

NI-BASE ALLOYS

Application Segments

Aerospace

Automotive

Available Product Variants

Long Products*

Semi-Finished Products / Billet

Plates

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

- > Aerospace
- > Turbine and Engine Parts (Aerospace)
- > Other Aerospace Components
- > Automotive
- > Structural parts (Aerospace)
- > Motorsport industry

Technical data

Material designation		Standards	
Alloy 625	Market grade	B446 Grade 1	ASTM
2.4856	SEL	B564-06A	
NiCr22Mo9Nb	EN	5666	AMS
N06625	UNS		

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	20.00 to 23.00	8.00 to 10.00	REM	max. 1.00	max. 0.40	max. 0.40	3.15 to 4.15	max. 5.00

Related to AMS 5666

Delivery condition

Annealed

Hardness (HB)	max. 287 Hot finished, round bars ground or turned
Tensile Strength (MPa)	min. 827 up to 101.6 mm diameter
Yield Strength (MPa)	min. 414 up to 101.6 mm diameter

Annealed

Hardness (HB)	max. 287
Tensile Strength (MPa)	min. 758 above 101.6 mm up to 254 mm diameter
Yield Strength (MPa)	min. 345 über 101,6 mm bis zu 254 mm Durchmesser

Round Bars and Wire Rod (if any)

Round Bars and Wire Rod (in mm)							
Diameter mm			MOQ ex mill kg	Length m			Tolerance
ROLLED							
12.50	-	55.00	700	3.00	-	4.00	IT h/k 12
55.01	-	101.60	1,500	3.00	-	4.00	IT h/k 12
FORGED							
100.61	-	203.20	2,800	2.00	-	6.00	IT h/k 12

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.

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ONE STEP AHEAD.