

Revised Specifications of INCONEL 617 Alloys

Chemical compositions:

Composition	IN 617
C	0.05-0.15
Ni	44.5
Cr	20.00-24.00
Mo	8.00-10.00
Co	10.00-15.00
Al	0.80-1.50
Ti	0.6 max
Nb	-
Mn	1.00 max
Fe	3.00 max
Si	1.00 max
Cu	0.50 max
B	0.006 max

Size Specifications:

1. INCONEL alloy 617 - hot rolled / solution annealed / descaled - 0.5905" X 73.532" X 98.425" (Near by sizes are acceptable, but minimum thickness should be 0.5")

2. IN 617 Alloy of rod form of 100 mm diameter or near by sizes are also acceptable.

For any Technical Clarifications please contact :

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Mechanical Properties:

Test Temperature		Ultimate Tensile Strength		0.2% Yield Strength		Elongation in 2 in (51mm)
°F	°C	Ksi	MPa	Ksi	MPa	%
ROOM	ROOM	113	779	53	367	52
1000	540	90	618	37	254	67
1200	650	91	627	35	239	67
1400	760	70	483	36	245	92
1600	870	41	286	30	207	99
1800	980	22	155	16	111	93
2000	1095	11	79	8	58	91

Stress Rupture Strength:

Test Temperature		Approximate Initial Stress, Ksi (MPa) to Produce Rupture in:					
°F	°C	100 Hours		1000 Hours		10,000 Hours	
1200	650	55.0	(379)	44.0	(303)	33.5	(231)
1400	760	29.0	(200)	19.5	(134)	14.5	(100)
1600	870	13.0	(90)	9.7	(67)	6.8	(47)