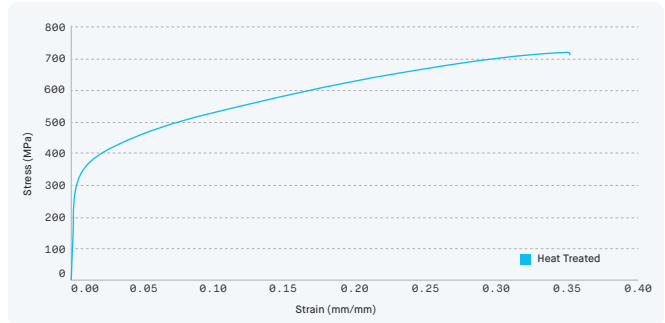


[Material Data Sheet]

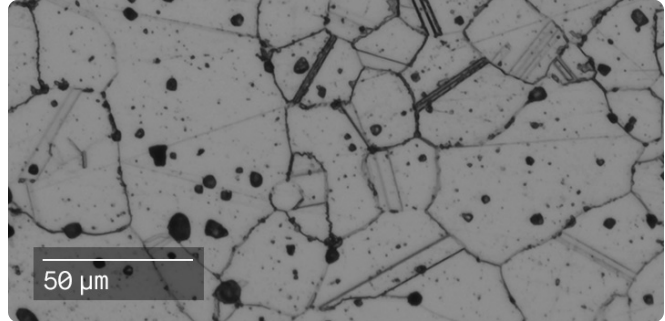
IN625

Nickel Alloy



COMPOSITION %

Ni	Balance
Cr	20.00 - 23.00
Mo	8.00 - 10.00
Nb	3.15 - 4.15
Fe	0.00 - 5.00
Mn	0.00 - 0.50
Si	0.00 - 0.50
Al	0.00 - 0.40
P	0.00 - 0.015
C	0.10 (max)
Co	0.00 - 1.00
Ti	0.00 - 0.40
S	0.00 - 0.015



MECHANICAL PROPERTIES *

	Standard	Studio System™ 2 As-Sintered
Yield strength – xy (MPa)	ASTM E8	303
Ultimate tensile strength – xy (MPa)	ASTM E8	725
Elongation at break (%)	ASTM E8	34
Young’s modulus (GPa)	ASTM E111	199
Hardness (HRB)	ASTM E18	83.5
Density (g/cc)	ASTM B311	8.2

OTHER STANDARD DESIGNATIONS **

UNS N06625
 AMS 5666F
 DIN NiCr22Mo9Nb

ATTRIBUTES & APPLICATIONS

Excellent fatigue, thermal fatigue, oxidation & corrosion resistance
 High tensile, creep and rupture strength
 Heat-treatable and weldable material
 Aerospace components (e.g. nozzles, combustion and burner systems)
 Corrosive environment (e.g. marine, power generation, chemical processing applications)
 Oil & gas components (e.g. deep sea drilling rig components)

* Hardness, tensile and density data reported are mean values minus 1 sigma.

** Listed designations are for reference purposes only. Composition and mechanical properties may vary.

End-use material performance is impacted (+/-) by certain factors including but not limited to part geometry and design, application and evaluation conditions, etc.