

ANCOR Ti 6242

ANCOR Ti 6Al-2Mo-4Zr-2Sn

is an elevated temperature alloy with an excellent combination of tensile strength, creep strength, toughness and high temperature service. A near alpha titanium alloy, it has applications in the aerospace industry (high-temperature parts) and the automotive industry in automotive valves. The tin and zirconium additions are solid solution strengtheners and the alloy can be heat treated by solution treatment and aging to allow for a wide range of mechanical properties. This alloy is recommended for service conditions that require high strength and toughness, excellent creep resistance, and oxidation resistance up to about 565° C.

CONTACT INFORMATION

Additive Materials Expert

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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 to AS9100 "D"
- 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

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Chemical Composition Nominal (wt%)					Maximum (wt%)			
Titanium	Aluminum	Zirconium	Molybdenum	Tin	Oxygen	Carbon	Hydrogen	Nitrogen
Bal.	6.3	4.0	4.8	2.0	0.20	0.05	0.02	0.05

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