

CREEP RESISTANT STEELS

Application Segments

Aerospace

Available Product Variants

Long Products*

Semi-Finished Products / Billet

Plates

*) Presented data refer exclusively to long products. Please observe the detailed explanations at the end of the data sheet (pdf).

Product Description

BÖHLER T552 is a premium aircraft-quality corrosion-resistant chromium-nickel-molybdenum steel in the form of bars, wire, forgings and stock for forging.

These products have been used typically for parts such as compressor wheels and structural members requiring corrosion resistance and high strength up to 800°F (427 °C), but usage is not limited to such applications.

Process Melting

Airmelted + ESR

Applications

> Aerospace

> Other Aerospace Comps.

> Structural parts (Aerosp)

Technical data

Material designation		Standards	
Jethete	Market grade	5719	AMS
1.4939	SEL		
X12CrNiMo12	EN		
S64152	UNS		

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	V	Cu	N
0.08 to 0.15	max. 0.35	0.50 to 0.90	max. 0.025	max. 0.025	11.00 to 12.50	1.50 to 2.00	2.00 to 3.00	0.25 to 0.40	max. 0.50	0.01 to 0.05

Related to AMS 5719 Type 2

Delivery condition

Annealed

Hardness (HB)	max. 311 bars, hot or cold finished, forgings
Tensile Strength (MPa ksi)	max. 1,069 156 for wire products

Round Bars and Wire Rod (if any)

Diameter				MOQ ex mill				Length				Tolerance		
mm		inch		kg		lbs		m		ft				
ROLLED														
12.50	-	55.00	0.492	-	2.165	850	1,874	3.00	-	4.00	9.84	-	13.12	IT h/k 11
55.01	-	120.00	2.166	-	4.724	2,650	5,842	3.00	-	4.00	9.84	-	13.12	IT h/k 11
120.01	-	140.00	4.725	-	5.512	2,650	5,842	3.00	-	5.00	9.84	-	16.40	IT h/k 14
FORGED														
140.01	-	203.20	5.512	-	8.000	2,400	5,291	2.00	-	5.00	6.56	-	16.40	IT h/k 14
203.21	-	304.80	8.000	-	12.000	3,800	8,378	2.00	-	5.00	6.56	-	16.40	IT h/k 14
304.81	-	457.20	12.000	-	18.000	8,000	17,637	2.00	-	5.00	6.56	-	16.40	IT h/k 14

Flat Bars

Width				Thickness				MOQ ex mill				Length				Tolerance				
mm		inch		mm		inch		kg		lbs		m		ft						
ROLLED																				
15.00	-	121.00	0.591	-	4.764	10.00	-	86.00	0.394	-	3.386	950	2,094	3.00	-	4.00	9.84	-	13.12	LN 1017
120.00	-	150.00	4.724	-	5.906	22.00	-	112.00	0.866	-	4.409	2,700	5,952	3.00	-	4.00	9.84	-	13.12	LN 1017
150.00	-	275.00	5.906	-	10.827	18.00	-	107.00	0.709	-	4.213	2,700	5,952	3.00	-	4.00	9.84	-	13.12	LN 1017
275.00	-	330.00	10.827	-	12.992	15.00	-	107.00	0.591	-	4.213	2,700	5,952	3.00	-	4.00	9.84	-	13.12	LN 1017

Long Products: For additional specifications, technical requirements, and other dimensions, please contact our regional voestalpine BÖHLER sales companies.

Sheet & Plates: Product Variant may differ in terms of melting process, technical data, delivery, and surface condition as well as available product dimensions. Please contact voestalpine BÖHLER Bleche GmbH & Co KG.

Semi-Finished Products: Product Variant may differ in terms of melting process, technical data, delivery, and surface condition as well as available product dimensions. Please contact the business unit Semi Finished Products of voestalpine BÖHLER Edelstahl GmbH & Co KG.

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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