

INDO-SPHERE 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 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

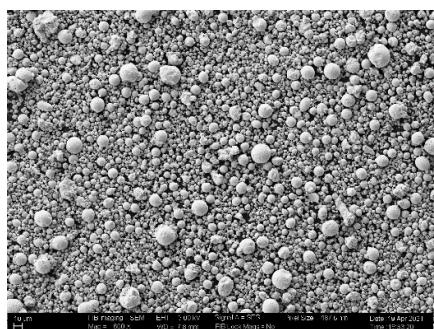
Chemical Composition (weight %)

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

Physical Properties

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

Morphology



Customization on chemical composition & particle size can be made.

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