

ANCOR TI BETA 21S

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is gas atomized titanium alloy powder (UNS R58210). Beta 21S was originally developed as a material for titanium metal matrix composites but has been used for Additive Manufacturing (AM) and Metal Injection Molding (MIM) due to its higher strength than conventional titanium alloys such as Ti-6Al-4V. ANCOR Ti Beta 21S alloy exhibits superior oxidation and creep resistance compared to conventional titanium alloys such as Ti-15V-3Cr.

CONTACT INFORMATION

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- > Spherical Powder for Additive Manufacturing
- > Particle Size Engineered for Laser Powder Bed Fusion (LPBF), Electron Beam Melting (EBM)
- > Rigorous Quality Testing of each powder lot
- > Powder Size Available for Metal Injection Molding and DED, "Direct energy deposition"

Typical Powder Characteristics

Laser Particle Size Analysis [um]				Powder Properties		Application
Size Type	D10	D50	D90	Flow	AD	
15-45	15	30	45	--	>2.0 g/cm ³	LPBF
20-63	30	43	58	<35 s/50g	>2.0 g/cm ³	LPBF
50-100	58	76	102	<35 s/50g	>2.0 g/cm ³	DED

AncorTi Beta 21S

Chemical Composition Nominal (wt%)					Maximum (wt%)			
Titanium	Molybdenum	Aluminum	Niobium	Silicon	Oxygen	Carbon	Hydrogen	Nitrogen
Bal.	15.0	3.2	2.7	0.2	0.17	0.05	0.02	0.05

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