

Nickel Alloy C22

C22 is a Ni-base super alloy used for its creep resistant and outstanding oxidation resistant. Its Chemical Composition corresponds to UNS N06022 for use in additive manufacturing processes. Vacuum Induction Melting Inert Gas Atomization process is used 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

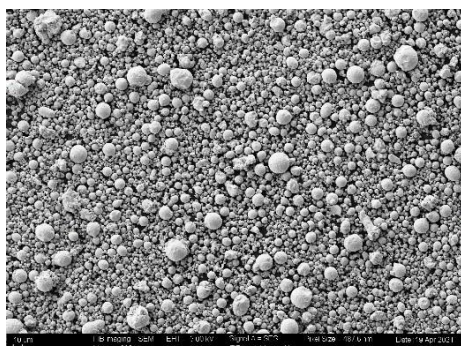
Physical Properties

Property	g/cc	Test Method
Tap Density	4.60 min	ASTM B527
True Density	8.00 min	ASTM B923

Chemical Composition (weight %)

Element	Range (%)
Carbon	0.015 max
Silicon	0.08 max
Manganese	0.50 max
Phosphorous	0.020 max
Sulphur	0.020 max
Chromium	20.00-22.50
Molybdenum	12.50-14.50
Vanadium	0.35 max
Cobalt	2.50 max
Tungsten	2.50-3.50
Iron	2.00-6.00
Nickel	Balance

Morphology



Customization on chemical composition & particle size can be made.

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