



## Nickel Alloy - ASTM B446-03 (2014)

### SPECIFICATIONS

Commercial Alloy 625

Alloy 625 is a Nickel-Chromium based Superalloy with Min 58% Nickel.

Note that the Chemical Composition requirements vary according to which variant is ordered. For full details consult the published specification.

### CHEMICAL COMPOSITION

ASTM B446-03 (2014)  
Alloy 625

Element	% Present
Nickel (Ni)	58 min
Chromium (Cr)	18 - 23
Molybdenum (Mo)	7 - 12.5
Iron (Fe)	2 - 5
Niobium (Columbium) (Nb)	3.15 - 4.15
Columbium + Tantalum (Cb+Ta)	3.15 - 4.15
Cobalt (Co)	1 max
Copper (Cu)	0.5 max
Silicon (Si)	0.5 max
Aluminium (Al)	0.4 max
Titanium (Ti)	0.4 max
Manganese (Mn)	0.05 max
Carbon (C)	0.03 max
Phosphorous (P)	0.02 max
Sulphur (S)	0.02 max

*This details the main elements only*

### ALLOY DESIGNATIONS

N06625, N06219, N06650, Alloy 625, ASTM B446-03 (2014)

### SUPPLIED FORMS

Please contact us with your requirements

- Bar
- Rod

### MECHANICAL PROPERTIES

ASTM B446-03 (2014)  
Bar

Property	Value
Proof Stress	270-420 Min MPa
Tensile Strength	660-820 Min MPa
Elongation A50 mm	25-50 Min %

*A wide range of Mechanical requirements applies according to size and the degree of cold or hot work that has been applied. For full details consult the published specification.*

### CONTACT

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### REVISION HISTORY

Datasheet Updated 26 February 2019

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