

Inconel 625

UNS N06625

W.Nr. 2.4856

Nickel

Chromium

Molybdenum

Niobium

<https://www.arialloy.com/inconel-625/>

Chemical Composition

C%	Mn%	Si%	P%	S%	Cr%	Nb% + Ta%
≤ 0.10	≤ 0.50	≤ 0.50	≤ 0.015	≤ 0.015	20.0 ~ 23.0	3.15 ~ 4.15
Co%	Mo%	Fe%	Al%	Ti%	Ni%	
≤ 1.0	8.0 ~ 10.0	≤ 5.0	≤ 0.4	≤ 0.4	≥ 58.0	

Mechanical Properties

Product	Condition	T.S.	Y.S.	EL	RA	Hardness
		MPa, min	MPa, min	%, min	%, min	HR
Pipe & Tube	Annealed	827	414	30	...	...
	Solution Annealed	690	276	30	...	...
Round Bar & Rod	≤ 102mm Annealed	827	414	30	...	...
	102 ~ 254mm Annealed	758	345	25	...	...
	Solution Annealed	690	276	30	...	...
Sheet & Strip	Annealed	827	414	30	...	...
Plate	Annealed	758	379	30	...	...
Plate, Sheet & Strip	Solution Annealed	690	276	30	...	...

Physical Properties

Density		Melting Range		Curie Temperature	
lb/in ³	g/cm ³	°F	°C	°F	°C
0.305	8.44	2350 ~ 2460	1290 ~ 1350	< -320	-196

Main Standards

Rod, Bar, Wire & Forging Stock	Plate, Sheet & Strip	Pipe & Tube	Fitting	Welding Products
ASTM B446		ASTM B444/ASME SB 444		
ASME SB 446	ASTM B443	ASTM B829/ASME SB 829		AWS A5.14/ ERNiCrMo-3
ASTM B564	ASTM SB 443	ASTM B704/ASME SB 704	ASTM B366	
ASME SB 564	SAE AMS 5599	ASTM B705/ASME SB 705	ASME SB 366	AWS A5.11/ ENiCrMo-3
SAE AMS 5666	SAE AMS 5869	ASTM B751/ASME SB 751		
SAE AMS 5837		ASTM B775/ASME SB 775		