HB-3

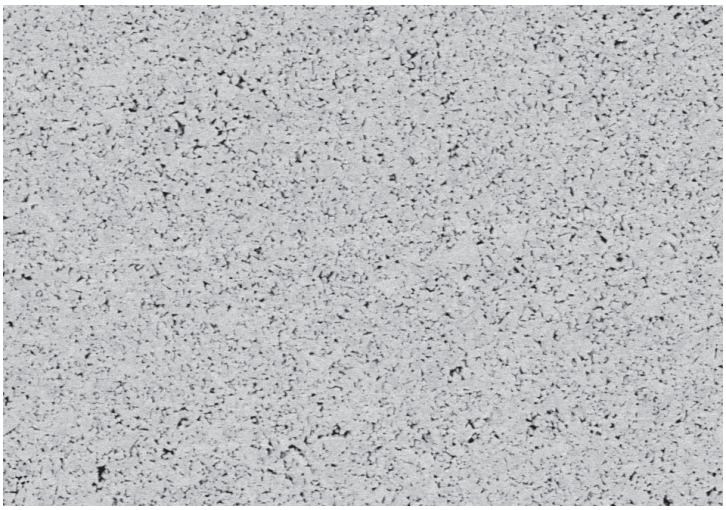
H.B. Carbide

OPTIMIZE WITH GRADE HB-3

High hardness and High wear resistance

Grade HB-3 is a 6% cobalt binder and 93 HRA hardness, offering special advantages in a wide range of materials. It exhibits excellent performance when machining in non-ferrous, ISO K10 to K20 application range, specifically aluminum alloys, graphite, fiber-reinforced materials, and composites. HB-3 has proven to consistently offer superior coating adhesion. This makes it an excellent substrate for toolmakers who will be applying diamond coating to their tools, especially those used for composite routing and drilling.

In addition, the high hardness and high wear resistance of HB-3 can also provide excellent performance in wear parts such as drawing tools and industrial-grade nozzles.



1500X Magnification

COMPOSITION	
Tungsten Carbide, WC	94.0 ± 0.3%
Cobalt, Co	6.0 ± 0.3%
MICROSTRUCTURE GRAIN SIZE (ASTM B-390)	0.8 µm
HARDNESS – ROCKWELL A (ASTM B-294)	93.0 ± 0.5
TRANSVERSE RUPTURE STRENGTH (ASTM B-406)	520,000 PSI
APPARENT POROSITY (ASTM B-276)	<A02, B00, C00
DENSITY (ASTM B-311)	14.90 ± 0.05

RECOMMENDED APPLICATIONS

ISO K10 to K20 application range. Aluminum, Fiber-reinforced plastics (CFRP,GFRP), Graphite, Composite materials. Outstanding suitability for diamond coating.

MANUFACTURED IN PREFORMS, ALTERED AND STANDARD BLANKS DESIGNS

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