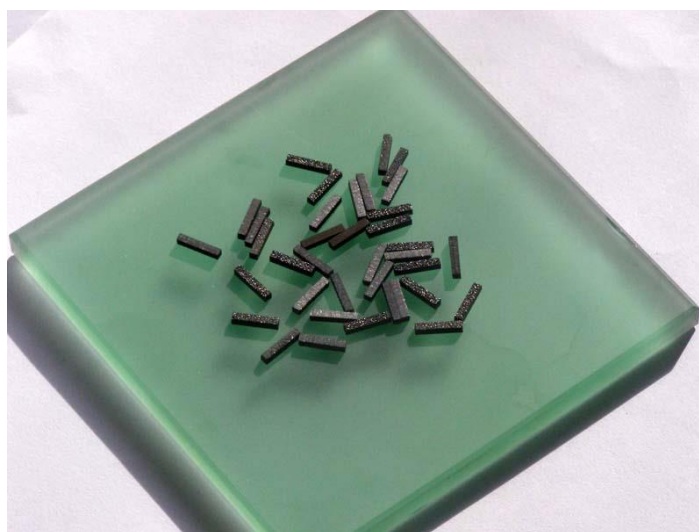


STINGRAY ABRASIVE TOOL POLYCRYSTALLINE (PCD) CVD DIAMOND

PHYSICAL PROPERTIES



	Growth Method Color	Hot Filament Black/Opaque	Dc Arc Plasma Dark Green/Translucent		
	CVDD Grade	HF1	DC1	DC2	DC3
Vickers Hardness	kg/mm ²	8,000	8,000	10,000	10,000
Density	g/cm ³	3.52	3.52	3.52	3.52
Young Modulus	Gpa	850	850	1,100	1,100
Thermal Conductivity	W/m K	>800	>800	>1500	>1500
Chemical Stability		Non-soluble in acids and alkali			
Fracture Hardness (0.5mm th.)	MPa	250-450	250-450	300-600	300-600
Thermal Stability		800°C	800°C	800°C	800°C
Wear Resistance	(x 1,000)	10-20	20-35	35-55	55-85

Diamonds & CBN for Industry