



NICKEL ALLOY IN625

MATERIAL PROPERTIES:

- Excellent fatigue, thermal fatigue
- Oxidation & corrosion resistance
- High tensile, creep and rupture strength
- Heat-treatable and weldable material

COMPOSITION	%
Ni	Balance
Cr	20 - 30
Mo	8 -10
No	3.15 - 4.15
Fe	0.00 - 5.00
Mn	0.00 - 0.50

TYPICAL PROPERTIES:

	Standard	Sintered parts	Sintered and HIP
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

APPLICATIONS :

- 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)

