

INDO-SPHERE Ni-247LC

Ni-247LC is a NI-base superalloy used for its creep resistant and outstanding oxidation resistant and can function where high surface stability is required. Vacuum Induction Melting - Inert Gas Atomization process is used at INDO-MIM for manufacturing of powder. Our unique ASB technique improves powder sphericity, which enhances flowability in achieving consistent density and uniform build rates.

Particle Size Distribution

Light scattering (ASTM B822 / ISO 13320-1)				
Application	Size Range	D10%	D50%	D90%
MIM	<22µm	5.0 max	12.0 max	22.0 max
BJ	<25µm	5.5 max	13.5 max	25.0 max
LPBF	15 – 53µm	24.0 max	36.0 max	54.0 max

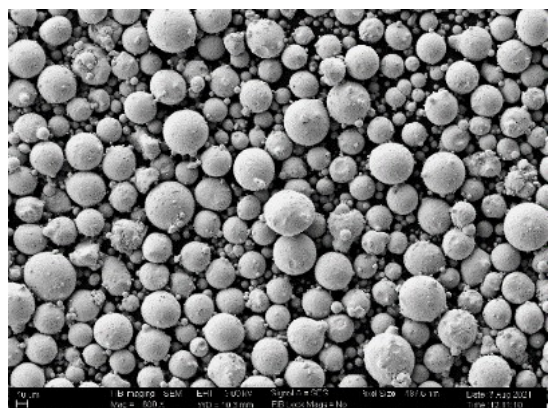
Physical Properties

Property	g/cc	Test Method
Tap Density	4.85 min	ASTM B527
True Density	8.00 min	ASTM B923

Chemical Composition (weight %)

Element	Range (%)
Carbon	0.05 – 0.09
Silicon	0.25 max
Manganese	0.10 max
Molybdenum	0.40 – 0.60
Phosphorous	0.012 max
Sulphur	0.012 max
Aluminium	5.30 – 5.80
Chromium	7.80 – 8.20
Tungsten	9.30 – 9.70
Tantalum	3.10 – 3.30
Titanium	0.60 – 0.80
Hafnium	1.30 – 1.50
Boron	0.015 Max
Zirconium	0.015 Max
Cobalt	9.00 – 9.40
Nickel	Balance
Iron	0.50 Max

Morphology



* Applicable only for LPBF

Customization on chemical composition & particle size can be made.

Packing with 10 / 50 / 100 kg containers & custom packing is possible.