



DIAMOND & CBN (CUBIC BORON NITRIDE) GRINDING WHEELS



AVAILABLE IN A WIDE RANGE OF RESIN, VITRIFIED, HYBRID, METAL BONDS
& ELECTROPLATED.

GP NET DIAMOND & CBN GRINDING WHEELS

Enriched with vast industrial experience, we are involved in offering a wide range of Precision Grinding Wheels. Our Wheels are engineered using best quality components and following international standards. These are manufactured and tested which ensures versatility, quality and competitive pricing structure in our products. These can be availed in various range, technical specifications as per the precise demands and requirements of clients. G P NET Wheels offer improved cutting action, productivity, and longer life.



FEATURES

- High wear resistant
- Thermally Stable
- Better form holding
- Light Weight
- Easy to install
- Low Maintenance



APPLICATIONS

Diamond Wheels

- Tungsten Carbide
- Glass
- Hard alloys
- Ferrites & Ceramics
- Gem stones
- Plastics
- Graphite
- Cast Iron

CBN Wheels

- High Speed Steel
- Alloy Tool Steels
- Super Alloys
- Case hardened Steels
- Ferrous Material

RESIN BOND WHEEL

Resin bond Grinding Wheel, as the names describes, is a combination of resins and fillers along with matching Diamond or CBN pressed under heat and pressure that are easily dressed to straight, angle forms, , and special radius forms. Due to the degree of elasticity, these wheels promote relatively low infeed forces which provides for a cool running and smooth grinding wheel with superior performance and finishes.



This versatile bond makes the wheels applicable in a wide range of fields.

Resin Bond Wheels generally used for wet grinding, but they can be used for dry grinding in certain conditions.

TYPES OF GRINDING

- Surface grinding,
- OD grinding,
- Center-less grinding,
- Tool grinding,
- Fine grinding,
- Double disc grinding,
- Slot grinding
- Internal grinding



VITRIFIED BOND WHEEL

Porosity and strength of wheels made with this bond gives high stock removal with low grinding force and their rigidity helps in the attainment of high precision. They are not affected by water, acid, oil or ordinary temperature variations.

- Better profile holding capability
- Higher porosity
- Requires dressing
- Widely used for PCD/PCBN, diamond, gemstone etc.



METAL BOND WHEEL



Metal bonded tools are created from the sintering of powdered metals and other compounds with either Diamond or CBN. This process produces an extremely strong product that holds its shape well during use. Metal Bond maintains a long and useful tool life with a reduction in the frequency of dressing. Generally, Metal Bond wheels have the hardest matrix, therefore it performs best in operations under flood coolant. Used for grinding of Ceramics, Optic Materials, Quartz & Glass. They are also excellent for form grinding and profile grinding that requires grain retention and abrasion resistance

ELECTROPLATED WHEEL

Diamond plated products are usually a single layer of diamonds highly concentrated, and held on by a tough, durable nickel alloy. This high concentration enables plated products to retain their original shape and dimensions throughout its working life.

Electroplated wheels permit high-efficiency, high-speed grinding.

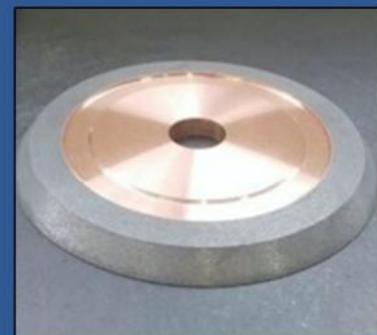
They are excellent for form grinding and profile grinding where accuracy is major concern.



HYBRID BOND WHEEL

Hybrid Wheels ensure higher material removal without compromising on the surface finish, while ensuring considerable reduction in cycle times.

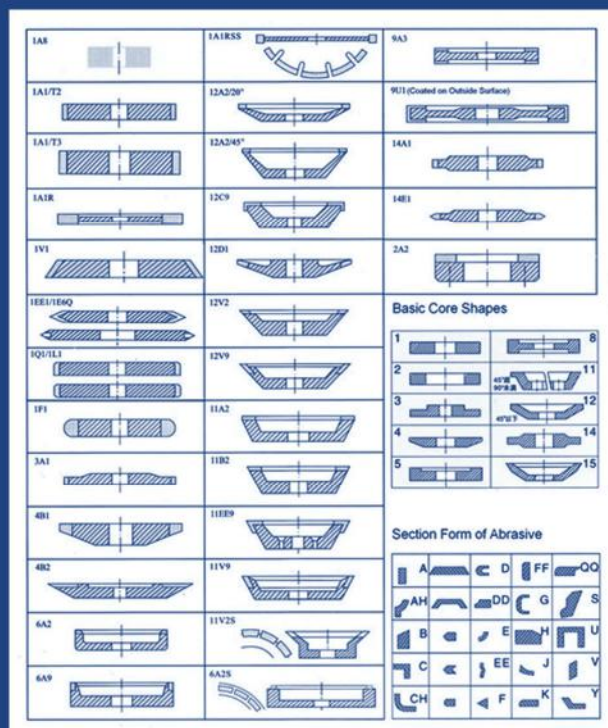
- Suitable on CNC Tool and Cutter Grinders.
- Designed to take higher depth of cuts.
- Lesser load on the spindle motor.
- Increased profile retention of the wheel.
- Lower grinding force on the work piece.
- Long wheel life and long dressing interval.



STANDARD MESH SIZES

MESH SIZE	AVERAGE DIAMETER (µm)	JIS	U.S.A	B.S.S	FEPA
50	297	50/60	50/60	50/60	D301
60	250	60/85	60/85	60/85	D252
80	177	85/100	85/100	85/100	D181
100	149	100/120	100/120	100/120	D151
120	125	120/140	120/140	120/150	D126
140	105	140/170	140/170	150/170	D107
170	88	170/200	170/200	170/200	D91
200	74	200/230	200/230	200/240	D76
230	62	230/270	230/270		D64
270	53	270/325	270/325	240/300	D54
325	44	325/400	325/400		D46
400	37		36 - 54µ		M40
600	28		22 - 36µ	27 - 40µ	M25
1000	15		12 - 22µ	12 - 18µ	M16
1500	10		8 - 12µ	8 - 12µ	M10
2000	8		5 - 12µ		
2500	6		4 - 8µ	4 - 8µ	M6.3
3000	5		2 - 6µ		

SHAPE & SYMBLE OF WHEELS



CONTACTS

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