

# INDO-FUSION SS-316L

Vacuum Induction Melting - Inert Gas Atomization process is used to manufacture SS 316L 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. 316L is a low carbon, non-magnetic, austenitic stainless steel that is molybdenum alloyed for enhanced corrosion resistance in chloride environments along with moderate to good strength, good fracture toughness and has generally good corrosion resistance, especially intergranular corrosion and its chemical composition corresponds to UNS S31603.

## 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 %)

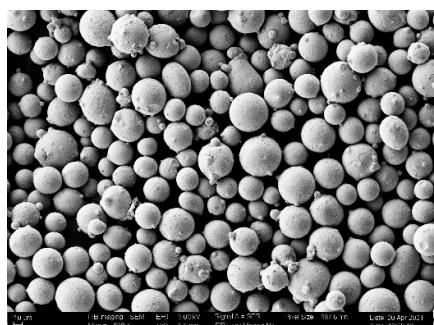
| Element     | Range (%)   |
|-------------|-------------|
| Carbon      | 0.03 max    |
| Silicon     | 1.00 max    |
| Manganese   | 2.00 max    |
| Phosphorous | 0.045 max   |
| Sulphur     | 0.030 max   |
| Chromium    | 16.0 – 18.0 |
| Nickel      | 10.0 – 14.0 |
| Molybdenum  | 2.00 – 3.00 |
| Others      | 0.30 max    |
| Iron        | Balance     |

## Physical Properties

| Property         | Specification  | Test Method |
|------------------|----------------|-------------|
| Tap Density      | Min 4.65 g/cc  | ASTM B527   |
| Apparent Density | Min 4.20 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 container & custom packing is possible.

TS: Thermal Spray

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