

INDO-SPHERE Tool Steel-M2

M2 is a high-speed tool steel that is known for its balanced combination of abrasion resistance, toughness and good hardness. 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

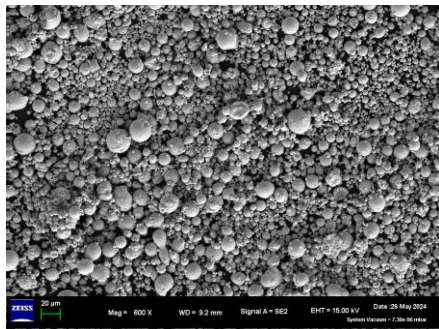
Physical Properties

Property	g/cc	Test Method
Tap Density	4.70 min	ASTM B527
True Density	8.10 min	ASTM B923

Chemical Composition (weight %)

Element	Range (%)
Carbon	0.95 – 1.05
Silicon	0.45 Max
Manganese	0.35 Max
Phosphorous	0.05 max
Sulphur	0.03 max
Nickel	0.25 max
Niobium	0.15 – 0.25
Chromium	4.25 – 4.75
Molybdenum	5.10 – 5.50
Vanadium	1.75 – 2.20
Tungsten	6.20 – 6.75
Iron	Balance

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