CORROSION RESISTANT STEELS - MARTENSITIC PRECIPITATION HARDENING (PH) 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 N717 is a premium quality, corrosion-resistant steel for aerospace applications, supplied in the form of bars, wire, forgings in the solution-annealed condition, and pre-material of any size for forging.
It is a martensitic, precipitation-hardenable chromium-nickel-molybdenum-aluminum steel with high strength and toughness.
This steel is typically used for components requiring corrosion resistance and a combination of high strength and toughness up to 427 °C, although its use is not limited to such applications.
Certain processing methods and service conditions may lead to stress corrosion cracking in these products.

Process Melting

VIM + VAR

Applications

- Other Aerospace Components
- Structural parts (Aerospace)

Technical data

Standards	
5935	AMS

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Ti	Al	N
max. 0.02	max. 0.25	max. 0.25	max. 0.015	max. 0.010	11.00 to 12.50	1.75 to 2.25	9.00 to 10.50	0.2 to 0.5	0.80 to 1.10	max. 0.01

Related to AMS 5739

Delivery condition

Solution annealed	
Hardness (HB)	max. 331 | bars, hot or cold finished, forgings
Tensile Strength (MPa)	max. 1,103 | for wire products

Round Bars and Wire Rod (if any)

Diameter mm			MOQ ex mill kg	Length m			Tolerance
ROLLED							
12.50	-	55.00	1,200	3.00	-	4.00	IT h/k 11
55.01	-	69.00	1,200	3.00	-	4.00	IT h/k 11

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.

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ONE STEP AHEAD.