

WOW could supply hybrid ceramic bearing and full ceramic bearing both.

For hybrid ceramic ball bearing, the rolling elements of are made in ceramic material, the races are made in chrome steel or stainless steel;

For full ceramic bearing, both rolling elements and races are made in ceramic material.

WOW have following popular ceramic material:

Silicon Nitride (Si₃N₄)

Zirconia (ZrO₂)

Silicon Carbide (SiC)

Aluminium Oxide (Al₂O₃)

WOW ceramic bearings are widely used in:Skateboard and Bicycle Wheel; Turbocharger; Aerospace equipment;Machine tools and Feature etc.

Bearing accuracy class: ABEC-1, ABEC-3, ABEC-5, ABEC-7, ABEC-9;

Ceramic ball grade: G3, G5, G10, G16.

WOW could process inner diameter 1mm miniature ceramic bearing, also be capable of providing inner diameter reach to 400mm large ceramic bearing. Metric and Inch size both.

Seals form: Normally, full ceramic bearing is open style without seals, WOW could provide ceramic sealed bearing with PTFE seals.

Ceramic bearing have many advantages as following;

High speed bearings. Especially for hybrid ceramic bearing, the highest speed can reach to 450,000RPM, mainly are applied to dental handpiece and spindle field.

High temperature ceramic bearings. The endurable highest temperature is 1200 centigrade degree.

Anti-corrosion. The material itself has corrosion-resistance speciality which could be applied to strong acid, strong alkali, mineral, organic salt, sea water and so on, for examples: Electroplating Apparatus, Electronic Equipment, Chemical Machinery, Shipbuilding, Medical Devices as so.

Nonmagnetic Bearing: Nonmagnetic means no dust absorption which could reduce bearing wear in advance and lower bearing noise. Application examples such as demagnetizing apparatus, precise instrument field.

Electrical Insulation bearing: Due to high electrical resistance could avoid electrical arc damage bearing which could be used in electronic equipment which insulation is needed.

High Vacuum bearing: ceramic material have the unique character of self-lubricating without oil, ceramic bearing can overcome lube difficult problem in super high vacuum, which common bearing can never achieve.

Besides standard bearings with ceramic materials, WOW could design and process non-standard types per customer's special requirement.

For more technical information, please contact with

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