



Industrial Applications

Titanium Alloy Bar

ASTM B 348

FEATURES	Excellent Strength to density Ratio (Weight Saving), Non-Magnetic , Strong Corrosion resistance, Good Corrosion Crack Resistance (ELI-Version) Superior Erosion Resistance
END USE	Fasteners, Bicycle Parts, Offshore Components, Desalination Parts , Chemical Processing Parts , Pulp & Paper Parts , Valve, Fittings , Pump , Ultrasonic Sonotrode Weld Wire,

ASTM B348		CHEMICAL COMPOSITION %									
Grade	N Max.	C Max.	H Max.	Fe Max.	O Max.	Pd	Al	V	Residual %		Ti
									each	total	
Gr.5 Ti-6Al-4V	0.05	0.08	0.015	0.40	0.20	—	5.50-6.75	3.50-4.50	0.1	0.4	Bal.
Gr.23 Ti-6Al-4V ELI	0.03	0.08	0.0125	0.25	0.13	—	5.50-6.50	3.50-4.50	0.1	0.4	Bal.
Gr.7	0.03	0.08	0.015	0.30	0.25	0.12-0.25	—	—	0.1	0.4	Bal.

ASTM B348		MECHANICAL PROPERTIES , ANNEALED					
Grade	Tensile Strength (Rm)		Yield Strength (Rp) 0.2%		Elongation , 4D %	Area Reduction %	
	Min.		Min.				
	ksi	MPa	ksi	MPa			
Gr.5 Ti-6Al-4V	130	895	120	828	10	25	
Gr.23 Ti-6Al-4V ELI	120	828	110	759	10	15	
Gr.7	50	345	40	275	20	30	

SIZE RANGE	Bar ϕ : 0.12" - 2.0" (3.0mm - 50.0mm)
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TOLERANCE	Peeled 0.8"-2.0" (20.0mm-50.0mm)	ISO h10 (h9)
	Ground & Polished 0.12"-0.86" (3.0mm-22.0mm)	ISO h7 (h6)
	· Surface finish Ra · Straightness · End chamfering	$\leq 0.8\mu\text{m}$ Max.0.5m/m $\phi > 3.0\text{mm}$

CRACK DETECTION On Request	· Eddy current crack test according to EN 10277-1 , Tab.1 Dia. $\phi < 2.00\text{mm}$ class 1 Dia. $\phi > 2.00\text{mm}$ class 3 · Ultrasonic Inspection ($\phi \geq 6\text{mm}$) : acc. to AMS-STD-2154 (2010-11) class AA
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GRAIN SIZE	· According to :ETTC2 :A1-A7
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Contact us at info@appliedtitanium.com
to learn more about **ATA™ Titanium Alloy Bar**

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www.appliedtitanium.com