

Nickel alloy 625 spherical powder

Alloy 625 (UNS N06625 / 2.4856) is used for its high strength and outstanding corrosion resistance. The combination of its alloying elements is also responsible for superior resistance to a wide range of corrosive environments as well as to high-temperature effects such as oxidation and carburization.

It is used for propeller blades, aircraft ducting systems, engine exhaust systems, resistance welded honeycomb structures, turbine shroud rings, and heat-exchanger tubing in environmental control systems.

Material in soft annealed condition has got exceptional resistance to pitting, crevice corrosion, erosion and intergranular corrosion, resistance to chloride-induced stress corrosion cracking and has got good resistance to mineral acids such as nitric, phosphoric, sulfuric. Service temperatures range from cryogenic to 1800°F (982°C).

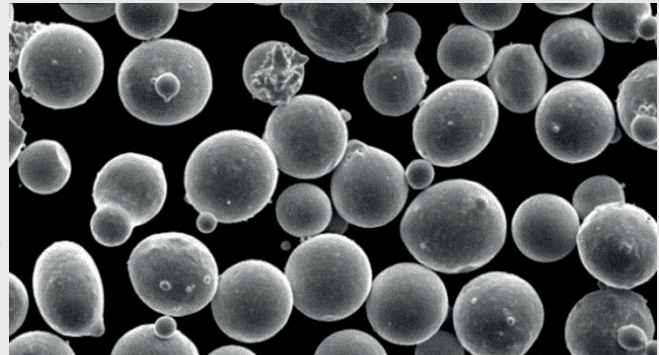
CHEMICAL COMPOSITION

	MIN	MAX		MIN	MAX
C	-	0.1	Nb	3.14	4.15
Mn	-	0.5	Ti	-	0.40
Si	-	0.5	Al	-	0.40
P	-	0.015	Fe	-	5.00
Cr	20.00	23.00	Cu	-	0.07
Co	-	1.00	Other elements	-	-
Mo	8	10	Ni	Balance	Balance



PHYSICAL PROPERTIES

Particle Size Range	0 - 53 μm	53 - 105 μm
Morphology	Spherical	Spherical
Particle size distribution	D10: 15μm	D10: 53μm
	D50: 33μm	D50: 75μm
	D90: 59μm	D90: 105μm
Powder sphericity	Φ ≥ 0.85	
Angle of repose	≤ 40°	
Apparent density	4.4 g/cm ³	4.6 g/cm ³



Standards satisfied: ASTM F3055, ASTM F3049

Particle size distribution. Laser diffraction.

