

Incoloy 825 has excellent resistance to stress corrosion cracking and good pitting resistance in all environments except strongly oxidizing chloride solutions. Alloy 825 is used in chemical processing, pollution control, oil and gas recovery, acid production, pickling operations, nuclear fuel reprocessing and handling of radioactive wastes.

Incoloy 825 Specification

Grade	UNS	W.Nr
Alloy 825	N08825	2.4858

Incoloy 825 Chemical composition

Grade	%	Ni	Cr	Fe	C	Mn	Si	Cu	Mo	Al	Ti	P	S
Incoloy 825	Min	38	19.5	Bal.				1.5	2.5		0.6		
	Max	46	23.5		0.05	1	0.5	3	3.5	0.2	1.2	0.03	0.03

Incoloy 825 Mechanical properties: (Minimum value at 20°C)

Tensile Strength σ_b /MPa	Yield Strength $\sigma_{p0.2}$ /MPa	Elongation σ_5 /%
≥ 550	≥ 220	≥ 30

Incoloy 825 Standards

Bar/Rod	Forging	Sheet/Strip	Wire	Pipe/Tube
ASTM B408	ASTM B564	ASTM B409	ASTM B408	ASTM B423 ASTM B163 ASTM B704 ASTM B705

Incoloy 825 Size Range

- Wire: Dia 0.08-12mm
- Bar: Dia 1.0-300mm
- Strip(Coil): 0.2-20mm TCK x 10-300mm W
- Sheet: min.0.7mm TCK x 1200mm W max.
- Tube & Forging & Machine Parts: customized
- Welding wire: 0.8mm,1.0mm,1.2mm,2.0mm,2.4mm,3.2mm,3.8mm,4.0mm etc
- Welding Strip: 0.4-0.7mm TCK x 25-60mm W