

Low Carbon Steel (Case Hardened)

General Information

Balls of this type are generally used in applications where there are only moderate loads and slow rotating parts. for example Castors, Conveyors and Non-Precision Bearings. The main feature of this type of ball is the Carburised case with a soft core giving resistance to surface wear.

International Equivalents

AISI 1010, JIS SWRM 12, EN32 ASTM A/29, Wks 1.0010

Composition

C	0.10 - 0.15%
Mn	0.30 - 0.60%
P	0.045% Max
S	0.045% Max
Si	0.1 - 0.4% Max

Hardness

HRC	60 min
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Mechanical Properties

Tensile Strength	53,000 psi
Yield Strength	44,000 psi
Density	0.284 lbs/cu.in

Size Range - 1.588mm (1/16") to 12.700mm (1/2")

Standard Grades Available

100, 200, 500, 1000

Minimum Case Depth

Ball Dia	Case Depth	Ball Dia	Case Depth
1.5mm - 2mm	0.4mm	9.5mm - 11mm	1.4 mm
2.1mm - 3mm	0.5mm	11.1mm - 12.5mm	1.7 mm
3.1mm - 4.5mm	0.6mm	12.6mm - 14mm	1.8 mm
4.6mm - 5.5mm	0.8mm	14.1mm - 19mm	1.9 mm
5.6mm - 6.5mm	0.9mm	19.1mm - 38mm	2.0 mm
6.6mm - 9.5mm	1.1mm		