



Alloy 825

1. Brief introduction:

It's a Ni-Fe-Cr alloy with additions of Mo, Cu and Ti.

It has excellent resistance to reducing and oxidizing acids, stress-corrosion cracking and localized attack such as pitting and crevice corrosion. And it is especially resistant to sulfuric and phosphoric acids.

Used for chemical processing, pollution-control equipment, oil&gas well piping, nuclear fuel reprocessing, acid production and pickling equipment.

2. Main specifications:

USA	Chinese	UNS	Werkstoff Nr.
Alloy 825	NS142	N08825	2.4858

3. Chemical composition under ASTM B425-11 (2017) standard:

Grade	chemical composition,%										
	Ni	Cr	Fe	Mn	C	Cu	Si	S	Al	Ti	Mo
alloy N08825	38.0-46.0	19.5-23.5	≥22	≤1.0	≤0.05	1.5-3.0	≤0.5	≤0.03	≤0.2	0.6-1.2	2.5-3.5

Fe element shall be determined arithmetically by difference.

4. Main product types:

wire, rod, forging, bar, strip, sheet/plate, tube/pipe.



5. Main produce standards:

Wire,Rod, Bar	Forging	Plate/Sheet/Strip	Seamless Tube/Pipe	Welded Tube/Pipe	Fitting
ASTM B425 ASME SB425	ASTM B564 ASME SB564	ASTM B424 ASME SB424	ASTM B163 ASME SB163 ASTM B423 ASME SB423	ASTM B704 ASTM B705	ASTM B366/B366M-16

6. Alloy 825 source URL:

<https://www.hitealloy.com/product/alloy-825-ns142.html>