

究極の滑らかさが求められる人工関節に 世界が認めた“真球”加工ノウハウを活用

We utilize processing know-how with "high sphericity" that was gained world recognition to the artificial joint that ultimate smoothness is required.

半世紀もの高品質バルブボール製造実績が世界最高レベルの球体製造を可能にしています。
さらに高精度人工関節といった医療分野などへも進出、新たな挑戦を続けています。

As we have experience of high-quality valve balls production for half a century, we can produce the sphere with the world's best level.
In addition, we have advanced into the medical field such as high precision artificial joint and continue to try new challenge.



人工関節同士がこすれ合う関節部分は摩擦によるゆるみが生じます。
「真球度」と「表面粗さ」の精度を向上させ、耐摩耗性を改善します。

The part which joints rub against each other might occur loosening by abrasion. We improve wear resistance to the maximum by improving "sphericity" and "surface roughness".



“限りなくまん丸” “限りなく滑らか”が 当社のコア技術

"Ultimate sphericity" and "Ultimate smooth" are our core technology.

球面切削と球面研磨技術を駆使し自社独自の球体加工技術を確立。市場が求める以上の真球度と表面粗さを実現。

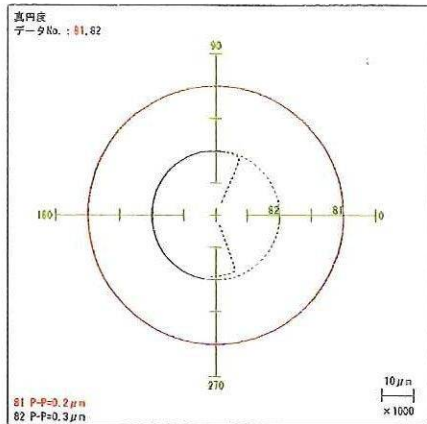
真球度 0.3 ミクロン以下 表面粗さ Ra0.03 ミクロン以下

Applying spherical surface machining and grinding technology, we have established original sphere processing technology. We have realized sphericity and surface roughness more than market required level.

Sphericity less than 0.3 μm , surface roughness less than 0.03Ra

真球度測定データ Sphericity measurement data

2014.03/14 13:26:40 骨頭 32Φ(L)
測定速度 7/min



高精度量産加工技術を確立

Established high precision mass production processing technology

81=縦軸

Vertical axis



82=横軸

Horizontal axis

「真球度」と「表面粗さ精度」の両立で 長寿命化を実現

We realized long life by "high sphericity" and "good surface roughness"

メーカー基準値をはるかに超える真球度 0.3 ミクロンを達成

We have achieved sphericity 0.3 μm which is much better than the maker's standard.

	当社製品 Our product	他社製品 Competitor's product
真球度 Sphericity	0.1 ~ 0.3 μm	1.5 ~ 3.0 μm
表面粗さ Surface roughness	Ra 0.01 ~ 0.03 μm	Ra 0.06 ~ 0.10 μm

We can contribute to society with the world's best level.

世界最高レベルで社会に貢献。