

IN718

NICKEL SUPERALLOY

Composition

Aluminum

Chromium Copper

Carbon

Manganese
Molybdenum

Niobium

Nickel

Silicon

Titanium

Phosphorus

IN718 is a high-performance nickel based superalloy that exhibits excellent strength and good corrosion resistance at elevated temperatures.

It is stronger and harder than IN625, but has less corrosion resistance and a lower operating temperature ceiling.

IN718 alloys are commonly used in aerospace applications: turbines, spacecraft, rocket engines, turbo pumps, and tooling.



Weight% 0.50 0.04 18 0.05 17 0.01 3

Excellent s at high tem	trength & creep resistance peratures
Good corro	osion resistance
Outstandin	g weldability

	1200		TENS	ILE PROPE	RTIES	
	800				•	
Stress [MPa]	400					
	0	Ę	5 1	0 1 Strain [%]	5 2	0 25

*Related denominations: Inconel® 71	8. IN718	. UNS N07718	ASTM B637.	2.4668, NCF718

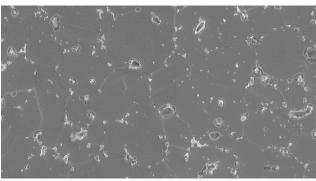
Balance

0.01

0.01

0.90

Physical Properties	As Sintered
Ultimate tensile strength [MPa]	1000
Yield strength [MPa]	700
Elongation [%]	15
Hardness [HRC]	34
Relative density [%]	98



As sintered

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