

NI-BASE ALLOYS

Application Segments

Oil & Gas/CPI

Available Product Variants

Long Products

Product Description

Non-magnetizable corrosion and heat resistant nickel alloy in the form of bars, forgings and semi-finished products up to max 254 mm diameter/ cross-section and oxidation resistant up to 1093°C. Best fatigue strength and resistance to stress corrosion cracking when exposed to chloride containing media. Good weldability.

Process Melting

VIM + ESR

Applications

- > Comp. for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- > Oil & Gas
- > Other Oil and Gas + CPI comps.
- > Paper and Pulp Industry / Printing
- > Well Completion Tools
- > Well Logging Tools
- > Wellhead, X-mas trees and Manifolds (incl. Tubing hangers), BOPs

Technical data

Material designation		Standards
2.4856	SEL	B446 Grade 1
N06625	UNS	B564-06A
Alloy 625	Market grade	NACE MR0175 / ISO 15156
		NACE MR0103 / ISO 17945
		ASTM
		Others

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Co	Ti	Al	Nb	Fe
max. 0.10	max. 0.50	max. 0.50	max. 0.015	max. 0.015	20.0 to 23.00	8.0 to 10.00	max. Rem	max. 1.00	max. 0.40	max. 0.40	3.15 to 4.15	max. 5.00

Related to ASTM B446 Grade 1 Nb content refers to Nb + Ta

Delivery condition

Annealed	
Tensile Strength (MPa ksi)	827 120 up to 102 mm diameter or thickness
Yield Strength (MPa ksi)	414 61 up to 102 mm diameter or thickness

Annealed	
Tensile Strength (MPa ksi)	758 110 above 102 mm up to 254 mm diameter or thickness
Yield Strength (MPa ksi)	345 51 above 102 mm up to 254 mm diameter or thickness

Available Dimensions

Round Bars						MOQ ex mill	Length	Tolerance
Diameter								
mm	inch							
						ROLLED		
12.50	-	101.60	0.492	-	4.000			
						FORGED		
101.61	-	254.00	4.000	-	10.000			

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

For more information see <https://www.voestalpine.com/boehler-edelstahl/de/>

For additional specifications and other sizes please contact BÖHLER Edelstahl - Special Materials Aerospace & Land Based Turbine

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.

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