

INDO-SPHERE Co400

Co400 is a material with exceptional wear properties in metal-metal contact scenarios at high temperatures. Its chemical composition corresponds to UNS R30400 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

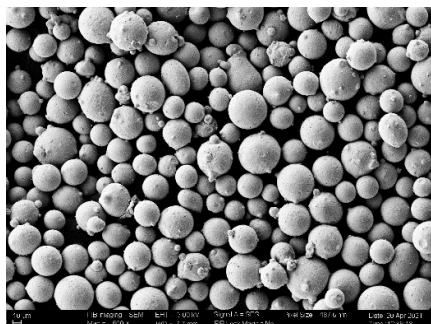
Physical Properties

Property	g/cc	Test Method
Tap Density	4.50 min	ASTM B527
True Density	7.60 min	ASTM B923

Chemical Composition (weight %)

Element	Range (%)
Carbon	0.05 Max
Silicon	2.30-2.80
Manganese	0.30 Max
Phosphorous	0.035 Max
Sulphur	0.035 Max
Chromium	7.00-8.50
Molybdenum	27.00-30.00
Nickel	1.00 Max
Iron	0.50 Max
Others	1.00 Max
Cobalt	Balance

Morphology



Customization on chemical composition & particle size can be made.

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