

NI-BASE ALLOYS

Application Segments

Oil & Gas / CPI

Available Product Variants

Long Products*

Open Die Forgings

* Presented data refer exclusively to long products. Please observe the detailed explanations at the end of the data sheet (pdf).

Product Description

BÖHLER L625 is a 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

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

Technical data

Material designation		Standards	
Alloy 625	Market grade	B446	ASTM
2.4856	SEL	B564	
NiCr22Mo9Nb	EN	NACE MR0175 / ISO 15156	Others
N06625	UNS	NACE MR0103 / ISO 17945	

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 23.0	8.0 to 10.0	REM	max. 1.0	max. 0.40	max. 0.40	3.15 to 4.15	max. 5.0

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

Delivery condition

Annealed	
Tensile Strength (MPa)	min. 827 up to 102 mm diameter or thickness
Yield Strength (MPa)	min. 414 up to 102 mm diameter or thickness

Annealed	
Tensile Strength (MPa)	min. 758 above 102 mm up to 254 mm diameter or thickness
Yield Strength (MPa)	min. 345 above 102 mm up to 254 mm diameter or thickness

Round Bars and Wire Rod (if any)

Diameter*		mm	
ROLLED			
12.50	-	101.60	
FORGED			
101.61	-	254.00	

* Diameter 5.00 - 13.50 mm available as Wire Rod.

Diameter 12.5 - 101.6 mm round bars.

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

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, please contact our regional voestalpine BÖHLER sales companies. 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.