

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

Address: Gould Alloys Ltd
Markham Lane
Markham Vale
Chesterfield
S44 5HS
United Kingdom
Tel: +44 (0) 1246 263300
Email: sales@gouldalloys.co.uk
Web: www.gouldalloys.co.uk

REVISION HISTORY

Datasheet Updated 26 February 2019

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.