#### C&N Industrial Group limited

#### inquiry to bill@cnpipefitting.com

We are the ASTM B564 UNS N08825 Flange,incoloy 825 Flange ,Alloy 825 Flange manufacturer.

ASTM B 564 UNS N08825 INCOLOY 825 Welding Neck Flange(WNF)

ASTM B 564 UNS N08825 INCOLOY 825 Slip on Flange(SOF)

ASTM B 564 UNS N08825 INCOLOY 825 Lap Joint Flange

ASTM B 564 UNS N08825 INCOLOY 825 Blind Flange

ASTM B 564 UNS N08825 INCOLOY 825 Socket Welding Flange (SWF)

ASTM B 564 UNS N08825 INCOLOY 825 Threaded Flange(THW)

ASTM B 564 UNS N08825 INCOLOY 825 Orifice Flange

# UNS N08825 INCOLOY 825

### **Related Speci ications**

**ASTM B564** N08825 INCOLOY 825

ASTM B564 UNS N08825, also known as Incoloy 825, is a high nickel alloy that is used in high corrosion and high temperature applications. It has different designations in different countries: ASTM B424 Gr. UNS N08825(US), DIN 17750 Gr. 2.4858, JIS G4902 Gr. NCF 825. Incoloy 825 Flange has excellent resistance to chloride-ion-induced stress corrosion cracking, reducing environments containing phosphoric and sulfuric acids, oxidizing environments containing nitric acid and nitrates, and pitting, crevice corrosion and intergranular corrosion. It has good mechanical properties at cryogenic temperatures to moderately high temperatures up to 538 °C.

## **Chemical Composition**

[wt %]

	С	Si	Mn	Р	S	Ni	Cr	Fe	Мо	Cu	Al	Ti
Specification (NCF 825)	≦0.05	≦0.50	≦1.00	≦0.030	≦0.015	38.00~ 46.00	19.50~ 23.50	Bal.	2.50~ 3.50	1.50~ 3.00	≦0.20	0.60~ 1.20
Specification (UNS N08825)	≦0.05	≦0.5	≦1.0	-	≦0.03	38.0~ 46.0	19.5~ 23.5	≧22.0	2.5~ 3.5	1.5~ 3.0	≦0.2	0.6~ 1.2

#### **Physical Properties**

Density	[g/cm³]		8.14
Specific heat	[J/kg·K]	20°C	444
Electrical resistivity	$[\mu\Omega\cdot cm]$		112
Thermal conductivity	[W/m·K]		10.9
Average coefficient of thermal expansion	[10 <sup>-6</sup> /°C]	20~100°C	13.4
		20~200°C	14.1
		20~500°C	15.1
		20~900°C	16.9
Young's modulus	[MPa]		19.7 × 10 <sup>4</sup>
Magnetism			None
Melting range	[°C]		1370~1400