

## TITAN TUNGSTEN CARBIDE SPECIFICATION

Recycled WC Powder

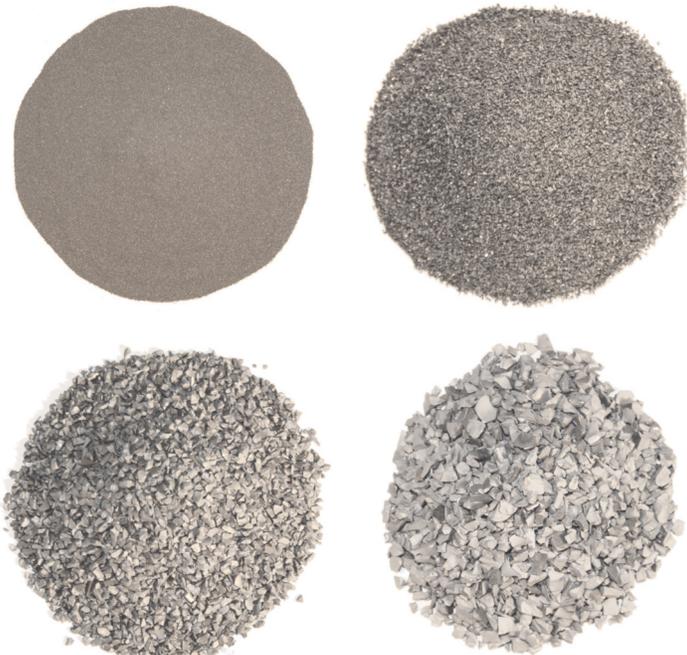
Element	% Weight
W	88% nominal
C	6% nominal
Co	6-8% nominal
Fe	0% to 2%

**Apparent Density:** 6-7 g/cc

**Rockwell A Hardness:** 89 HRA typical

Available in a range of mesh sizes  
to suit your application

Produced from recycled carbide inserts.  
These powders offer excellent abrasion and wear  
characteristics at relatively low cost.



# TUNGSTEN CARBIDE GRIT

Titan's environmentally friendly recycling process utilizes a highly efficient process to reduce solid carbide waste to versatile high performance material. Useful in hardbanding, weld overlay, casting and similar fabrication processes, Titan Tungsten Carbide Grit further improves the performance life of components and equipment.

Reclaimed cemented carbide powders have the same chemical composition as the original carbide components.

Tungsten carbide grit mixed with steel provides a unique combination of strength and wear resistance. Changing the ratio of carbide to steel, along with the size distribution of carbide grit pieces provides engineers and technicians with a wide range of application solutions within a given system.

Individual tungsten carbide grains are 1-3 microns with an nominal cobalt content of 6-8% for binder. Titan Tungsten Carbide Grit is normally includes a minority of Titanium and Tantalum carbides for maximum economy.

### CUSTOM SIZING

At Titan Metal Powders, size control is our business. We maintain in house laboratory equipment to control exactly what particles go into your products. We can develop size targets for you, or cost effectively reproduce what you like.

### MESH

Mesh	Inches	Microns
4 x 8	0.187 - 0.090	4800 - 2400
8 x 12	0.090 - 0.067	2400 - 1700
10 x 20	0.079 - 0.034	2000 - 850
12 x 24	0.067 - 0.028	1700 - 700
24 x 40	0.028 - 0.017	700 - 425
40 x 140	0.017 - 0.004	425 - 100
60 x 325	0.010 - 0.002	250 - 45
270 x 325		
-325	<.002	<45

### SHAPE CONTROL

Our mills generate the prime blocky carbides that the industry demands. In circumstances where sharp angular or flaky material is preferred, our engineers can create this morphology.

The extremely high hardness of Tungsten Carbide particles exceeds the Rockwell C hardness scale. Combined with the melting temperature over 3500 degrees F, these particles readily survive the application process and bond to the filler metal for lasting performance.

### Titan Metal Powders Division

740 Queen Street

Pottstown PA 19464

inquiry@ titanintl.com

800-435-4644 • 856-735-2220