1 Variety and Applying fields of Synthetic Diamond and CBN (Cubic Boron Nitride): Synthetic Diamond and CBN (Cubic Boron Nitride):

Diamond is the hardest material at present, Synthetic Diamond is synthesized by the means of static pressure catalysis & experience high temperature with high pressure, it suits to proceed sintered-carbide and other hard-brittle nonmetal materials.

The hardness of CBN is just inferior to Diamond, compare with the later, CBN owns the characteristics of excellent thermal stability and large chemical inertia with iron family metal etc, it suits to process metal-materials for instance high-vanadium steel, high-speed steel and alloyed steel etc.

(1).Original criterion of Industry Department(JB2808-79)

Variety

Code

Granularity

Usage

Synthetic Diamond No.1

JR1

46#0 280#

Be used to make grinding tools in resinoid binder or for grinding etc.

Synthetic Diamond No.2

JR2

46#0 280#

Be used to make grinding tools ih metalic/ceramic binder or for grinding etc.

Synthetic Diamond No.3

JR3

36#🛛 120#

Be used to make ordinary stratum and geologic drill head, semi-conductor and nonmetal materials incisi

Synthetic Diamond No.4

JR4

36#0 120#

Be used to make hard stratum and geologic drill head, amending tools and hard-brittle nonmetal materia

(2).Criterion of China(GB6405-86)

Series code

Applying fields

Granularity

Usage

Synthetic Diamond

RVD

60/70 325/400

Be used to make grinding tools in resinoid/ceramic binder or for grinding etc.

MBD

50/60 325/400

Be used to make grinding tools in metalic binder, plating products, drilling tool or for grinding etc.

Cubic Boron Nitride

SMD

16/18060/70

Be used to make cutting, drilling and amending tools etc.

CBN

20/25 325/400

Be used to make grinding tools in resinoid/metalic/ceramic binder etc.