

TIMET TIMETAL® 367 (Ti-6Al-7Nb) Titanium Alloy

Category : Metal , Nonferrous Metal , Titanium Alloy , Alpha/Beta Titanium Alloy

Material Notes:

Medium-Strength Surgical Implant Alloy Features: TIMETAL 367 is a dedicated, medium strength, titanium alloy for surgical implants. The alloy was developed specifically for the manufacture of femoral component items for hip prostheses. Its metallurgy is closely analogous to that of TIMETAL 6-4 but biocompatibility is improved with the replacement of vanadium by niobium. Typical heat treatment for this alloy: Anneal at 700°C for 1 hour, air cool. Data provided by TIMET.

Order this product through the following link:

http://www.lookpolymers.com/polymer_TIMET-TIMETAL-367-Ti-6Al-7Nb-Titanium-Alloy.php

Physical Properties	Metric	English	Comments
Density	4.52 g/cc	0.163 lb/in ³	Typical

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	>= 900 MPa	>= 131000 psi	
Tensile Strength, Yield	>= 800 MPa @Strain 0.200 %	>= 116000 psi @Strain 0.200 %	
Elongation at Break	>= 10 %	>= 10 %	
Reduction of Area	35 %	35 %	
Modulus of Elasticity	105 - 120 GPa	15200 - 17400 ksi	Typical
Fatigue Strength	500 MPa @# of Cycles 1.00e+7	72500 psi @# of Cycles 1.00e+7	rotating bend

Thermal Properties	Metric	English	Comments
Beta Transus	1015 °C	1859 °F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	5.5 - 6.5 %	5.5 - 6.5 %	
Carbon, C	<= 0.080 %	<= 0.080 %	
Hydrogen, H	<= 0.0090 %	<= 0.0090 %	
Iron, Fe	<= 0.25 %	<= 0.25 %	
Niobium, Nb (Columbium, Cb)	6.5 - 7.5 %	6.5 - 7.5 %	
Nitrogen, N	<= 0.050 %	<= 0.050 %	

Component Elements Properties	Metric %	English %	Comments
Tantalum, Ta	<= 0.50 %	<= 0.50 %	
Titanium, Ti	84.5 - 88 %	84.5 - 88 %	Calculated as remainder

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China