

COMPOSITE SILVER-POLYMER RETAINER

APPLICATIONS

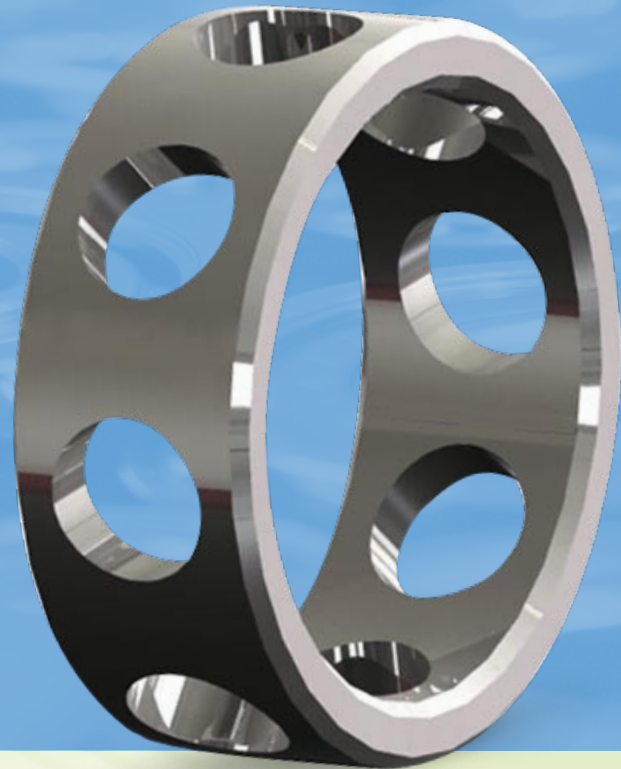
Dental Handpieces

Medical Devices

Flow Meters

Semiconductor Processing

High Speed Motors



AN INNOVATIVE SOLUTION FOR IMPROVED LUBRICANT RETENTION.

NHBB's patented composite silver-polymer retainer combines the lubricant retaining properties of a porous coating with the solid lubricating and anti-microbial properties of metallic silver. The combination of the polymer substrate with the silver coating provides the optimal solution for ultra high-speed applications, especially those requiring repeated exposure to autoclave sterilization. NHBB was able to introduce the industry's first ball bearing that can help fight fungus and bacteria, a critical need in medical and dental applications.

Based on performance and excellent market acceptance, NHBB's silver-polymer retainer was recognized by Medical Product Manufacturing News as one of the Top 100 Products of the Year.

This retainer option joins the family of NHBB ultra high-speed bearing solutions. NHBB ultra-precision miniature and instrument bearings with machined retainers such as Torlon®, PEEK and other high performance polymers are known for their anti-friction properties, self-lubricating additives and good thermal stability.

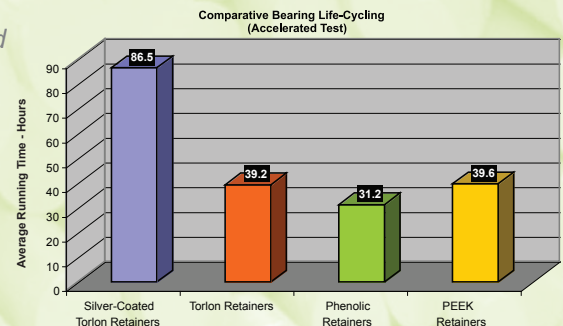
Due to the nature of many severe applications (a dental handpiece being one of them), the bearings often work in a condition of marginal lubrication. Designed by our research team, and borne out in exhaustive tests in our in-house R&D Test Lab, the composite silver-polymer retainer combines a durable core with multiple layers of pure silver applied using a proprietary technology.

For over 100 years, the antimicrobial properties of the element silver have been used to control bacteria, mold, mildew and fungus in medical and food applications.

Our silver-polymer retainer provides increased service life and enhanced performance for challenging miniature and instrument ball bearing applications. NHBB's broad range of engineered solutions, including bearing construction types, proprietary retainer designs and an extensive offering of specialty coatings and platings, are available to meet the most demanding application challenges. Please contact us early in your design phase to learn about our latest developments in bearing technology.

Advantages

- Offers the antimicrobial properties of silver
- Increases self-lubrication capabilities
- Enhances the properties of a strong polymer
- Prevents premature retainer failure
- Increases operational life
- Enhances performance for challenging miniature and instrument ball bearing applications



KEEPING TECHNOLOGY ON THE MOVE™



New Hampshire Ball Bearings, Inc.

A Minebea Company