

Incoloy 825

UNS N08825

W.Nr. 2.4858

Nickel

Iron

Chromium

Molybdenum

Copper

www.arialloy.com/incoloy-825/

• Chemical Composition •

Ni%	Cr%	Fe%	Mn%	C%	Cu%
38.0 ~ 46.0	19.5 ~ 23.5	≥ 22.0	≤ 1.0	≤ 0.05	1.5 ~ 3.0
Si%	S%	Al%	Ti%	Mo%	
≤ 0.5	≤ 0.03	≤ 0.2	0.6 ~ 1.2	2.5 ~ 3.5	

• Mechanical Properties •

Product	Condition	T.S.	Y.S.	EL	RA	Hardness
		MPa, min	MPa, min	%, min	%, min	HRB, max
Seamless Pipe & Tube	Hot-finished & Annealed	517	172	30	...	...
Seamless Pipe & Tube	Hot-worked & Annealed	586	241	30	...	...
Welded Pipe & Tube	All	586	240	30	...	...
Bar & Rod	Annealed	586	241	30	...	...
Sheet, Strip & Plate	Annealed	586	241	30	...	...

• Physical Properties •

Density		Melting Range		Curie Temperature	
lb/in ³	g/cm ³	°F	°C	°F	°C
0.294	8.14	2500 ~ 2550	1370 ~ 1400	< -320	< -196

• Main Standards •

Rod, Bar, Wire & Forging Stock	Plate, Sheet & Strip	Pipe & Tube	Fittings	Welding Products
ASTM B425 ASME SB 425 ASTM B564 ASME SB 564	ASTM B424 ASME SB 424 ASTM B906 ASME SB 906	ASTM B163/ASME SB 163 ASTM B423/ASME SB 423 ASTM B829/ASME SB 829 ASTM B705/ASME SB 705 ASTM B775/ASME SB 775 ASTM B704/ASME SB 704 ASTM B751/ASME SB 751	ASTM B366 ASME SB 366	AWS A5.14/ ERNiFeCr-1