

# INDO-FUSION SS-420

Vacuum Induction Melting - Inert Gas Atomization process is used to manufacture SS420 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. SS-420 is a high carbon, martensitic stainless steel with good corrosion resistance, ductility, and machinability properties. Due to its excellent properties it is used in high level performance applications like cooled injection mould tools, medical instruments and knives. Its chemical composition corresponds to UNS S42000.

## Particle Size Distribution

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

## Chemical Composition (weight %)

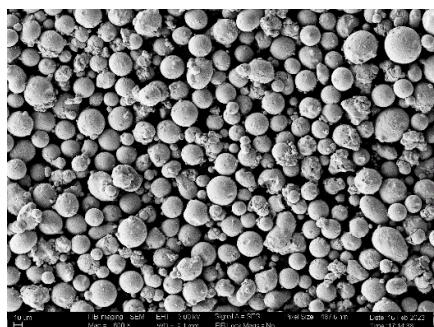
Element	Range (%)
Carbon	0.15 min
Silicon	1.00 max
Manganese	1.00 max
Phosphorous	0.040 max
Sulphur	0.030 max
Chromium	12.00 – 14.00
Nickel	0.75 max
Molybdenum	0.50 max
Iron	Balance

## Physical Properties

Property	Specification	Test Method
Tap Density	Min 4.60 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