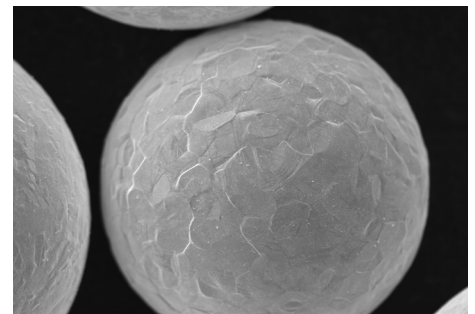
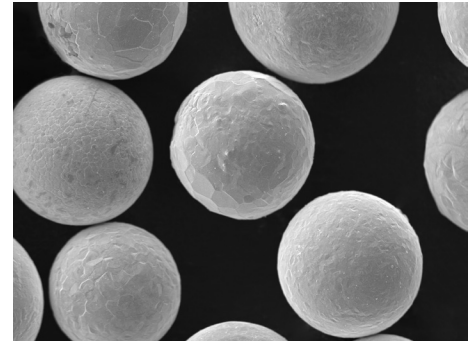


HIGH PERFORMANCE PARTS START WITH HIGH PERFORMANCE POWDER

From 6K's UniMelt® process, the world's only microwave plasma production system comes the highest performing and most versatile set of powders. 6K's spherical tungsten powders deliver excellent material properties that enable designers to take advantage of the design freedom of additive manufacturing. Tungsten has the highest melting point of all the elements combined with its high density and tensile strength makes this material a great choice for nuclear and aerospace applications. 6K Additive has tungsten powder readily available at many different PSDs to be used across a wide variety of applications.



6K Premium Tungsten Powders

- Ultra clean
- No satellites
- High sphericity
- Free flowing
- High apparent density
- Low interstitials
- High density powders

NOMINAL CHEMISTRY

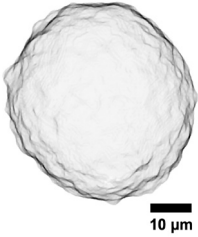
Tungsten	99.9 m.b. (Min)
Chromium	0.1 (Max)
Iron	0.1 (Max)
Nickel	0.1 (Max)
Oxygen	250ppm (Max)

PHYSICAL PROPERTIES

Apparent Density	≥10.0 g/cm ³
Tap Density	≥11.0 g/cm ³
Hall Flow	8 sec/50g (Max)
+45 μm	5 wt% (Max)
-15 μm	10 vol% (Max)

POWDER SIZE

L-PBF	+45μm	5 wt% (Max)
	-15μm	10 vol% (Max)
EB-PBF	+106μm	10 wt% (Max)
	-45μm	10 wt% (Max)



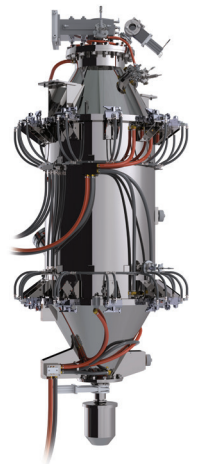
HIGH DENSITY POWDER

Unlike competitive technologies, 6K's process delivers highly dense, highly spherical powders without satellites, as shown in microCT of the particle.



DERIVED FROM SUSTAINABLE SOURCES

At 6K our powders are produced from sustainable sources including used powders and machine turnings. We leverage these input streams as feedstock for the UniMelt process, essentially turning scrap into high value AM powder. This process enables your organization to get value back from your past powder investment by participating in 6K Additive's powder buy-back program. We will buy your used powder, provide you a credit towards new premium powder for a wide variety of applications.



HIGH UNIMELT YIELD AND TUNABLE PSD

6K's UniMelt process can deliver the highest yield in the industry for your target PSD. With our unique microwave plasma technology our production run can be tailored for any additive manufacturing (AM) platform including powder bed fusion, EBW, Binder Jet, direct energy deposition and cold spray plus PM processes like MIM and HIP.

With 6K's UniMelt breakthrough technology we have the capability of producing almost limitless material combinations, allowing you to design with infinite possibilities for your application.

Key Properties

- High heat resistance
- High tensile strength
- High density
- Exceptional electrical conductivity

Industries

- Aerospace & Defense
- Medical
- Nuclear
- Industrial
- Power

6K Additive's production team has extensive experience in powder production, alloys and metal reclamation. Our 80,000 sq. ft. facility is ISO9001 certified and AS9100 certification is in process.

6K CORPORATE HEADQUARTERS

25 Commerce Way, N. Andover, MA 01845
978 258 1645

6K ADDITIVE, GLOBAL MANUFACTURING CENTER

541 Steubenville Pike, Burgettstown, PA 15021
724 215 7049