

FERRITIC AND MARTENSITIC STEELS, INCL. PRECIPITATION HARDENING STEELS

Application Segments

Aerospace

Available Product Variants

Long Products*

Semi-Finished Products / Billet

Plates

Open Die Forgings

* Information and data presented in this Data-Sheet refers to the indicated Product Shape only. For information on further Product Shapes mentioned above please contact the regional BOHLER sales representative.

Product Description

This specification covers 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	
1.4939	SEL	5719	AMS
S64152	UNS		
Jethete	Market grade		

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)	1,069 156 for wire products

Available Dimensions

Round Bars

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

For more information see <https://www.voestalpine.com/boehler-edelstahl/de/>

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.