

# KOS Metal Powder for AM

# KOSMP 630



## 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	630 (17-4PH)
Size	0~15, 15-45, 15-53, 20-63, 45-100, 45-150 $\mu\text{m}$
Manufacturing process	Gas Atomized (EIGA)
Gas	Argon
Packaging	5 kg

## Technical Specifications : 15-53 $\mu\text{m}$

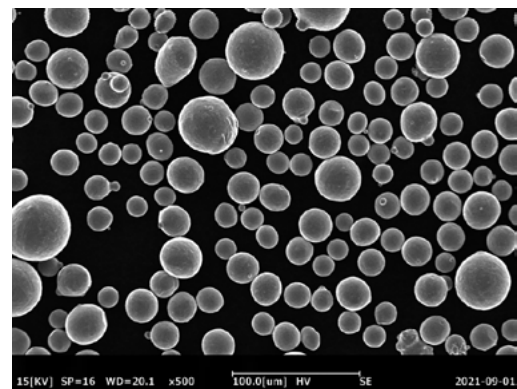
### Chemical Composition

Element	Requirement (wt%)	Test Method
C	Max. 0.07	ASTM A751
Mn	Max. 1.00	
Si	Max. 1.00	
P	Max. 0.04	
S	Max. 0.03	
Cr	15.00 - 17.00	
Cu	3.00 - 5.00	
Ni	3.00 - 5.00	
Fe	Bal.	
Nb+Ta	0.15 - 0.45	

- Similar Chemistry : ASTM A564/564M, AMS 7012, AMS 5643

### Morphology

Powder is predominantly spherical, with low levels of deformed particles



SEM Image (x500)

### Particle Size Distribution Analysis

Size	Requirement	Test Method
D10, D50, D90	Reported	ASTM B822
<15 $\mu\text{m}$	Max. 5.0 vol. %	

### Sieve Analysis

Size	Requirement	Test Method
53 $\mu\text{m}$ <	Max. 5.0 wt%	ASTM B214

### Powder Density Analysis

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

### Flowability

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

## ISO 9001 & AS9100 Certified