

陶瓷保持架全陶瓷轴承/Full ceramic(All-ceramic) bearing of ceramic cage

陶瓷制保持架具有耐磨损,高强度,耐腐蚀及自润滑的优点,采用陶瓷保持架制造的全陶瓷轴承可用于极强腐蚀,超高温度和低寒及高真空等苛刻环境.常用保持架陶瓷材料为ZrO₂。

Ceramic cage has excellences as wear and corrosion resistance, high strength, self-lubrication and maintenance free when working. Adopting the ceramic cage, Ceramic bearing can be used in the most inclemency environments as corrosive, low temperature, high vacuum. The normal used ceramic materials is ZrO₂.

氧化锆全陶瓷轴承/Full ceramic(All-ceramic) bearing of ZrO₂ material

氧化锆全陶瓷轴承具抗电磁绝缘、耐磨耐腐蚀、无油自润滑、耐高温耐低寒等特点,可用于极度恶劣环境及特殊工况。套圈及滚动体采用氧化锆(ZrO₂)陶瓷材料,保持器使用聚四氟乙烯(PTFE)作为标准配置,一般也可使用玻璃纤维增强的尼龙66(GRPA66-25),特种工程塑料(PEEK,PI),不锈钢(AISI SUS316、SUS304),黄铜(Cu)等。

Full ceramic bearing have excellences as special electrical and magnetism resistance, wear and corrosion resistance, self-lubrication and maintenance free when working, especially high and low-temperature application.etc. It could be used in awful environment and specially condition. The rings and balls made by full ceramic material:ZrO₂, as a standard constructure, the cage made by PTFE, generally we also could make the cage with GRPA66-25,PEEK,PI,AISI SUS304,SUS316, Cu,etc

氮化硅全陶瓷轴承/Full ceramic(All-ceramic) bearing of Si₃N₄ material

氮化硅全陶瓷轴承具有氧化锆全陶瓷轴承的所有使用性能。套圈及滚动体采用氮化硅(Si₃N₄)陶瓷材料保持器使用聚四氟乙烯(PTFE)作为标准配置,一般也可使用玻璃纤维增强的尼龙66(GRPA66-25),特种工程塑料(PEEK,PI),不锈钢(AISI SUS316、SUS304),黄铜(Cu)等。氮化硅材料比氧化锆材料更适用于高速旋转和较大负荷的场合,以及更高的环境温度下使用。

Full ceramic bearing made by Si₃N₄ have some better performance than ZrO₂, the rings and balls made by full ceramic material:Si₃N₄, as a standard constructure,the cage made by PTFE, generally we also could make the cage with GFRPA66-25,PEEK,PI, AISI SUS304,SUS316, Cu,etc.Comparing with the material of ZrO₂,The SiN₄ ceramics bearings could endure high-speed circumgyration and heavier load and could be used in higher temperature environment.

满装球氧化锆全陶瓷轴承/Full ceramic(All-ceramic) bearing of full complement balls of ZrO₂ material

满装球型全陶瓷轴承一面带添球缺口,因采用无保持架结构设计,可以比标准结构的轴承装入多的陶瓷球,从而提高其径向负荷能力,另外还可避免因保持架材料的限制,可达到保持架型全陶瓷轴承达不到的耐腐蚀及耐温效果。该系列轴承不宜较高转速,安装时应注意将缺口面装于不承受轴向负荷的一端。因该轴承内外圈具填球缺口,故不适合有较大轴向负荷场合应用。最高推荐使用温度500度。

Full ceramic bearing of full complement balls of ZrO₂ material has an add-ball gap on its side. Because using no cage design, the bearing is able to install more ceramic balls than the standard construction, so the heavier radial load ability could be increased more. In addition, to avoid the limited of the cage material, this bearing has more corrosion resistance and higher temperature application than the full ceramic bearing of ceramic cage.This series of bearing is not for high-speed circumgyration,so the side with gap shouldn't be intalled on enduring axial load side.As there are add-balls gaps in the inner and out rings,the bearing couldn't be used in more axial load application.The highest temperature of recommendation is 500°C.



满装球氮化硅全陶瓷轴承/Full ceramic(All-ceramic) bearing of full complement balls of Si₃N₄ material

满装球型全陶瓷轴承一面带添球缺口,因采用无保持架结构设计,可以比标准结构的轴承装入多的陶瓷球,从而提高其径向负荷能力,另外还可避免因保持架材料的限制,可达到保持架型全陶瓷轴承达不到的耐腐蚀及耐温效果。该系列轴承不宜较高转速,安装时应注意将缺口面装于不承受轴向负荷的一端。因该轴承内外圈具填球缺口,故不适合有较大轴向负荷场合应用。最高推荐使用温度1000度。

Full ceramic bearing of full complement balls of Si₃N₄ material has an add-ball gap on its side. Because using no cage design, the bearing is able to install more ceramic balls than the standard construction, so the heavier radial load ability could be increased more. In addition, to avoid the limited of the cage material, this bearing has more corrosion resistance and higher temperature application than the full ceramic bearing of ceramic cage. This series of bearing is not for high-speed circumgyration, so the side with gap shouldn't be intalled on enduring axial load side. As there have in the inner and out rings the bearing couldn't be used in more axial load application.The highest temperature of recommendation is 1000°C.

混合陶瓷球轴承/Hybrid construction ceramic ball bearing

陶瓷球特别是氮化硅球具有低密度、高硬度、低摩擦系数,抗电磁绝缘、耐磨、自润滑及刚性好等特点,特别适合做高速、高精度及长寿命混合陶瓷球轴承的滚动体(内外圈为金属)。一般内外圈采用轴承钢(GCr15)或不锈钢(AISI440C, 316 304)也有内圈和球用陶瓷的外圈用金属的,陶瓷球可选用ZrO₂, Si₃N₄,或SiC材料。

Ceramic ball especially Si₃N₄ have the following performance as low density, high strength, low friction coefficient, electrical and magnetism resistance, wear resistance, well rigidity, self-lubrication, it's the best choice for rollers (inner ring and outer ring are made by metal) of the hybrid construction ceramic ball bearings with long life which are used in high-speed,high accuracy environments. Normally, GCr15 or (AISI440C,316 304) makes inner ring and outer ring,sometimes,there are ceramic inner ring and ball,and metallic outer ring. The ceramic ball can adopt ZrO₂, Si₃N₄ or Sic.

高精度微型全陶瓷轴承/Full ceramic(All-ceramic) bearing of high precision and minisize

随着陶瓷轴承在各行业的广泛应用,各行业对陶瓷轴承的结构,种类,材料,精度都提出了各种不同的要求。在实际生产的过程中,一个个的要求通过长期的试验都有改进和改善。但在小型号方面(内孔小于10MM),用常规的加工工艺,产品的精度上很难满足客户提出的要求。

With widely using of the ceramic bearing in all kinds of industries ,they have the different requirements of frame,category,material ,and precision of the ceramic bearing.During the production,the requirements need to be improved by a long experiment.but on the small type(inner diameter less than 10mm),the precision of product is hard to meet the requirement of customers by the routine processing craft.

针对已上情况,我司在生产设备和加工工艺上做了重新调整,针对内孔10MM已下的陶瓷轴承采用了新的加工工艺,并增添了新的加工设备。从硬件上保证了高精度微型陶瓷轴承的生产。欢迎新老客户来电联系!公司本着让客户满意的创业精神,竭诚为广大客户服务。

According to above problem,we have a adjustment of the manufacturing machine and processing craft.we use a new processing craft aiming at the ceramic bearing whose inner diameter less than 10mm,and purchase the new processing machine,which insure the production of the high precision and minsize ceramic bearing from the hardware.welcome to call us by the new and regular customers!we have the spirit that satisfies the customer and offer the better service to all the customers.

