

Titanium Materials for mil spec and other applications

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Titanium and titanium alloy, sheet, strip and plate...Mil-T-9046H

Type I

- » Composition A--Unalloyed (40 KSI-YS)
- » Composition B--Unalloyed (70 KSI-YS)
- » Composition C--Unalloyed (55 KSI-YS)

Type II

- » Composition A--5Al-2.5Sn
- » Composition B--5Al-2.5SnELI
- » Composition F--8Al-1Mo-1V
- » Composition G--6Al-2CG-1Ta-0.8Mo

Type III Alpha Beta Titanium Alloy

- » Composition C--6Al-4V
- » Composition D--6Al-4V ELI
- » Composition E--6Al-6V-2Sn
- » Composition G--6Al-2Sn-4Zr-2Mo
- » Composition H--6Al-4VSP

Type IV Beta Titanium Alloys

- » A 13V-11Cr-3Al
- » B 11.5Mo-6Zr-4.5Sn
- » C 3Al-8V-6Cr-4Mo-4Zr
- » D 8Mo-8V-2Fe-3Al

Military Specifications

Titanium and Titanium Alloy Bars and Reforge Stock

A Cross Reference by Revision and Composition Classifications

MIL-T-9047D Rev June 1967	MIL-T-9047E Rev June 1970 MIL-T009047F Rev March 1971 *MIL-T83142A Rev Dec 1967	MIL-T-9047G Rev Dec 1978
Type I Commercially Pure Ti Comp. A - Unalloyed	Alpha Alloys Comp. 1 - Unalloyed	Commercially Pure Ti CP-B
Type II Alpha Titanium Alloys Comp. A - 5Al - 2.5Sn Comp. B - 5Al - 2.5Sn (ELI) Comp. C - 5Al - 5Zr - 5Sn Comp. D - 8Al - 1 Mo - 1 V	Alpha Alloys Comp. 2 - 5Al-2.5Sn Comp. 3 - 5Al-2.5Sn (ELI) 2/ Comp. 5 - 8Al-1 Mo-1V	Alpha Titanium Alloys 3Al-2.5V 5Al-2.5Sn 5Al-2.5Sn (ELI) 8Al-1Mo-1V 6Al-2Cb-1Ta-0.8Mo
Type III Alpha-Beta Ti Alloy Comp. A - 6Al - 4V Comp. B - 6Al - 4V(ELI) Comp. C - 6Al - 6V - 2Sn Comp. D - 7Al - 4Mo Comp. E - 4Al - 4Mn Comp. F-5Al-1.5Fe-1.5Cr- 1.5Mo Comp. G -11 Sn - 5Zr - 2Al -1 Mo Comp. H - 4Al -3Mo -1 V Comp. I - 6Al -2Sn - 4Zr - 2Mo	Alpha-Beta Alloys Comp. 6 - 6Al-4V Comp. 7 - 6Al-4v(ELI) Comp. 8 - 6Al-6V-2Sn Comp. 9 - 7Al-4Mo Comp.10 -11 Sm-5Zr-2Al-1 Mo Comp.11- 6Al-2Sn-4Zr-2 Mo Comp.14 - 6Al-2Sn-4Zr-6Mo	Alpha-Beta Ti Alloys 6Al-4V 6Al-4V(ELI) 6Al-6V-2Sn 7Al-4Mo 6Al-2Sn-4Zr-2 Mo 6Al-2Sn-4Zr-6Mo
Type IV Beta Ti Alloys Comp. A -13V -11 Cr -3Al	Beta Alloys Comp. 12 - 13V-11Cr-3Al Comp. 13 - 11.5Mo-6Zr-4.5Sn	Beta Titanium Alloys 13V-11Cr-3Al 11/5Mo-6Zr-4.5Sn 8Mo-8V-2Fe-3Al 3Al-8V-6Cr-4Mo-4Zr

*Titanium and titanium alloy forgings

Applicable Specifications

Mil-I-6866	Dye penetrant inspection	AM54921	GRADE 4 BARS
Mil-I-8959	Ultrasonic inspection	AM54901	GRADE 4 PLATE & SHEET
Mil-H-81200	Heat treatment of titanium and titanium alloys	AM54902	GRADE 2 PLATE & SHEET
AMS 2631	Ultrasonic inspection	ASTMB348	GRADE 4 BARS
		ASTMB265	GRADE 4 PLATE & SHEET
		ASTMB348	GRADE 2 BARS
		ASTMB265	GRADE 2 PLATE & SHEET