



Medical Applications

Commercially Pure Titanium Bar ASTM F 67(Grade 1 . 2 . 3 . 4)

FEATURES	Excellent Strength to density Ratio , Strong Corrosion resistance, Good Formability, Biocompatibility
END USE	Orthopedic appliance , Surgical & Dental Implants , Needles, Ligature clip , Sutures , woven mesh , Orthodontic appliance

ASTM F 67		CHEMICAL COMPOSITION %						
Grade	N Max.	C Max.	H Max.	Fe Max.	O Max.	Residual %		Ti
						each	total	
C.P. Gr.1	0.03	0.08	0.015	0.20	0.18	0.1	0.4	Bal.
C.P. Gr.2	0.03	0.08	0.015	0.30	0.25	0.1	0.4	Bal.
C.P. Gr.3	0.05	0.08	0.015	0.30	0.35	0.1	0.4	Bal.
C.P. Gr.4	0.05	0.08	0.015	0.50	0.40	0.1	0.4	Bal.

ASTM F 67		MECHANICAL PROPERTIES , ANNEALED				
Grade	Tensile Strength (Rm) Min.		Yield Strength (Rp) 0.2% Min.		Elongation , 4D % Min.	Area Reduction % Min.
	ksi	MPa	ksi	MPa		
C.P. Gr.1	35	240	25	170	24	30
C.P. Gr.2	50	345	40	275	20	30
C.P. Gr.3	65	450	55	380	18	30
C.P. Gr.4	80	550	70	483	15	25

SIZE RANGE	Bar ϕ : 0.12" – 2.0" (3.0mm - 50.0mm)
------------	--

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)
	<ul style="list-style-type: none"> · Surface finish Ra $\leq 0.8\mu\text{m}$ · Straightness Max.0.5m/m · End chamfering $\phi > 3.0\text{mm}$ 	

CRACK DETECTION On Request	<ul style="list-style-type: none"> · 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
-------------------------------	--

GRAIN SIZE	· According to ASTM E112 finer than 5
------------	---------------------------------------

Contact us at info@appliedtitanium.com

to learn more about **ATA™ CP Titanium Bar _ Medical**



www.appliedtitanium.com