



Diamond Tool **Innovation** : ***Cutting Tungsten Carbide with CVD-Diamond***

Contour Fine Tooling is pleased to announce the availability of a new type of diamond making it possible to cut Tungsten Carbide.

The CVD-Diamond is a polycrystalline diamond grown by plasma-assisted Chemical Vapor Deposition (CVD) technology. It is one of the most versatile engineering materials available. Features are:

- CVD is 100% diamond (no binders to degrade properties)
- Extremely hard
- High thermal conductivity



The properties of CVD diamond have a very positive effect on wear resistance when used as a cutting tool on hard non-ferrous materials. Test results have shown that tungsten carbide with a Cobalt percentage of 6% and more is machinable with good results.

Results which are achieved with a CVD-Diamond tool with radius of 0,8mm on Tungsten Carbide with 10% Cobalt and Hardness 1680HV:

Surface Finish

Ra : 0,11 °m

Rt : 0,85 °m



The cutting edge preparation of the CVD diamond developed by Contour Fine Tooling offers the highest possible edge sharpness in combination with high wear resistance. This reduces production time dramatically (no grinding and less or no polishing) and more flexibility on produced shapes and forms.

For more information please contact us.