

Titanium Grade 5 / Ti6Al4V spherical powder

Ti6Al4V (UNS R56400 / 3.7165) is an alpha-beta alloy most widely used in high strength applications including aerospace, offshore, marine and power generation. This material has got excellent biocompatibility and good osseointegration especially when direct contact with tissue or bone is required.

Grade 5 titanium is often used in the manufacture of airframe structural components and skin, aircraft hydraulic systems and aircraft engine components. Other practical applications: in submarines, ship's propellers, shafts, rigging, and other highly corrosive parts.

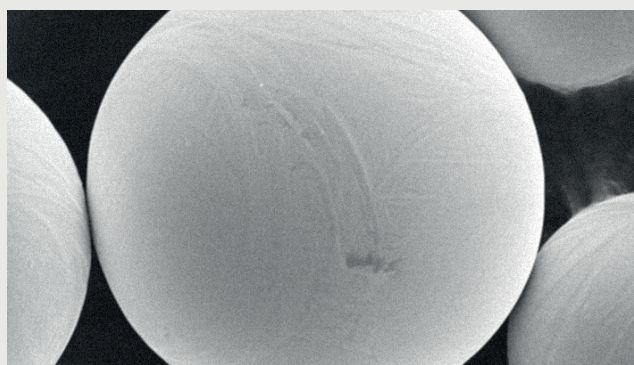
CHEMICAL COMPOSITION

	MIN	MAX		MIN	MAX
C	-	0.1	Zr	-	0.1
Mn	-	0.1	N	-	0.04
Sn	-	0.1	Al	5.50	6.75
V	3.50	4.50	O	0.07	0.15
Cu	-	0.1	H	-	0.012
Fe	-	0.3	Other elements	-	0.2
Mo	-	0.1	Ti	Balance	Balance



PHYSICAL PROPERTIES

Particle Size Range	0 - 53 μm	53 - 105 μm
Morphology	Spherical	Spherical
Particle size distribution	D10: 17 μm	D10: 57 μm
	D50: 35 μm	D50: 72 μm
	D90: 60 μm	D90: 108 μm
Powder sphericity	$\Phi \geq 0.95$	
Angle of repose	$\leq 40^\circ$	
Apparent density	2.53 g/cm ³	2.56 g/cm ³



Standards satisfied: AMS4998, ASTM F2924, ASTM F3001, ASTM F3049

Particle size distribution. Laser diffraction.

