AUSTENITIC STEELS

Application Segments

Oil & Gas/CPI

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 A965SA is an austenitic stainless steel alloy with 6% molybdenum and nitrogen. It has very high resistance to crevice and surface corrosion and was specially developed for the requirements of the chemical industry, the pulp and paper industry and the oil/gas industry. Due to its PREN value of over 40, the material is particularly resistant to seawater and is therefore often used in offshore technology. Furthermore, BÖHLER A965SA is resistant to intergranular corrosion up to 400°C. The required surface finish is pickled, scale-free heat treated or machined.
For applications in highly corrosive environments due to chemically aggressive media, e.g. for equipment and installations cooled with seawater and parts for offshore installations. In the chemical industry, where resistance to attack by pure acids as well as chloride ion-containing acids (especially sulphuric acid), organic acids and mixed acids in the higher pressure and temperature range is required. The increased resistance to crevice corrosion also allows the use where incrustations must be expected and / or where the formation of crevices cannot be avoided by constructive measures.

Process Melting

Airmelted

Applications

- Comp. for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- Oil & Gas
- Tubular Products, Flanges, Fittings
- Well Logging Tools
- Heat Exchanger
- CPI (incl. LNG, Urea)
- Other Components
- Valves and Actuators
- Wellhead, X-mas trees and Manifolds (incl. Tubing hangers), BOPs
- Food processing Industry
- Other Oil and Gas + CPI comps.
- Well Completion Tools
- Chemical industry - general

Technical data

Material designation	
F44	Market grade
254SMO	
1.4547	SEL
X1CrNiMoCuN20-18-7	EN
S31254	UNS

Standards	
10088-3	EN ISO
A182/A182M	ASTM
A276/A276M	
A479/A479M	
MDS R17	NORSOK

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	N
max. 0.020	max. 0.80	max. 1.00	max. 0.030	max. 0.010	19.5 to 20.5	6.0 to 6.5	17.5 to 18.5	0.50 to 1.00	0.18 to 0.25

Refers to ASTM A479 S 31254.

Delivery condition

Solution Annealed + Quenched	
Tensile Strength (MPa | ksi)	min. 655 | 95
Yield Strength (MPa | ksi)	min. 300 | 44

Round Bars and Wire Rod (if any)

Diameter					
mm			inch		
ROLLED					
12.50	-	130.00	0.492	-	5.118
FORGED					
130.10	-	200.00	5.122	-	7.874

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.

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.

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