

## DIRECT METAL LASER SINTERING

# INCONEL 718

## PRODUCT SPECIFICATIONS



### PRODUCT DESCRIPTION:

Protolabs' Inconel material is used in our DMLS process. Inconel is a high strength, corrosion resistant nickel chromium superalloy used at temperatures of -423F to 1300F. Its high-temperature strength is derived from its ability to create a thick, stable passivating oxide layer at high temperatures, protecting the material from further attack. Inconel also has good tensile, fatigue, creep and rupture strength. It is available in both high and normal resolution and can be used for parts as large as 10" x 10" x 11" in size.

### APPLICATIONS:

Inconel is an excellent choice for rocket engine components and related equipment exposed to extreme environments.



### KEY PRODUCT BENEFITS

- High strength
- Excellent High-temperature and corrosion resistance
- Good tensile, fatigue, creep and rupture strength

### PROPERTIES:

Standard	Ultimate Tensile Strength (ksi)	0.2% Yield (ksi)	Elongation (%)	Hardness (HRB)
ASTM F3055-14A	180	150	6-12	35.5