This page is mainly introduced the IncoloyA-286 Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of IncoloyA-286,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

Datasheet for Steel Grades Superalloys IncoloyA-286

IncoloyA-286 Standard Number:		
ITEM	Standard Number	Descriptions
4	ASTM B516	Pipe
5	ASTM A453	Bolt

IncoloyA-286 Chemical composition(mass fraction)(wt.%)		
Chemical	Min.(%)	Max.(%)
C		0.08
Cr	13.50	16.00
Ni	24.00	27.00
Mo	1.00	1.50
Ti	1.75	2.30
V	0.10	0.50
B	0.001	0.010
Mn	1.00	2.00
Fe		Bal
Al		0.40
Si		1.00
P		0.030
S		0.020

C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Note: a cold pull rods, round cakes and ring blank standard (Ti) 1.80% ~

2.35%.
2 (B) of hot-rolled and cold-rolled sheet standard 0.003% ~ 0.010%, 2.00% or less (Mn), (P) acuities were 0.020%, 0.015% or less (S).
3 (Al) of cold drawn wire standard acuities were 0.35%, 1.75% ~ 2.35% (Ti) and (Si) 0.40% ~ 1.00%, 0.020% or less (P), (S) of 0.015% or less. Use the wire, cold heading standards (Ti) 1.75% ~ 2.35%, 0.40% ~ 1.00% (Si), (P) acuities were 0.025%, 0.020% or less (S).
5 hot rolled and forged bar standard (Cu) of 0.25% or less.
1.5), heat treatment system is the standard heat treatment system are shown in table 1-3;Alloy is 900 ℃ heat treatment system plus or minus 10 ℃, 1 to 2 h, oil cooled to + 750 ℃ + 10 ℃, 16 h, air cooling.

IncoloyA-286 Physical Properties		
Tensile strength	115-234	σb/MPa
Yield Strength	23	σ 0.2 ≥/MPa
Elongation	65	δ5≥ (%)
ψ	-	ψ≥ (%)
Akv	-	Akv≥/J
HBS	123-321	-
HRC	30	-

IncoloyA-286 Mechanical Properties		
Tensile strength	231-231	σb/MPa
Yield Strength	154	σ 0.2 ≥/MPa
Elongation	56	δ5≥(%)
ψ	-	ψ≥(%)
Akv	-	Akv≥/J
HBS	235-268	-
HRC	30	-

IncoloyA-286 Heat Treatment Regime				
Annealing	**Quenching**	**Tempering**	**Normalizing**	**Q & T**
√	√	√	√	√

IncoloyA-286 Range of products				
Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

We can produce Superalloys the specifications follows: