AUSTENITIC STEELS

Application Segments

Oil & Gas/CPI

Available Product Variants

Long Products* | Semi-Finished Products / Billet

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

Product Description

BÖHLER A962RC (Alloy 904L, UNS N08904) is a super-austenitic stainless steel designed for a medium to high level of corrosion resistance. The alloy contains high levels of chromium and nickel with additions of molybdenum and copper to provide higher corrosion resistance in certain media.
The alloy is produced to low carbon levels for use in the welded condition as in welded vessels and other large and complex fabrications. No post-weld heat treatment required. The high nickel (25%) and molybdenum (4.5%) contents of BÖHLER A962RC provide good resistance to chloride stress corrosion cracking. The Chromium, molybdenum and nickel levels provide general corrosion restistance and restistance to chloride pitting corrosion above the level of Types 316 and 317 in many media. The copper addition provides added resistance to reducing media such as hot phosphoric acid and dilute sulfuric acid.

Process Melting

Airmelted

Applications

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

Technical data

Material designation	
904L	Market grade
1.4539	SEL
X1NiCrMoCu25-20-5	EN
N08904	UNS

Standards	
10088-3	EN ISO
A182/A182M A479/A479M	ASTM

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	N
max. 0.020	max. 1.00	max. 2.00	max. 0.045	max. 0.035	19.0 to 23.0	4.0 to 5.0	23.0 to 28.0	1.0 to 2.0	max. 0.10

Refers to ASTM A479 - 904L.

Delivery condition

Solution Annealed + Quenched	
Tensile Strength (MPa | ksi)	min. 490 | 72
Yield Strength (MPa | ksi)	min. 220 | 32

Round Bars and Wire Rod (if any)

Diameter*					
mm			inch		
ROLLED					
5.00	-	13.50	0.197	-	0.531
12.50	-	130.00	0.492	-	5.118
FORGED					
130.10	-	254.00	5.122	-	10.000

* 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.

Semi-Finished Products: Product Variant may differ in terms of melting process, technical data, delivery, and surface condition as well as available product dimensions. Please contact the business unit Semi Finished Products of voestalpine BÖHLER Edelstahl GmbH & Co KG.

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/

voestalpine
ONE STEP AHEAD.