

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

Application Segments

Aerospace
Automotive

Available Product Variants

Long Products*
Plates

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

Product Description

BÖHLER N360 is a premium aircraft quality corrosion resistant, martensitic stainless steel, produced using the P-ESR-process. Compared to conventionally produced Cr and CrMo steels, BÖHLER N360 offers improved corrosion resistance and toughness properties as well as high hardness and compressive strength.

It is typically used for anti-friction bearing components e.g. bearings, ball screws and wear resistant components for use in the aircraft industry and for automotive components, requiring resistance to both corrosion and wear with hardness not lower than 58 HRC after hardening and tempering, but usage is not limited to such applications.

Process Melting

Airmelted + PESR

Applications

- > Structural parts (Aerospace)
 - > Bearings
- > Aerospace
 - > Automotive
- > Other Aerospace Components
 - > Motorsport industry

Technical data

Material designation		Standards	
X30	Market grade	DIN SEW 400	DIN
1.4108	SEL	A756	ASTM
X30CrMoN15-1	EN	5898	AMS
S42027	UNS		

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	N
0.28 to 0.34	0.30 to 0.80	0.30 to 0.60	max. 0.020	max. 0.010	14.5 to 16.0	0.95 to 1.10	max. 0.30	0.35 to 0.44

Related to AMS 5898

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 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							
2.00	-	12.49	700	3.00	-	4.00	IT h/k 11
12.50	-	65.00	800	3.00	-	4.00	IT h/k 11
65.01	-	120.00	1,500	3.00	-	4.00	IT h/k 11
120.01	-	130.00	1,500	3.00	-	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.