

INDO-FUSION STL-12 (Co alloy)

Vacuum Induction Melting - Inert Gas Atomization process is used to manufacture STL-12 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. STL 12 is a cobalt-chromium-tungsten superalloy having a good abrasion resistance and good impact resistance so it is used as cutting edges in textile, timber and plastic industries and for bearings.

Particle Size Distribution

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

Physical Properties

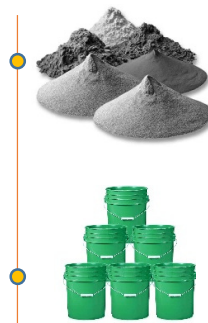
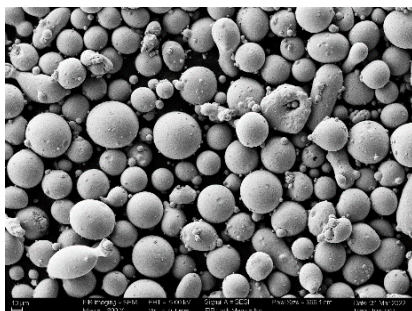
Property	Specification	Test Method
Tap Density	Min 5.10 g/cc	ASTM B527
Apparent Density	Min 4.00 g/cc	ASTM B212
Hall Flow Number	Max 22 sec/50g	ASTM B213

Chemical Composition (weight %)

Element	Range (%)
Carbon	1.50 – 1.80
Silicon	1.00 – 1.50
Manganese	1.00 max
Phosphorous	0.03 max
Sulphur	0.03 max
Chromium	29.00 – 31.00
Molybdenum	1.00 Max
Nickel	0.50 max
Iron	1.00 max
Tungsten	8.00 – 9.00
Cobalt	Balance

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