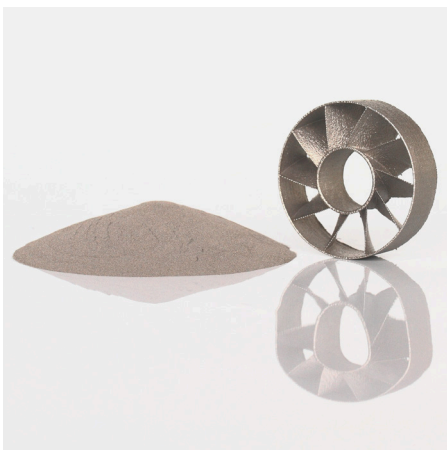
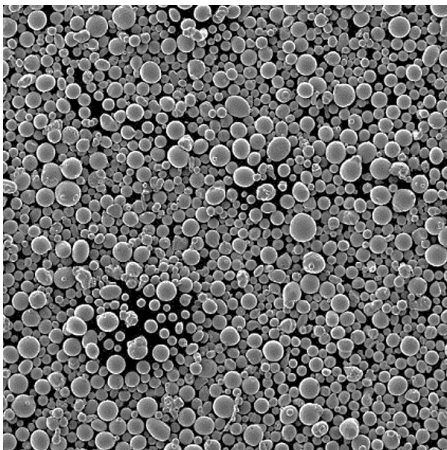


AMAPOWDER



Through the development of centrifugal atomization technology, Ervin Technologies produces highly spherical metal powders. The Rapid Solidification Rate (RSR) technology enables the production of unique microstructures unattainable through some other atomization methods. The extremely high cooling rates from the RSR technology create fine-grained (nanometre-scale) and amorphous metals with uniform chemistry.

AMAPOWDER is ideal for:

- Powder bed fusion (PBF)
- Selective Laser Melting (SLM)
- Directed energy deposition (DED)
- Metal injection moulding (MIM)
- Binder jet
- Metal sintering
- Thermal sprays
- Hot isostatic pressing (HIP)

Example applications:

- Additive manufacturing
- Metal 3D printing
- Aerospace
- Automotive
- Construction elements
- Architecture
- Medical technology

Key benefits:

- High purity
- Low oxygen content
- Highly spherical
- Homogeneous chemistry
- Particle diameters 1-1200 μm
- Excellent flow and packing characteristics

AMAPOWDER

17-4PH

Chemical Analysis

Silicon	0.2 – 0.8%
Manganese	0.4 – 0.9%
Chromium	16 – 16.7%
Nickel	4 – 4.5%
Phosphorus	0.04% max
Molybdenum	0.15 – 0.35%
Copper	3.90 – 4.50%
Niobium	0.2 – 0.4%
Oxygen	0.08% max
Nitrogen	0.09% max
Carbon	0.05% max
Sulfur	0.03% max

Shape
Spherical

Density
Density 7.8 – 7.9 g/cm³
Tap density 4.7 g/cm³ min

Hall Flow
< 15 seconds

Carney Flow
< 5 seconds

304L

Chemical Analysis

Silicon	1.0% max
Manganese	2.0% max
Chromium	18 – 20%
Nickel	8 – 12%
Phosphorus	0.045% max
Oxygen	0.08% max
Nitrogen	0.09% max
Carbon	0.03% max
Sulfur	0.03% max

Shape
Spherical

Density
Density 7.8 – 7.9 g/cm³
Tap density 4.7 g/cm³ min

Hall Flow
< 15 seconds

Carney Flow
< 5 seconds

316L

Chemical Analysis

Silicon	0.8% max
Manganese	2.0% max
Chromium	16 – 18%
Nickel	10 – 14%
Phosphorus	0.045% max
Oxygen	0.08% max
Nitrogen	0.09% max
Carbon	0.03% max
Sulfur	0.03% max

Shape
Spherical

Density
Density 7.8 – 7.9 g/cm³
Tap density 4.7 g/cm³ min

Hall Flow
< 15 seconds

Carney Flow
< 5 seconds