

BEARING STEELS

Available Product Shapes

Long Products

Product Description

This specification covers a premium aircraft-quality, vacuum-arc-remelted low-alloy steel in the form of bars, forgings and forging stock.

It is used typically for parts requiring through hardening properties, usually with hardness of approximately 60 HRC in section thicknesses 0.50 inch (12.7 mm) and under. E.g. bearing rings and rolling elements, bearing balls and races.

Process Melting

Airmelted + VAR

Applications

- > Bearings
- > Turbine and Engine Parts (Aerosp)
- > Other Aerospace Comps.

Material designation		Standards	
100Cr6	EN	6444	AMS
1.2067	SEL		
52100	Market grade		

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Al	O
0.93 - 1.05	0.15 - 0.35	0.25 - 0.45	< 0.015	< 0.015	1.35 - 1.60	< 0.10	< 0.25	< 0.30	< 0.050	< 0.0015

Related to AMS 6444

Delivery condition

Annealed

Hardness	max. 248 HB Cold finished and annealed, above 12.7 mm diameter
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Annealed

Hardness	max. 207 HB Hot finished and annealed, above 12.7 mm diameter
Tensile Strength	max. 827 119.942 N/mm ² KSI Cold finished and annealed, max 12.7 mm diameter

Available Dimensions

Round Bars

Diameter		MOQ		Length		Tolerance*
mm	inch	kg	lbs	m	ft	
ROLLED						
12.50	- 55.00	0.492	- 2.165	1,100	2,425	3.00 - 4.00 9.84 - 13.12 IT h/k 11
55.01	- 120.00	2.166	- 4.724	1,200	2,646	3.00 - 4.00 9.84 - 13.12 IT h/k 11
120.01	- 140.00	4.725	- 5.512	1,200	2,646	3.00 - 5.00 9.84 - 16.40 IT h/k 14

* ISO 286

For more information see www.voestalpine.com/boehler-edelstahl

For additional specifications and other sizes please contact BÖHLER Edelstahl - Special Materials Aerospace & Land Based Turbine

The data contained in this brochure is merely for general information and therefore shall not be binding on the company. We may be bound only through a contract explicitly stipulating such data as binding. Measurement data are laboratory values and can deviate from practical analyses. The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.

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ONE STEP AHEAD.