BINDER JETTING MATERIAL DATASHEET

Markforged

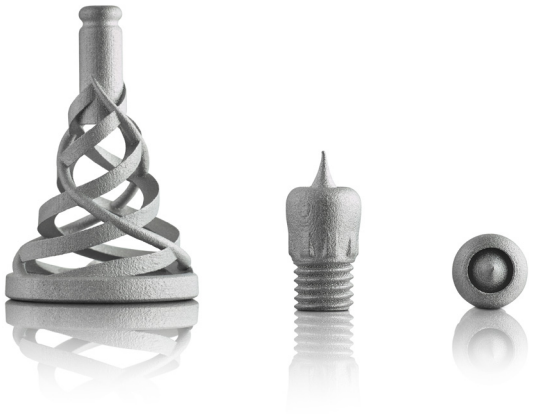
IN718

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

Features & Benefits
Excellent strength & creep resistance at high temperatures
Good corrosion resistance
Outstanding weldability
Heat treatable

*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

TENSILE PROPERTIES