

# ALLIAGES À BASE DE NICKEL

## Segment d'application

Oil & Gas/CPI
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## Variantes de produits disponibles

Produit long*
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Produit semi-fini
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Tôle
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\* ) Presented data refer exclusively to long products. Please observe the detailed explanations at the end of the data sheet (pdf).

## Description du produit

BÖHLER L059 (2.4605/N06059) is a nickel-chromium-molybdenum material with particularly low contents of carbon and silicon, which has high mechanical strength and excellent corrosion resistance. The most important properties of BÖHLER L059 are the excellent resistance to a wide range of corrosive media, both under oxidising and reducing conditions, the excellent resistance to chloride-induced pitting and crevice corrosion as well as the insensitivity to stress corrosion cracking and the excellent resistance to mineral acids such as nitric, phosphoric, sulphuric and hydrochloric acid and in particular to sulphuric/hydrochloric acid mixtures.

The alloy is therefore suitable for a wide range of applications in chemistry, petrochemistry, energy and environmental technology, e.g. plant components in the fine chemicals and pharmaceutical industries, scrubbers, heat exchangers, flaps, fans and agitators for flue gas desulphurisation plants (FGD) in fossil-fuelled power stations and waste incineration plants, SO<sub>2</sub> scrubbers for marine diesel engines, components for seawater and concentrated brines, equipment and components for geothermal and sour gas applications, reactors for acetic acid and acetic anhydride, and hydrofluoric acid and sulphuric acid coolers and pipes in geothermal power plants.

Due to the particularly low carbon and silicon content, the material does not tend to precipitate grain boundaries during welding or hot forming.

Optimum properties in terms of corrosion resistance are achieved in the clean, metallic bright state.

## Procédé d'élaboration

VIM + ESR or Airmelted + ESR
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## Applications

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| <ul style="list-style-type: none"> <li>&gt; Composants pour l'industrie chimique (LNG, FGD, Urée, LDPE...)</li> <li>&gt; Chemical industry - general (FR)</li> <li>&gt; Storage technology</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Autres composants pour l'industrie pétrolière, gazière et chimique</li> <li>&gt; Heat Exchanger (FR)</li> <li>&gt; Valves et actionneurs</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Tubes, brides et raccords</li> <li>&gt; Industrie du papier / imprimerie</li> </ul> |
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## Données techniques

Désignation normalisée		Normes	
Alloy 59	Market grade	17744	DIN
2.4605	SEL	17752	
NiCr23Mo16Al	EN	B574	ASTM
N06059	UNS	B564	
		NACE MR0175 / ISO 15156	Others

## Composition chimique

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Co	Al	Fe
max. 0,010	max. 0,10	max. 0,5	max. 0,015	max. 0,100	22,0 jusqu'à 24	15,0 jusqu'à 16,0	REM	max. 0,50	max. 0,3	0,1 jusqu'à 0,4	max. 1,5

Refers to ASTM B574 Alloy N06059

## Condition de livraison

### Recuit de mise en solution + trempe

Résistance à la traction (MPa)	min. 690
Yield Strength (MPa)	min. 310

### Barres rondes et fil machine (le cas échéant)

Diamètre*		mm	
<b>CERCLE</b>			
5,00	-	13,50	
12,50	-	101,60	
<b>FORMÉ</b>			
101,70	-	355,60	

\* Diameter 5.00 - 13.50 mm available as Wire Rod.

Diameter 12.5 - 101.6 mm round bars.

More information regarding MOQ, lengths and tolerances upon request.

**Long Products:** For additional specifications, technical requirements, and other dimensions, please contact our regional voestalpine BÖHLER sales companies.

**Semi-Finished Products:** Product Variant may differ in terms of melting process, technical data, delivery, and surface condition as well as available product dimensions. Please contact the business unit Semi Finished Products of voestalpine BÖHLER Edelstahl GmbH & Co KG.

**Sheet & Plates:** Product Variant may differ in terms of melting process, technical data, delivery, and surface condition as well as available product dimensions. Please contact voestalpine BÖHLER Bleche GmbH & Co KG.

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