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-FUSION ALLOY-718

Vacuum Induction Melting - Inert Gas Atomization process is used to manufacture alloy 718 powder at various fractions. Our unique controls in process will control particle size and morphology to get good powder flowability for achieving dense coatings consistently. Alloy-718 is an age-hardenable nickel base super alloy with high yield, tensile and creep- rupture properties at temperatures up to 704℃ and for additive manufacturing it is highly processable due to good phase stability, minimal segregation and low crack susceptibility and its chemical composition corresponds to UNS N07718.

Particle Size Distribution

Light scattering (ASTM B822 / ISO 13320-1)				
Application	**Size Range**	**D10%**	**D50%**	**D90%**
TS	15 - 45µm	24.0 max	36.0 max	48.0 max
	15 – 53µm	24.0 max	36.0 max	54.0 max

Chemical Composition (weight %)

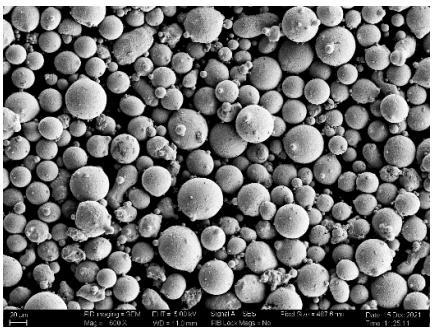
Element	Range (%)
Carbon	0.08 max
Silicon	0.35 max
Manganese	0.35 max
Phosphorous	0.015 max
Sulphur	0.015 max
Chromium	17.0 – 21.0
Nickel	50.0 – 55.0
Molybdenum	2.80 – 3.30
Cobalt	1.00 max
Niobium + Tantalum	4.75 – 5.50
Titanium	0.65 – 1.15
Aluminium	0.20 – 0.80
Copper	0.30 max
Boron	0.006 max
Iron	Balance

Physical Properties

Property	Specification	Test Method
Tap Density	Min 4.85 g/cc	ASTM B527
Apparent Density	Min 4.00 g/cc	ASTM B212
Hall Flow Number	Max 22 sec/50g	ASTM B213

Morphology

***** Applicable only for Thermal Spray



Customization on chemical composition & particle size can be made.

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

TS: Thermal Spray

**Specification is only for illustrative purposes, and it varies with specific application requirements*