

DUPLEX AND SUPER DUPLEX STAINLESS 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

Bohler A913 (UNS S32750) is the most widely used super duplex grade on the market and is a 25%Cr ferritic-austenitic stainless steel with PREN min 41.

The steel offers highest corrosion resistance and good strength properties and is especially suitable for use in aggressive environments containing chlorides.

Good weldability, heat treatment after welding is not required.

Excellent resistance to general corrosion, stress corrosion cracking, vibration cracking, pitting and crevice corrosion as well as erosion corrosion.

Max. operating temperature for long-term use: 280°C (short-term exceeding up to 300°C permissible).

Required surface finish: pickled or machined.

Components exposed to seawater such as heat exchangers, feed or injection pumps, propeller shafts, highly stressed parts in chemical and waste water plants and for oil and gas production (e.g. manifolds), separators, turbine and fan blades, low-pressure compressor components.

Process Melting

Airmelted

Applications

- > Comp. for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- > CPI (incl. LNG, Urea)
- > Flowlines & Connectors
- > Oil & Gas
- > Pumps and High Pressure Components
- > Well Completion Tools
- > Comps. for Food processing and Animal Feed
- > Drilling Tools and Components
- > Food processing Industry
- > Other Components
- > Tubular Products, Flanges, Fittings
- > Well Logging Tools
- > Consumer Goods - General
- > Fasteners, Bolts, Nuts
- > Mechanical Engineering
- > Other Oil and Gas + CPI comps.
- > Valves and Actuators
- > Wellhead, X-mas trees and Manifolds (incl. Tubing hangers), BOPs

Technical data

Material designation		Standards	
1.4410	SEL	10088-3	EN ISO
X2CrNiMoN25-7-4	EN	A182/A182M	ASTM
S32750	UNS	A276/A276M	
		A479/A479M	
		MDS D57	NORSOK

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	N
max. 0.030	max. 0.80	max. 1.20	max. 0.035	max. 0.020	24.0 to 26.0	3.0 to 5.0	6.0 to 8.0	max. 0.50	0.24 to 0.32

Refers to NORSOK M630 MDS D57 - UNS 32750 | PREN = % Cr + 3.3 x % Mo + 16 x % N min 41.

Delivery condition

Solution Annealed + Quenched

Hardness (HB)	max. 310 hot finished or cold finished / up to 50.8 mm Diameter
Tensile Strength (MPa ksi)	min. 800 117 hot finished or cold finished / up to 50.8 mm Diameter
Yield Strength (MPa ksi)	min. 550 80 hot finished or cold finished / up to 50.8 mm Diameter

Solution Annealed + Quenched

Hardness (HB)	max. 310 hot finished or cold finished / over 50.8 mm Diameter
Tensile Strength (MPa ksi)	min. 760 111 hot finished or cold finished / over 50.8 mm Diameter
Yield Strength (MPa ksi)	min. 515 75 hot finished or cold finished / over 50.8 mm Diameter

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	-	200.00		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.

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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