

Special Bearings

DMAG provides special bearings which are widely applied in petroleum machinery, chemical industry, medical equipment, electronics, textile, food, marine, aerospace industries and many other corrosion-resistant industrial areas.

The special bearings are oil-free, self-lubricating, corrosion-resistant, anti-rust, and non-magnetic. They can operate in aggressive environments such high temperature and bitterly cold fields.

Stainless Steel Bearings:

The main materials of DMAG stainless steel bearings are SUS304, AISI316L.

Comparing with ordinary stainless-steel bearings, 304 or 316 stainless steel bearings are anti-rust and corrosion-resistant in aggressive environment to a higher degree. They are also non-magnetic comparing with 440C stainless steel. Especially, AISI316L can achieve non-magnetic completely.



However, not like 440C or 420 stainless steel (higher carbon chromium martensitic stainless steel), AISI316L and SUS304 stainless steel (austenitic stainless steel) cannot be quenched as whole, bearings made out of AISI316L and SUS304 are not suitable for heavy load and high speed.

We also offer non-standard stainless-steel bearings to meet the clients' special needs.



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Ceramic Bearings:

At DMAG, we offer both hybrid ceramic and full ceramic bearings.
The available ceramic materials are ZrO2, Si3N4, Sic and Al203 etc.

We have Si3N4 angular contact ball ceramic bearing, Si3N4 full ball ceramic bearing, Si3N4 sealed ceramic bearing, Si3N4 full ceramic bearing, Si3N4 thrust ball bearing, ZrO2 angular contact ball ceramic bearing, ZrO2 sealed ceramic bearing, ZrO2 full ceramic bearing, ZrO2 full ceramic bearing, ZrO2 self-aligning ceramic bearing, ZrO2 thrust ball bearing.



Plastic Bearings:

The materials for industrial plastic bearings are PEEK, POM, PTFE, PVDF, PP etc.

POM and PA materials have excellent mechanical strength and wearing resistance. These materials are quite suitable for manufacturing high precision plastic bearings. With good self-lubrication performance and low friction coefficients, POM and PA materials are good for precision and high-speed applications.



Plastic bearing made in POM is applied most extensively among all plastic bearings. In general, the inner and outer ring materials are made in POM or PA, cages are made in PA and the balls are made in glass, stainless steel or ceramic. These bearings are alkali resistant but not acid resistant.



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Custom Bearings:

In order to address special requirements from our clients, we provide out-of-box bearing solutions to help with their small or niche applications. DMAG work closely with our customers and create custom bearing solutions for their specific application.

We delivery unique OEM service with below services:

- Special Materials: 52100, 440C, 304, 316, Silicon Nitride (Ceramic), Nylon, Peek, Steel, Bronze etc.
- Special lubricants, coatings and design requirement
- Special sealing and closure solutions.
- Short lead times
- Low minimum order quantities

DMAG OEM bearing solutions including, but not limited to, those listed below:

- Stainless Steel Bearing Assembly
- Full Ceramic and Hybrid Ceramic Bearing
- Anti-Corrosion Plastic Bearing
- Tracking Roller Bearings
- Bearings with Coatings
- Flange Bearing Assembly

