

# NI-BASE ALLOYS

## Available Product Shapes

Flat Bar	Long Products	Open Die Forgings	Plates	Round Bar
Round Ground Bar				

## Product Description

Components for gas turbines, chemical plants, nuclear power plants, the aircraft industry, furnace construction and particular seawater applications.

## Process Melting

VIM + ESR
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## Properties

BOHLER L625 is a non magnetic, corrosion and oxidation - resistant, nickel - base alloy. High toughness and strength in the temperature range cryogenic to 1000°C. The alloy has excellent fatigue strength and stress corrosion cracking resistance to chloride ions. Weldability is good.

## Applications

- > Aerospace
- > Comp. for Industrial Gas Compressors
- > Distributors for Component Applications
- > Flowlines & Connectors
- > General Components for Mechanical Engineering
- > Other Components
- > Power Generation (Gas/Steam/ Nuclear)
- > Tubular Products, Flanges, Fittings
- > Valves and Actuators
- > Wellhead, X-mas trees and Manifolds (incl. Tubing hangers), BOPs
- > Blades & Shafts for Turbines and Compressors
- > Comps. for Food processing and Animal Feed
- > Distributors or producers of standard parts without knowledge of final applications
- > Food processing Industry
- > Oil & Gas
- > Other Oil and Gas + CPI comps.
- > Pumps and High Pressure Components
- > Turbine and Engine Parts (Aerosp)
- > Well Completion Tools
- > Mechanical Engineering / Machine Building General
- > Comp. for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- > CPI (inc. LNG, Urea)
- > Drilling Tools and Components
- > Forging Applications
- > Other Aerospace Comps.
- > Other Power Generation Components
- > Structural parts (Aerosp)
- > Unknown Components Application
- > Well Logging Tools

Material designation		Standards	
2.4856	SEL	B446 G1	ASTM
N06625	UNS	B564-06A	
N06002			5599
NiCr22Mo9Nb	EN	5666	
NC22DNb			
Alloy 625	Market grade		

### Chemical composition (wt. %)

C	Cr	Mo	Ni	Co	Ti	Al	Nb	Fe
≤ 0,050	21	8.5	Rest	≤ 1,00	≤ 0,40	0.18	3.4	≤ 3,0

### Heat treatment

Temperature (°C   °F)		

### Available Dimensions

#### Round Bars

Diameter		MOQ		Length		Tolerance*
mm	inch	kg	lbs	m	ft	
<b>ROLLED</b>						
12.50	- 55.00	0.492	- 2.165	700	1,543	3.00 - 4.00   9.84 - 13.12   IT h/k 12
55.01	- 101.60	2.166	- 4.000	1,500	3,307	3.00 - 4.00   9.84 - 13.12   IT h/k 12
<b>FORGED</b>						
100.61	- 203.20	3.961	- 8.000	2,800	6,173	2.00 - 6.00   6.56 - 19.69   IT h/k 12

\* ISO 286

### Thermal Expansions

Temperature (°C   °F)	200   392	400   752	600   1112	800   1472	1000   1832
Thermal expansion (10 <sup>-6</sup> m/(m.K)   10 <sup>-6</sup> inch/(inch.F))	11.1   6.167	12.6   7	13.8   7.667	14.9   8.278	15.8   8.778

For more information see [www.voestalpine.com/boehler-edelstahl](http://www.voestalpine.com/boehler-edelstahl)

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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ONE STEP AHEAD.