



PO Box 2161
MANSFIELD, QLD, 4122
Ph: 1300 330414
Fax: 07 3014 8764

If you haven't found it, you probably haven't tried MBA

www.minibearings.com.au

sales@minibearings.com.au

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 RMB Swiss Product is 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. 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 information about the materials used in bearing closures and cages please see our web site sections **[Seals and Shields](#)** and **[Cages](#)**.

Bearings for very corrosive environments are made from

[316 STAINLESS STEEL](#) or

[ACETAL](#)

but it must be noted that **[tolerances](#)** for these bearings are not as precise as for AISI440C or SAE52100. The available range of these types is limited.

For more information

<http://www.minibearings.com.au/technical/materials/>

<http://www.minibearings.com.au/catalogue/quick/Bearing%20Material%20Selection%20and%20Benefits.pdf>

