



Global Aerospace Products Manufacturing



Machined Component Solutions
Bearings and Fasteners

MinebeaMitsumi Group Aerospace Products and Solutions



We are a global family of aerospace companies working together to meet your challenging performance requirements through advanced, high-precision machining capabilities and new product development.





NORTH AMERICA

- 1** Peterborough, NH:
NHBB Corporate Headquarters
NHBB HiTech Division
- 2** Laconia, NH:
NHBB Astro Division
NHBB New Product Development
Center (NPDC)
- 3** Chatsworth, CA:
NHBB Precision Division
myonic USA (sales div.)
- 4** Churubusco, IN:
C&A Tool Engineering, Inc.

EUROPE

- 5** Lincoln, UK:
NMB-Minebea UK Ltd.
- 6** Leutkirch, Germany:
myonic GmbH
- 7** Roznov, Czech Republic:
myonic s.r.o.
- 8** Herzogenrath, Germany:
CEROBEAR GmbH
- 9** Paris, France:
Mach Aero Bretigny SAS

ASIA

- 10** Fujisawa, Japan:
Fastener Division
- 11** Karuizawa, Japan:
Rod End Division
- 12** Tokyo, Japan:
Shiono Precision Co. Ltd.
- 13** Lop Buri, Thailand:
Rodend Bearing Division
- 14** Bangalore, India:
Mach Aero Components Pvt. Ltd.

Industry Knowledge and Expertise

We design and engineer solutions for critical applications on everything from small business jets to wide body commercial airliners, from light turbine helicopters to heavy lift rotorcraft, and from space launch vehicles to satellites.



Cylindrical Roller Bearing
Flexure cage outer ring
High speed vibration control



Rolling Element Rod End Bearing
Heavy load capacity
Precise low friction motion



Large Trunnion Bearing
Wear resistant ball material
High load capacity

AIRFRAME FLIGHT CONTROL AND FUSELAGE

- Ailerons
- Elevators
- Flaps and Slats
- High Lift Assemblies
- Instruments
- Rudders
- Spoilers
- Stabilizers

AUXILIARY MECHANICAL SYSTEMS

- Air Mgt. Systems
- APU's
- De-Ice Valves
- Hydraulic Pumps
- Nacelle Blowers
- RAM Air Turbines
- Starter Generators
- Thrust Reversers

ENGINES GEARBOXES AND TRANSMISSIONS

- Engine Mounts
- Gearboxes
- Hot Air Valves
- Main Shafts
- Pylon Mounts
- Spigot Assemblies
- Tower Shafts
- Variable Stator Vanes

LANDING GEAR- MAIN AND NOSE

- Braces
- Downlocks
- Pintles
- Retraction Actuators
- Shock Struts
- Steering Actuators
- Trunnions



Self-Lubricating Rod End
INVINSYS® patented liner system
Extremely long life



Hybrid Tapered Roller Bearing
Duplex design with ceramic rollers
High reliability



Custom Machined Part
Light weight alloy
Corrosion resistant coating

**ROTORCRAFT
 AND VTOL**

- Blade Retention
- Damper Actuators
- Pitch Control
- Rotor Heads
- Scissor Drives
- Swash Plates

**SPACECRAFT
 AND SATELLITES**

- Cargo Capsules
- Crew Transport
 Vehicles
- Launch Vehicles
- Orbital Satellites
- Planetary Probes

CAD Images

The products shown are just a few of the many customized, high-value aerospace solutions available through the MinebeaMitsumi Group.



Angular Contact Ball Bearing
High temperature alloy
Silicon nitride balls



Custom Pin Fastener
High strength and toughness
Corrosion resistance



Blisk Aero Engine Component
High temperature alloy
Additive manufacturing process

ROD END DIVISION
 Karuizawa, Japan

Rod end and spherical bearings, bushings, ball bearing rod ends, roller bearings, machined parts, next-up assemblies

ISO 9001/JIS Q 9100
 ISO 14001/JIS Q 14001
 Nadcap: AC7101, AC7102, AC7108, AC7114, AC7117

FASTENER DIVISION
 Fujisawa, Japan

High strength titanium bolts, fasteners, metal sleeve bearings, machined parts

ISO 9001/JIS Q 9100
 Boeing D1-4426
 ISO 4001/JIS Q 14001
 Nadcap: AC7102, AC7108, AC7114

RODEND BEARING DIV.
 Lop Buri, Thailand

Rod end and spherical bearings, machined parts, next-up assemblies

ISO 9001/JIS Q 9100
 ISO 14001/JIS Q 14001
 Nadcap: AC7101, AC7102, AC7108, AC7114

SHIONO PRECISION
 Tokyo, Japan

Precision machined components for airframes, aero engines, satellites, electronically controlled equipment, and oil hydraulic equipment

ISO 9001/JIS Q 9100

NMB-MINEBEA UK
 Lincoln, UK

Large special spherical bearings and bushings, max. ID 180mm (7.09 in.)

ISO 9001/EN9100
 Nadcap: AC7101, AC7102, AC7108, AC7114, AC7117

MACH AERO
 Paris, France
 Bangalore, India

Spherical bearings, rod ends, bushings, customized solutions, high precision machined parts, next-up assemblies, hydraulic components, maintenance

ISO 9001/AS9100/
 JIS Q 9100/EN9100
 FR.145.471
 (maintenance)
 FR.21G.0201
 Nadcap: AC7114

New Product Development

Your products of tomorrow will require the adoption of new technologies as well as dramatic improvements in existing components. As a group, we are dedicated to creating solutions across our entire product offering that deliver transformative performance improvements. Key focus areas include:

- Bearing wear sensor systems
- Self-lubricating liner technology
- Hybrid bearings and ceramic components
- New manufacturing methods and technologies - including additive manufacturing
- New materials

For more information, contact the nearest sales office (see back page).

NHBB ASTRO DIV.
Laconia, NH
USA

Rod end and spherical bearings, customized solutions with complex features, machined parts, next-up assemblies

ISO 9001/AS9100
Boeing D6-82479
ISO 14001
Nadcap: AC7102, AC7108, AC7114, AC7118

NHBB HITECH DIV.
Peterborough, NH
USA

Ball and cylindrical roller bearings up to 12 in. (300mm) OD, complex bearing assemblies

ISO 9001/AS9100
Boeing D6-82479
ISO 14001
Nadcap: AC7102, AC7108, AC7114

NHBB PRECISION DIV.
Chatsworth, CA
USA

Precision ball bearings up to 3 in. (75mm) OD, complex bearing assemblies, airframe control ball bearings

ISO 9001/AS9100
Boeing D6-82479
ISO 14001
Nadcap: AC7102, AC7108

MYONIC
Leutkirch, Germany
Roznov, Czech Rep.

High precision miniature ball bearings, duplex and super duplex ball bearings, thrust bearings, precision mechanical subassemblies

DIN ISO 9001
DIN ISO 14001

CEROBEAR
Herzogenrath,
Germany

Hybrid and all-ceramic ball and roller bearings up to 16.5 in. (420mm) OD, complex designs

DIN ISO 9001/EN9100
DIN ISO 14001
BS OHSAS 18001

C&A
Churubusco, IN
USA

Custom complex high-precision machining, additive manufacturing, contract manufacturing, tooling and project engineering

ISO 9001/AS9100
ISO/TS 16949
ISO 13485
Nadcap: AC7116

Aerospace Products Sales Offices

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MinebeaMitsumi..... minebeamitsumi.com
myonic myonic.com
New Hampshire Ball Bearings.....nhbb.com
Shiono Precision..... shiono-precision.com

MinebeaMitsumi

Passion to Create Value through Difference