

NI-BASE ALLOYS

Available Product Shapes

Long Products	Plates	Semi-Finished Products / Billet
---------------	--------	---------------------------------

Product Description

Corrosion and heat resistant nickel alloy - precipitation hardenable - in the form of bars, forging and forging stock. High resistance to creep and stress-rupture up to 1300°F (704°C) and oxidation resistance up to 1800°F (982°C). High duty parts and components for gas turbines, aerospace engines, high-speed airframe parts such as disks, buckets, spacers and high temperature bolts and fasteners.

Compared to standard alloy 718 AMS limits, Cb in L718HCB is adjusted in the upper range of the standard limits in order to enhance mechanical properties. L718HCB is typically used for high temperature bolting and fasteners.

Process Melting

VIM + VAR

Applications

- > Other Aerospace Comps.
- > Turbine and Engine Parts (Aerosp)
- > Aerospace

Material designation	Standards
2.4668	SEL
N07718	UNS
NiCr19NbMo/ NiCr19Fe19Nb5Mo3	AMS
NC19FCNb	5662
Alloy 718	5962
	5663
	EN
	Market grade

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Co	Ti	Al	Nb	B	Fe	Pb	Bi	Se
< 0.08	< 0.35	< 0.35	< 0.015	< 0.015	17 - 21	2.8 - 3.3	50 - 55	< 0.3	< 1	0.65 - 1.15	0.2 - 0.8	4.75 - 5.5	< 0.006	< Rem	< 5ppm	< 0.3ppm	< 3ppm

Related to AMS5662

Delivery condition

Solution annealed
Hardness
max. 277 HB bars and forging stock, max 254 mm diameter

Available Dimensions

Round Bars

Diameter		MOQ		Length		Tolerance*
mm	inch	kg	lbs	m	ft	
ROLLED						
5.01	- 11.00	0.197	- 0.433	250	551	3.00 - 4.00 9.84 - 13.12 IT h/k 9
12.20	- 40.00	0.480	- 1.575	550	1,213	3.00 - 4.00 9.84 - 13.12 +/-0,1mm

* ISO 286

For more information see www.voestalpine.com/boehler-edelstahl

For additional specifications and other sizes please contact BÖHLER Edelstahl - Special Materials Aerospace & Land Based Turbine

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.

voestalpine BÖHLER Edelstahl GmbH & Co KG

Mariazeller Straße 25

8605 Kapfenberg, AT

T. +43/50304/20-0

E. info@boehler-edelstahl.at

www.voestalpine.com/boehler-edelstahl

voestalpine

ONE STEP AHEAD.