

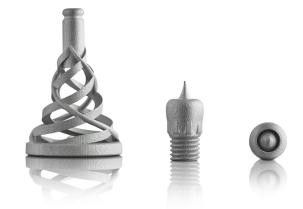
IN718

NICKEL SUPERALLOY

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.



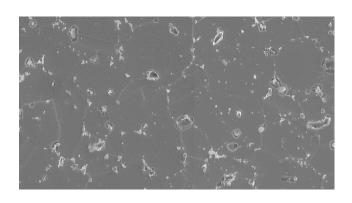
Composition	Weight%
Aluminum	0.50
Carbon	0.04
Chromium	18
Copper	0.05
Iron	17
Manganese	0.01
Molybdenum	3
Niobium	5
Nickle	Balance
Phosphorus	0.01
Silicon	0.01
Titanium	0.90

	strength & creep resistance mperatures
Good cor	rosion resistance
Outstand	ing weldability

TENSILE PROPERTIES 1200 400 0 5 10 15 20 25 Strain [%]

*Related denominations: Inconel® 718, IN718, UNS N07718, ASTM B637, 2.4668, NCF718

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



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