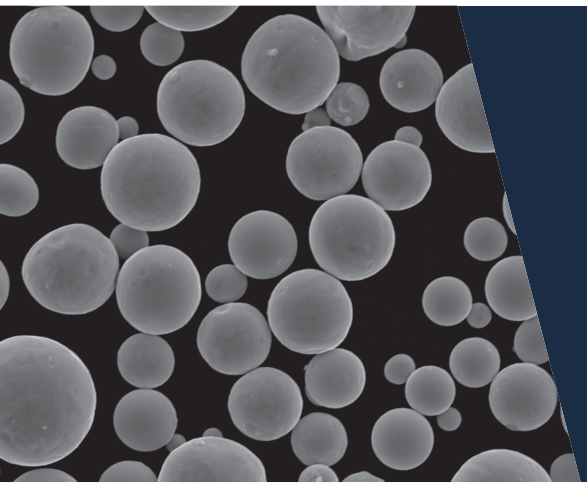
NITINOL



Nitinol

Metal alloy powders consist of nearly equivalent atomic percentages of nickel and titanium. Nitinol alloys exhibit the shape memory effect which is the ability to undergo deformation at one temperature, then recover its original, undeformed shape upon heating above its transformation temperature. Nitinol also exhibits super-elasticity which makes it ideal for applications such as actuator components and bio-medical applications such as stents and orthodontics.

CONTACT INFORMATION
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- Spherical Powder for Additive Manufacturing
- Particle Size Engineered for Binder Jetting, Laser Powder Bed Fusion, Melting and Electron Beam Melting
- Rigorous Quality Testing of each powder lot
- Powder Size Available for Metal Injection Molding and DED, "Direct energy deposition"
- Material produced to specification

Typical Powder Characteristics

Laser Particle Size Analysis [um]				Powder Properties		Application
Size Type	D_{10}	D_{50}	D_{90}	Flow	AD	
15-45	15	30	45	--	>3.0 g/cm³	LPBF
20-63	30	43	58	<35 s/50g	>3.0 g/cm³	LPBF
50-100	58	76	100	<28 s/50g	>3.0 g/cm³	EBM

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Chemical Composition (wt%)		Maximum (wt%)	
Nickel	Titanium	Carbon	Hydrogen
54.5-57.0	Bal.	0.05	0.01