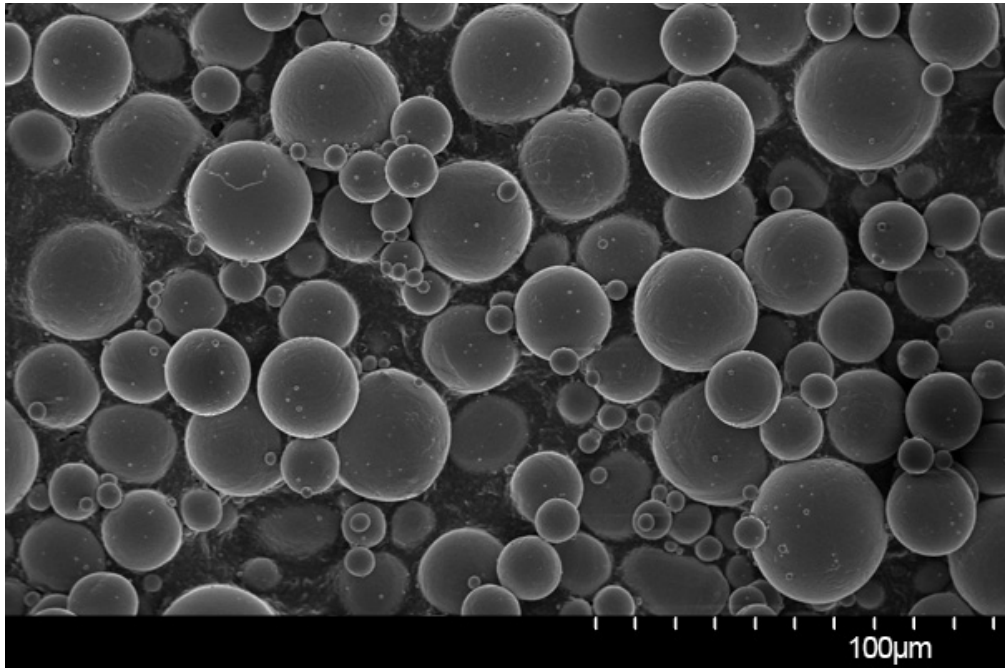
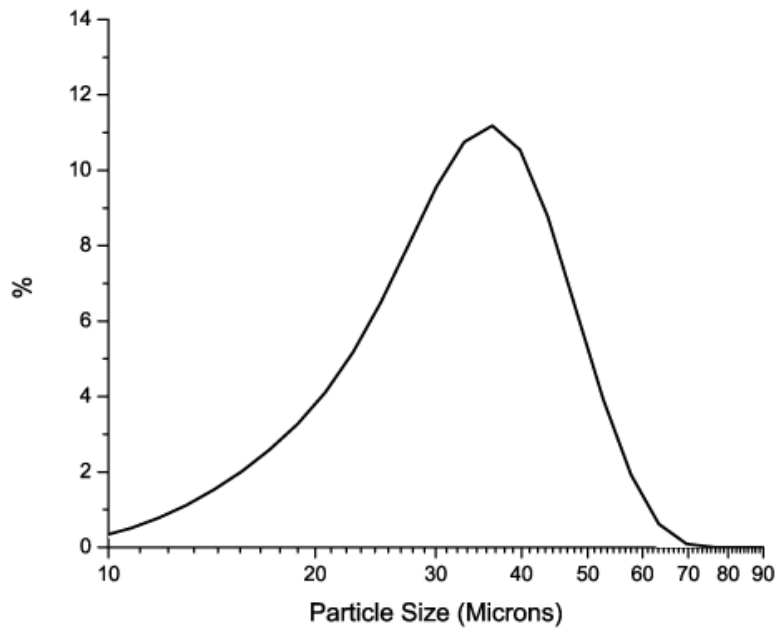


Ti-6Al-4V (15-45 μm)

SEM



Particle Size Distribution



Size Distribution by Laser diffraction (ASTM B822-10)	
D10	18.0 μm
D50	31.6 μm
D90	43.5 μm

Flowability

Test	Time	Testing method
Hall Flowmeter	– 28 s	ASTM B213-11
Carney Flowmeter	– 10 s	ASTM B964-09

Chemical Composition

Element	AP&C typical Gr.5 (% wt.)	AP&C typical Gr.23 (% wt.)	Testing method
Carbon	0.02	0.02	ASTM E1941
Oxygen	0.14-0.16	0.10-0.12	ASTM E1409
Nitrogen	0.02	0.02	ASTM E1409
Hydrogen	0.010	0.010	ASTM E1447
Iron	0.05-0.25	0.05-0.20	ASTM E2371
Aluminum	5.50-6.75	5.50-6.50	ASTM E2371
Vanadium	3.50-4.50	3.50-4.50	ASTM E2371
Copper	< 0.10	< 0.10	ASTM E2371
Tin	< 0.10	< 0.10	ASTM E2371
Yttrium	< 0.005	< 0.005	ASTM E2371
Other max. each	0.1	0.1	ASTM E2371
Other max. total	0.4	0.4	ASTM E2371
Titanium	Balance	Balance	ASTM E2371

AP&C powders chemistry may comply with standards: ASTM B348, ASTM F136, ASTM F1580, ASTM B863, AMS 4956, AMS 4998 and AMS 4928.

Densities

Test	Density	Testing method
Apparent density	2.50 g/cm ³	ASTM B212-12
Tap density	2.79 g/cm ³	ASTM B527-06