

INDO-FUSION STL-6 (Co alloy)

Vacuum Induction Melting - Inert Gas Atomization process is used to manufacture STL-6 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 6 is a cobalt-chromium-tungsten superalloy having a good resistant to wear, abrasion, corrosion and retain these properties at high temperatures, it also has good resistance to impact and cavitation erosion. This exceptional properties is mainly due to unique inherent characteristics of the hard carbide phase dispersed in CoCr matrix.

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

Chemical Composition (weight %)

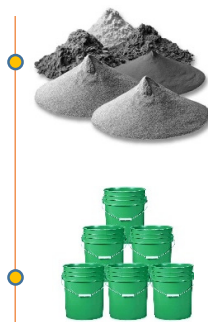
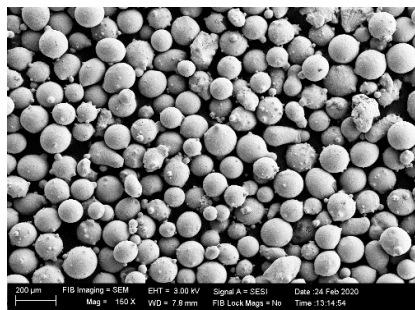
Element	Range (%)
Carbon	0.90 – 1.40
Silicon	0.70 – 1.50
Manganese	0.50 max
Phosphorous	0.03 max
Sulphur	0.03 max
Chromium	27.00 – 30.00
Molybdenum	1.00 Max
Nickel	3.00 max
Iron	3.00 max
Tungsten	3.50 – 5.50
Cobalt	Balance

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

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