NI-BASE ALLOYS

Application Segments

Oil & Gas/CPI

Available Product Variants

Long Products* | Plates

*) Information and data presented in this Data-Sheet refers to the indicated Product Shape only. For information on further Product Shapes mentioned above please contact the regional BOHLER sales representative

Product Description

BÖHLER L004 belongs to the group of highly corrosion-resistant nickel-chromium-molybdenum alloys with very low carbon, iron and silicon content and has good corrosion resistance, even at elevated temperatures. The combination of chromium with a high molybdenum content gives BÖHLER L004 exceptional resistance to a wide range of chemical media: e.g. contaminated, reducing mineral acids and good resistance under reducing and oxidising conditions, e.g. hot, contaminated media such as sulphuric acid, nitric acid, dry chlorine, formic acid, acetic acid, solvents, chlorine and chloride-containing media. Due to its composition, BÖHLER L004 shows a significantly reduced tendency to form precipitates in the temperature range between 650 and 1,040 °C. This improves the resistance to intergranular corrosion. Due to the high nickel content, the material is practically insensitive to chloride-induced stress corrosion cracking even in hot chloride solutions. Due to its excellent thermal stability, the alloy is easily weldable and is usually used in the welded condition. Suitable for pressure vessels with wall temperatures from-196°C to 400°C.

Process Melting

VIM + ESR or Airmelted + ESR

Applications

- Comp. for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- CPI (incl. LNG, Urea)
- Other Oil and Gas + CPI comps.
- Heat Exchanger
- Components for Recycling Industry
- Oil & Gas
- Tubular Products, Flanges, Fittings
- Storage technology
- Comps. for Food processing and Animal Feed
- Other Components
- Valves and Actuators

Technical data

Material designation	
2.4610	SEL
N06455	UNS
Alloy C4	Market grade

Standards	
B574	ASTM
17744	DIN
17752	
NACE MR0175 / ISO 15156 VdTÜV WB424	Others

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Co	Ti
max. 0.009	max. 0.050	max. 1.00	max. 0.020	max. 0.010	14.50 to 17.50	14.00 to 17.00	REM	max. 2.00	max. 0.70

Refers to VdTÜV WB424

Delivery condition

Solution Annealed + Quenched	
Tensile Strength (MPa | ksi)	700 to 900 | 102 to 131
Yield Strenght (MPa | ksi)	min. 280 | 41

Round Bars and Wire Rod (if any)

Diameter*					
mm			inch		
ROLLED					
5.00	-	13.50	0.197	-	0.531
5.00	-	101.60	0.197	-	4.000
FORGED					
101.70	-	355.60	4.004	-	14.000

* Diameter 5.00 - 13.50 mm available as Wire Rod.

Diameter 5.00 - 101.6 mm round bars.

More information regarding MOQ, lengths and tolerances upon request.

For more information see https://www.voestalpine.com/bohler-edelstahl/de/

For additional specifications and other sizes please contact BÖHLER Edelstahl - Special Materials Oil & Gas

voestalpine BÖHLER Edelstahl GmbH & Co KG
Mariazeller Straße 25
8605 Kapfenberg, AT
T. +43/50304/20-0
E. info@bohler-edelstahl.at
https://www.voestalpine.com/bohler-edelstahl/de/

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ONE STEP AHEAD.