CORROSION-RESISTANT STEELS - FERRITIC-AUSTENITIC (DUPLEX) 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 A911SA is a ferritic-austenitic stainless steel of Type 25%Cr with PREN of min. 40. It offers excellent corrosion resistance against general corrosion, stress corrosion cracking, corrosion fatigue, pitting, crevice and erosion corrosion and possessing very high mechanical strength properties. However, it contains less copper compared to other super Duplex SS but a deliberate addition of tungsten instead, claimed to selectively improve corrosion resistance. Good weldability, post weld heat treatment not necessary.
Max. temperature for long periods of service: 280°C (535°F) / (300°C/570°F possible for short periods).
Surface condition for optimum corrosion resistance: pickled or machined.
Components in offshore, waste water, sea water desalination and chemical plants with aggressive chloride-containing media e.g. heat exchangers, separator parts, compressor and pump components, turbine blades.

Process Melting

Airmelted

Applications

- Components for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- CPI (incl. LNG, Urea)
- Food processing industry
- Pumps and High Pressure Components
- Well Completion Tools
- Oil & Gas, CPI & Renewables
- Components for the recycling industry
- Fasteners, Bolts, Nuts
- Oil & Gas / CPI
- Tubular Products, Flanges, Fittings
- Wellhead, X-mas trees and Manifolds (incl. Tubing hangers), BOPs
- Well Logging Tools
- Components for food processing and animal feed
- Flowlines & Connectors
- Other Oil and Gas + CPI components
- Valves and Actuators
- Chemical industry - general
- Drilling tools and components

Technical data

Material designation	
F55	Market grade
1.4501	SEL
X2CrNiMoNCuW25-7-4	EN
S32760	UNS

Standards	
10088-3	EN ISO
A182/A182M	ASTM
A276/A276M	
A479/A479M	
MDS D57	NORSOK

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	W	Cu	N
max. 0.030	max. 1.00	max. 1.00	max. 0.030	max. 0.010	24.0 to 26.0	3.0 to 4.0	6.0 to 8.0	0.50 to 1.00	0.50 to 1.00	0.20 to 0.30

Refers to NORSOK MDS D57-UNS 32760 | PREN = % Cr + 3.3 x % Mo + 16 x % N min 40.

Delivery condition

Solution Annealed + Quenched	
Hardness (HB)	max. 310 | hot finished or cold finished
Tensile Strength (MPa)	min. 750 | hot finished or cold finished
Yield Strength (MPa)	min. 550 | hot finished or cold finished

Round Bars and Wire Rod (if any)

Diameter* mm		
ROLLED		
5.00	-	13.50
12.50	-	130.00
FORGED		
131.10	-	200.00

* 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.

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ONE STEP AHEAD.