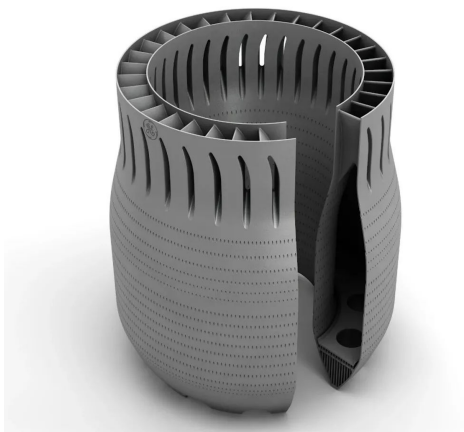


Inconel 718

METALS FOR SLM 3D PRINTING



MATERIAL NAME

Inconel 718

COLOR

Silvery-gray

PROCESS

SLM

PRODUCT DESCRIPTION

A Ni-Cr-Fe-based precipitation hardening type deformed high-temperature alloy, the long-term use temperature range is $-253^{\circ}\text{C}\sim 650^{\circ}\text{C}$, and the short-term use temperature can reach 800°C . The alloy has high strength below 650°C and has good fatigue resistance, radiation resistance, oxidation resistance and corrosion resistance, as well as good processing performance, welding performance and long-term structural stability. It is widely used in aviation, aerospace, petrochemical and other fields.

TYPICAL APPLICATIONS

- Metal terminal pieces
- Assembly testing
- Functional prototype testing
- Chemical/Energy Equipment Parts

PRODUCT SAFETY

Handle printed parts according to normal workshop safety practices. Review material-specific handling, finishing, and operating requirements before use.

PRODUCT DELIVERY & WAREHOUSING

- **STORAGE**
Store parts in a clean, dry environment away from moisture, direct sunlight, and heat.
- **TRANSPORTATION**
Pack parts with cushioning and moisture protection. Avoid impact, compression, and prolonged exposure to heat during transit.

PROPERTIES OF PRINTED MATERIAL

Properties	Test Method	Value
Density (g/cm3)	ISO 1183	8.24 g/cm3
Tensile strength (MPa)	ISO 527	1370 MPa
Elongation at break	ISO 527	19%
Yield strength (MPa)	ISO 527	1200 MPa

Tips: Want to explore a wider range of materials? Check out <https://www.unionfab.com/materials>