

APPLICATIONS

The following are the various applications with Diamond and CBN.

DIAMOND

MATERIALS

- ◆ Tungsten Carbide
- ◆ Tungsten Carbide & Steel Composite materials
- ◆ Hard alloys (Hard cast metal, stellite)
- ◆ Ferro - TiC
- ◆ Ferrites, Ceramics, Magnetic Materials
- ◆ Wear-resistant coatings
- ◆ Oxide ceramic, abrasive materials
- ◆ Porcelain ceramic materials
- ◆ Glass-Sheet glass, optical glass
- ◆ Gem stones, Semi-precious stones
- ◆ Pastic (duroplast, Fibre reinforced)
- ◆ Graphite
- ◆ Grey Cast Iron, Cast Steel
- ◆ Semi-Conductors

TYPICAL OPERATIONS

- ◆ Offhand grinding
- ◆ Tool and cutter grinding
- ◆ Form grinding
- ◆ Surface grinding
- ◆ Cylindrical grinding
- ◆ Internal grinding
- ◆ Polishing and lapping
- ◆ Deep grinding - Creep feed
- ◆ Jig grinding
- ◆ Electrolytic grinding
- ◆ Honing
- ◆ Slitting and dicing

CBN

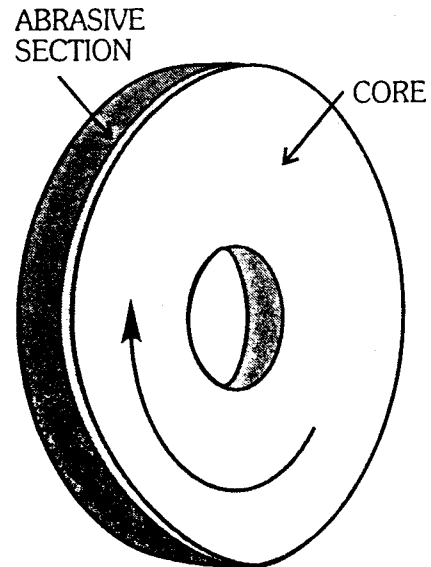
MATERIALS

- ◆ High speed steel
- ◆ Alloyed tool steels
- ◆ Super Alloys (Nimonic, Inconel, Incoloy, etc.)
- ◆ Wear-resistant coatings
- ◆ Cast Iron
- ◆ Case hardened steel
- ◆ Tool steels (Unhardened)

TYPICAL OPERATIONS

- ◆ Internal grinding - Gears bushings, bearings
- ◆ Cylindrical grinding
- ◆ Slot grinding
- ◆ Creep-feed grinding
- ◆ Cam & Cam Shaft grinding
- ◆ Jig grinding
- ◆ Gear grinding
- ◆ Hob resharpening
- ◆ Form grinding
- ◆ Honing - various applications
- ◆ Slitting and dicing
- ◆ Flute grinding

Super Abrasive grinding wheels are made by using synthetic diamond or CBN abrasives bonded together as to form an abrasive section and fused on a core. Different bonds and cores are used to make Super Abrasive grinding wheels. Some popular bonds and core materials are given below :



BONDS

- ◆ Resin Bond
- ◆ Metal Bond
- ◆ Vitrified Bond
- ◆ Electroplated

CORE MATERIALS

- ◆ Steel
- ◆ Aluminium
- ◆ Resalloy
- ◆ Copper
- ◆ Bakelite
- ◆ Other Composites