



陶瓷球 Ceramic Ball

Ceramic Ball Series

陶瓷球比金屬鋼球有許多優異的特性，因此使用於高速運轉，化學惡劣環境，真空，高溫或絕緣環境中，可以提高軸承的使用壽命及性能。

Ceramic Ball have many advantages comparing with Steel Ball, the bearing come with ceramic ball can increase bearings performance and extend bearing life when used on High speed, Chemical, Vacuum and High temperature environment.

產品特色 Product Feature

耐化性佳: 陶瓷球可耐大部份的化學品腐蝕
Good corrosion resistance.

重量輕: Si3N4陶瓷球是鋼珠的40%重量
Si3N4 ball only 40% weight of steel ball..

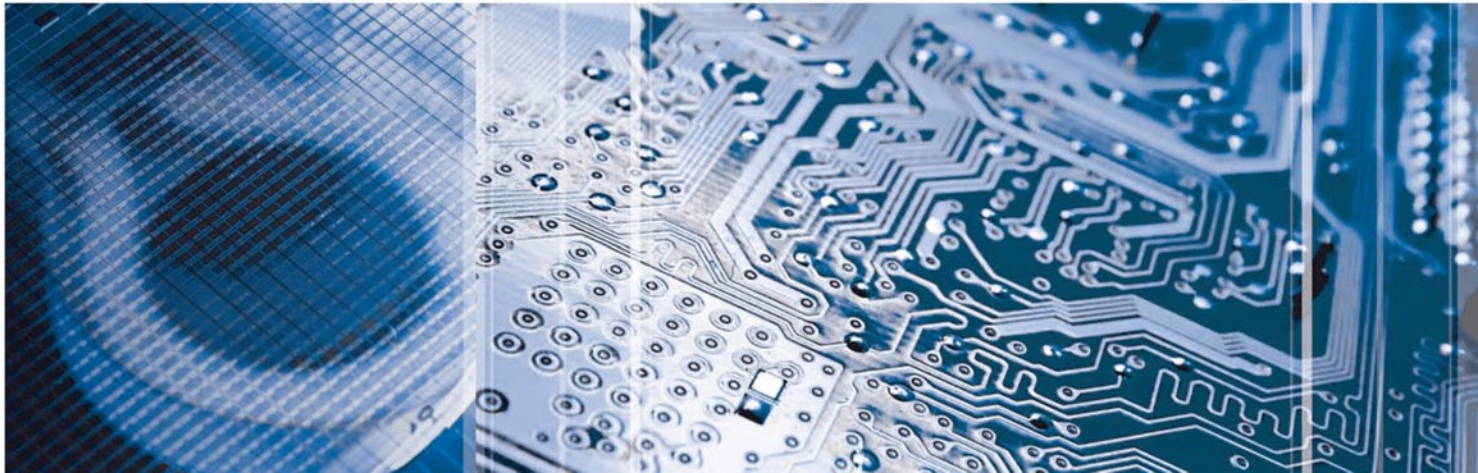
硬度高: Si3N4陶瓷球的硬度比鋼珠高一倍
Better hardness than steel ball.

熱膨脹係數: Si3N4陶瓷球是鋼珠的1/4
Lower thermal expansion than steel ball.

耐高溫: Si3N4 陶瓷球可以在800°C時仍維持其機械特性
Excellent mechanical property even at 800°C temperature.

陶瓷球增圓度佳，磨擦係數小
Better ball geometry & surface finish.

在低油脂狀況下可以高速運轉
Work in low lubrication condition.



Si3N4 球圖



Product: Si3N4 Ball
 Density: 3.2 g/cm
 Color: Black
 Grade: G5

ZrO2 球圖



Product: ZrO2 Ball
 Density: 6.0 g/cm
 Color: White
 Grade: G10

SiC 球圖



Product: SiC Ball
 Density: 3.15 g/cm
 Color: Black
 Grade: G10~G16

陶瓷球製程



陶瓷球等級區分 Ceramic Ball Grade

等級 Grade	球直徑允許變動量 Ball Dia Variation VDWS(um)	可允許球形誤差 Allowable Deviation From Deviation From Spherical Form(um)	最大表面粗糙度 Surface Roughness (um)	批直徑允許變動量 Lot Dia. Variation(VDWL,um)
G5	0.13	0.13	0.014	0.25
G10	0.25	0.25	0.02	0.5
G16	0.4	0.4	0.032	0.8
G20	0.5	0.5	0.04	1

