



Grade	Code	UNS	Nickel Alloys
Inconel 617	Alloy 617 (2.4663)	N06617	

### Nickel Alloy Properties

Alloy 617 is a nickel chromium cobalt molybdenum alloy which combines exceptional high-temperature strength with oxidation resistance. This results in the alloy having excellent resistance to a wide range of corrosive environments. Alloy 617 also benefits from ease of fabrication and can be readily welded when using conventional welding techniques.

### Chemical Composition (Inconel 617)

Ni %	Cr %	Co %	Mo %	Mn %	Si %	Al %	Ti %	Cu %	Fe %
44,50	20,00 –	10,00 –	8,00 –	1,00	1,00	0,80 –	0,60	0,05 –	3,00
max.	24,00	15,00	10,00	max.	max.	1,50	max.	0,15	max.

### Mechanical Properties (Hot Rolling Solution-Annealed)

Product Form	Rp0.2, Mpa	Rm, Mpa	Elongation [%]	Hardness[HB]	Density (g/cm <sup>3</sup> )
Bar & Rod	≥300	≥690	≥ 35	181	8,3

### Suitable For

Inconel 617 is used in Power generating plants, Gas turbines, Gas valve components, Reformer tubes, Boiler tubes, Petrochemical plants, Combustion cans and Ducting & liners.

### Remarks

Increased strength & stability at elevated temperature, High temperature corrosion resistance, Easy to fabricate, Good weldability with most conventional welding techniques.

### Specification

Inconel 617, Alloy 617, 2.4663, N06617

### Norm

ASTM B 166/ASME SB 166, ASTM B 564/ASME SB 564, SAE AMS 5887