

## INDO-SPHERE COBALT-800

Cobalt 800 is a cobalt-chromium-tungsten superalloy having a good resistant to wear, galling and corrosion and retain these properties at high temperatures. 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%
<b>MIM</b>	<22µm	5.0 max	12.0 max	22.0 max
<b>BJ</b>	<25µm	5.5 max	13.5 max	25.0 max
<b>LPBF</b>	15 – 53µm	24.0 max	36.0 max	54.0 max

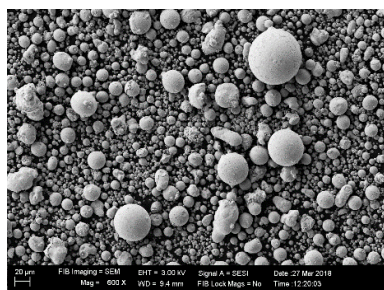
### Chemical Composition (weight %)

Element	Range (%)
Carbon	0.030 Max
Silicon	3.25 – 3.75
Phosphorous	0.03 max
Sulphur	0.03 max
Chromium	17.00 – 18.00
Molybdenum	27.75 – 28.75
Iron	0.25 max
Cobalt	Balance

### Physical Properties

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

### 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.