Polycrystalline Micron Diamond

Polycrystalline Micron Diamond (PC) is formed by the explosive shock synthesis process as opposed to the cubic or belt press technology utilized in monocrystalline diamond synthesis. This more costly technique results in polycrystalline crystals which have more aggressive cutting properties than monocrystalline diamond. PC diamond is primarily used in engineered slurries for optical/electro-optical applications and in electronic materials lapping and polishing for productivity gains. It is often mixed with other abrasive materials to improve cut rate and/or finish.

Poly Type I is a light-colored material that combines good material removal rate with the best economy. It produces excellent surface finishes on hard substrates due to its internal structure, which allows micro fracturing of particles to sizes smaller than the mean of the batch.

Poly Type II is a dark-colored material with a more irregular shape than Type I. It can provide the highest material removal rates because of its aggressive abrasiveness. Superior surface finishes are attainable when properly formulated in slurry applications. A wide range of sizes are available.

Poly Type III is a medium-colored material that provides consistent material removal rates and surface finishes on a wide range of hard, brittle material applications. Its main advantage is excellent availability in a broad range of sizes.

Lapping/Polishing:
- Sapphire, SiC & GaN LED Wafers
- Sapphire Watch Glass
- Glass
- Ceramics
- Optics/Electro-Optics

ISO CERTIFIED 9001:2008 and 14001:2004

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