

INDO-MIM Limited.

#45(P), KIADB Industrial Area, Doddaballapur, Bengaluru - 561203

Phone: +91-080-22048600/636 | FAX: +91-080-27630532

 $\textbf{Email:} \ \underline{infopowders@indo-mim.com} \ or \ \underline{infohq@indo-mim.com} \ | \ Website: www.indo-mim.com$

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.

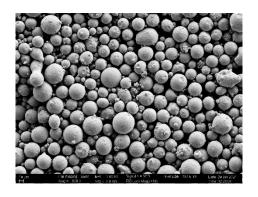
Particle Size Distribution

Light scattering (ASTM B822 / ISO 13320-1)						
Application	Size Range	D10%	D50%	D90%		
МІМ	<22µm	5.0 max	12.0 max	22.0 max		
ВЈ	<25µm	5.5 max	13.5 max	25.0 max		
LPBF	15 – 53μm	24.0 max	36.0 max	54.0 max		
	15 – 45μm	24.0 max	36.0 max	48.0 max		

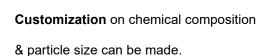
Physical Properties

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

^{*} Applicable only for LPBF







Morphology



Packing with 10 / 50 / 100 kg containers

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	

& 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