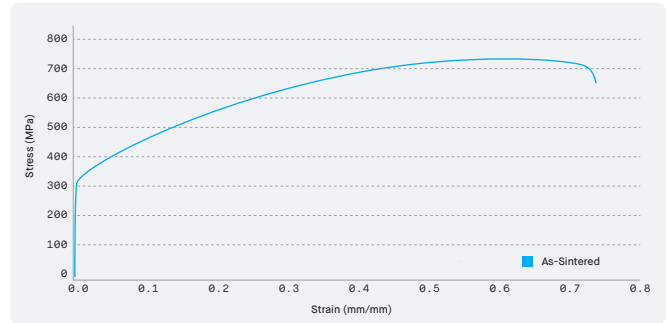


[Material Data Sheet]

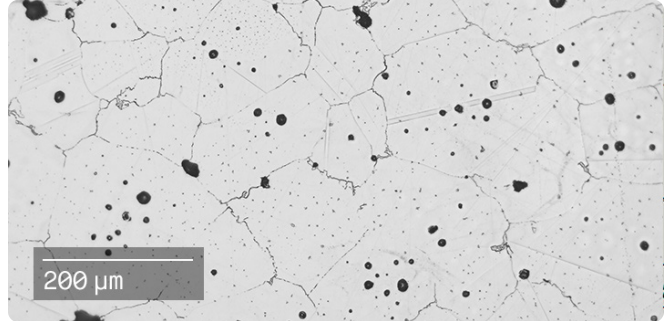
IN625

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
O	0.12 (max)
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	Production System™ As-Sintered
Ultimate tensile strength ¹ (MPa)	ASTM E8	695 ± 7
Yield strength ¹ (MPa)	ASTM E8	295 ± 28
Elongation at break (%)	ASTM E8	63.0 ± 7.5
Young's modulus (GPa)	ASTM E8	200
Hardness (HRB)	ASTM E18	81.5 ± 1.2
Density	g/cc	8.3
Surface finish ² (μm Ra)	ISO 4287	3 - 8

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)

1. YS & UTS properties noted represent mean values across Xy & Yx orientations.
 2. Surface roughness measured in Z direction after sintering & sand blasting.