



Inconel 718

1. Brief introduction:

It has quite good combination property during $-253\sim 700^{\circ}\text{C}$. Its yield strength ranks the first among deformation super alloy when the temperature is below 650°C .

The alloy has quite good fatigue strength, anti-radiation, antioxidant property, corrosion resistant performance, and machining, welding performance and long-term structure stability.

It can be made into complicated shaped components, and has been widespread used in space navigation, nuclear energy and petrochemical industry.

2. Main specifications:

Chinese	US	USA	Werkstoff Nr.
GH4169/GH169	UNS NO7718	Inconel 718	2.4668

3. Chemical composition under ASTM B637 standard:

Grade	chemical composition,%														
	Ni	C	Si	Mn	Cr	S	Al	Fe	Ti	Cu	Nb+Ta	Co	P	B	Mo
UNS No7718	50.0-55.0	≤ 0.08	≤ 0.35	≤ 0.35	17.0-21.0	≤ 0.015	0.2-0.8	Remainder	0.65-1.15	≤ 0.3	4.75-5.5	≤ 1.0	≤ 0.015	≤ 0.006	2.8-3.3

Fe element shall be determined arithmetically by difference.



4. Main product types:

wire,rod, bar,strip,sheet/plate,tube/pipe.

5. Main produce standards:

Wire	rod, Bar, forging	Sheet/Strip	Tube
AMS 5832	ASTM B637 ASME SB-637 API 6A	ASTM B670	AMS 5589C

6. Inconel718 source URL:

<https://www.hitealloy.com/product/alloy-718-gh4169.html>