

#### 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

# **SS 17-4PH**

SS 17-4PH is martensitic precipitation hardening stainless steel that provides an outstanding combination of mechanical properties and corrosion resistance. Its chemical composition corresponds to UNS S17400 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	
BJ	<25µm	5.5 max	13.5 max	25.0 max	
LPBF	15 – 53μm	24.0 max	36.0 max	54.0 max	

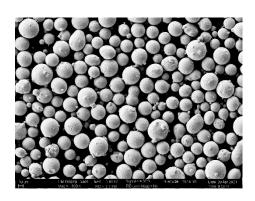
#### **Physical Properties**

Property	g/cc	Test Method
Tap Density	4.65 min	ASTM B527
True Density	7.70 min	ASTM B923

### **Chemical Composition (weight %)**

Element	Limits	
Carbon	0.07 max	
Silicon	1.00 max	
Manganese	1.00 max	
Phosphorous	0.040 max	
Sulfur	0.030 max	
Molybdenum	0.30 max	
Chromium	15.0 – 17.50	
Copper	3.0 - 5.00	
Nickel	3.00 - 5.00	
Niobium	0.15 – 0.45	
Oxygen*	0.06 max	
Nitrogen*	0.12 max	
Iron	Balance	

## Morphology







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

\*Applicable only for LPBF

& particle size can be made.

Customization on chemical composition