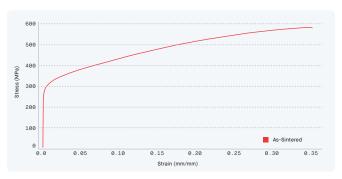
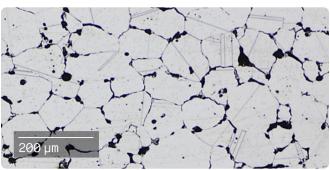


[Material Data Sheet]

IN625 Nickel Alloy



COMPOSITION %	
Ni	Balance
Cr	20.00 - 23.00
Мо	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
Р	0.00 - 0.015
С	0.10 (max)
Со	0.00 - 1.00
Ті	0.00 - 0.40
S	0.00 - 0.015



MECHANICAL PROPERTIES 1					
	Standard	Shop System ™ As-Sintered	Shop System ™ Sintered and HIP ²		
Ultimate tensile strength – xy (MPa)	ASTM E8M	595 ± 20	661 ± 38		
Yield strength - xy (MPa)	ASTM E8M	287 ± 5	303 ± 7		
Elongation – xy (%)	ASTM E8M	35 ± 3	42 ± 9		
Young's modulus - xy (GPa)	ASTM E111	204 ± 22	204 ± 22		
Hardness (HRB)	ASTM E18	77 ± 2	82 ± 2		
Density (g/cc)	ASTM B311	8.2 ± 0.05	8.43 ± 0.02		

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 appl	ications)
Oil & gas components (e.g. deep sea drilling rig components)	

	OTHER STANDARD DESIGNATIONS 3
	UNS N06625
	AMS 5666F
	DIN NiCr22Mo9Nb

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

Mechanical properties noted represent mean values +/- 1 standard deviation across Xy & Yz orientations for as-printed samples.

Samples were hot isostatic pressed at 2125°F and 14.75 ksi for 240 minutes.

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