

AUSTENITIC STEELS

Application Segments

Oil & Gas/CPI

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 A970 is a stainless austenitic CrNiMoCu steel with excellent resistance to pitting, crevice and stress corrosion cracking. It is also resistant to intergranular corrosion up to 400°C. Required surface finish pickled, scale-free heat treated or machined. For components subjected to highly corrosive conditions, e.g. in seawater-cooled plants and in offshore applications. In areas of the chemical industry where, at higher pressures and temperatures, there is exposure to pure acids as well as acids containing chlorine ions (especially sulphuric acid), organic acids and acid mixtures. Due to the increased resistance to crevice corrosion, it can also be used wherever the formation of deposits is to be expected or where crevices cannot be prevented by constructive measures.

Process Melting

Airmelted

Properties

Austenitic Cr-Ni-Mo-Cu-stainless steel with excellent resistance to stress corrosion cracking, pitting and crevice corrosion. Resistant to intergranular corrosion in the temperature range up to 400°C (752°F). For optimum resistance, surfaces should be pickled, scalefree heat treated or machined.

Applications

- > Comp. for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- > CPI (incl. LNG, Urea)
- > Mechanical Engineering
- > Other Components
- > Well Completion Tools
- > Other Oil and Gas + CPI comps.
- > Drilling Tools and Components
- > General Components for Mechanical Engineering
- > Well Logging Tools
- > Shafts
- > Tubular Products, Flanges, Fittings
- > Food processing Industry
- > Oil & Gas
- > Wellhead, X-mas trees and Manifolds (incl. Tubing hangers), BOPs
- > Flowlines & Connectors

Technical data

Material designation		Standards	
1.4529	SEL	10088-3	EN ISO
X1NiCrMoCuN25-20-7	EN	B649	ASTM
N08926	UNS		

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Fe	N
max. 0.020	max. 0.5	max. 2.00	max. 0.03	max. 0.01	19.00 to 21.00	6.0 to 7.0	24.00 to 26.00	0.5 to 1.5	REM	0.15 to 0.25

Refers to ASTM B649 UNS N08926.

Delivery condition

Solution Annealed + Quenched	
Tensile Strength (MPa ksi)	min. 650 95
Yield Strength (MPa ksi)	min. 295 43

Round Bars and Wire Rod (if any)

		Diameter*			
		mm		inch	
ROLLED					
5.00	-	13.50		0.197	-
12.50	-	130.00		0.492	-
FORGED					
130.10	-	228.60		5.122	-

* Diameter 5.00 - 13.50 mm available as Wire Rod.

Diameter 12.5 - 130 mm round bars.

More information regarding MOQ, lengths and tolerances upon request. Flat bars on request.

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.

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.

voestalpine BÖHLER Edelstahl GmbH & Co KG
 Mariazeller Straße 25
 8605 Kapfenberg, AT
 T. +43/50304/20-0
 E. info@bohler-edelstahl.at
<https://www.voestalpine.com/bohler-edelstahl/de/>