



Miniature Bearings Australia

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Bearing Materials

Standard materials used for the races of our miniature ball bearings are AISI440C Stainless Steel or SAE52100 Chrome Alloy Bearing Steel

AISI440C Stainless Steel bearings are heat treated to a hardness usually from Rockwell C 58 to Rockwell C 61+. All Myonic (RMB) Swiss Products are manufactured to a minimum of Rockwell C 61. The maximum recommended operating temperature is 177° Celsius (350° Fahrenheit).



SAE52100 Chrome Steel Bearings are usually slightly harder than AISI440C bearings. Myonic (RMB) heat treats their SAE52100 Chrome Steel Bearings to Rockwell C 61-64. The maximum recommended operating temperature of chrome steel bearings is 120° Celsius (248° Fahrenheit).

Operating temperatures higher than those shown above will need special treatment. Please consult MBA for any special requirements.

For information about the materials used in bearing closures and cages please see our information sheets: [Bearing Closures](#) and [Bearing Cages](#)

Bearings for very corrosive environments are made from 316 Stainless Steel, acetal (Plastic) or full ceramic. Please see our [Corrosion Resistant Bearings Catalogue](#).

It should be noted that tolerances for 316 Stainless and Plastic bearings are not as precise as for AISI440C or SAE52100. The range available in these special materials is limited.

See Also

[TBN-6H \(CASSTOP\)](#) bearing material for fishing reel bearings

[Bearing Tolerances for 440C & Chrome Steel](#)

[Bearing Tolerances for 316 Stainless & Plastic](#)

