



Miniature Bearings Australia

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Magnetism & Bearing Materials

Bearings and balls come in a wide variety of materials. Often, applications require the bearing material to have no or very low magnetic permeability.

The best materials for no magnetic permeability are plastics, ceramics and titanium.

Stainless steel is often thought to have no magnetic permeability, however there are many types of stainless steel and the magnetic properties of each type vary considerably.



The most common stainless steels used in bearings are 400 grade, including 420 and 440C. These are high carbon content stainless and they have a high magnetic permeability.

316 stainless steel has very low magnetic permeability, but it is not entirely non-magnetic.

