INDO-MIM PVT LTD.
#45(P), KIADB Industrial Area, Doddaballapur, Bengaluru - 561203
Phone: +91-080-22048600/636 | FAX: +91-080-27630532
Email: infopowders@indo-mim.com or infohq@indo-mim.com | Website: www.indo-mim.com

INDO-SPHERE CoCr-1

CoCr1 is a cobalt-chromium-molybdenum-tungsten superalloy with excellent mechanical properties, high wear and corrosion resistance, proven biocompatibility, and a very high specific strength as well. This specialized chemical composition is well suited for use in additive manufacturing processes for high strength application. 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

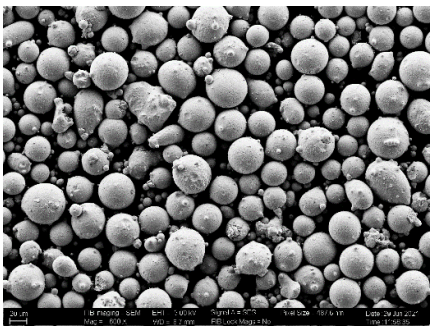
Light scattering (ASTM B822 / ISO 13320-1)				
Application	**Size Range**	**D10%**	**D50%**	**D90%**
MIM	<22µm	5.0 max	12.0 max	22.0 max
BJ	<25µm	5.5 max	13.5 max	25.0 max
LPBF	15 – 53µm	24.0 max	36.0 max	54.0 max

Chemical Composition (weight %)

Element	Range (%)
Carbon	0.10 max
Silicon	0.90 -1.20
Manganese	0.10 max
Phosphorous	0.03 max
Sulphur	0.03 max
Chromium	24.20 – 25.50
Molybdenum	4.90 – 5.90
Nickel	0.10 max
Iron	0.30 max
Tungsten	4.50-5.50
Cadmium	0.02 max
Oxygen	0.06 max
Nitrogen	0.25 max
Cobalt	Balance

Physical Properties

Property	g/cc	Test Method
Tap Density	5.10 min	ASTM B527
True Density	8.20 min	ASTM B923



Morphology

Customization on chemical composition & particle size can be made.

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

MIM: Metal Injection Molding | BJ: Binder Jetting | LPBF: Laser Powder Bed Fusion

**Specification is only for illustrative purposes, and it varies with specific application requirements*