HYBRID CERAMIC BEARINGS

Applications

Semiconductor Processing (High Vacuum)

Medical Handpieces

Turbomolecular Pumps

Flow Meters

Scanners

Micro Turbines (Power Generation)

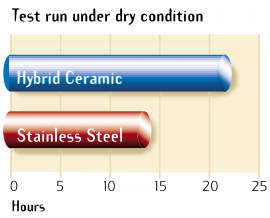
Aircraft Instrumentation

Machine Tools Spindles

Proven design recommended for ultra high-speed applications.

NHBB ultra-precision miniature & instrument bearings with Cerbec® ceramic (silicon nitride) balls from Saint-Gobain Advanced Ceramics have been proven to extend operational life, especially under marginal lubrication conditions.

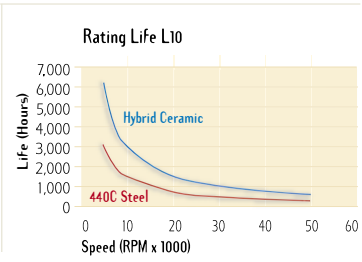
Hybrid ceramics are used extensively in ultra high-speed applications due to the superior surface finish of the ceramic balls, lower operating temperature, reduced ball skidding and lower starting and running torque. The specific density of the ceramic ball is less than half of a steel ball, therefore reducing the centrifugal forces. In addition, these bearings have a lower coefficient of friction and generate less noise and vibration.



Corrosion resistance can also be enhanced through the use of Cerbec ceramic balls combined with a dry film lubricant on the ring and retainer components.

The ceramic balls are corrosion resistant, non-magnetic, and can withstand repeated autoclaving. NHBB hybrid ceramics represent the latest in geometric control and product design to assure optimal bearing performance.

Please feel free to consult with us early in your design phase to learn about our latest developments in bearing technology.



Advantages

- Minimal Lubrication
- Longer Life
- Higher Speeds
- Corrosion Resistant
- Lower Friction
- No Micro Welding
- Higher Accuracy
- Non-Conductive

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