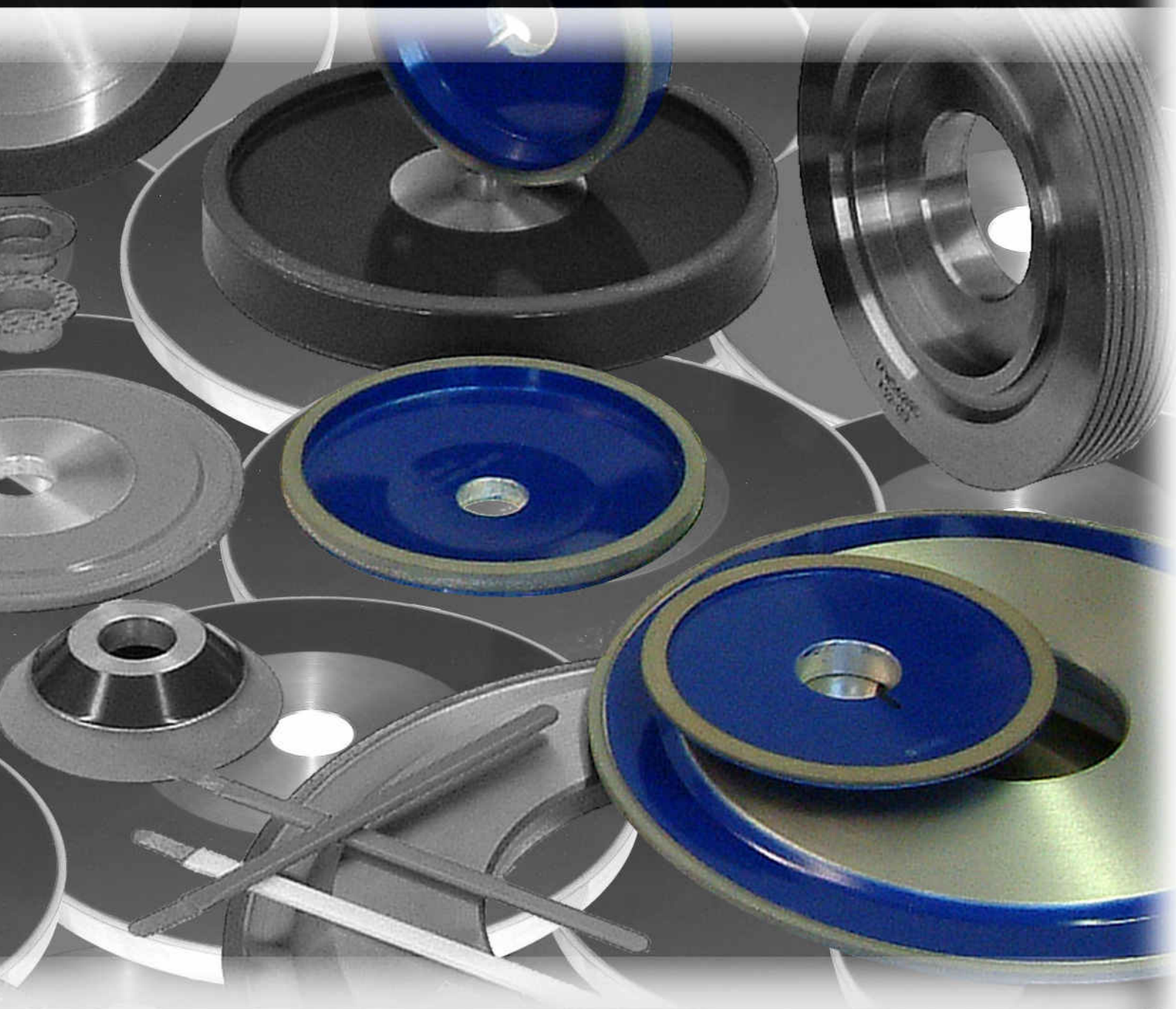


*superabrasive tools for*

# **ENGINEERING 2017**



A

M

P

-TEKNIK A/S

# introduction

*Providing abrasives to industry .....*



## **STOCK AND SPECIAL TOOLS**

A large range of the most popular products are held in stock at our Staplehurst factory for immediate despatch. Special tools can be designed and manufactured to meet your specific requirements on a relatively short lead time.

## **CUSTOMERS' MATERIALS**

Our Technical Department can test and advise on the best tooling required for special materials. Specialised tools can be made to suit most requirements and designs.

Illustrations of products are not to scale.

We hope that you will find the enclosed information interesting and helpful in assisting you with your selection of our tools.



## DIAMOND & CBN SUPERABRASIVES

The use of Superabrasives for cutting, grinding, drilling, profiling, reaming and polishing has become increasingly more important because of the tremendous benefits gained with quality, speed and cost saving of the final finished product.

**Diamond** is pure carbon in a cubic crystal structure. It is the hardest of all known materials. Many applications benefit by the use of diamond in the Engineering Industry for cutting, drilling, profiling, grinding and polishing etc. because it enables faster operation, extended life of the tool and allows accurate tolerances of shape and size. Used in industry it is either 'natural' diamond extracted from the ground, crushed and shaped to suit a particular requirement, or it is 'synthetic' man-made diamond for specific applications. Diamond is made and graded according to its size, shape and friability. Diamond is used for cutting or grinding hard brittle and abrasive materials, but it is not suitable for grinding steels due to iron having an affinity for carbon (which is what diamond is) at a high temperature.

**Cubic Boron Nitride** is man made like synthetic diamond and is a chemical bond of the elements boron and nitrogen with a cubic lattice structure, made in a high temperature/pressure process. It is available in different grades and sizes and is particularly designed for grinding hardened steels.

### GRIT SIZE CONVERSION TABLE

BS5851 1ST SYSTEM SINGLE GRADE CODES (FEPA)	BS5851 2ND SYSTEM US STANDARD ASTM-E-11-70	BS1987
1181	16/18	14/16
1001	18/20	16/18
851	20/25	18/22
711	25/30	22/25
601	30/35	25/30
501	35/40	30/36
426	40/45	36/44
356	45/50	44/52
301	50/60	52/60
251	60/70	60/72
213	70/80	72/85
181	80/100	85/100
151	100/120	100/120
126	120/140	120/150
107	140/170	150/170
91	170/200	170/200
76	200/230	200/240
64	230/270	240/300
54	270/325	300/350
46	325/400	350/400

### MICRON CONVERSION TABLE

SIZE REF.	APPROXIMATE RANGE	APPROXIMATE FEPA EQUIVALENT	APPROXIMATE EQT MESH SIZE
50	40/60	—	400
45	35/45	M40	500
35	30/40	—	600
25	20/30	M25	800
15	10/20	M16	1100
9	6/12	M10	1800
6	4/8	M6.3	3000
3	2/4	M2.5	8000

The above micron range is for guidance only.  
Other sizes are available on request.



# electroplated diamond & cbn



**AMP-Teknik** supply a very wide range of electroplated products which includes:

- Peripheral Wheels
- Precision Reamers (Direxanders)
- Precision Profile Wheels
- Radius, Flat, 'V' Form, Special Forms, Cut-off Wheels
- Straight and Taper Cup Wheels
- Internal Grinding Wheels
- Routers
- Needle Files
- Sharpening Wheels/Discs and Saw Blades
- Drill Bits
- Flexible Diamond Products.

## REPLATING

An extremely economical service is offered, subject to the body of the tool concerned being undamaged. Tools can be returned for strip and replating at a considerable cost reduction of the original tool price.

Our Technical Department will be pleased to give advice.

## APPLICATIONS

Electroplated products have been used very successfully in a large number of applications. Some of the materials worked with diamond and CBN includes:

- Aluminium, Asbestos
- Beryllium Copper, Boron Carbide, Brass
- Carbon, Carbon Fibre, Ceramics, Cermet, Copper
- Ferrite, Frozen Foods
- Glass, Granite, Graphite
- Kevlar
- Leather
- Marble, Mild Steel
- Nimonic
- Pottery, PVC
- Reinforced Plastics, Rubber
- Slate, Stainless Steel, Stellite
- Tool Steel, Titanium, Tungsten Carbide
- Vanadium
- Wood

## GRIT SIZES

We can advise which grit sizes of diamond or CBN are recommended for optimum performance for each application.

Please see the Grit Size Table on Page I-iii.



# electroplated diamond & cbn

## PRECISION PROFILE WHEELS

AMP supply accurate diamond and CBN profile wheels for creep feed grinding. Wheels with diameters from 10mm to 500mm can be manufactured. Prices and details available on request.

### DIAMOND & CBN

Diamond: tungsten carbide, ceramics, ferrites, glass, carbon, reinforced plastics and other nimonics.

CBN: high speed and tools steels, etc.

### APPLICATIONS

Carbide tooling and inserts, centreless profile grinding, circular form tools, crusher blocks, thread forms, thread milling tools, broach and cam grinding, gear forms, medical tools and devices and specialized applications.

### VERY ACCURATE TOLERANCES

As good as  $\pm 0.003$  mm dimensionally and  $\pm 3'$  on angles. Generally such tight tolerances are not required,  $\pm .01$  mm and  $\pm 10'$  are suitable for most tooling.

### NUMBER OF PROFILES

With certain profiles it is possible to make more than one form per wheel. This doubles, trebles or even quadruples the life of the wheel for relatively smaller increase in wheel cost. We will advise when submitting quotations where this is possible.

### EQUIPMENT & COOLANT

These profile wheels should be used in conjunction with a creep-feed grinding machine having adequate coolant supply. The absolute minimum supply of coolant is 50 litres per minute. The use of a centrifuge system delivering up to 135 litres per minute will lead to substantially improved wheel life and surface finish.

### SETTING UP

Each wheel is supplied with a clocking flange or clocking groove depending on wheel thickness. Wheels must be trued to these datum faces for both side and peripheral run-out. Run-out should not exceed 0.005 mm in either direction.

### CLEARANCE ANGLES

Top rake front clearance and helix angles are compensated for in the design of the wheel profile. A suitable wheel is produced from a customer's insert or drawing. If side clearance is required we can supply 'split' profile wheels.

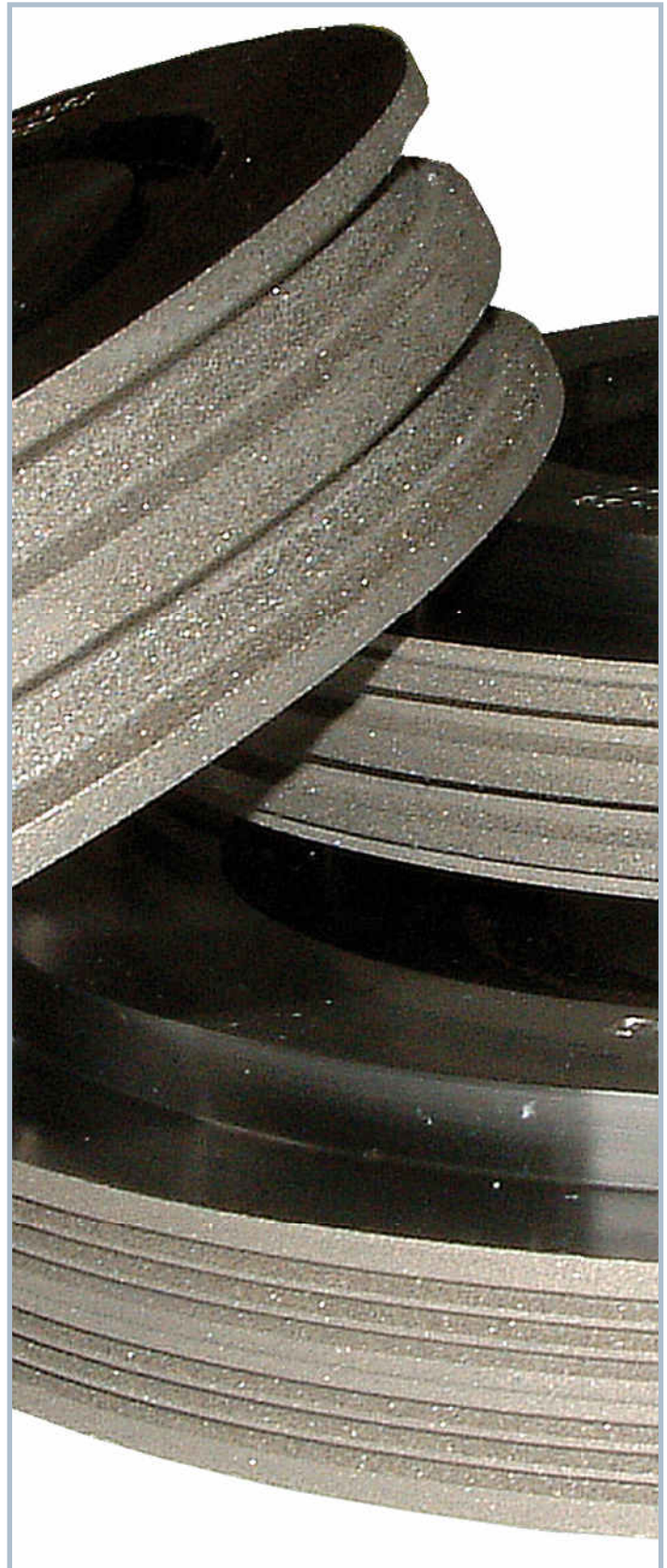
### GRIT SIZE

The grit size on accurate profile wheels is determined by the profile tolerances minimum radii and depth of profile. We will recommend the most suitable grit size.

## REPEAT/STRIP & REPLATE

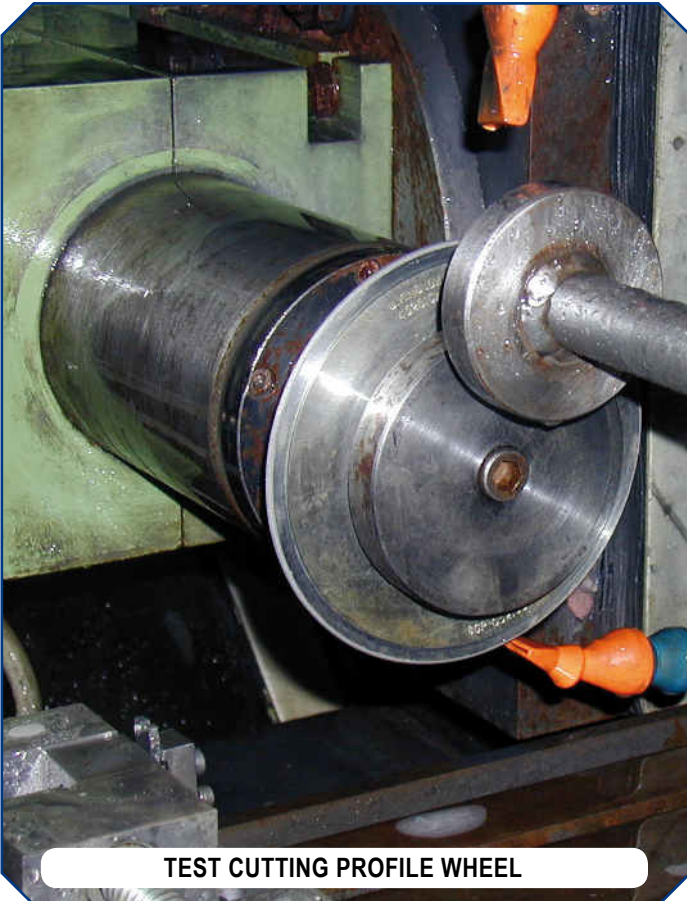
Repeat wheels are supplied at a substantially lower price than the original wheel.

A strip and replate service is offered at very competitive prices.

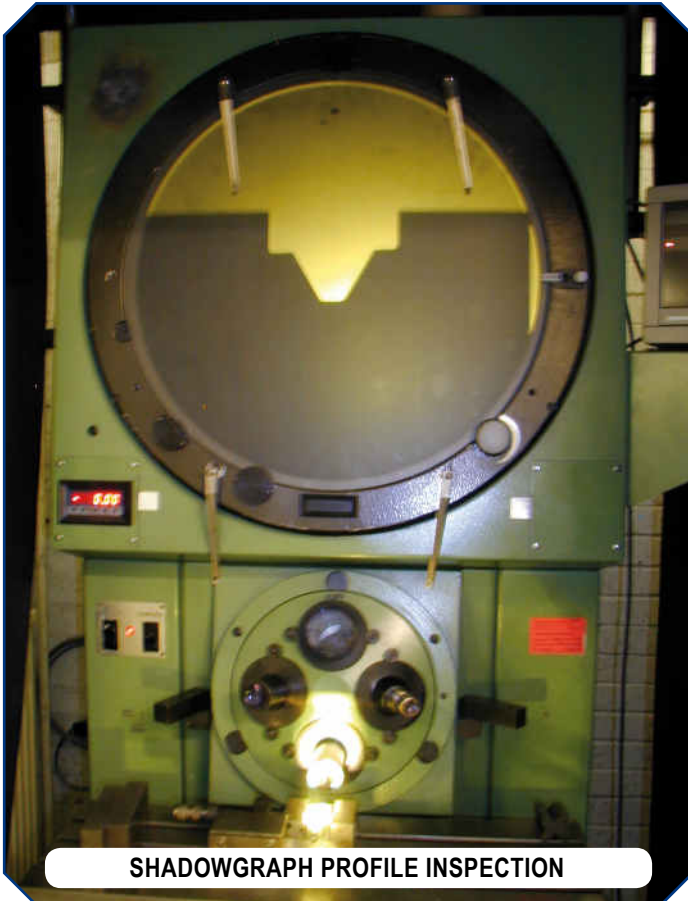




# electroplated diamond & cbn



## TEST CUTTING PROFILE WHEEL



## SHADOWGRAPH PROFILE INSPECTION



## COMPUTER CONTROLLED PROFILE INSPECTION



## COMPONENTS PRODUCED

# electroplated diamond & cbn

## DIREXPANDER®

Diamond and CBN precision reamers for very accurate bore finishing.

The Direxpander® consists of a diamond coated helical sleeve mounted on a tapered mandrel which allows the final diameter of the tool to be adjusted to very fine limits. The combination of the sleeve and tapered mandrel produces a tool of great rigidity and the diamond coating ensures a consistent gauging over thousands of components.

Over the last three decades the Direxpander® has become the definitive tool for sizing and straightening the bores of cast components eg Hydraulic Transfer Valves. During these years our technicians have acquired a wealth of knowledge and expertise covering all aspects of the problems associated with this operation.

These precision reamers can be supplied in a standard range of sizes from 6 mm to 60 mm diameter, other sizes are available on request.

The Direxpander® will size a bore to within 0.002 mm on diameter and leave a standard finish of 0.4 RA (16 CLA) in one pass and at the same time correct the bore geometry.

Finishes between 0.2 RA (8 CLA) and 0.8 RA (32 CLA) can also be achieved.

Material	Roughing Reamer 0.8 RA (32 CLA)	Finishing Reamer 0.4 RA (16 CLA)
Cast Iron	0.038 mm (0.0015")	0.015 mm (0.0006")

### Reasons for using the DIREXPANDER®

- 75% Reduction floor-floor time
- Consistency of bore size
- Consistency of finish
- Correction of any bore misalignment
- Single pass operation
- Increased production rates
- Lower tool cost per component
- Unskilled operation
- Longer tool life
- Negligible component rejection





# electroplated diamond & cbn



1A1

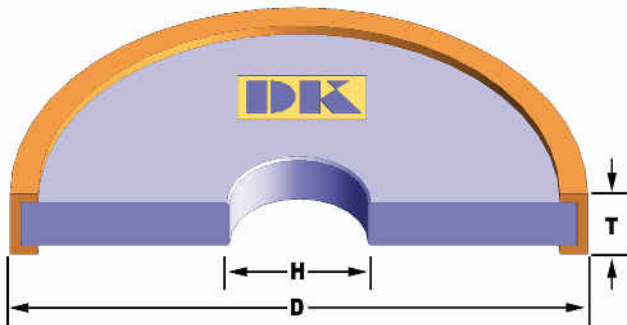
## 1A1 PERIPHERAL WHEELS

Electroplated diamond and CBN Peripheral Wheels are produced for use on Surface Grinding machines as well as Bench machines.

These wheels are manufactured in both diamond and CBN. The diamond wheels are used for grinding Tungsten Carbide, Ceramics and CBN wheels are for grinding HSS and Steels harder than 40 Hrc.

Benefits include:

- No reduction to wheel diameter or loss of shape during use.
- No need to dress wheel.
- No dust generated through wheel breakdown.
- Worn out wheels can be returned for re-plating giving cost savings over new wheels.



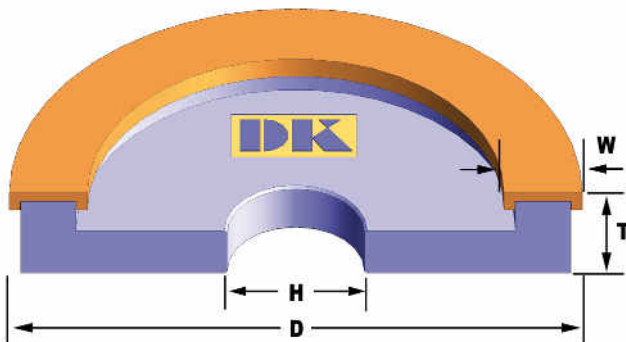
6A2

## 6A2/6A2C PLAIN CUP WHEELS

Diamond and CBN electroplated Plain Cup Wheels are manufactured for use on Surface Grinding machines and Bench machines.

These 6A2/6A2C cup wheels are can be produced in both diamond and CBN. The diamond wheels are used for grinding Tungsten Carbide, Ceramics and CBN wheels are for grinding HSS and Steels harder than 40 Hrc.

Several benefits are available in using these types of wheels and include — No reduction to wheel diameter or loss of shape during use. No need to dress wheel. No dust generated through wheel breakdown. Worn out wheels can be re-plated giving cost savings over new wheels.



6A2C

When ordering .....

please state all dimensions as illustrated.



# electroplated diamond & cbn

## 11A2 TAPER CUP WHEELS

Electroplated Taper Cup Wheels are manufactured for use on Surface Grinding machines as well as Bench machines.

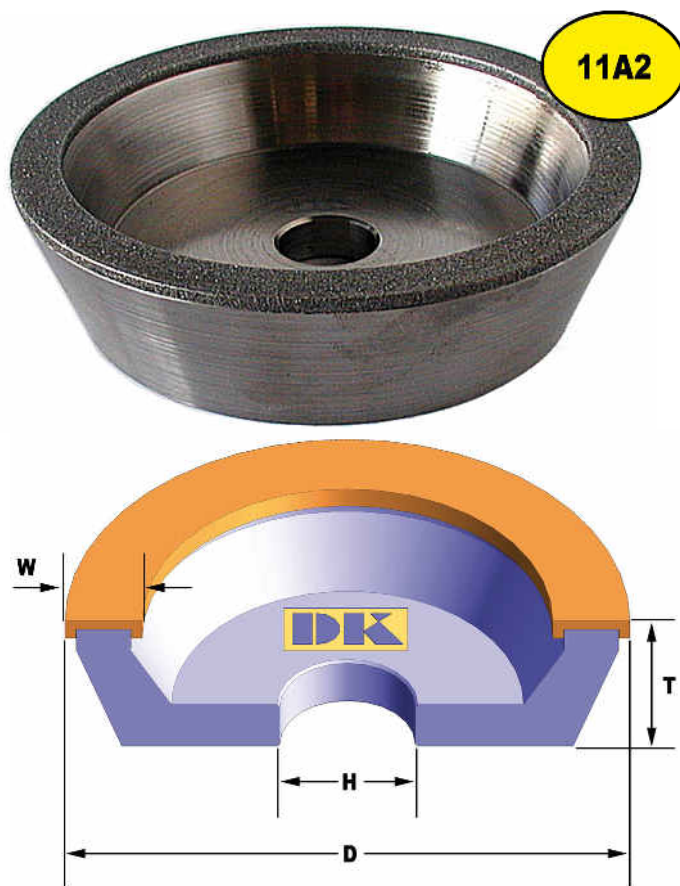
These wheels can be produced in both diamond and CBN. The diamond wheels are used for the grinding of Tungsten Carbide, Ceramics and CBN wheels for HSS and Steels harder than 40 Hrc.

Benefits include:

- No reduction to wheel diameter or loss of shape during use.
- No need to dress wheel.
- No dust generated through wheel breakdown.
- Worn out wheels can be returned for re-plating giving cost savings over new wheels.

### When ordering .....

Please state all dimensions as illustrated.



## INTERNAL GRINDING WHEELS

Electroplated internal grinders are widely used on Jig and Internal Grinding Machines. They are widely used in the production of Dies, Punches and cutting tools.

Available in standard sizes but specials are also readily available. Profiled internal grinders can also be manufactured.

### ELECTROPLATED INTERNAL GRINDERS



	CODE		D	W	Y	L1	L	GRIT
	Diamond	CBN	(mm)	(mm)	(mm)	(mm)	(mm)	
TYPE 'A'	BEI005D	BEI005B	0.5	3	3	7	55	D91-170/200
	BEI007D	BEI007B	0.7	3	3	7	55	
	BEI010D	BEI010B	1.0	5	3	10	55	
	BEI015D	BEI015B	1.5	5	3	12	55	
	BEI020D	BEI020B	2.0	5	3	12	55	
	BEI025D	BEI025B	2.5	5	3	16	55	D126-120/150
	BEI030D	BEI030B	3.0	5	3	16	55	
	BEI035D	BEI035B	3.5	5	6	20	60	
	BEI040D	BEI040B	4.0	5	6	20	60	
	BEI050D	BEI050B	5.0	6	6	20	60	
TYPE 'B'	BEI060D	BEI060B	6.0	8	6	20	60	D181-85/100
	BEI070D	BEI070B	7.0	8	6	-	60	
	BEI090D	BEI090B	9.0	10	6	-	60	
	BEI100D	BEI100B	10.0	10	6	-	60	
	BEI120D	BEI120B	12.0	10	6	-	60	
	BEI150D	BEI150B	15.0	10	6	-	60	

Other shapes & sizes available on request

### When ordering .....













please state code part numbers.

# electroplated diamond & cbn



## NEEDLE FILES

A full range of quality diamond coated needle files is available in the most popular shapes and grits, fine, medium and coarse.

TYPE NO.	CODE	GRIT SIZE	DESCRIPTION
TAPERED			
TF1	ENF010	85/100	Taper Flat
	ENF020	120/150	
	ENF030	200/240	
TF2	*ENF040	85/100	Oval
	ENF050	120/150	
	ENF060	200/240	
TF3	ENF070	85/100	3 Square
	ENF080	120/150	
	ENF090	200/240	
TF4	ENF100	85/100	Knife Edge
	ENF110	120/150	
	ENF120	200/240	
TF5	ENF130	85/100	Square
	ENF140	120/150	
	ENF150	200/240	
TF6	ENF160	85/100	Round
	*ENF170	120/150	
	ENF180	200/240	
TF7	ENF190	85/100	Barette
	*ENF200	120/150	
	ENF210	200/240	
TF8	ENF220	85/100	Pippin
	ENF230	120/150	
	ENF240	200/240	
TF9	ENF250	85/100	Half Round
	ENF260	120/150	
	ENF270	200/240	
PARALLEL			
PF10	ENF280	85/100	Hand
	ENF290	120/150	
	ENF300	200/240	
PF11	ENF310	85/100	Slitting
	ENF320	120/150	
	ENF330	200/240	
PF12	ENF340	85/100	Crossing
	ENF350	120/150	
	ENF360	200/240	
Handle			

### NOTE:

1. When ordering please state code and grit size required.



# flexible diamond & cbn

## FLEXIBLE DIAMOND ELECTROFLEX & ELECTROPLUS FOR ENGINEERING

This flexible material has been developed by engineers to combine the long life and aggressive cutting action of diamonds with a backing material which has strength and flexibility. This diamond impregnated material enables tools of various shapes to quickly and economically grind and polish a wide range of hard materials including hard metals.

Electroplus is an alternative to the Electroflex pattern and works particularly well when used on discs and belts for rapid stock removal applications.

## MANUFACTURING PROCESS

The manufacturing process produces diamond islands of identical size and shape with a regular spacing. This manufacturing process has been specifically designed to allow slurry to be freely washed away with the lubricant (water) without any clogging. The overall pattern produced gives the optimum rapid stock removal with the ability to achieve the desired honed or polished finish.

## ELECTROFLEX AND ELECTROPLUS METAL (M)

Selected high quality diamonds are electroplated with a nickel matrix through special flexible stainless steel mesh, or a very strong flexible backing cloth, which achieves a very strong fast grinding and finishing product.

## WET WORKING

Electroflex and Electroplus products have been designed for wet use to achieve the maximum performance, finish and life.

## DRY WORKING

Some Electroflex and Electroplus products are available for dry working where appropriate.

## GRADE IDENTIFICATION

Colour coded for simplicity

COLOUR	TYPE	GRIT	MICRON
GREEN	METAL	60	250
BLACK	METAL	120	125
RED	METAL	200	74
YELLOW	METAL	400	40-50
WHITE	METAL	800	20-30
BLUE	METAL	1800	6-12

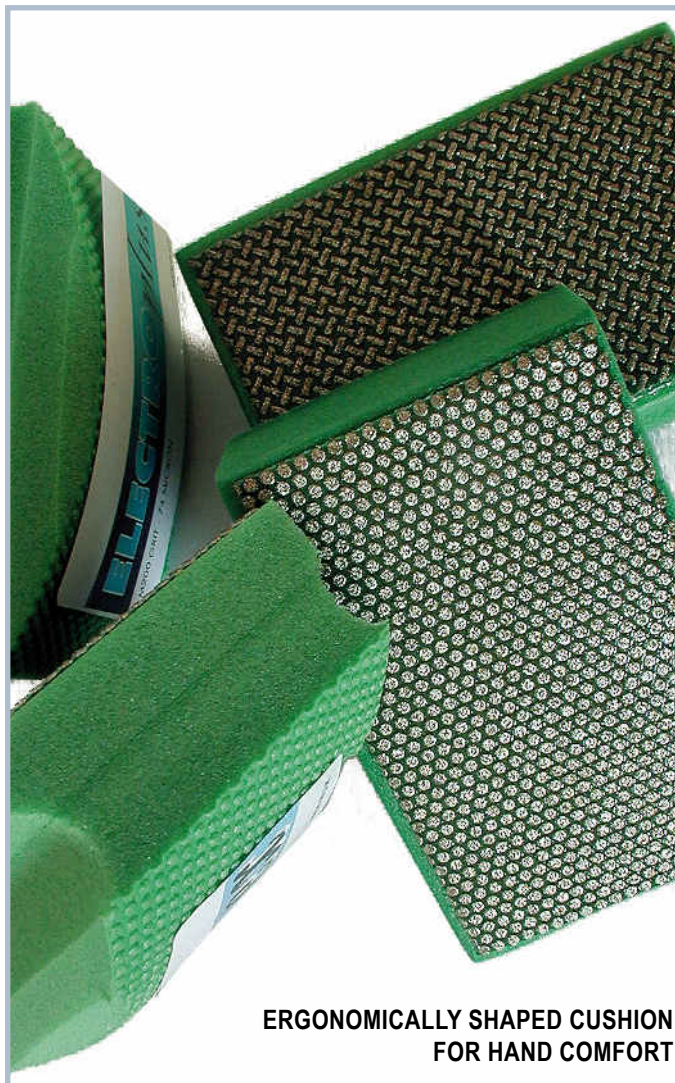
The above micron range is for guidance only.  
Other sizes are available on request.



# flexible diamond & cbn

## DIAMOND FLEXIBLE ELECTROFLEX & ELECTROPLUS HAND PADS

Diamond flexible material hand pads for wet hand grinding and polishing the edges and surfaces of hard metals and other hard materials for the engineering industry. All diamond hand pads are colour coded with green, black red, yellow, white and blue foam backing for easy grade identification.



ERGONOMICALLY SHAPED CUSHION  
FOR HAND COMFORT



ELECTROFLEX & ELECTROPLUS HAND PADS

## FLEXIBLE CUSHIONED HAND PADS

The diamond flexible cushioned hand pads have a superior foam backing for a more comfortable grip. These diamond hand pads are suitable for wet grinding and polishing the edges, corners and flat surfaces of hard metals used in the engineering industry.

**Sizes** — 90 x 55mm and 100 x 55mm

**Electroflex:** Metal Grades — 60 - 1800 grit  
**Electroplus:** Metal Grades — 60 - 800 grit

### CUSHIONED HAND PADS 90 x 55mm

ELECTROFLEX		ELECTROPLUS
GRADE	CODE	CODE
M60	*BEPN202	BEPNP202
M120	*BEPN212	BEPNP212
M200	*BEPN217	BEPNP217
M400	*BEPN222	BEPNP222
M800	BEPN223	BEPNP223
M1800	BEPN224	BEPNP224

### CUSHIONED HAND PADS 100 x 55mm

ELECTROFLEX		ELECTROPLUS
GRADE	CODE	CODE
M60	*BEPN200	BEPNP200
M120	*BEPN210	BEPNP210
M200	*BEPN215	BEPNP215
M400	*BEPN220	BEPNP220
M800	BEPN221	BEPNP221
M1800	BEPN228	BEPNP228

### When ordering .....

please state code part numbers.



# flexible diamond & cbn

## FLEXIBLE FLAT HAND PADS

Diamond flat hand pads are a cost effective alternative to the cushioned type of hand pad and are ideal for hand grinding and polishing edges, corners and flat surfaces of hard metals. These flat hand pads are manufactured with colour coded foam backing for easy grade identification.

Sizes — 75 x 75mm and 90 x 55mm

### Electroflex:

Metal Grades — 60 - 1800 grit

### Electroplus:

Metal Grades — 60 - 800 grit

### FLAT HAND PADS

75 x 75mm

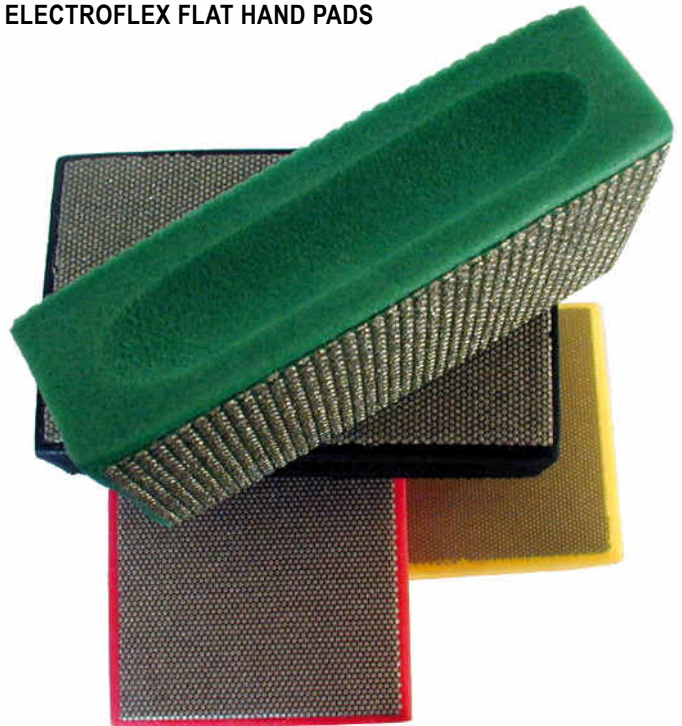
GRADE	ELECTROFLEX CODE	ELECTROPLUS CODE
M60	*BEPN165	BEPNP165
M120	*BEPN175	BEPNP175
M200	*BEPN180	BEPNP180
M400	*BEPN185	BEPNP185
M800	BEPN187	BEPNP187
M1800	BEPN189	BEPNP189

### FLAT HAND PADS

90 x 55mm

GRADE	ELECTROFLEX CODE	ELECTROPLUS CODE
M60	*BEPN702	BEPNP702
M120	*BEPN712	BEPNP712
M200	*BEPN717	BEPNP717
M400	*BEPN722	BEPNP722
M800	BEPN723	BEPNP723
M1800	BEPN727	BEPNP727

## ELECTROFLEX FLAT HAND PADS



IDEAL FOR HAND GRINDING & POLISHING EDGES

When ordering .....

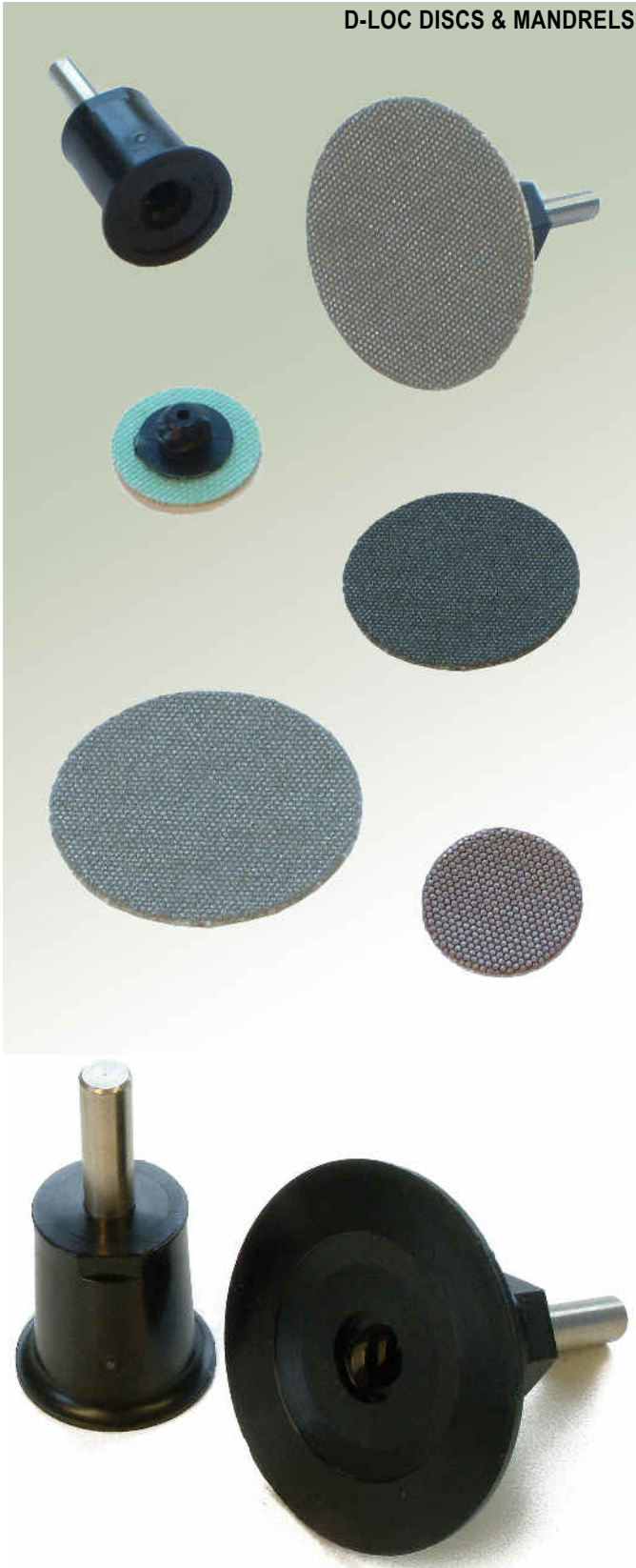
please state code part numbers.

# flexible diamond & cbn

## DIAMOND FLEXIBLE ELECTROFLEX & ELECTROPLUS DISCS

Electroflex and Electroplus discs are suitable for wet grinding and polishing all types of hard materials in the engineering industry. All sizes, backings are metal grades are available with various fittings for hand and stationary machines.

D-LOC DISCS & MANDRELS



MANDRELS FOR D-LOC DISCS

## FLEXIBLE DIAMOND D-LOC DISCS

D-Loc quick release discs are for grinding, polishing and de-burring applications in the engineering industry.

Diameters — 25, 50 & 75mm

**Electroflex:** Metal Grades — 60 - 1800 grit  
**Electroplus:** Metal Grades — 60 - 800 grit

### D-LOC DISCS

Ø25mm

ELECTROFLEX		ELECTROPLUS
GRADE	CODE	CODE
M60	*BEP900A	BEPNP900A
M120	*BEP900C	BEPNP900C
M200	*BEP900D	BEPNP900D
M400	*BEP900E	BEPNP900E
M800	BEP900F	BEPNP900F
M1800	BEP900J	BEPNP900J

### D-LOC DISCS

Ø50mm

ELECTROFLEX		ELECTROPLUS
GRADE	CODE	CODE
M60	*BEP910A	BEPNP910A
M120	*BEP910C	BEPNP910C
M200	*BEP910D	BEPNP910D
M400	*BEP910E	BEPNP910E
M800	BEP910F	BEPNP910F
M1800	BEP910J	BEPNP910J

### D-LOC DISCS

Ø75mm

ELECTROFLEX		ELECTROPLUS
GRADE	CODE	CODE
M60	BEP915A	BEPP915A
M120	BEP915C	BEPP915C
M200	BEP915D	BEPP915D
M400	BEP915E	BEPP915E
M800	BEP915F	BEPP915F
M1800	BEP915J	BEPP915J

## D-LOC MANDRELS FOR DISCS

Quick release backup pads with 6mm diameter shank for D-Loc Electroflex and Electroplus discs.

### BACKUP PAD & SHANK

CODE	DIAMETER
*BES900	Ø25mm
*BES910	Ø50mm
BES915	Ø75mm



# flexible diamond & cbn

## **ELECTROFLEX & ELECTROPLUS FLEXIBLE DIAMOND BELTS**

These flexible diamond belts are being used extensively in wet grinding and polishing applications in the engineering industry. Advantages are consistent finish, increased productivity and reductions in downtime and abrasive costs.

Electroflex and Electroplus flexible belts are available in a wide range of grits and sizes and can be supplied in diamond or CBN.

High quality manufacturing processes allow for long life and good edge retention.

Applications for flexible belts can be as diverse as —

- Replacement knee joints
- Roll grinding for the paper industry
- Automotive Cam Shaft grinding/polishing
- Automotive Crank Shaft grinding/polishing





# flexible diamond & cbn

## FLEXIBLE ABRASIVE SHEETS

Flexible diamond and CBN sheets for hand polishing all types of hard materials in the engineering industry. The colour coded flexible abrasive material can be supplied in Electroflex and Electroplus sheets of various sizes and backings, which can be easily cut with scissors to make customised tooling.

### **Electroflex:**

Metal Grades 60 - 120 – Sheet Dimensions 850 x 290mm

Metal Grades 200 - 1800 – Sheet Dimensions 3000 x 290mm

### **Electroplus:**

Metal Grades 60 - 120 – Sheet Dimensions 850 x 290mm

Metal Grades 200 - 800 – Sheet Dimensions 3000 x 290mm

### **Types of Backings -**

Unbacked (Canvas)

QRS (Quick Release System - Velcro(tm))

Self-Adhesive (S/A)

Plastazote (Foam Rubber)

Magnetic





# resin/metoid diamond & cbn

## DIAMOND & CBN WHEELS

**Diamond wheels for** — Tungsten Carbide, Titanium Carbides and Ceramics.

**Cubic Boron Nitride (CBN/Borazon) wheels for** — High Speed Steels, Various Hardened Steels, Stellites and Cast Iron.

### DIAMOND WHEELS

The major use of resin bonded diamond wheels is for the grinding of cemented carbides. Results have proved that the resin bonded wheel provides the most economical method of grinding tungsten carbide when high stock removal, coupled with good surface finish is the prime consideration. These wheels find their use in all types of grinding operations such as surface, cylindrical, optical profile, slot grinding, saw grinding, multi-tooth cutter grinding and can be used wet or dry.

Our technical staff can recommend the correct bond and diamond type for your application.

### CUBIC BORON NITRIDE (CBN/BORAZON)

Cubic Boron Nitride is a synthetic abrasive produced by subjecting hexagonal Boron Nitride, in the presence of a catalyst, to a high pressure and temperature. The resulting crystals of CBN are considerably harder than the conventional silicon carbide and aluminium oxide abrasives and thermally more stable than diamond.

ABRASIVE	HARDNESS (Knoop Scale)
Diamond	7,000
CBN	4,700
Silicon Carbide	2,480
Aluminium Oxide	2,100

The CBN resin bonded wheels were developed for grinding hard, tough, high speed tool and die steels and show the following advantages over conventional abrasives.

1. Wheel wear is very low and grinding can be done without wheel compensation.
2. Close tolerances can be maintained without interim checks.
3. More effective stock removal.
4. Increase production.
5. Cool cutting and lack of residual stress.
6. Generates less heat, less power required.
7. Can be used wet or dry

## METOID® BOND WHEELS

The Metoid® bonded range was developed for those difficult grinding operations where conventional resin bond wheels cannot be used effectively. The Metoid® bond is extremely tough combining the free cutting properties of resin bond wheels with a robustness normally found only in metal bonded wheels.

It is possible to undertake the dry grinding of brazed tooling when using a Metoid® diamond bond wheel and the dry grinding of tool steels using the CBN Metoid® wheels. These wheels are effective grinding ceramics, stellites, nimonics and a variety of other exotic materials. These wheels are extremely versatile and effective under both wet and dry conditions. Its outstanding corner holding characteristics make it ideally suited for production and creep feed grinding.

Metoid® bond wheels are available in a wide variety of shapes and sizes. Complying with the FEPA international standards, wood working machine tool manufacturers standards or as specials. A full range of slitting discs are also available.

## POLYIMIDE BOND WHEELS

These wheels are produced using the most up to date high temperature Polyimide Bonds. This type of bond is particularly successful in the most arduous grinding processes including saw sharpening operations.



# resin/metoid diamond & cbn



LAPPING WHEEL



1A1 CENTRELESS GRINDING WHEEL



RESIN DIAMOND WHEELS ON AN ANCA CNC MACHINE





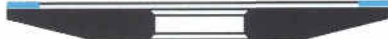



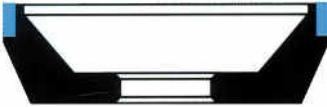
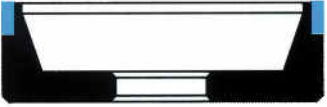
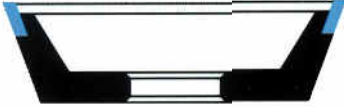
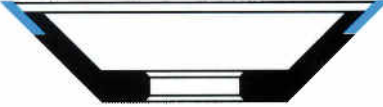
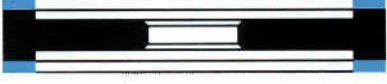
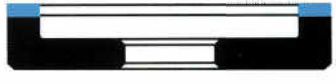
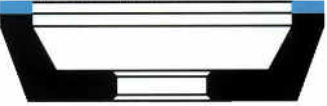
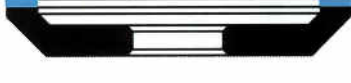







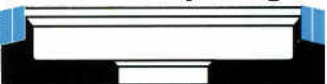
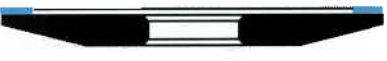
1A1 PERIPHERAL & 11V9 FLARING CUP DIAMOND WHEELS

COMPONENTS GROUND ON ANCA CNC USING DIAMOND RESIN WHEELS





## STANDARD WHEEL SHAPES

<b>Peripheral Wheel</b>  <b>TYPE 1A1</b>	<b>Peripheral Wheel</b>  <b>SLITTING SAW TYPE 1A1R</b>	<b>Dish Wheel</b>  <b>TYPE 4A2</b>
<b>Dish Wheel</b>  <b>TYPE 4BT9</b>	<b>Dish Wheel</b>  <b>TYPE 4ET9</b>	<b>Dish Wheel</b>  <b>TYPE 12A2 20°</b>
<b>Peripheral Cup Wheel</b>  <b>TYPE 11A9</b>	<b>Peripheral Cup Wheel</b>  <b>TYPE 6A9</b>	<b>Flaring Cup Wheel</b>  <b>TYPE 11V9</b>
<b>Flaring Cup Wheel</b>  <b>TYPE 12V9 45°</b>	<b>Double Face Wheel</b>  <b>TYPE 9A3</b>	<b>Cup Wheel</b>  <b>TYPE 6A2</b>
<b>Taper Cup Wheel</b>  <b>TYPE 11A2</b>	<b>Dish Wheel</b>  <b>TYPE 12A2 45°</b>	<b>OPG Wheel</b>  <b>TYPE 14A1</b>
<b>OPG Wheel</b>  <b>TYPE 14F1</b>	<b>OPG Wheel</b>  <b>TYPE 3A1</b>	<b>Internal Grinding Wheel</b>  <b>TYPE 1A8W</b>
<b>Internal Grinding Wheel</b>  <b>TYPE 1A1W</b>	<b>Hand Hone</b>  <b>TYPE DHH1</b>	<b>Hand Hone</b>  <b>TYPE DHH2</b>
<b>Saw Sharpening</b>  <b>TWIN RIM WHEEL for VOLLMER MACHINE</b>	<b>Saw Sharpening</b>  <b>FACE GRINDING WHEEL for AKE MACHINE</b>	

# resin diamond & cbn



## RESIN BONDED SUPERABRASIVE WHEELS

A wide range of shapes and sizes is available for toolroom and production use. Many other shapes and sizes can be manufactured on request for special machines.

## RESIN BOND DIAMOND WHEELS

The main use is for grinding tungsten carbide tools and ceramics. A range of bonds is available to suit different applications including grinding glass, ferrites and other non-ferrous hard materials.

## RESIN BOND CBN WHEELS

The CBN wheels have been specially developed for the efficient grinding of hardened steels, super alloys and other similar materials.

## BONDS

Wheel performance and the economy of the grinding operation is determined to a large extent by the correct choice and the careful manufacture of the bond, as well as by the quality and size of the diamond/CBN grit.

The bond should give perfect diamond/CBN grit retention to ensure maximum utilisation and suitable wear characteristics to expose fresh diamond/CBN tips.

Specialized bonds such as Phenolics, Polyimide, Metoid, etc are available.

## SPECIFICATIONS

Please refer to our Technical Department to advise you on the best wheel specifications for your applications. The variations are:

- Grit type - Diamond or CBN
- Grit size - See the grit size table on Page iii
- Concentration - grit per unit volume
- Body material and Bond type -  
Wheel body usually available in Aluminium, Resinal or Bakelite

## ORDERING

When placing orders it would be helpful to give the following information.

1. Wheel shape and description - see standard wheels shapes on Page 10.
2. Wheel size.
3. Type of Superabrasive - diamond or CBN.
4. Grit size.
5. Concentration.
6. Application.



## FEPA - IDENTIFICATION CODE DIAMOND/CBN WHEEL SHAPES

With the exception of "specials" and wheels for the woodworking industry, resin wheels are produced to FEPA standard shapes and sizes. These diagrams are designed to describe the shape of a complete diamond or CBN wheel and is made up with four components see Analysis of a typical diamond/CBN wheel shape (Fig. 1), Basic Core Shape (Fig. 2), Shape of Diamond/CBN Cross Section (Fig. 3) and Location of Diamond/CBN section (Fig. 4).

Fig. 1 - Analysis of a typical diamond or CBN wheel shape.

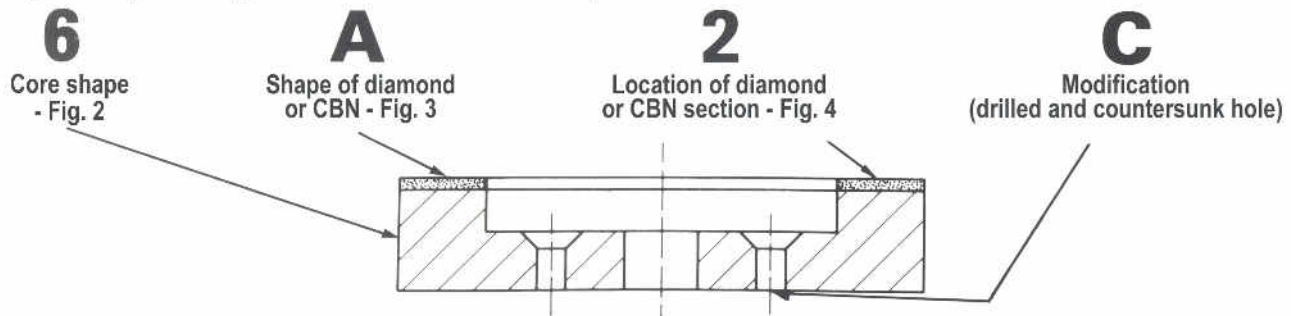


Fig. 2 - Core Shapes and Designations.

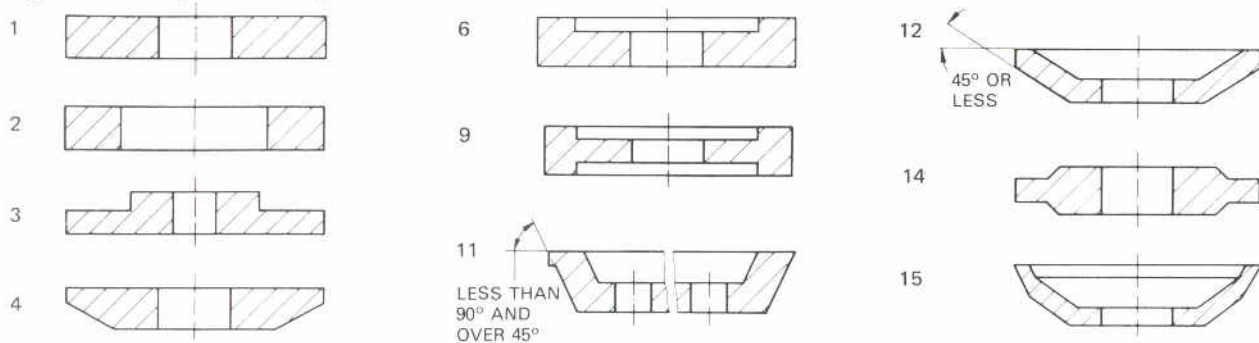
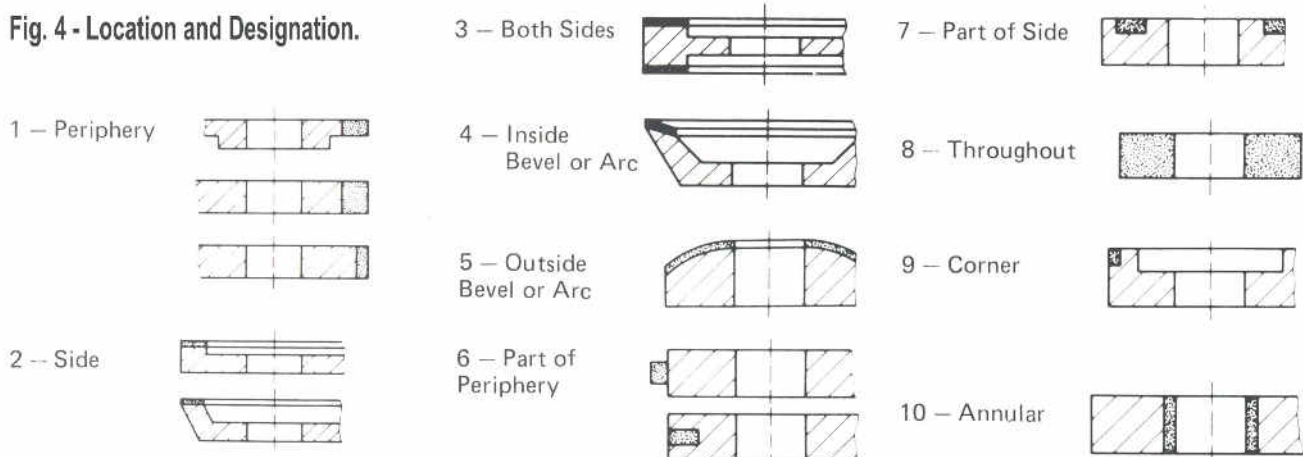


Fig. 3 - Diamond & CBN Cross Sections and Designations.			A	AH	B	C
CH	D	DD	E	EE	F	FF
G	H	J	K	L	LL	M
P	Q	QQ	S	U	V	Y

Fig. 4 - Location and Designation.



# resin diamond & cbn

## PERIPHERAL WHEELS

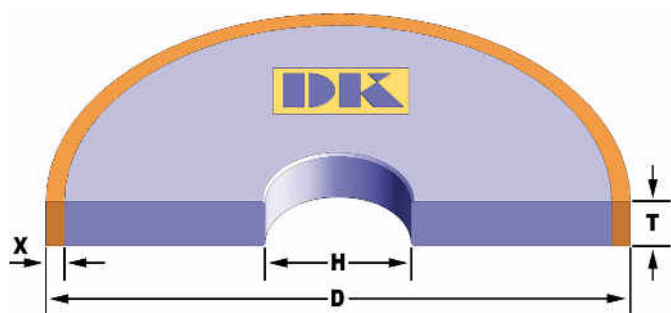
Resin bond diamond and CBN peripheral wheels can be tailored to customers' specific grinding requirements within the engineering industry.



### type 1A1

TYPE 1A1 PERIPHERAL WHEEL

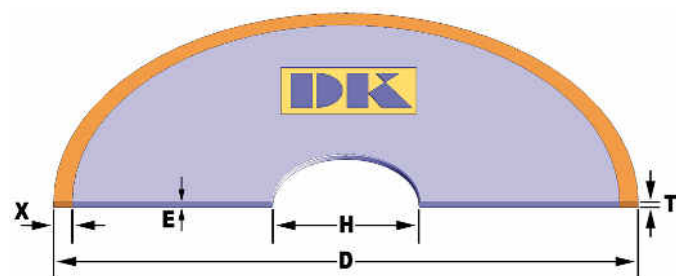
D	T	X
25	3 6 10 12	3.2
30	3 6 10 12	3.2
40	3 6 10 12	1.6 3.2
50	3 6 10 12	1.6 3.2
75	3 6 10 12	1.6 3.2
100	3 6 10 12	1.6 3.2
125	3 6 10 12	1.6 3.2
150	3 6 10 12	1.6 3.2
175	3 6 10 12 20	1.6 3.2
200	5 6 10 12 15 20	1.6 3.2
255	6 10 12 15 20	1.6 3.2
300	6 10 12 15 20	1.6 3.2
350	6 10 12 15	3.2
400	20 25 30	2.0 3.2
500	20 25 30	3.2



### type 1A1R

TYPE 1A1R SLITTING SAW

D	T	X	E
75	1.0	3.2	0.8
100	1.2	3.2 6.0	1.0
125	1.2	3.2 6.0	1.0
150	1.5	3.2 6.0	1.3
175	1.5	3.2 6.0	1.3
200	1.5	6.0	1.3



### When ordering .....

please state all dimensions as illustrated.



## DISH WHEELS

High quality diamond or CBN dish wheels are manufactured to customers' specific specifications for grinding applications in the toolroom or in a production environment. When ordering please specify the application and grinding requirements including grit, bond, body type.

### type 4A2

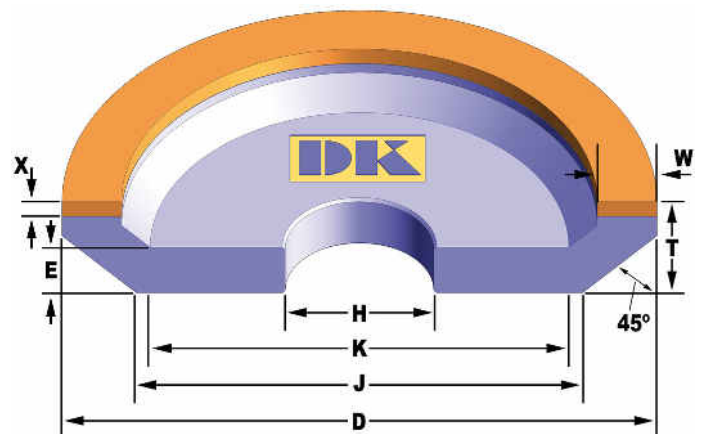
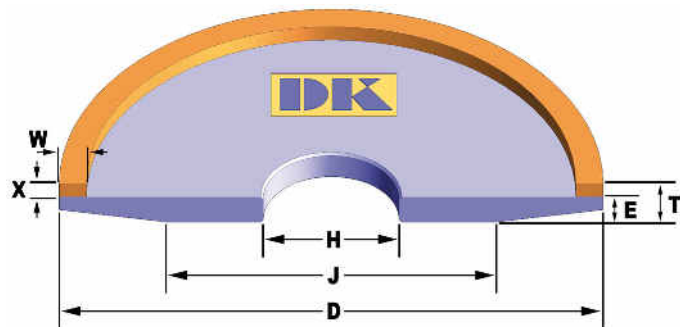
TYPE 4A2 DISH WHEEL

D	W	X	T
100	5.0	1.6	6
	6.0	3.2	
125	5.0	1.6	7
	6.0	3.2	
150	5.0	1.6	9
	6.0	3.2	

### type 12A2 45°

TYPE 12A2 (45°) DISH WHEEL

D	W	X	T-X	E
40	5.0	1.6	15	8
		3.2		
50	3.2	1.6	15	8
	5.0	3.2		
75	5.0	1.6	20	9
	6.0	3.2		
	10.0	3.2		
90	6.0	1.6	23	10
	10.0	3.2		
100	5.0	1.6	23	10
	6.0			
	10.0			
	12.5			
125	5.0	1.6	23	10
	6.0			
	10.0			
	12.5			
	15.0			
150	5.0	1.6	23	10
	6.0			
	10.0			
	12.5			
	15.0			
	20.0			
175	5.0	1.6	25	12
	10.0			
	12.5			
	15.0			
	20.0			
	25.0			
200	10.0	1.6	25	12
	12.5			
	15.0			
	20.0			



# resin diamond & cbn

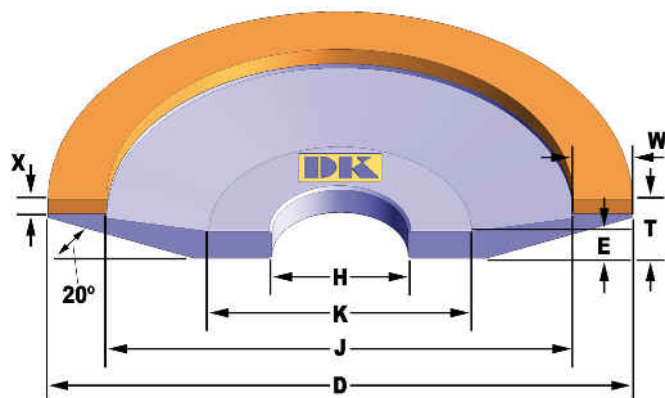
## DISH WHEELS (CON'T)

12A2 20°

### type 12A2 20°

TYPE 12A2 (20°) DISH WHEEL

D	W	X	T-X	E
40	5.0	1.6		
		3.2		
50	3.2	1.6		
	5.0	3.2		
75	5.0	1.6	8	5
	6.0	3.2		
	10.0	3.2		
90	6.0	1.6		
	10.0	3.2		
100	5.0	1.6	10	6
	6.0			
	10.0			
	12.5			
125	5.0	1.6	14	8
	6.0			
	10.0			
	12.5			
	15.0			
150	5.0	1.6	16	9
	6.0			
	10.0			
	12.5			
	15.0			
175	5.0	1.6	18	10
	10.0			
	12.5			
	15.0			
	20.0			
200	10.0	1.6	20	11
	12.5			
	15.0			
	20.0			



When ordering .....

please state all dimensions as illustrated.

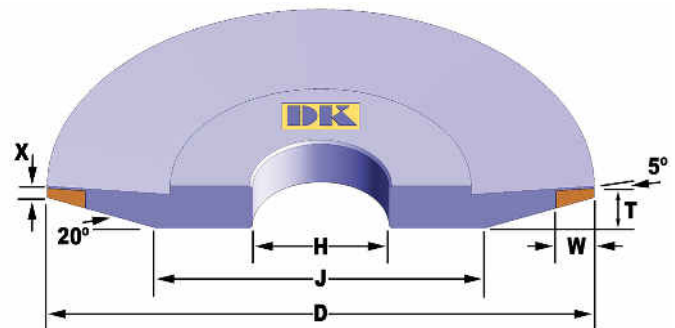


## DISH WHEELS (CON'T)

### type 4BT9

TYPE 4BT9 DISH WHEEL

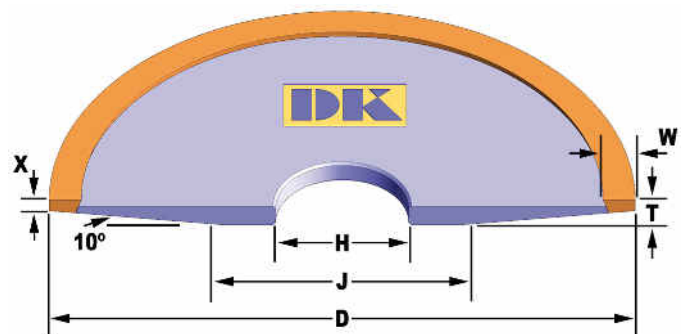
D	W	X	T
75	10.0	1.0	8.0
100	10.0	1.0	10.0
125	10.0	1.0	12.0



### type 4ET9

TYPE 4ET9 DISH WHEEL

D	W	X	T
75	6.0	1.0	6.0
100	6.0	2.0	8.0
125	6.0	2.0	8.0



# resin diamond & cbn

## CUP WHEELS

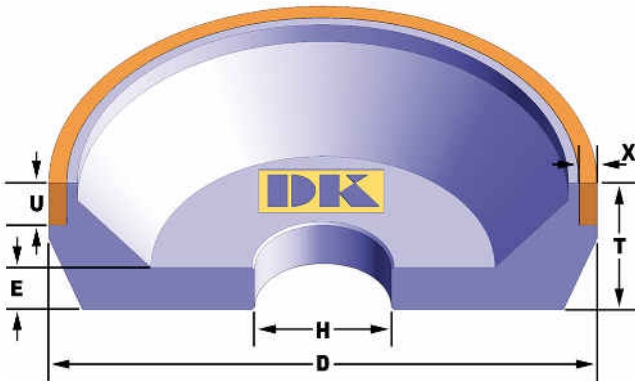
Diamond or CBN cup wheels can be made to customers' specific requirements. Grits, bonds and body types are tailored to the customers' applications and grinding requirements. Resin bond cup wheels can be manufactured in a relatively short lead time to work within the machine parameters and finish required in the toolroom or production environments.



### type 11A9

TYPE 11A9 PERIPHERAL CUP WHEELS

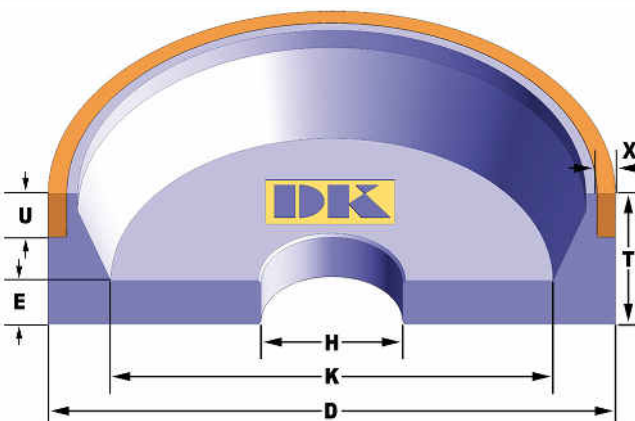
D	U	X
75	10.0	1.6 3.2
100	10.0	1.6 3.2
125	10.0	1.6 3.2



### type 6A9

TYPE 6A9 PERIPHERAL CUP WHEELS

D	U	X
75	10.0	1.6 3.2
100	10.0	1.6 3.2
125	10.0	1.6 3.2



**When ordering .....**

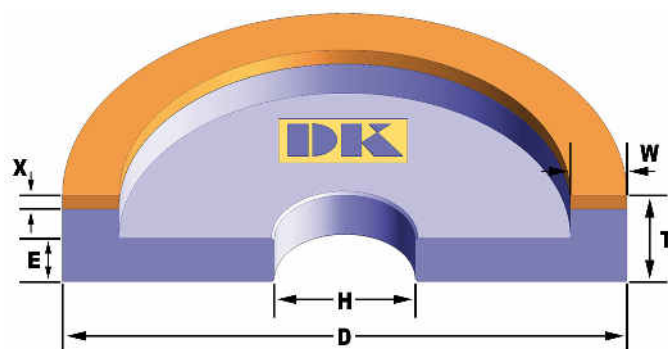
please state all dimensions as illustrated.



## CUP WHEELS (CON'T)

### type 6A2

TYPE 6A2 CUP WHEEL				
D	W	X	T-X	E
40	5.0	1.6	20	8
		3.2		
50	3.2	1.6	20	8
	5.0	3.2		
75	5.0	1.6	20	10
	6.0	3.2		
	10.0			
90	6.0	1.6	20	10
	10.0	3.2		
100	5.0	1.6	20	10
	6.0			
	10.0			
	12.5			
125	5.0	1.6	23	10
	6.0			
	10.0			
	12.5			
150	15.0	3.2	23	10
	5.0			
	6.0			
	10.0			
	12.5			
175	15.0	1.6	25	13
	20.0			
	25.0			
	10.0			
	12.5			
200	15.0	3.2	25	13
	20.0			



### When ordering .....

please state all dimensions as illustrated.

# resin diamond & cbn

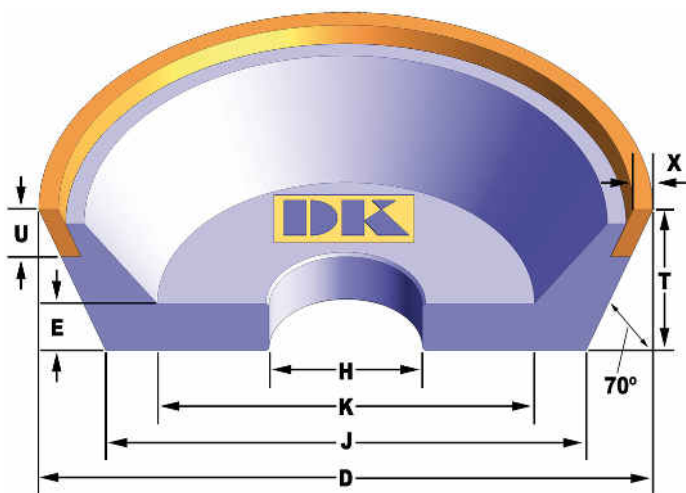
## CUP WHEELS (CON'T)



### type 11V9

TYPE 11V9 FLARING CUP WHEELS

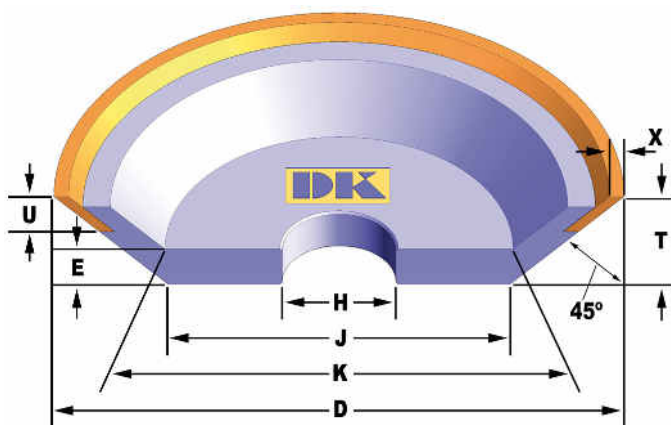
D	U	X
50	6.0	1.6 3.2
75	10.0	1.6 3.2
90	6.0 10.0	3.2 1.6 3.2
100	10.0	1.6 2.0 3.2
125	10.0	1.6 3.2
150	10.0	1.6 3.2



### type 12V9 45°

TYPE 12V9 (45°) FLARING CUP WHEELS

D	U	X
30	6.0	1.6 3.2
38	6.0 7.0	1.6 3.2
40	4.0	1.6 3.2
50	4.0 6.0	1.6 3.2
75	6.0 10.0	1.6 3.2
90	10.0	1.6 3.2
100	6.0 8.0 10.0	1.6 3.2
125	10.0	1.6 3.2
150	6.0	1.6 3.2





## CUP WHEELS (CON'T)

### type 11A2 - Taper Cup

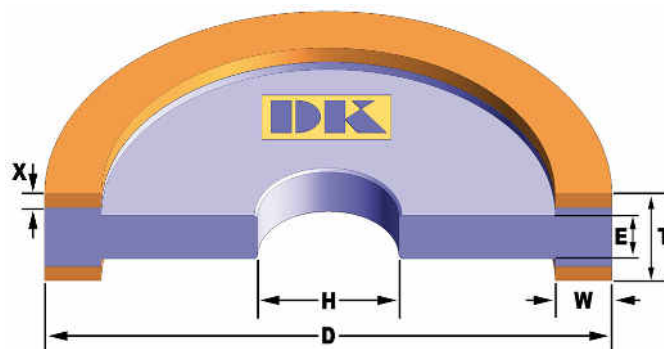
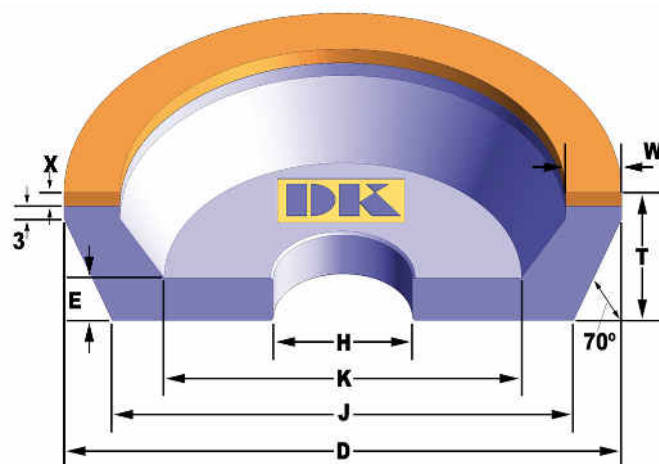
TYPE 11A2 TAPER CUP WHEEL

D	W	X	T-X	E
40	5.0	1.6	15	8
		3.2		
50	3.2	1.6	15	8
	5.0	3.2		
75	5.0	1.6	20	9
	6.0	3.2		
	10.0	3.2		
90	6.0	1.6	23	10
	10.0	3.2		
100	5.0	1.6	23	10
	6.0			
	10.0			
	12.5			
125	5.0	1.6	23	10
	6.0			
	10.0			
	12.5			
150	15.0	3.2	23	10
	5.0			
	6.0			
	10.0			
175	12.5	1.6	25	12
	15.0			
	20.0			
	25.0			
200	10.0	1.6	25	12
	12.5			
	15.0			
	20.0			

### type 9A3 - Double Face

TYPE 9A3 DOUBLE FACE WHEELS

D	W	X
150	6.0	1.6
	10.0	
	12.5	
	15.0	
	20.0	
175	5.0	1.6
	6.0	
	10.0	
	3.2	



# resin diamond & cbn

## OPG WHEELS

A variety of optical profile wheels are available to customers specific grinding applications, the square edged 14A1 or 3A1 and the rounded edge 14F1 shapes can be manufactured in either CBN or diamond according to the type of material to be ground. When ordering please state wheel diameter (D), grinding width (U), layer thickness (X), layer thickness radius if required (R), body thickness (T), bore size (H) and flange diameter if required (J). Grinding parameters are also required to enable correct grit size and bond type to be advised.

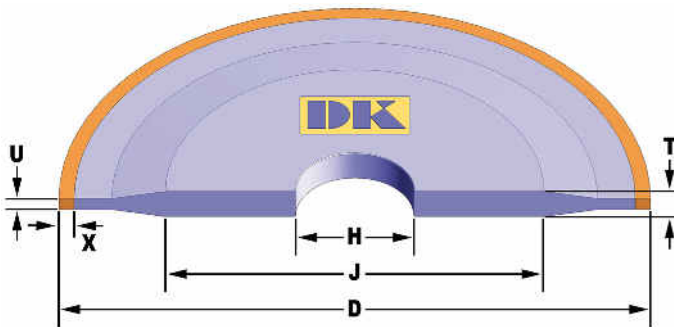
14A1



### type 14A1 - Optical Profile

TYPE 14A1 OPTICAL PROFILE WHEELS

D	U	X	T	J
125	1.5 3.0	3.2 6.0	7	105 100
	2.5 5.0			
150	1.5 3.0	3.2 6.0	8	130 120
	2.5 5.0			
200	6.0	3.2 6.0	12	175 160
255	6.0 10.0	3.2 6.0	15	200



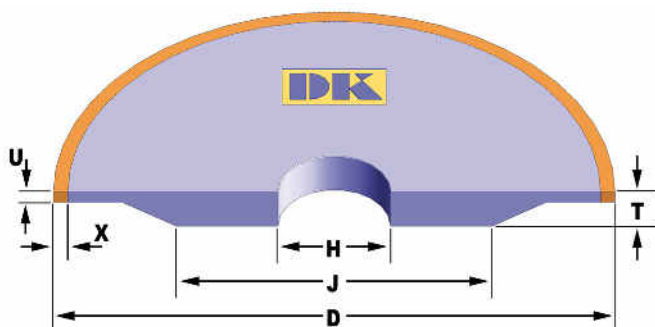
3A1



### type 3A1 - Optical Profile

TYPE 3A1 OPTICAL PROFILE WHEELS

D	U	X
125	1.5	6.0
	2.5	6.0
	3.0	3.2 6.0
	5.0	3.2 6.0
150	1.5	6.0
	2.5	6.0
	3.0	3.2 6.0
	5.0	3.2 6.0



When ordering .....

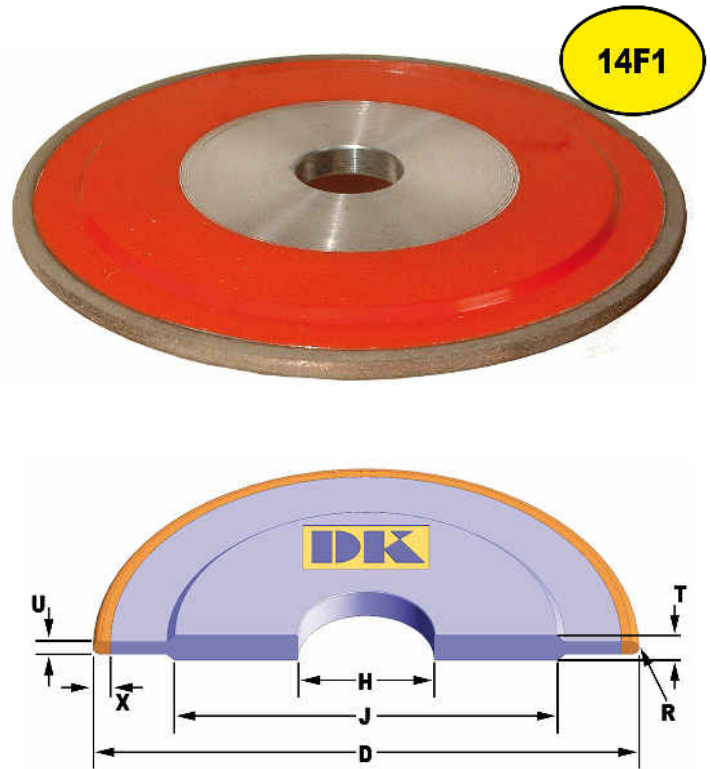
please state all dimensions as illustrated.



## OPG WHEELS (CON'T)

### type 14F1 - Optical Profile

TYPE 14F1 OPTICAL PROFILE WHEELS				
D	U	X	R	T
40	2		1.0	
	3	3.2	1.5	6
	4		2.0	
50	2	3.2 5.0	1.0	
	3	3.2 5.0	1.5	6
	4	3.2 5.0	2.0	
75	2	3.2 5.0	1.0	
	3	3.2 5.0	1.5	6
	4	3.2 5.0	2.0	
100	2	3.2 5.0	1.0	
	3	3.2 5.0	1.5	6
	4	3.2 5.0	2.0	
125	2	3.0 5.0	1.0	
	3	3.0 5.0	1.0	6
	4	3.0 5.0	2.0	
150	2	3.0 5.0	1.0	
	3	3.0 5.0	1.0	8
	4	3.0 5.0	2.0	



# electroplated diamond & cbn



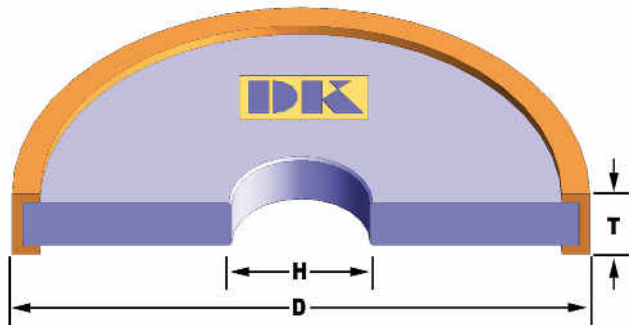
## 1A1 PERIPHERAL WHEELS

Electroplated diamond and CBN Peripheral Wheels are produced for use on Surface Grinding machines as well as Bench machines.

These wheels are manufactured in both diamond and CBN. The diamond wheels are used for grinding Tungsten Carbide, Ceramics and CBN wheels are for grinding HSS and Steels harder than 40 Hrc.

Benefits include:

- No reduction to wheel diameter or loss of shape during use.
- No need to dress wheel.
- No dust generated through wheel breakdown.
- Worn out wheels can be returned for re-plating giving cost savings over new wheels.

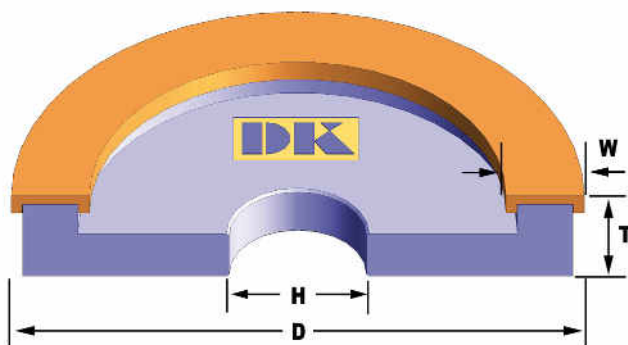


## 6A2/6A2C PLAIN CUP WHEELS

Diamond and CBN electroplated Plain Cup Wheels are manufactured for use on Surface Grinding machines and Bench machines.

These 6A2/6A2C cup wheels are can be produced in both diamond and CBN. The diamond wheels are used for grinding Tungsten Carbide, Ceramics and CBN wheels are for grinding HSS and Steels harder than 40 Hrc.

Several benefits are available in using these types of wheels and include — No reduction to wheel diameter or loss of shape during use. No need to dress wheel. No dust generated through wheel breakdown. Worn out wheels can be re-plated giving cost savings over new wheels.



When ordering .....

please state all dimensions as illustrated.



## INTERNAL GRINDING WHEELS

Diamond resin bonded 1A8W and 1A1W internal grinding wheels are manufactured to customers' specifications. These grinding tools can be used on a wide variety of engineering applications and are available in either CBN or diamond.

### TYPE 1A8W INTERNAL WHEEL

D	T	Y	L1	L1-L2	X	Y1
3	4	3	40	6	0.75	2
5	6	3	40	-	1.0	-
6	6	3	50	-	1.5	-
6	8	6	50	10	1.5	5
8	8	6	50	-	1.5	-
10	8	6	50	-	2.0	-
12	10	6	50	-	3.0	-

### TYPE 1A1W INTERNAL WHEELS

D	T	Y	L1	X
15	10	6	60	3.0
20	10	10	60	3.0
25	10	10	60	3.0

## HAND HONES

A range of diamond and CBN hand hones to customer specific requirements can be manufactured. These high quality hand laps are tailor made according to the customer's individual lapping applications, when ordering please state material to be honed, finish required and hand hone dimensions.

### TYPE DHH1 HAND HONE

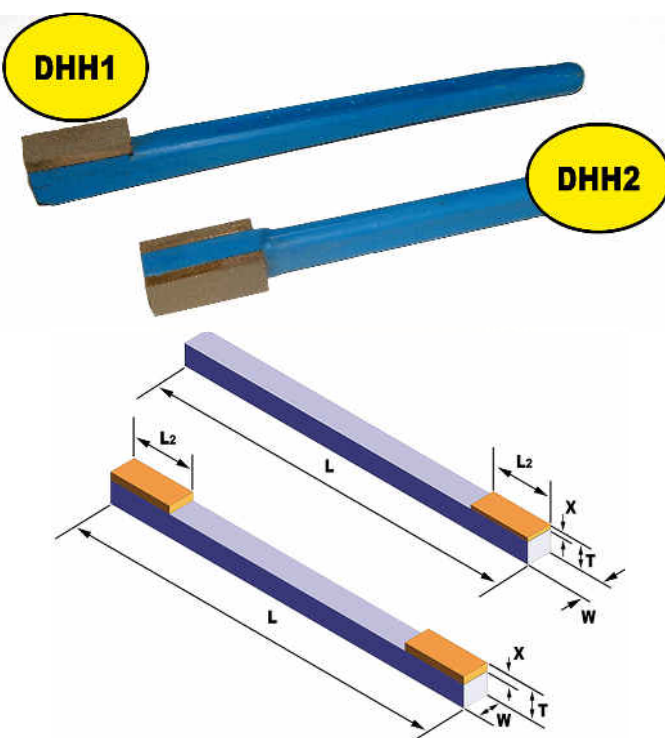
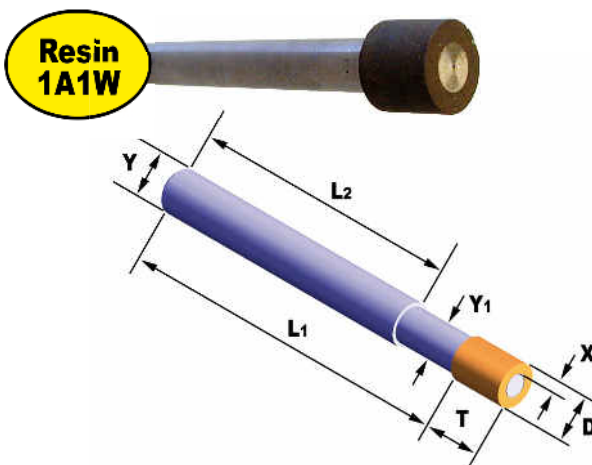
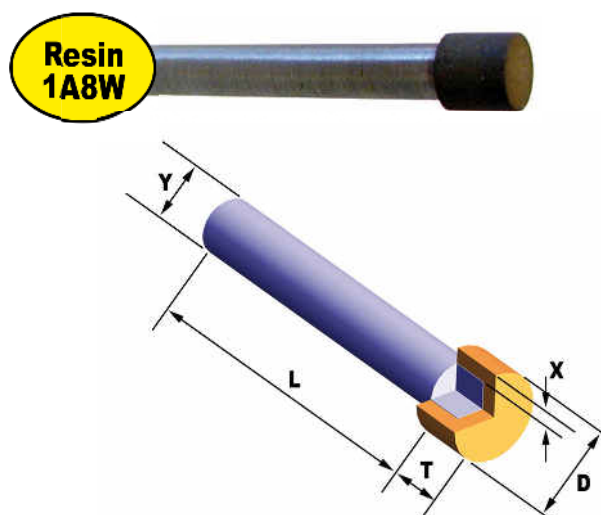
L2	L	T	W	X
25	150	10	10	1.5
25	150	10	10	3.0

### TYPE DHH2 HAND HONE

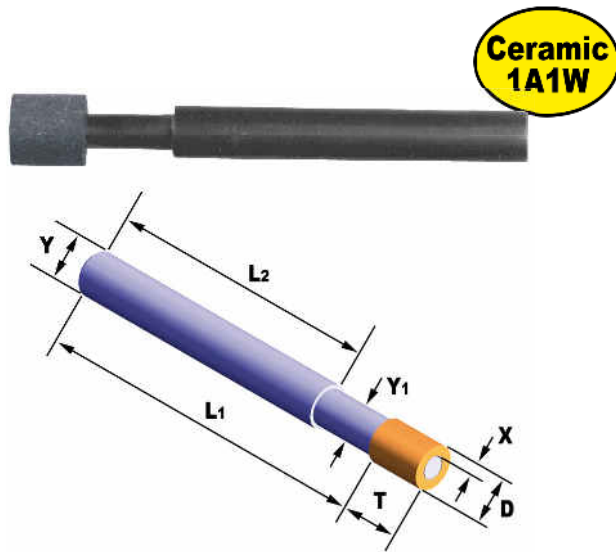
L2	L	T	W	X
25	150	10	10	1.5
25	150	10	10	3.0

### When ordering .....

please state all dimensions as illustrated.



# ceramic/polycrystalline diamond & cbn



## CERAMIC INTERNAL GRINDERS

Ceramic internal grinding wheels are available in diameters 4mm to 25mm and are supplied with or without a shank. The diamond wheels are for grinding carbides and ceramics and the CBN wheels are for grinding hardened steels. Ceramic grinders are extremely tough and have a porous structure which has the following advantages:

1. Extremely fast cutting with low wear.
2. Cool cutting with improved surface finish when used dry.
3. Outlasts electroplated wheels by up to 20 times whilst cutting 25% faster.

### TYPE 1A1W CERAMIC INTERNAL GRINDER

D	T	X	Y	L1	Y1	L1 - L2
4	5	1.0	3	50	2	6
6	5	1.5	3	50	-	-
8	8	2.5	6	50	4	10
10	8	2.5	6	50	5	10
12	10	3.0	6	50	-	-
15	10	3.0	6	50	-	-
20	10	3.0	10	60	-	-
25	10	3.0	10	60	-	-

### NOTE:

Other shapes of wheels are available on request.



POLYCRYSTALLINE ROUTER

## POLYCRYSTALLINE TOOLS

Many materials can be machined successfully with Polycrystalline diamond and CBN tools which include:

**DIAMOND:** Light Alloys, Bronzes, Composite Products, Precious Metals, Plastics, Rubber, Ceramics, Porcelain, Granite and Sandstone.

**CBN:** Hardened Steels and Hardened Super Alloys.

The benefits of using Polycrystalline are:

1. Longer life.
2. Higher cutting speeds.
3. Consistent precise defined surface finishes.

This range of tools are available as; Tips to fit standard throw away tools, Turning Tools, Boring Tools, Boring and Facing Tools, Microbores, Drills, Routers and Reamers.

### POLYCRYSTALLINE TOOLS

CODE	DESCRIPTION
BMPHL	Custom made tools and inserts



# wheel preparation

## DIAMOND/CBN WHEEL PREPARATION

### Wheel mounting

As with any grinding wheel it is very important that diamond or C.B.N. wheels are mounted true with the aid of a clock dial indicator.

### Truing & dressing

It is essential with diamond and C.B.N. wheels, that they are trued on the machine and properly dressed to expose the abrasive particles.

## ALUMINIUM OXIDE STICKS

Dress diamond wheels with a wet grade 100 grit aluminium oxide stick and C.B.N. wheels aggressively dress with a wet 220 grit aluminium oxide stick.

### DRESSING STICKS

CODE	SIZE	GRADE
*BMP010	1" x 1" x 4"	100 mesh
*BMP015	1" x 1" x 6"	220 mesh

## BRAKE DRESSER

The Brake Dresser is a simple but fast and effective method of wheel truing and dressing and is supplied with two dressing wheels. It is a fully self-contained unit which can be used on any grinding machine.

Using the Brake Dresser will improve both the working life of your wheels and the quality of the surface finish.

The Brake Dresser consists of a cast body containing a shaft, which is controlled by a centrifugal braking system. A silicon carbide wheel is mounted on the shaft. Due to its simplicity, the unit requires virtually no maintenance.

### BRAKE TRUEING DEVICE

CODE	DESCRIPTION
*BMP002	Self-contained Trueing/Dressing Unit
*BMP005	Dressing Wheels 3" x 1" x 1/2" C150 IV

## MICROTOUCH

The Microtouch Audible Signal Detector has been designed to inform the machine operators precisely when the cutting tool makes contact with the surface by audible or visual means. It eliminates operator fatigue when machining to super fine tolerances by taking the guesswork and tension out of the operation.

A very simple and easy system to use, by switching on the Microtouch and attaching the magnetic head of the accelerometer to the workpiece, any vibration that is applied to the workpiece will be immediately and clearly distinguishable through the earphones enabling control of the machine to micron dimensions.

### MICROTOUCH AUDIBLE SIGNAL DETECTOR

CODE	DESCRIPTION
*MMT005	Model M240 (240 volt)
*MMT030	Type P (Battery)
*MMT050	Headphones
*MMT055	VP7 Pickup

\*Denotes ex-stock.

All prices are exclusive of VAT and Carriage.



DRESSING STICKS



TRUEING DEVICE



AUDIBLE SIGNAL DETECTOR

# dressing tools

We offer a wide range of Natural Diamond Tooling for the engineering industry to suit your application and including single point, chisel point, cone point, multi-point and index diamond dressers.

GRADE		DIAMOND QUALITY
KE	Economy	A very economic robust quality of irregular shape with usually one to two points.
KC	General Use	Standard quality of an irregular shape with three working points.
DB	General Industrial	A higher quality diamond for general use with four working points.
KA	Quality Industrial	General toolroom quality of good shape with five working points.
KAA	Super Quality Toolroom	Good toolroom quality with six working points, good shape and with no inclusions or cracks.



SINGLE POINT

## SINGLE POINT DRESSING TOOLS

The 'Single Point' is the traditional diamond dressing tool for straight grinding of conventional grinding wheels. A single natural diamond is used which can usually be reset several times so that new cutting points can be exposed once a point becomes blunt. The size of the diamond used can vary in weight, normally from 0.25 carats each to 5 carats or more. The diamonds are selected from a wide range of qualities and shapes to suit each working application.

### Ordering and Resetting Service

Please give shank dimensions, quality and size of diamond when placing orders. Contact our technical department for advice. We offer a fast reliable reset service.

### SINGLE POINT DRESSERS

CODE	DESCRIPTION
BMPHL	Single Point Natural Diamond Dresser



MULTI POINT

## MULTI POINT DRESSING TOOLS

The Multi Point is used for straight dressing of conventional grinding wheels or very simple profiles. They can be supplied in various diamond sizes to suit wheels to be dressed. These dressers are often used in place of a Single Point where fast dressing or stock removal is required. Fine diamonds can be used where high finish or sharp corners are required.

The dressing load is divided on a number of natural diamond particles which are set in a strong matrix. These tools do not require re-setting. Various designs are available. A cost effective dresser in the production environment where used as a disposable tool. Special custom tools can be made on request.

### MULTI POINT DRESSERS

CODE	DESCRIPTION
BMPHL	Multi Point Diamond Disposable Dresser



INDEX DRESSER

## INDEX DRESSERS

A cost effective Single or Multi Point Dresser which comprises of multiple diamonds which are set in a strong matrix around the circumference of the wheel. After the diamonds in one position have become worn the wheel is easily indexed to the next line of diamonds and locked into position. These can be used one after the other by simply rotating the tool. Can be made to dress straight or profile wheels.

### MULTIPLE DIAMOND INDEX DRESSERS

CODE	DESCRIPTION
BMPHL	Single or Multi Point Diamond Dresser



## DIAFORM CHISELS

The Diaform Diamond Chisels are used with grinding wheel forming equipment and the diamond chisels can be built into the machine design. Mainly used for precision profiling of grinding wheels, sometimes in conjunction with Blade Dressers which can be used to rough out a form.

Specially selected diamonds are used to produce these tools and can be supplied in various size tip radii and normally with 40 or 60 degree angles, shank size to customers specification. The natural diamond used is high quality, can be re-set and relapped also there is a remake service available.

### DIAFORM CHISELS

CODE	DESCRIPTION
BMPHL	Natural Diamond Diaform Chisel



DIAFORM CHISEL

## BLADE DRESSERS

Diamond Blade Dressers can be used for both straight or profiling of grinding wheels. These diamond dressers can be used to rough profiles before finishing with a Chisel Point Dresser.

The diamond blade dresser provides a robust and cost effective alternative to the single stone diamond chisel. It maintains a consistent, thin diamond cutting edge throughout its working life.

Blade Dressers are produced in a number of widths to suit requirements and adjustable, re-useable or fixed head holders are available for mounting the diamond blade dresser.

### BLADE DRESSER

CODE	DESCRIPTION
BMPHL	Diamond Blade Dressing Tool



BLADE DRESSERS

## KD DRESSERS

Metal bonded disposable diamond dressing tools for dressing medium to coarse grained grinding wheels by hand or mounted in a suitable holder. No resetting required.

Manufactured using higher quality coarse natural diamonds to give long life and continuously produce an 'open' grinding wheel.

### KD DIAMOND DRESSING TOOLS

CODE	DESCRIPTION
BMPHL	Metal Bond diamond disposable dresser



KD DRESSER

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