

Stainless Steel 316L

Material Introduction

Introduction

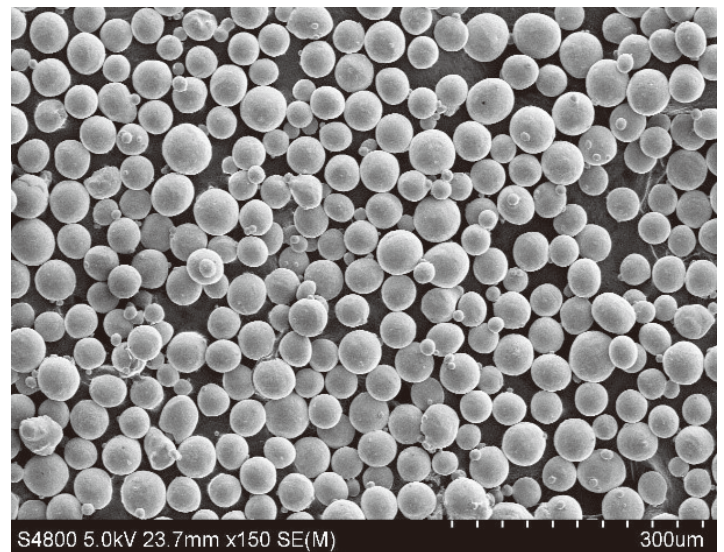
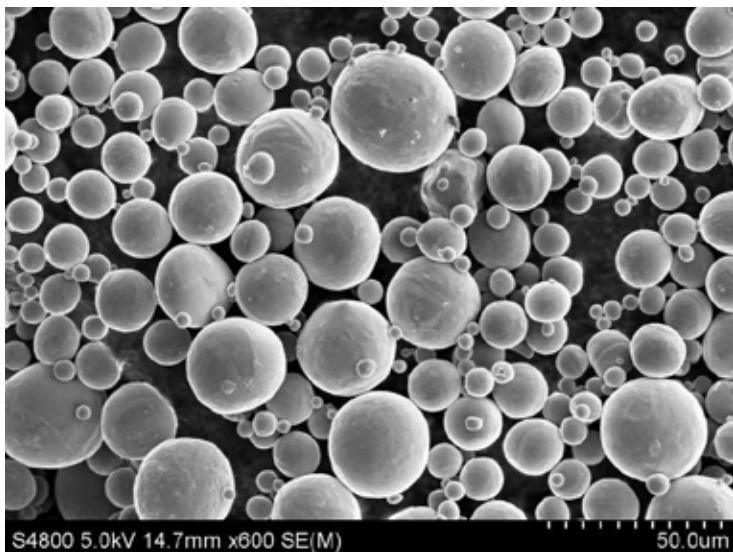
316L steel is a stainless steel material with excellent corrosion resistance and processing hardening properties.

Powder Chemical Composition (wt.%)

| Element | Cr | Ni | Mo | Mn | Si |
|---------------|-------|-------|-----|----|----|
| Content Range | 16-18 | 12-15 | 2-3 | ≤2 | ≤1 |

| Element | C | P | S | Fe | / |
|---------------|-------|-------|-------|------|---|
| Content Range | ≤0.03 | ≤0.03 | ≤0.03 | Bal. | / |

Powder EM Diagram (spherical degree of 0.9)



Advantages

316L is the superior choice for high corrosion, high ductility, high durability applications.

Tolerance

200 µm or 0.2%

Attributes

| Performance | Printing State | Thermal Treatment State |
|------------------------|----------------|-------------------------|
| Tensile Strength (Mpa) | 600±50 | 550±50 |
| Yield Strength (Mpa) | 500±50 | 450±50 |
| Hardness HRC/HV | 215-10 HV5/15 | 190-10 HV5/15 |
| Extensibility | 34±5 | 45±5 |

Note: Surface hardness can vary greatly depending on how the specimen is prepared.

Applications

- 316L stainless steel is commonly used in life consumption, metal prototype, lightweight design, automobile industry, food and chemical industry, aerospace and other fields.