



株洲三盈和国际贸易有限公司  
ZHUSHOU SANYINGHE INTERNATIONAL TRADE CO.,LTD

## 1/ Materials Recommended for Cutting with PCD

- Aluminium and aluminium alloys
- Copper, brass and bronze alloys
- Zinc and magnesium alloys
- Gold and silver
- Carbon and graphite Ceramics,unfired
- Epoxy resins
- Plastics and rubber
- Fiberglass composites
- Graphite composites
- Phenolics Chipboard and fiberboard
- Platin



Note: PCD cutting tools are available in various grades, depending on the application

## Recommended Speeds & Feed of PCD

PCD MATERIAL	SPEED	FEED RATE (MM/REV)	DEPTH OF CUT (MM)
Aluminium Si < 12%	1000-3000	0.08-0.5	0.2-0.3
Aluminium Si > 12%	200-700	0.08-0.38	0.2-0.3
Copper,Bronze,Brass	300-1000	0.10-0.25	0.2-0.3
Carbon	500-1000	0.10-0.38	0.2-0.3
Glass Fiber	750-1000	0.02-0.25	0.2-0.3
Carbon Composites	500-2000	0.10-0.38	0.2-0.3
Sintered Carbide	30-50	0.10-0.15	0.2-0.3

## 2/ Materials Recommended for Cutting with CBN

- Alloy steels (45-68 RC)
- Carbon tool steels (45-68 RC)
- Die steel (45-68 RC)
- High speed steel (45-68 RC)
- Chilled cast iron
- Ni Hard
- Forged steel
- Meehanite iron
- Moly chrome steel rolls
- Inconel 600
- Rene
- Incoloy
- Monel
- Stellite
- Colmonay
- Waspalay

## Recommended Speeds & Feeds of CBN

CBN MATERIAL	SPEED	FEED RATE (MM/REV)	DEPTH OF CUT (MM)
Carbon Steel (45-68 RC)	80-140	0.10-0.3	0.20-1.2
Alloy Steel	90-120	0.10-0.3	0.20-1.2
Hardened tool and die Steel (45-68 RC)	60-90	0.10-0.20	0.20-1.2
High Tensile Cast Iron	60-120	0.25-0.75	0.20-1.2
Pearlitic Gray Cast Iron < 240 HBN	450-1060	0.25-0.50	0.20-1.2
Pearlitic Gray Cast Iron > 240 HBN	305-610	0.25-0.50	0.20-1.2
Powered Metal	90-120	0.10-0.25	0.20-1.2
Stellite	100-210	0.15-0.50	0.20-1.2