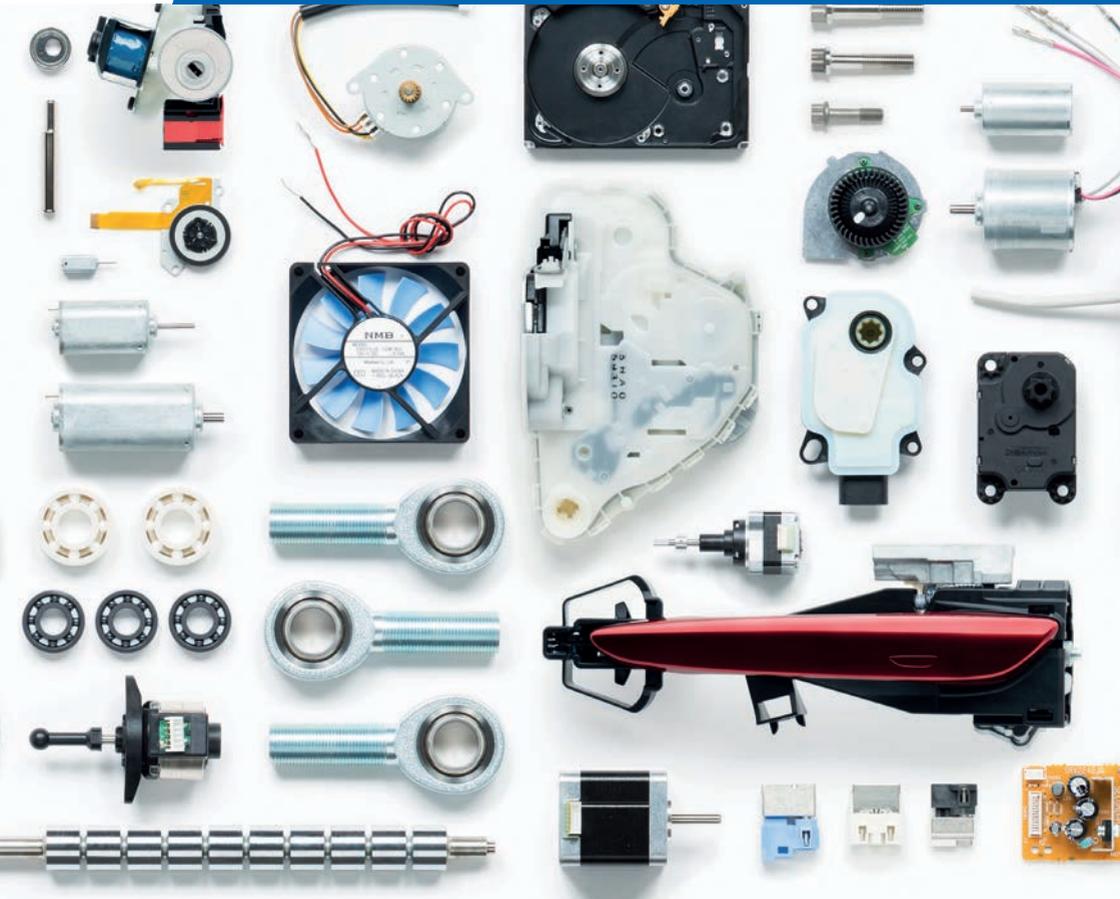


MinebeaMitsumi

Passion to Create Value through Difference

Innovative power for Europe

Products, locations and technologies



MinebeaMitsumi

Passion to Create Value through Difference

A strong, global partner

MinebeaMitsumi Inc. began manufacturing miniature ball bearings in 1951 and is now the world's largest manufacturer in this segment. In the following years, other key business areas in the fields of electronics and electromechanics were established on the basis of the precision technologies developed in-house.

MinebeaMitsumi employs more than 100,000 people worldwide at 171 locations in 27 countries. Whether in aviation, the aerospace industry, the automotive sector, the computer industry, medical technology, or in the household, MinebeaMitsumi products are integrated everywhere.



MinebeaMitsumi

Passion to Create Value through *Difference*

Ultra-precision technology

MinebeaMitsumi combines a wide range of advanced technologies and continuously works on products which contribute to the further development of IoT, Industry 4.0 and smart cities.



MinebeaMitsumi

Passion to Create Value through Difference

Innovative power for Europe



Sustainable growth driver

MinebeaMitsumi is a global company with research and development facilities and production sites in 27 countries.

MinebeaMitsumi Inc. combines a wide range of advanced technologies. The products range from precision ball bearings via motors, sensors and semiconductors to radio technology.

MinebeaMitsumi

Passion to Create Value through Difference

European sales headquarter
Langen, Germany



Access & control systems in the automotive sector
Main Office Europe - Créteil, France
Competence Center Germany - Erdweg, Germany



Spherical bearings & component production for the aviation industry
Paris, France

MinebeaMitsumi

Passion to Create Value through Difference

Spherical Bearing technologies & products for the Aerospace Industry
Lincoln, Great Britain



Industrial weighing & inspection technologies
Hamburg, Germany

MinebeaMitsumi

Passion to Create Value through Difference

Development & technology center
Villingen-Schwenningen, Germany



Smart city & IoT solutions
Novazzano, Switzerland

MinebeaMitsumi

Passion to Create Value through Difference

Production plant & development center
Košice, Slovakia



— MinebeaMitsumi Group —

Precision bearings & bearing systems
Leutkirch, Germany

Smart City & Infrastructure

- | | | | |
|------------------------|---|------------------------|---|
| Solar Power Generators |  | Smart Lighting Devices |  |
| Wind Power Generators |  | Smart Street Lights |  |
| Battery Modules |  | Parking Sensors |  |
| Smart Meters / Bulbs |  | Security Cameras |  |
| Smart Locks |  | Elevators / Escalators |  |
| Automatic ticket gates |  | EV Charging Station |  |

Industrial

- | | |
|---------------------------------------|---|
| Industrial Machinery |  |
| Industrial Measurement Instrument |  |
| ATMs |  |
| POS Terminals |  |
| Agricultural & Construction Machinery |  |

Medical/Health Care

- | | |
|------------------------------|---|
| CT Scanners / X-ray Machines |  |
| Dental Handpieces |  |
| Medical Infusion Pumps |  |
| Laboratory Equipments |  |
| Nursing Care Products |  |
| Bathroom Scales |  |
| Blood Pressure Monitors |  |
| Blood Purification Machines |  |
| Alcohol Checker |  |

Robotics

- | | |
|----------------------|---|
| Drones |  |
| Communication Robots |  |
| Cooperative Robots |  |
| Surgical Robots |  |
| Industrial Robots |  |

Aviation / Space

- | | |
|--------------------------|---|
| Aircrafts |  |
| Satelites / Space Crafts |  |

Transportation

- | | |
|-------------------|---|
| Automobiles |  |
| Electric Vehicles |  |
| Electric Bikes |  |



Our product portfolio

We encounter MinebeaMitsumi products in countless areas of everyday life where we might not even expect them at first.

Vending Machines



3D Printers



Multi-Function Copier-Printers



Crossing Gates



Information Technology

Telecommunication Base Stations



PCs



Data Centers



Smart Phones / Tablet Devices



Home & Entertainment

Refrigerators



Hair Dryers



Laundry Machines



Electric Toothbrushes



Cooking Appliances (IH / Microwaves / Rice Cooker)



Shavers



Vacuum Cleaners



Fitness Equipments



Air Conditioners



Facial Equipments



Electric Fans



Toys



Air Cleaners / Humidifiers / Dehumidifier



Game Devices



Bidets



VR Equipments



Televisions



Automatic Translation Devices



Set Top Boxes



Power Tools



DVD / Blue-ray Disc



Fishing Equipments



Digital Cameras/Action Cameras



Suitcases



Space Rockets



Trains



Ships / Motor Boats /
Water Bikes



Trams / Light Rails



MinebeaMitsumi

Passion to Create Value through Difference



Our service

From product development to series production and beyond - our experts support our customers in achieving their individual application.



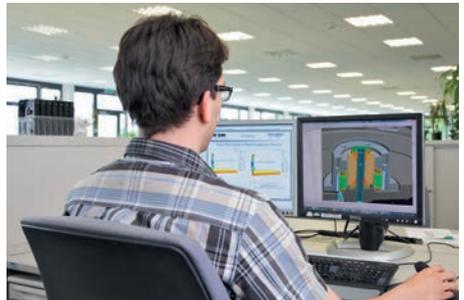


Worldwide service and support

As a strong partner, we support you from the start of development with our expertise and our comprehensive knowledge of your sector. In the automotive sector, industry, transportation, or aviation and space travel, we provide expert knowledge from a single source.

In constantly achieving the best possible results, our developers, technicians and engineers collaborate closely with the customer. Each customer is as unique and individual as the application itself. Our most important concern, therefore, is to deliver customized products and services at all times.

European manufacturing facilities that are specially established for the European market not only guarantees proximity to the market and our partners but also satisfies the most demanding quality and service requirements. We support you from development to series production and beyond as a competent and reliable partner.



MinebeaMitsumi

Passion to Create Value through Difference

NMB-Minebea-GmbH

European sales headquarter

NMB-Minebea-GmbH in Langen near Frankfurt is the European sales headquarter of the MinebeaMitsumi Group. It closely cooperates with the other sales offices NMB-Minebea U.K. Ltd. (UK), NMB Italia S.r.L. (Italy) and NMB-Minebea S.a.r.l. (France). From the outset, it has been NMB-Minebea-GmbH's top priority to develop strong and trusting partnerships with its customers. This aim is reflected by arranging services from competent technicians on site, expert direct sales and cooperation with market-leading distributors and local experts.

Supported by a strong development network, NMB-Minebea-GmbH advises you with valuable expertise in all MinebeaMitsumi product areas.



Sales quality at the highest level

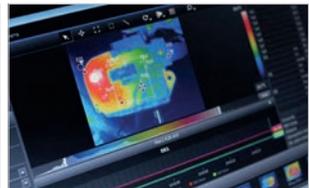
NMB-Minebea-GmbH is committed to securing the supply chain and cost efficiency while maintaining the highest standards of quality.





Seamless and safe access for Mobility Solutions

U-Shin provides innovative and reliable mechatronic systems.
The company is part of MinebeaMitsumi since 2019.





U-Shin Ltd.

Access & control systems in the automotive sector

U-Shin develops and supplies the worldwide automotive industry with innovative access and control systems that ensure both greater safety and convenience.

Founded in 1926, the company is looking back on a long tradition among Tier 1 automotive suppliers.

Our mechatronic solutions for door access, steering systems or interior control and our electric power drives are developed and manufactured in 15 countries worldwide. Driven by the Japanese quality mindset, U-Shin develops modular products and systems that meet the scalable platform strategies of the major automotive manufacturers and at the same time are adapted to specific needs and requirements. In cooperation with automotive manufacturers, U-Shin constantly improves its products in the fields of vehicle security, functional safety, crash behavior, acoustics and aesthetics.

Through our CAE simulations and test capabilities in mechanics, hardware and software, U-Shin contributes to the success of complex developments.

U-Shin Germany, located in Erdweg near Munich, acts as competence center, working in close collaboration with the satellite competence centers in France and Italy as well as multi-products production plants to develop the best products close to our customers.



Drive is what matters

Experts for tailor-made, customer-specific drive systems in numerous areas.



MinebeaMitsumi Technology Center Europe GmbH

Development & technology center



MinebeaMitsumi Technology Center Europe GmbH, with its headquarter in Villingen-Schwenningen, is the largest motor development center in the international MinebeaMitsumi alliance. The Technology Center develops electronically commutated BLDC motors, sensor systems, LED backlights, innovative drive technologies and energy harvester systems and is certified according to IATF 16949:2016 and ISO 14001:2015. In addition to precision motors for the automotive and industrial sectors, the product portfolio also includes hard disk motors with integrated Fluid Dynamic Bearings (FDB) technology. This system is now also used in numerous other areas. The company is also the central development center for numerous products and technologies of the MinebeaMitsumi Group. The location allows a close development cooperation with the European customers. Mast Kunststoffe GmbH located in Bad Waldsee is a subsidiary of the Technology Center since 2019. Mast is an experienced specialty supplier of plastic tool-based gear and drive components.

At present, MinebeaMitsumi Technology Center Europe GmbH employs about 400 people who ensure that the development process for the respective drive systems is supported continuously. Processes range from the manufacture of modern production and measuring equipment for series production to the successful start of production in Europe's own manufacturing plant or in the Asian production facilities of the MinebeaMitsumi Group.

Many years of experience and expertise along with our employees' commitment and strategic thinking are important prerequisites for the success of our development, construction and manufacturing processes in a highly technological environment in a fast-paced world market.



Maximum precision for aerospace applications

Mach Aero is a leading manufacturer of spherical bearings, rod ends, and precision components for the aviation industry.



S.A.S. Mach Aero Brétigny Rectification

Spherical bearings & component production
for the aviation industry

Mach Aero started as a grinding specialist, in particular in the automotive industry. From the very beginning, its core competencies were engineering and innovative solutions to offer customers high-quality products which meet all expectations and requirements.

Today, Mach Aero is part of the MinebeaMitsumi Group and one of the leading manufacturers of spherical bearings, rod ends and precision components, mainly for the aviation industry (built to spec and built to print). Mach Aero engineers always work very closely with the respective customer's technical teams to find the best, customized solution together. In our test facilities the results of our simulation software can be checked under real conditions.

Since the company's foundation in Paris, Mach Aero has been able to establish another subsidiary in Bangalore, India. All Mach Aero production facilities have a documented management system and are certified according to ISO9001:2000 and AS9100. In "maintenance, repair & overhaul" and with regard to spare parts, Mach Aero is certified according to PART21/G and PART145. In-house NDT processes (passivation & FPI) and special processes (chromic & sulfuric anodizing) are also possible. The company is certified according to NADCAP.



MinebeaMitsumi

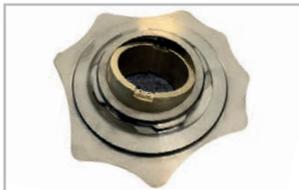
Passion to Create Value through Difference

NMB-Minebea U.K. Ltd.

Spherical Bearing technologies & products
for the Aerospace Industry

NMB-Minebea U.K. Ltd. in Lincoln, England, is the world market leader in the development and manufacture of Spherical bearing technologies wherever precision, weight and reliability are essential. Its core competences are the design, test and manufacture of Technology solutions to engineering problems in aerospace, particularly landing gear attachment and shock strut, low floor tram coupling and steering & suspension of special vehicles for customers in Europe and overseas, which are well served by our network of sales offices and partners.

The company's history began in 1906 as a manufacturer of Motor Cars under the name Rose Brothers. Later success in the packaging of sweets and chocolate preceded, entry into the market for bearings technology in 1954. In 1965, the company already employed more than 200 people and changed its name to Rose Bearings. In 2003, the company got its present name, NMB-Minebea U.K. Ltd., as part of the MinebeaMitsumi Group and today employs more than 300 people as a leader in the field of Bearing Design and Manufacture.



Precision-made premium products

NMB-Minebea U.K. Ltd. stands for precision-made premium products. It exceeds customers' expectations by designing, testing and manufacturing outstanding, customized product solutions to engineering problems.





The true measure

Minebea Intec supports customers from numerous industries with its high-quality industrial weighing and inspection solutions. Their mission is to increase the reliability, safety, and efficiency of production and packaging processes around the globe.

Minebea Intec GmbH

Industrial weighing and inspection technologies

Minebea Intec is a leading manufacturer of industrial weighing and inspection technologies. Headquartered in Hamburg, Germany, the company offers products and services that have stood for innovation, performance and reliability for around 150 years. The product portfolio includes high-resolution platform scales, load cells, silo and vessel scales, checkweighers, metal detectors, X-ray inspection systems and intuitive software solutions.

Around 1,000 employees at 19 locations worldwide and a network of over 200 certified international distribution partners make Minebea Intec a global player in its industry. With more than 90,000 inspection systems sold, 350,000 industrial scales and indicators, around 1,000,000 industrial load cells and worldwide services, the company is a reliable partner for its customers and partners from a wide range of industries.



A company with a long tradition and a vision

myonic develops innovative and economically optimized solutions through sustainability, quality, speed and flexibility.



myonic GmbH

Precision bearings & bearing systems

myonic is an international industrial enterprise with subsidiaries in Germany and the Czech Republic. The company has been a part of the MinebeaMitsumi Group since 2009. myonic's success is based on the skills, the efficiency and the expertise of its employees who excel with their fascination for details, precision and quality.

With over 80 years of experience in the manufacture of precision bearings and bearing systems, myonic offers a wide range of innovative products and services for the medical, automotive, precision engineering, mechanical engineering and aerospace industries. myonic is a pioneering company with a strong parent company behind it, capable of implementing progressive visions. However, the product range does not end with precision bearings. Core competencies also include the development, series production and assembly of complex subsystems.



Paradox Engineering SA

Smart city & IoT solutions

Paradox Engineering SA was founded in 2005 and has its headquarter in Switzerland. The company designs and develops forward-looking technologies to create unique interoperable and highly scalable Internet of Things infrastructures for smart, open cities.

Paradox Engineering SA offers an integrated portfolio of future-proof solutions for smart urban networks in the IoT era: unique expertise in data acquisition systems, radio design wireless sensor networks, and blockchain-powered applications are some of its core competencies. It supplies hardware and software to enable any type of urban services. These range from parking sensors and mobility networks via street lighting, energy management and waste collection to various wireless IoT applications and high-speed IoT services.

Since 2015 Paradox Engineering SA has been a part of MinebeaMitsumi. Within the Group, the company contributes to success in the IoT market through vision and innovation and develops cutting-edge technologies for smart applications, with increasing success in Asia, the United States, South America and Europe.





Cutting-edge technologies in the IoT era

Paradox Engineering is committed to interoperability and open standards and considers these to be the key to smart city success.

MinebeaMitsumi

Passion to Create Value through Difference

Our state-of-the-art production facility in Europe

The newly opened production facilities with an area of 20,500 square meters are also home to the company's own R&D center.



Minebea Slovakia s.r.o.

Production plant & development center

With premises of 20,500 square meters, Minebea Slovakia s.r.o. in Košice in Slovakia is one of MinebeaMitsumi's largest production facilities in Europe. The first products left the impressive production hall in June 2018. The product portfolio includes mechatronic drive systems, mainly engines and actuators for the automotive and industrial sectors, fans, stepper motors and further in-house parts (injection molding technology, PCB, monoliths). Currently, Minebea Slovakia s.r.o. employs around 300 people, most of whom are technically trained, and has an annual growth rate of 250 employees. A total of 1,100 employees and an investment sum of 60 million euros are planned to be reached by the end of the first phase of the major European project at the end of 2021.

The heart of the new manufacturing plant is the company's own R&D center, whose main task is to provide development support for various MinebeaMitsumi subsidiaries. This includes the development of new technologies, services, test facilities and the development of completely new research areas (body monitoring, power transmission, industrial drives for logistics and robotics, smart cities).



MinebeaMitsumi

Passion to Create Value through *Difference*

Creating new value worldwide

MinebeaMitsumi stands for ultra-precision technology in the age of IoT. Advanced technologies contribute to optimizing Industry 4.0 and smart cities.



Our markets

The key strategic sectors

» Infrastructure



» Automotive industry



» Health care



» Industrial applications



» Robotics



» Information technology



MinebeaMitsumi's "Electro Mechanics Solutions™" combine control technologies with developments from mechanical engineering and electronics. Innovative products are intended to contribute to a fully networked IoT society. This does not only include smart cities but also the digitization of health care, autonomous driving, and robotics.



Our locations in Europe

MinebeaMitsumi
Passion to Create Value through Difference

European sales headquarter

NMB-Minebea-GmbH
Siemensstraße 30
63225 Langen
Germany
www.minebeamitsumi.eu



Access & control systems in the automotive sector

Main Office Europe

U-Shin France S.A.S.
2-10 Rue Claude Nicolas Ledoux
94000 Créteil
France

Competence Center Germany

U-Shin Deutschland Zugangssysteme GmbH
Waldstraße 2
85253 Erdweg
Germany
www.u-shin-ltd.com

MinebeaMitsumi
Passion to Create Value through Difference

Development & technology center

MinebeaMitsumi Technology Center Europe GmbH
Minebea-Weg 1
78052 Villingen-Schwenningen
Germany
www.minebeamitsumi.eu



Spherical bearings & component production for the aviation industry

S.A.S. Mach Aero
2 Rue du Roussillon
91220 Breteigny-sur-orge
France
www.machaero.com

MinebeaMitsumi
Passion to Create Value through Difference

Spherical Bearing technologies & products for the Aerospace Industry

NMB-Minebea U.K. Ltd.
Doddington Road
LN6 3RA Lincoln
Great Britain
www.nmb-minebea.co.uk/

Minebea
intec
The true measure

Industrial weighing and inspection technologies

Minebea Intec GmbH
Meiendorfer Str. 205 A
22145 Hamburg
Germany
www.minebea-intec.com

 **myonic**
— MinebeaMitsumi Group —

Precision bearings & bearing systems

myonic GmbH
Steinbeisstraße 4
88299 Leutkirch
Germany
www.myonic.com

 **PARADOX**
ENGINEERING
MINEBEAMITSUMI GROUP

Smart city & IoT solutions

Paradox Engineering SA
Via Passeggiata 7
6883 Novazzano
Switzerland
www.pdxeng.ch

MinebeaMitsumi
Passion to Create Value through Difference

Production plant & development center

Minebea Slovakia s.r.o.
K Litisku 1637
04017 Košice
Slovakia
www.minebeamitsumi.eu

MinebeaMitsumi

Passion to Create Value through Difference

NMB-Minebea-GmbH

Siemensstraße 30, 63225 Langen (Germany)

Phone +49 6103 913 - 0 Fax +49 6103 91 32 20

www.minebeamitsumi.eu