

AUSTENITIC STEELS

Application Segments

Oil & Gas/CPI

Available Product Variants

Long Products

Product Description

BÖHLER A220 is a low carbon, chromium-nickel-and molybdenum steel. Structure homogeneous, stable austenite. Weldable with analogous filler metal giving fully austenitic deposit. Resistant to intergranular corrosion in the temperature range up to 400°C. Does not require post-weld heat treatment. Resistance to acids having a reducing effect, like diluted sulphuric acid and hydrochloric acid is good. The steel is not susceptible to pitting, crevice and stress corrosion cracking in media containing chloride ions and possesses excellent resistance to the attack of urea. For optimum resistance, surfaces should be pickled. Cold forming properties are good. The steel is capable of taking a mirror finish.

Components for urea plants, pump heads, valve stems, condensers, reactors, strippers, scrubbers. Equipment and parts in the dyeing industry, textile, paper and leather, chemical, pharmaceutical and synthetic fibre industries.

Process Melting

Airmelted + ESR

Applications

- > Comp. for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- > Other Oil and Gas + CPI comps.
- > Tubular Products, Flanges, Fittings
- > Valves and Actuators

Technical data

Material designation		Standards	
316L UG	Market grade	10088-3	EN ISO
1.4435	SEL	A182/A182M	ASTM
X2CrNiMo18-14-3	EN		
S31603	UNS		
F316 L	ASTM		

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	N
max. 0.030	max. 1.00	max. 2.00	max. 0.045	max. 0.030	16.0 to 18.0	2.00 to 3.00	10.0 to 15.0	max. 0.10

Related to ASTM A182.

Delivery condition

Solution Annealed + Quenched	
Tensile Strength (MPa ksi)	min. 485 71
Yield Strength (MPa ksi)	min. 170 25

Round Bars and Wire Rod (if any)

mm		Diameter		inch	
ROLLED					
12.50	-	130.00	0.492	-	5.118
FORGED					
130.10	-	600.00	5.122	-	23.622

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

For additional specifications and other sizes please contact BÖHLER Edelstahl - Special Materials Oil & Gas

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.