

# 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.

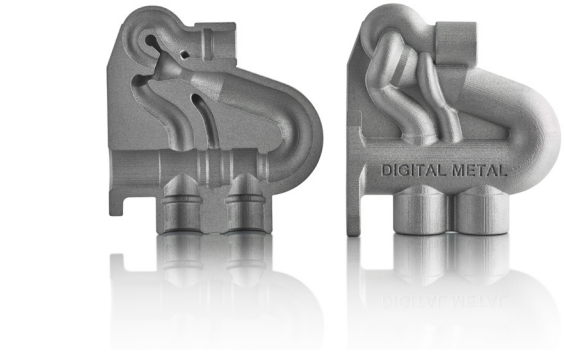
It is well suited for a variety of demanding applications in chemical processing, aerospace and marine engineering, power generation, and oil/gas. The material is notoriously difficult to machine, making 3D printing an attractive alternative.

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

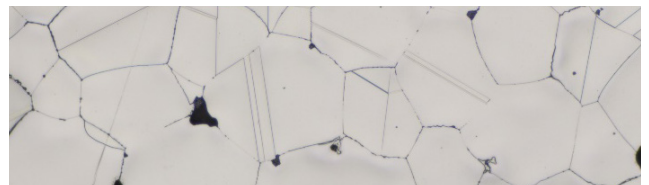
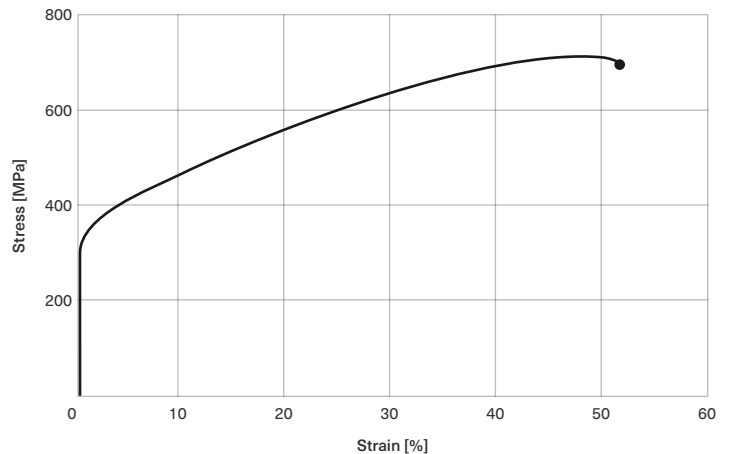
Features & Benefits
Excellent corrosion resistance
Good strength and toughness
Wide operating temperature range

\*Related denominations: UNS N06625, 2.4856 and NCF625

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



### TENSILE PROPERTIES



As sintered

These representative data were tested, measured, or calculated using standard methods and are subject to change without notice. Markforged makes no warranties of any kind, express or implied, including, but not limited to, the warranties of merchantability, fitness for a particular use, or warranty against patent infringement; and assumes no liability in connection with the use of this information. The data listed here should not be used to establish design, quality control, or specification limits, and are not intended to substitute for your own testing to determine suitability for your particular application. Nothing in this sheet is to be construed as a license to operate under or a recommendation to infringe upon any intellectual property right.