NICKEL ALLOYS

Advanced Materials. Engineered for Performance.

Inconel 625

Nickel Alloys | UNS: N06625 | EN: 2.4856

Nickel-chromium-molybdenum alloy strengthened by niobium. Exceptional strength and corrosion resistance from cryogenic temperatures to 980 C without heat treatment.



Stock status: Mill indent - Typical lead time: 4 - 8 weeks mill indent

Key features

- Service from cryogenic to 980 C
- Immune to chloride SCC
- No post-weld heat treatment required

Available forms & sizes

Form	Size range
Plates	1.5 - 100 mm thk, up to 2500 mm wide
Seamless Pipes & Tubes	1/2" - 24" NB, SCH 5S - SCH 160
Round Bars	6 - 500 mm dia
Flanges	1/2" - 48", 150# - 2500#
Fittings	1/2" - 48", SCH 10S - SCH 160

Chemical composition (%)

Element	Min	Max
Ni	58.0	-
Cr	20.0	23.0
Mo	8.0	10.0
Nb+Ta	3.15	4.15
Fe	-	5.0

Mechanical properties

Property	Value	Unit
Yield Strength (0.2%)	414 min	MPa

Property	Value	Unit
Tensile Strength	827 min	MPa
Elongation	30 min	%

Physical properties

Property	Value	Unit
Density	8.44	g/cm3
Max Service Temperature	980	C

Standards

ASTM B443, ASTM B444, ASTM B446, ASTM B564

Equivalent grades

2.4856, N06625, Alloy 625, NiCr22Mo9Nb

Industries served

Oil & Gas, Aerospace, Power Generation, Chemical Processing

Typical applications

- Flare tips and burner components
- Subsea cladding and overlay
- Sour service wellhead parts
- Aerospace ducting

Live datasheet