OȚELURI REZISTENTE LA COROZIUNE - OȚELURI MARTENSITICE CĂLITE (PH)

Application Segments

Petrol și gaze / IPC

Available Product Variants

Long Products* | Semi-Finished Products / Billet | Plates | Open Die Forgings

* Datele prezentate se referă exclusiv la produsele lungi. Vă rugăm să respectați explicațiile detaliate de la sfârșitul fișei tehnice (pdf).

Product Description

BÖHLER N701 is a corrosion-resistant steel available in the form of bars, wire, and forgings in the solution-annealed condition.

It is a martensitic, precipitation-hardenable chromium-nickel-copper steel with high strength and toughness. Further strength enhancements can be achieved through cold working and subsequent precipitation hardening.

These products are typically used for parts that require higher corrosion resistance than conventional 13% or 17% chromium steels and high strength up to 316°C. However, their use is not limited to such applications. The vacuum melting process is used to improve steel purity and homogeneity.

Certain processing methods and operating conditions can make these products susceptible to stress corrosion cracking.

Typical applications include reactor construction, highly stressed pump parts, springs, ship shafts, plastic injection molds and compression molds, and medical instruments.

Process Melting

Airmelted + VAR

Applications

- Inginerie civilă și mecanică
- Arbori
- Elemente de fixare, șuruburi, piulițe
- Inginerie mecanică
- Alte componente
- Turnare prin injecție
- Matrițe de injecție și șuruburi pentru prelucrarea materialelor plastice ranforsate cu fibră de sticlă
- Pompe și componente de înaltă presiune
- Components

Technical data

Material designation	
15-5 PH	Market grade
1.4545	SEL
X5CrNiCu15-5	EN
S15500	UNS

Standards	
A564	ASTM

BÖHLER N701

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Ni	Cu	Nb
max. 0.07	max. 1.00	max. 1.00	max. 0.040	max. 0.030	14.00 to 15.50	3.50 to 5.50	2.50 to 4.50	0.15 to 0.45

Related to ASTM A564

Delivery condition

Soluție recoaptă + călire

Hardness (HB)	max. 363

Soluție recoaptă + călire

Hardness (HRC)	max. 38

Round Bars and Wire Rod (if any)

Diameter mm		
ROLLED		
12.50	-	130.00
FORGED		
130.10	-	203.20

More information regarding MOQ, length and tolerance upon request. Flat Bars upon request.

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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