JHF®

Polycrystalline diamond powder
Product introduction

Specification: Polycrystalline diamond (PCD) powder are the detonation production of high energy density explosives in negative conditions. Under the super high pressure and temperature lasting for a very moment created by detonation, dissociative carbon atoms from the explosives transform to micro size diamond. PCD powders are always with irregular quasi-circular appearance, blade-like edges and better self-sharpening comparing with those prepared by normal isostatic pressing method.

Features:

● Ultra-precision polishing effect, the surface roughness is less than 1 nm.

● With excellent wear resisting property, decay resistance, heat-conducting and electrical insulation property.

●PCD powders are always with irregular quasi-circular appearance, uneven surface , blade-like edges and better self-sharpening.

● 2-3 times that of the single crystal diamond grinding rate.

Applications:

● As super hard abrasive materials, used for diamond grinding tools such as resin adhesive tools, metal bonding tools, electroplating tools.

● As fine polishing abrasives, used for various polishing process in industry and scientific fields,such as process for metal mold,hard alloy, ultra-precise buffing of magnetic head, hard disk,precious stone, ceramics, as well as glass components.

● As an additive material in composite, utilizing its excellent thermal conductivity or electrical insulation characteristics.

● Biological, medical applications.

● Used as additives of lubricants or engine oils. Leading to improvement of runnability of industrial machines and vehicles (risk reducing and service life enhancing).

● Used as coating film on metal molds, tools and units, abrasive resistance, surface hardness and service life will be enhanced.

● Applied in Field Emission and CVD film materials.

● PCD powder has been widely used in LED industry, military industry, aerospace and other fields.

Product packaging:

● Sealed with double PVC bags packed in cartons

● Bottles containing 1000 carats.