

CORROSION RESISTANT STEELS - MARTENSITIC, SEMI-MARTENSITIC AND FERRITIC STEELS

Application Segments

Aerospace

Product Description

Premium Aircraft Quality, Chromium stainless steel with high hardness, wear resistance and good corrosion resistance in the hardened and tempered condition.
BÖHLER N695SA is a vacuum remelted quality steel, typically used for parts requiring hardness up to 58 HRC and resistance to wear, corrosion, and oxidation, e.g. balls, rollers, needles and rings for corrosion resistant bearings, but usage is not limited to such applications.

Process Melting

Airmelted + VAR

Applications

- > Aerospace
- > Turbine and Engine Parts (Aerospace)
- > Other Aerospace Components
- > Bearings

Technical data

Material designation		Standards	
440C	Market grade	10088	EN ISO
1.4125	SEL	5618	AMS
X102CrMo17	EN		
X105CrMo17			
Z100CD17			
S44004	UNS		

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Cu
0.95 to 1.20	max. 1.00	max. 1.00	max. 0.020	max. 0.010	16.00 to 18.00	0.40 to 0.65	max. 0.75	max. 0.50

Related to AMS 5618

Delivery condition

Annealed

Hardness (HB)	max. 255 Bars max 69.85 mm diameter, cold finished
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Annealed

Hardness (HB)	max. 255 Bars above 69.85 mm diameter, hot or cold finished
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Annealed

Tensile Strength (MPa)	max. 896 Wire, cold finished
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Round Bars and Wire Rod (if any)

Diameter mm			MOQ ex mill kg	Length m			Tolerance
ROLLED							
12.50	-	55.00	1,100	3.00	-	4.00	IT h/k 11
55.01	-	120.00	1,200	3.00	-	4.00	IT h/k 11
120.01	-	140.00	1,200	3.00	-	5.00	IT h/k 14
FORGED							
140.01	-	152.40	1,200	2.00	-	5.00	IT h/k 14

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, please contact our regional voestalpine BÖHLER sales companies. 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.