BINDER JETTING MATERIAL DATASHEET

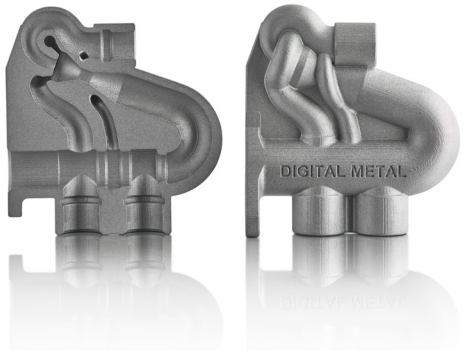
Markforged

IN625

NICKEL SUPERALLOY

IN625 is a high-performance nickel based superalloy known for its toughness and excellent corrosion resistance in both oxidizing and reducing environments. It is more corrosion resistant and can be used in higher temperatures than IN718, but exhibits inferior mechanical properties.

It is well suited for a variety of demanding applications in chemical processing, aerospace and marine engineering, power generation, and oil/gas. The material is notoriously difficult to machine, making 3D printing an attractive alternative.

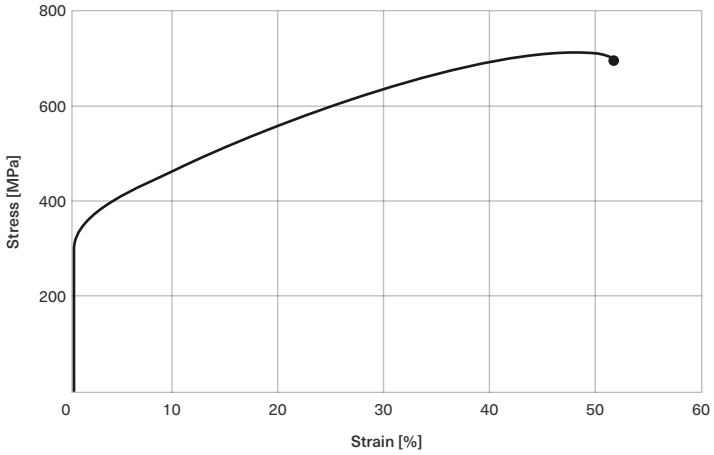


Composition	Weight%
Aluminum	0.30
Cobalt	0.15
Chromium	21
Iron	0.75
Manganese	0.04
Molybdenum	9.0
Niobium	3.8
Nickel	Balance
Silicon	0.02
Titanium	0.30

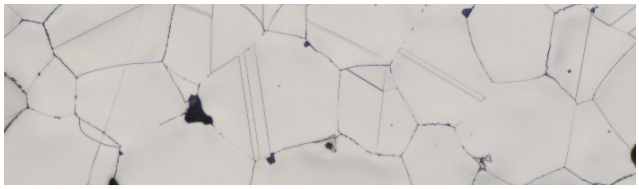
Features & Benefits
Excellent corrosion resistance
Good strength and toughness
Wide operating temperature range

*Related denominations: UNS N06625, 2.4856 and NCF625

TENSILE PROPERTIES



Physical Properties	As Sintered
Ultimate tensile strength [MPa]	725
Yield strength [MPa]	325
Elongation [%]	45
Hardness [HRB]	82
Relative density [%]	98



As sintered