



KOS metal powder with EIGA system

KOS provides atomized metal powder for high quality with EIGA systems.

- High pressure inert gas(Argon or Nitrogen) for atomizing
- Very high purity, spherical powder
- Most suitable for more reactive metal alloys

Powder Manufacturing

Grade	ALY718 (Inconel 718)
Size	0~15, 15-45, 15-53, 20-63, 45-100, 45-150 μm
Manufacturing process	Gas Atomized (EIGA)
Gas	Argon
Packaging	5 kg

Technical Specifications : 15-53 μm

Chemical Composition

Element	Requirement (wt%)	Test Method
C	Max. 0.08	ASTM E1019
Mn	Max. 0.35	
Si	Max. 0.35	ASTM E2594
P	Max. 0.015	
S	Max. 0.015	ASTM E1019
Cr	17.00 - 21.00	
Co	Max. 1.00	
Mo	2.80 - 3.30	
Nb + Ta	4.75 - 5.50	
Ti	0.65 - 1.15	ASTM E2594
Al	0.20 - 0.80	
Cu	Max. 0.30	
Ni	50.00 - 55.00	
B	Max. 0.006	
Fe	Bal.	

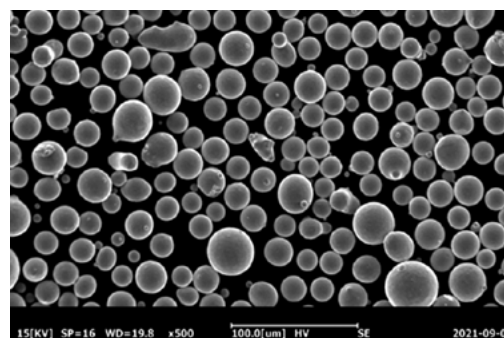
- Similar Chemistry : ASTM B637, ASTM F3055, AMS 5596, AMS 5662

Particle Size Distribution Analysis

Size	Requirement	Test Method
D10, D50, D90	Reported	ASTM B822
<15 μm	Max. 5.0 vol.%	

Morphology

Powder is predominantly spherical, with low levels of deformed particles



SEM Image (x500)

Sieve Analysis

Size	Requirement	Test Method
53 μm <	Max. 5.0 wt%	ASTM B214

Powder Density Analysis

Property	Requirement	Test Method
Apparent density	Min 4.00 g/cm ³	ASTM B212
Tap density	Min 4.80 g/cm ³	ASTM B527

Flowability

Property	Requirement	Test Method
Flow Rate	Max 30 s/50g	ASTM B213

ISO 9001 & AS9100 Certified