

KAYES INDUSTRIES

Pioneering the Diamond tool Industry

Nothing is too tough for us...
Production of special diamond tools



From a very humble beginning, KAYES has today grown into a corporation with hi-tech facilities and qualified techno commercial team.

KAYES developes, manufactures and markets state-of-the-art diamond toolings to serve all cutting and grinding applications for various industries like automobile manufacturing, petroleum exploration, ore-mining, building construction, stone, domestic glass, optical instrumentations, metal working and production of electronic components. Many of our products serve unusual and sophisticated applications which are demanding in performance and capabilities.

With more than 10 years of direct services to our customers and wide experience in the field of industrial diamonds by our technical staff, we are today in fit state to engineer special toolings for your specific needs.

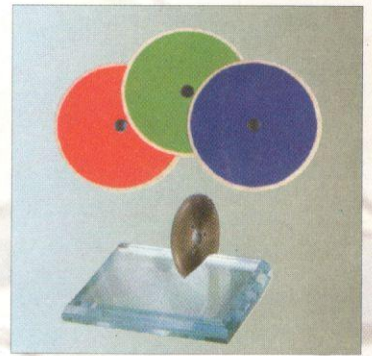
For its grinding-wheels KAYES uses the best synthetic or natural diamonds offered by the world market and selected on the basis of the results of numerous tests carried out in their laboratories. The main aim has been to optimize the performance of the diamonds and new bonds.

To be recognized as a premium diamond tool supplier, we have dedicated ourselves to delivering an extensive breadth of high quality products in a reliable and customer responsive manner. In today's competitive business environment KAYES will continue to meet the product needs, expectations, service and provide value addition for our customers.

We welcome the opportunity to explore new super abrasive application and to work with you as a technical partner in our continual search for more efficient, environment-friendly, cost-effective ways of doing business.

D. KAMAL
CHIEF EXECUTIVE
KAYES INDUSTRIES

Diamond cut-off-wheels are used for precision straight and curve cutting of thick glasses. All KAYES cut-off-wheels are precisely manufactured to exact specifications and each one is carefully inspected prior to shipping to ensure a smooth, trouble free operation. Metal matrix with diamond particles are sintered directly to the substrate and cannot pull out. The best suitable bonds and high quality diamond particles ensures smooth and chip free cutting.



Metal bonded diamond pencil, flat edging and bevelling wheels are used primarily in the fabrication of automotive, architectural and domestic glasses, radial edges ranging from shallow to full semi circular profiles are produced. The diamonds on these wheels are combined of different metals which have been optimized for better cutting performance. The advantage is that the diamond exposure and concentration can be controlled, resulting in good cutting edge exposure.

Sintered metal drill bits for use with all manual and automatic machines, these are used to produce high quality drilling on glass with speed, accuracy and economic tool life. The optimum peripheral working speed for drilling glass is approximately 5 m/sec. On request we can provide a detailed table which gives the min. and max spindle speeds (R.P.M.) and the recommended coolant supplies (L.P.M.) at different diameters.

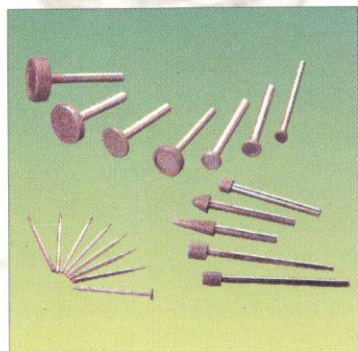
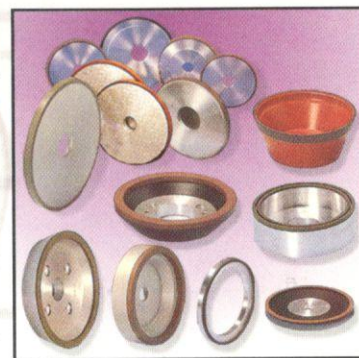


Diamond metal bonded edging wheels are produced by combining diamonds with blends of different metals which have been optimized for specific cutting performance. A soft bond yields an aggressive fast cut, while a harder bond produces a longer tool life that gives a finer finish. Metal bonds are normally used for glass and general purpose work. Based on your requirements, we can provide wheels for an aggressive, fast cutting action or a less aggressive, long tool life.

Diamond generators are used to grind the "Base" and "Cross" curves into the lens blank. The diamonds in these generators are well exposed which allows good cutting edge and less loading. The diamond portion is built with swarf clearance for heavy water flow and smooth running of the generator. Metal bond and electro deposited generators are made for both glass and C.R.39 lens blanks.

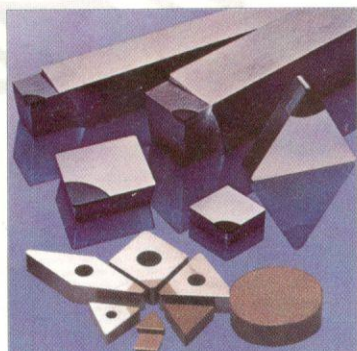
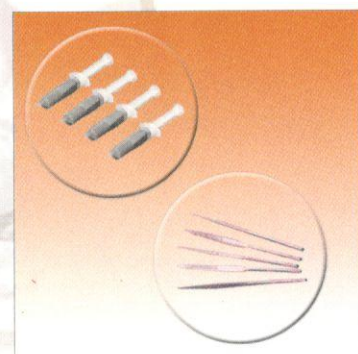


We offer a complete line of resin wheels for a wide range of grinding applications. Our resin wheels are made by using the highest quality super abrasives and raw materials to ensure superior performance. Designed to satisfy the basic needs of tool room grinding, where a cost effective wheel is required for sharpening carbide tipped tools. In addition, we have experienced engineers and the equipment necessary to design and manufacture wheels to suit your custom applications.



Our Diamond and CBN mounted points are made from a single piece of steel and are hardened for maximum rigidity to best meet your application. Available in both diamond and CBN bonding, the diamond mounted points are utilized for jig grinding of carbide tooling and the CBN mounted points are best used for high-speed steel tooling. Mesh sizes range from 60 to 220 grit with 60 designed for roughing, 100 for common commercial finishes and 220 for extra-fine finishes.

Our diamond hand files are designed for hand finishing of rough edges on fiberglass composites, ferrous and non ferrous materials. Easy-to-handle files are available in 6" and 10" lengths and different shapes. Diamond lapping compound is used for smoothing the die surface and also to wipe off unwanted foreign particles in used dies and fixtures. Different grades from rough to super fine can be made to suit customers requirement.



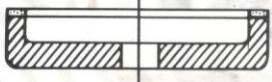
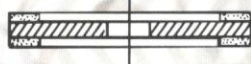
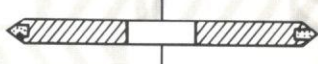
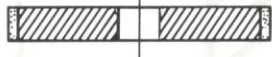
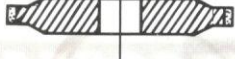
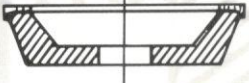
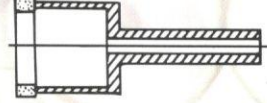
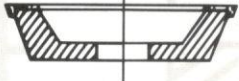
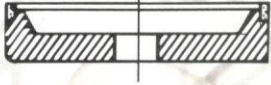
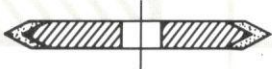
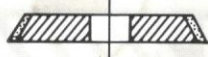
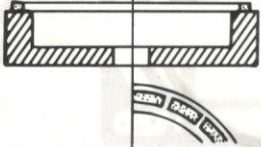
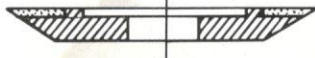
Our PCD/CBN turning tools are a cost-effective approach to higher material removal, improve finishes and to reduce tool change downtime. Recommended for machining ferrous metals and highly abrasive nonmetallic materials. They can be used in turning, boring, facing, forming, milling, grooving, reaming, parting and are available in most carbide insert shapes, as well as boring bars, special tools and wear parts.

KAYES has been synonymous with quality diamond dressers. Today, we offer you the broadest standard line of quality diamond dressing tools in the industry. All KAYES dressing tools are made to established standards that are spelled out in precision tool room works. Among the toughest in the industry, the quality standards are never compromised. All standard shapes are available and non standard profile dressers can be made against orders.

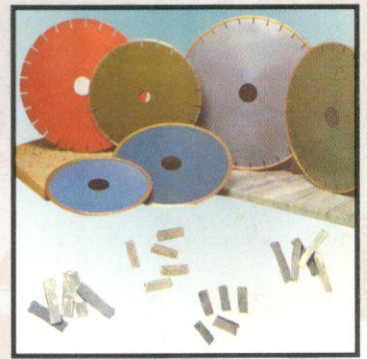


KAYES

TYPE OF WHEELS

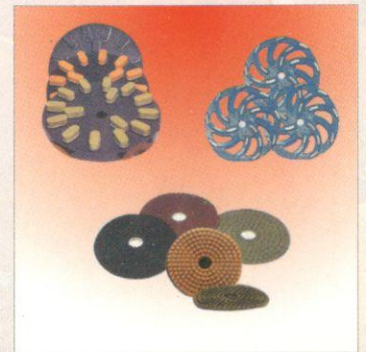
Type	Type	Type
6A2 Plain cup 	9A3 Double cup 	1E6Q Sandwich V-face 
11A2 Flare cup 	1A1 Straight 	1FF6Y, 1EE6Y, 1LL6Y, 1DD6Y Pencil-edge 
12A2 Dish 	3A1 Straight-raised hub on one side 	9 1A1, 1A8 Internal 
11B2 Angle flare cup 	14A1 Straight-raised hub on both side 	W Internal with shaft 
11C9 L flare cup 	1FF1 Straight with R 	3A2 Core drill 
11Y9 Angle L flare cup 	1A1R Cutting 	HH1 Hand stone 
6A9 Corner cup 	1EE1 V-face 	H Honing stone 
11V9 Angle corner cup 	1V1 Angle straight 	
6A2S Segment cup 	4B2 One-side V-face 	We also provide custom engineered toolings for your special grinding requirments.

KAYES produces diamond saws and spare segments of any size ranging from 4 inches to 3 meters. These saws have proven to be highly efficient and quite economical in cutting natural stones, tiles, electro cast refractories, reinforced concrete and other hard and brittle materials. All factors relating to cutting efficiency such as material to be cut, water flow, machine must be exactly considered to attain the best out of the saws. KAYES recommends the customer with the best suited saw for his working material and conditions.



KAYES dry cutters are designed to work well at construction sites as well as in any stone cutting operation where there is a need for cutting any number of materials, these blades have been designed to be used on hand held portable machines. KAYES offers these blades with segments for large surfaces and continuous rim for edges and shapes. Standard diameter is 100 mm also 75, 125 and 150 mm are made against order. Best suited for coarse fast grinding and excellent material removal of stone, granite, marble etc.

The unique design of our polishing tools allows rapid and uniform removal rates with minimum effort. The center hole permits water lubrication during material removal and polishing operations. These tools are designed to bring the work piece to the finest polish. The discs work extremely well on granite and marble. Featuring high quality, flexible, long lasting disc will meet your high quality standards. Available in eight different grits : #50, 100, 200, 300, 400, 800, 1500, 3000.



These profile wheels are specially designed and manufactured to order. To grind both simple and intricate profiles on stone, marble and granite. The use of these tools enables the user to reduce labour cost dramatically when compared to traditional methods of production. Electro deposited and segmented metal bonded tools are available in various shapes and diameters as requested by the customer. Small diameter profiling tools can be used on routing machines too.

KAYES manufactures general purpose core drill bits for drilling wide range of blocks, bricks, granite, marble, ferrites, crystallite and concrete with soft to hard aggregates and light steel reinforcing. KAYES provides a large range of core drills with diameters from 6 to 900 mm. Small diameter (6 to 60 mm) core drills are offered with a continuous rim. Large diameter (above 60 mm) core drills have segments and can thus be retipped. Available in different bonds and any special lengths on request for specific applications.

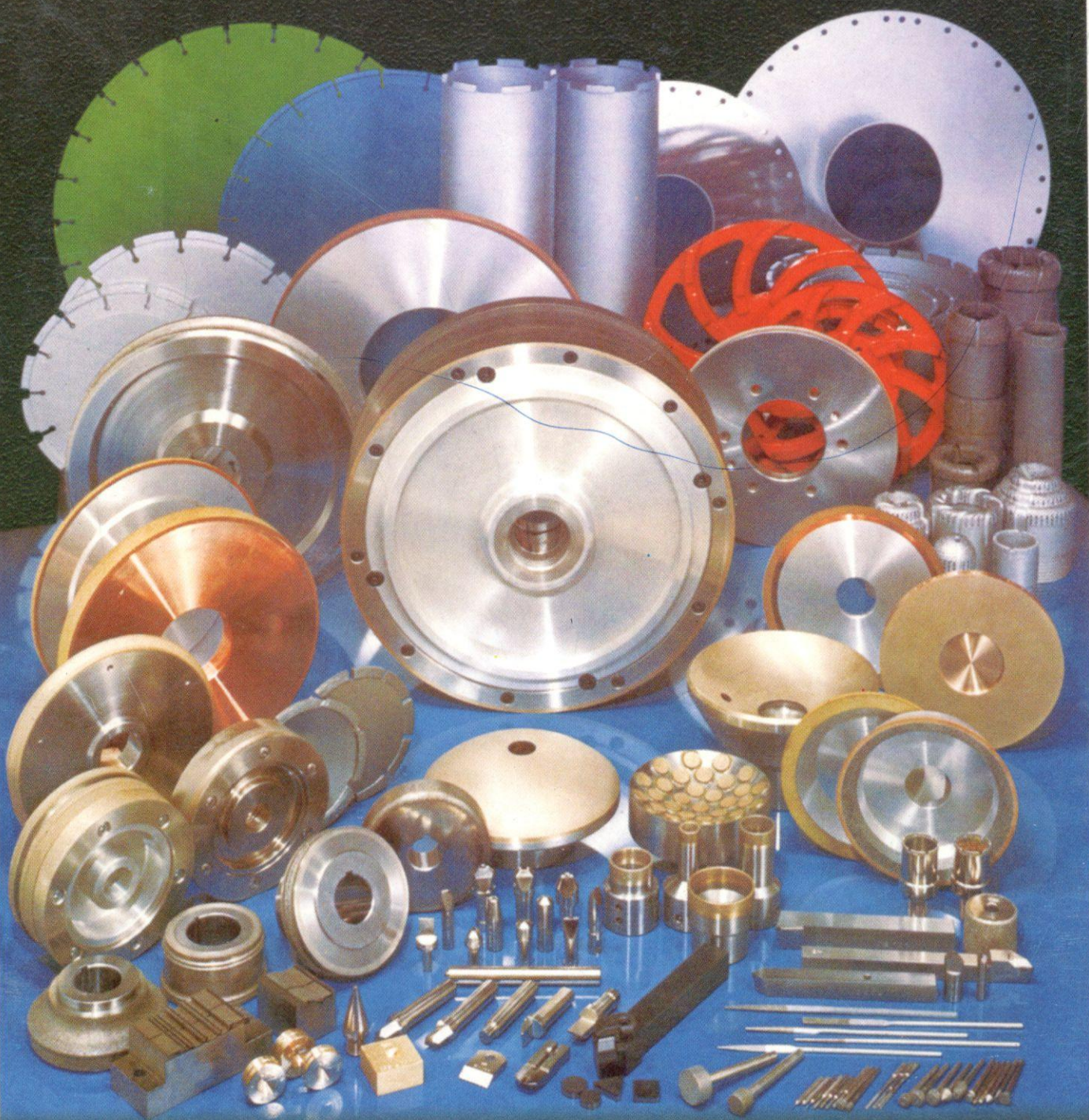




Diamonds are synthesized from carbon and catalyst such as iron, chromium, cobalt, nickel, at ultra high pressure and temperature. Being the hardest artificial abrasive on earth, it has many exclusive physical and mechanical properties, such as great hardness, compressive resistance, excellent wearability, less heat expansibility, good heat conductivity and chemical stability. As diamond abrasives are available in various sizes, shapes, crystal structure and strength, KAYES selects these abrasives with extra care to manufacture its wheels to suit a range of cutting and grinding applications in varied industries like automobile manufacturing, glass and optics, engineering, construction, stone, refractory, electrical and electronics, communication, ceramic, magnet, ferrite etc.

KAYES focus continues to be on cutting and grinding of hard materials. In just two words, the technology that has always been the speciality of KAYES is **surface preparation**. When selecting a diamond tool several factors must be taken into consideration like the machine type, roughness requirement on work piece, processing speed, tool life, etc. While ordering a diamond tool from KAYES for the first time, you are requested to kindly give as much as information possible for us to design a perfect tool for your application.

To become a winner in today's competitive world you need a right partner who can give you customized problem-solving techniques. For all your cutting, grinding and polishing needs, join KAYES the winning team - we produce the most competitive and finest diamond tools in India.



QUALITY THAT BUILDS CONFIDENCE !!

KAYES INDUSTRIES

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