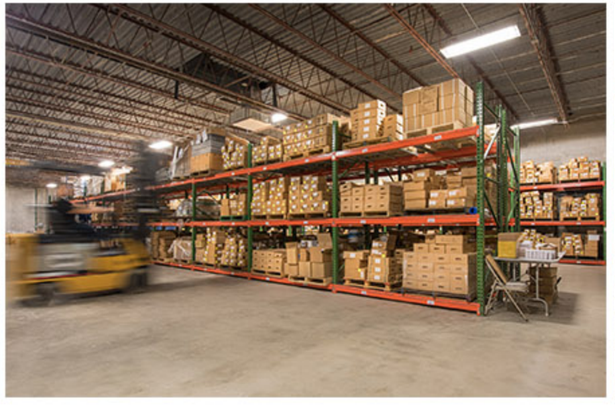
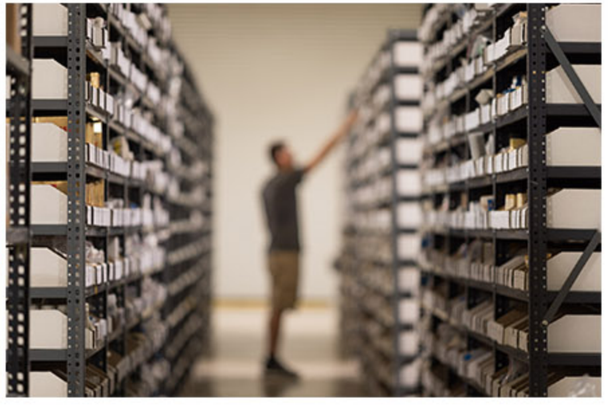
ABOUT BOCA BEARING COMPANY

- FOUNDED IN 1987 BY ALLEN BAUM
- SPECIALTY INVENTORY OF MINIATURE AND HARD TO FIND BEARINGS
- DEEP GROOVE, ONE WAY, NEEDLE, MACHINE TOOL, EMQ, MOUNTED UNITS
- CERAMIC HYBRID, FULL CERAMIC, STAINLESS STEEL, THERMOPLASTIC
- 9000 DIFFERENT BEARING SIZES, OVER 15 MILLION ITEMS IN STOCK





CERAMIC HYBRID BEARINGS

Steel Races and Ceramic Balls

BALL MATERIAL

- **Silicon Nitride** *(SiN4)*
- **Alumina Oxide** *(Al2O3)*
- **Zirconia Oxide** *(ZrO2)*
- **Silicon Carbide** *(SiC)*

BENEFITS

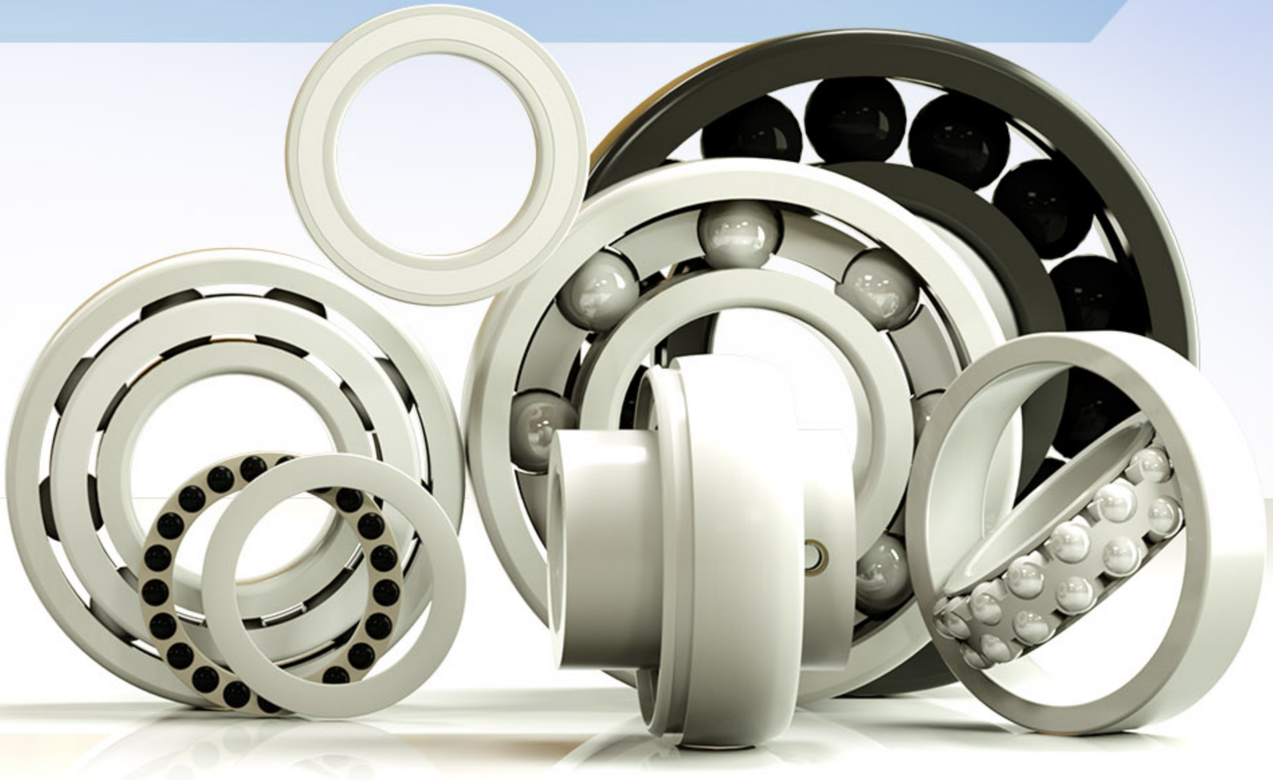
- High loads, high speeds and extreme temperatures are factors
- Increased bearing life and decreased down time
- Minimal need for lubrication
- No cold welding between ceramic balls and races

APPLICATIONS

- Any application that requires higher speeds, lower friction and longer life are ideal for ceramic hybrid bearings.
- Electric motors, aerospace applications, performance racing vehicles, laboratory equipment, under water

FULL CERAMIC BEARINGS

*Races and balls that are made **entirely** of ceramic material*



BEARING MATERIAL

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BENEFITS

- Will not corrode or rust
- 2/3 the weight of steel
- Resistant to resist acids, alkali, blood, salt and water
- Extremely low coefficient of friction and thermal expansion
- Lower friction results in less energy consumed
- Operating Temperature from as low as (-85°C} up to(+ 900°C)

APPLICATIONS

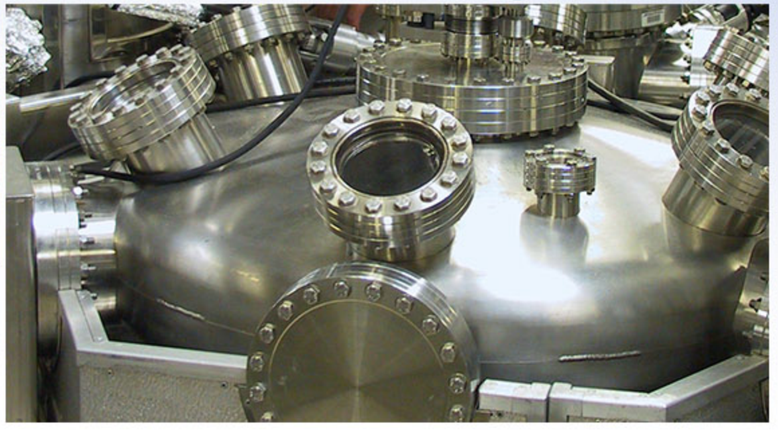
- Any extreme environment that requires non-corrosive, non-conductive or non-magnetic bearings is ideal for full ceramic bearings
- Chemical baths, vacuum environments, semiconductor manufacturing, food processing industries, radiotherapy, MRI, patient positioning systems

APPLICATIONS FOR CERAMIC

Semiconductors/
Advanced Manufacturing

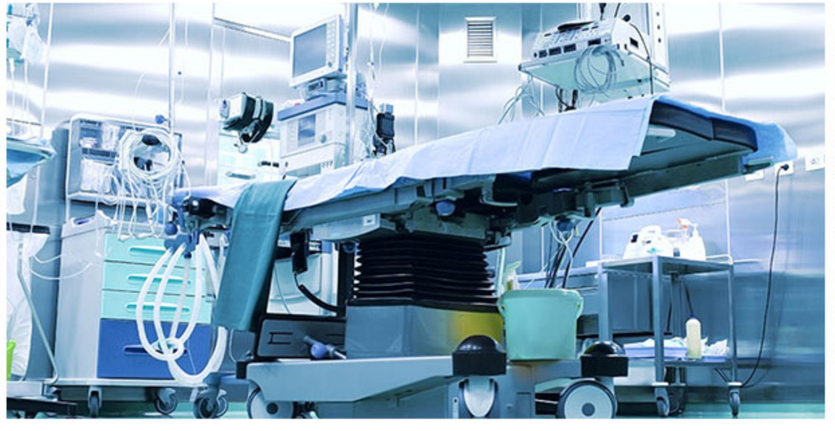
Photonics

Ultra High Vacuum



Water/Fluid Handling

Medical Device

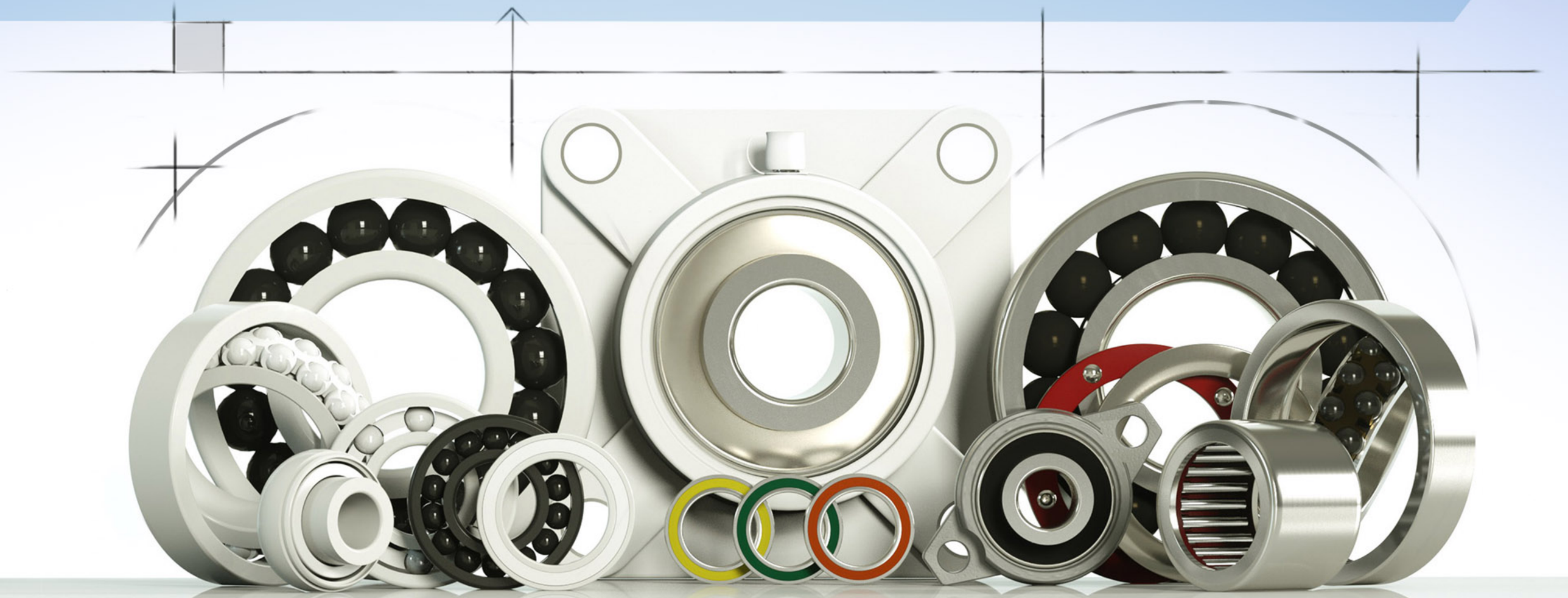


Food Processing

INDUSTRIAL LUBRICATION

- *Kyodo Yushi, Molykote, Krytox Lubricants*
- *LSL Solid Graphite Lubricant*
- *FDA approved*
- *Ultra Dry Lubricant coating*

FROM CONCEPT ▸ TO DESIGN ▸ TO DEVELOPMENT



SHORT RUN | SAMPLE ORDERS | QUICK TURNAROUND