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 Maraging steel-18-Ni300

18-Ni300 (Maraging Steel 300) has very good mechanical properties and is easily heat-treatable using a simple thermal age-hardening process to obtain excellent hardness and strength. Its chemical composition corresponds to ASTM A646-Maraging steel 300 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

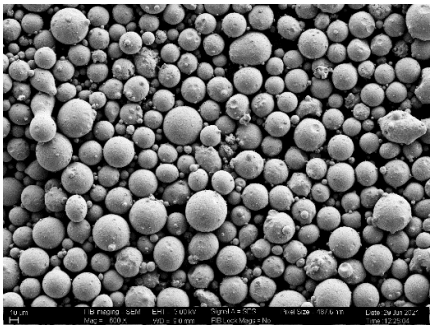
Property	**g/cc**	**Test Method**
Tap Density	4.80 min	ASTM B527
True Density	8.00 min	ASTM B923

Chemical Composition (weight %)

Element	**Range (%)**
Carbon	0.03 max
Silicon	0.10 max
Manganese	0.10 max
Phosphorous	0.010 max
Sulphur	0.010 max
Nickel	18.0 – 19.0
Molybdenum	4.70 – 5.20
Cobalt	8.50 – 9.50
Titanium	0.50 – 0.80
Aluminium	0.05 – 0.15
Oxygen*	0.04 max
Nitrogen*	0.06 max
Iron	Balance

***** Applicable only for LPBF

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*