

Alloy-625

Alloy-625 is used for its high strength, excellent fabricability, and outstanding corrosion resistance. Service temperatures range from cryogenic to 982°C. Its chemical composition corresponds to UNS N06625 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

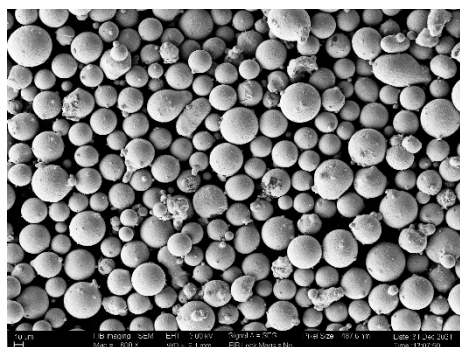
Chemical Composition (weight %)

Element	Range (%)
Carbon	0.10 max
Silicon	0.50 max
Manganese	0.50 max
Phosphorous	0.015 max
Sulphur	0.015 max
Chromium	20.0 – 23.0
Molybdenum	8.0 – 10.0
Cobalt	1.00 max
Niobium	3.15 – 4.15
Titanium	0.40 max
Aluminium	0.40 max
Iron	5.00 max
Oxygen*	0.04 max
Nitrogen*	0.04 max
Nickel	Balance

Physical Properties

Property	g/cc	Test Method
Tap Density	4.95 min	ASTM B527
True Density	8.30 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.