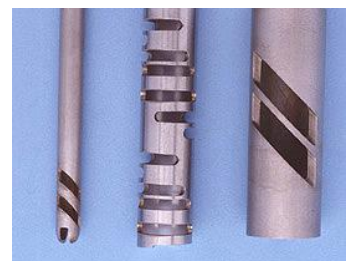
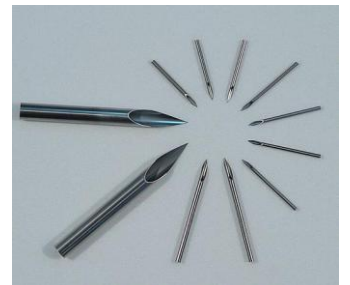
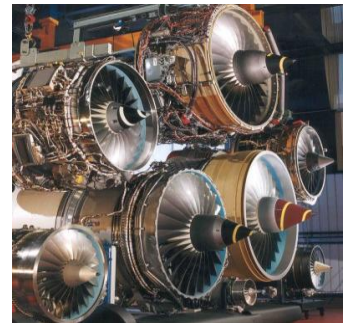


Kerry Abrasives

Precision Engineered Abrasives

- Company Profile
- Product Overview
- Detailed Product & Application Information
- Technical Data
- Trial Request Form
- Contact Details

Engineering Excellence



Introduction

Kerry Abrasives are a precision engineering company specialised in the manufacture of polymer bonded abrasives. Our abrasive cut off, grinding and polishing wheels are well known to perform to high standards – in even the most difficult grinding applications.

*We understand the unique difficulties of working with all kinds of metals and have a **great technical expertise** at our disposal to offer our clients **customised solutions** for their specific grinding requirements.*

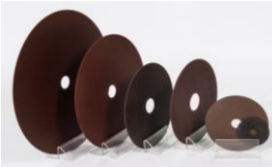

















This catalogue offers an overview of our products and their applications across a broad spectrum of industries.





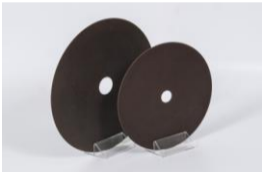


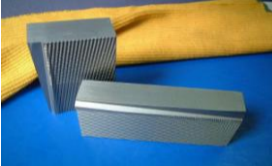

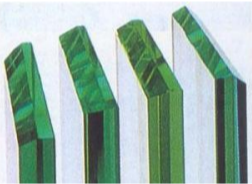






Please be advised that this is by no means a finite product listing – ***all our products are customised***, so we would like to hear your specific grinding requirements and offer you a unique solution!

Use the enclosed **Trial Request Form** to request trial wheels for testing and evaluation.



Kerry Abrasives 
Precision Engineered Abrasives

	Product Name	Product Application	Product	Application
1	Thin Rubber Cutoff Wheels	For precision cutting and slotting with very close tolerances and burr free Wet cutting with reduced heat and with minimum kerf loss. Ideal for large volume production		
2	Rubber Cylinder Wheels	Flat Grinding High Carbon Steels in the Premier Cutlery and Hand Tool Industries		
3	Rubber Polishing Wheels	Grinding, Polishing and Deburring Wheels for High Carbon Steels, High Temperature Alloys, Inconel, Nimonics, Hastalloys, Titanium. For SS Industries, Aerospace, Medical Devices and Automotive		
4	Epoxy Cylinder Wheels	Flat Grinding High Carbon Steels in the Standard Cutlery and Hand Tool Industries		
5	Epoxy Cup Wheels	Epoxy wheels used in the manufacture of cutlery and hand tools.		
6	Carding Wheels	Grinding the tops and fillets of carding wire used to comb textile fibres		
7	Needle Grinding Wheels	Grinding bevels on the top of small bore tubes and hypodermic needles		
8	Feed Wheels	Control wheels which act as a brake in Centerless grinding operations		
9	Tapered Bearing Wheels	Two zone epoxy wheels used in the manufacture of tapered roller bearings.		

Product Name	Product Application	Product	Application
10 Two-Zone Wheels	Two zone wheels (epoxy inner for grinding) and rubber outer for polishing cutlery and hand tools		
11 Cork Polishing Wheels	Cork wheels for fine grinding and polishing where surface finish is very important		
12 Metallurgical Cutoff Wheels	Rubber bonded wheels in a soft bond matrix used in metallurgical laboratories for cutting specimen samples for metallurgical testing		
13 Hot Pressed Rubber Wheels	Rubberized wheels which are hot pressed to give additional strength and life for use on thread rolling dies and other heavy duty grind/polish applications		
14 Glass Edging Wheels	Hot Pressed rubberized wheels for finishing and edging flat glass after grinding with superabrasives		
15 Deburring Aerospace "Bobs"	Small hot pressed wheels for deburring the "orange peel effect" after forging high temperature alloys in the aerospace industry.		
16 Scalpel & Razor Edge Grinding	Pressed resin fine grit wheels for grinding scalpels and edging razor blade steel.		
17 Fine Grit Sticks & Stones	Pressed resin fine grit sticks and stones for dressing grinding wheels and for use as sharpening and deburring items in various industries.		

Kerry Abrasives Ultra Thin Rubber & Resin Cut Off Wheels not only give your production a *Competitive Advantage* but also access to unique *Technical Expertise and Know-how*.

Excellent performance for the cutting of:

- Hypodermic, dental and veterinary needles
- Small bore steel and stainless steel tubes
- Copper, Nickel and Nickel alloy tubes
- Aluminium and Titanium tubes
- Tubes for aerospace and automotive applications
- Tungsten and Molybdenum contacts
- Metallurgical sampling
- ...and many more specialist applications.



Wet Cutting

Rubber & Resin Wheels

Large production volumes where an exacting finish is required.

Dry Cutting

Resin Wheels

Achieve outstanding results with highest degree of surface finish.



Kerry Abrasives are committed to delivering Quality and Expertise – Here is what you can expect:

- **Improved Cut:** Smooth, straight, burr free, no burn with minimal kerf loss.
- **Better Productivity:** Reliable, consistent quality and access to technical knowledge.
- **Technical Support:** Testing facility available to cut samples free of charge.
- **Material Range:** Cut materials from **Alnico** to **Zirconium**, including Brass, Copper, Glass, Gold, Iridium, Nitinol, Molybdenum, Silver, Tantalum, Titanium Tungsten, and other exotic materials.
- **Commitment:** Expert advice on correct wheel specification for your application and free of charge trial wheels for testing.

Typical Specifications

- Wheel sizes: 150 to 250mm with thickness from 0.38 to 0.8mm.
- Grit sizes: Aluminium Oxide (A) 90 to 400grit and Black (BC) or Green (GC) Silicon Carbide 320 to 800grit.
- Customised solutions: Other wheel sizes and specifications are available to suit your needs.



Kerry Abrasives Ultra Thin Rubber Bonded Cut Off Wheels are the right choice if you are looking for a high precision cut off wheel giving a maximal degree of surface finish.

- For precision cut off applications & slotting
- Thin and ultra thin rubber bonded abrasive wheels
- Burr free and cool cutting of materials
- Accurate cutting with close tolerances
- Minimum kerf loss
- Wet cutting to reduce heat generated
- Ideal for large production volumes
- Consistent quality
- Expert advise and technical know-how

Industry Specific Applications

Automotive Industry

Sprag clutches, Tungsten contacts, control cables, pump vanes etc.

Aerospace

Tube cutting, Titanium cutting, metallurgical sampling

Medical Device Industry

Hypodermic needles, dental slotting, orthopaedic implants

Electrical Industry

Transformer cores, Tungsten & Molybdenum contacts and slugs, magnets & wire filament for lamps

Miscellaneous

Pen nibs, mould ejector pins, collet slotting, glass tubing, precious metals, metal watchband parts, carding cloth, drill rods

Typical Wheel Specifications

Wheel sizes:	150 to 250mm with thickness from 0.38 to 0.8mm
Grit sizes:	Aluminium Oxide (A) 90 to 400grit and Black (BC) or Green (GC) Silicon Carbide 320 to 800grit
Customised solutions:	Other wheel sizes and specifications are available to suit your needs





Kerry Abrasives' new Hot Pressed Rubber Bonded Grinding Wheel opens up a whole new dimension for precision flute grinding applications!

Advantages of Hot Pressed Rubber Bonded Wheels:

- Outstanding high quality surface finish
- Dense bond structure, therefore:
- Excellent profile holding capabilities
- Absolutely no burn
- Long life wheel
- Ability to run at high peripheral speeds
- Better stability and more economic than industry standard resin bonded wheels.



Main Applications:

- Flute grinding with CNC grinding machines
- Grinding teeth in circular saw blanks (in package clamping)
- ...and many more specialist applications.



Kerry Abrasives are committed to delivering Quality and Expertise – Here is what you can expect:

- **Improved Grind:** Smooth surface finish without burn, high stock removal rate and stable profile.
- **Better Productivity:** Reliable, consistent quality and access to technical knowledge.
- **Technical Support:** In-house technical dept. available to offer support with all issues.
- **Material Range:** Superbly suited to grind HSS tool steel; and equally suited for other hard metals.
- **Commitment:** Expert advice on correct wheel specification for your application and trial wheels for testing.

Typical Specifications

- Wheel sizes: 150 to 250mm with thickness from 2mm to 15mm.
- Grit sizes: Aluminium Oxide (A) 36 to 400grit and Black (BC) or Green (GC) Silicon Carbide also available on request.
- Customised solutions: Other wheel sizes and specifications are available to suit your needs.



Rubber & Plastic Bonded Grinding and Polishing Wheels for Cutlery and Hand Tool Industries

- For Precision Grinding, Deburring & Polishing
- Rubber & Plastic Bonded Abrasive Wheels
- High Performance Resilient Products
- Suitable for Berger & Siepmann Machines
- High Finish Tolerances without Discolouration.

APPLICATIONS:

Cutlery

- Professional Knives
- Table Knives
- Penknives / Pocket Knives
- Scissors

Hand Tools

- Chisels
- Scraper Blades
- Putty Knives & Scrapers
- Woodworking Tools

Medical

- Surgical Knives
- Blades & Scalpels
- Surgical Scissors & Tools

Grinding Miscellany

- Flat Grinding
- Hollow Grinding
- Back Grinding
- Colouring

Grinding Wheels & Cups

- Types 1, 2 and 6
- Plain and Nut Inserted
- Type 1 to 500mm Type 2 to 450mm



Rubber Bonded Grinding and Polishing Wheels for Aerospace and Metal Finishing Industries

- For Precision Grinding, Deburring & Polishing
- Rubber Bonded Abrasive Wheels
- High Performance Resilient Products
- Suitable for Bench or Handheld Machines
- High Finish Tolerances without Discolouration.

APPLICATIONS:

Automotive Industry

- Gear deburring
- Aluminium castings
- Ball bearing rings and races

Aerospace

- Turbine Blades & Vanes in Titanium, Nimonics Nickel Alloys, Hastaloy Stainless Steel & Steel High Temperature Alloys

Medical Device Industry

- Orthopaedic Implants.

Cutting Tool Industry

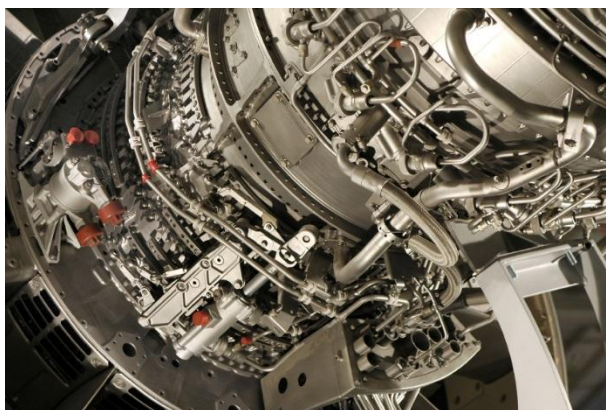
- Steel and carbide twist drill deburring & polishing
- Sharpening

Fabrication

- Weld Grinding, Blending & Deburring of Stainless Steel and Aluminum.

Miscellaneous

- Fine Jewelry
- Precious Metals
- Cutlery



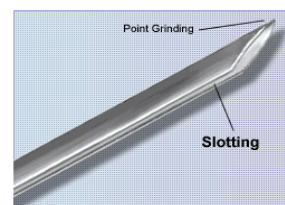
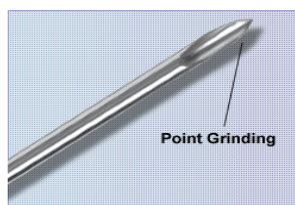
- For Precision Grinding of Small Bore Tubes and Hypodermic Needles.
- Superior Grade Consistency giving Predictable Performance.
- Excellent Technical Backup and Support. No Risk Trial Policy.
- Ongoing Product Development from Experienced Team.
- Shortest Lead Times in the Industry.

APPLICATIONS:

Medical Device Industry

- Grinding and Pointing of Hypodermic Needles, Blood Lancets, Infusion Sets, Dental Needles etc.
- Standard and Non Standard Cannulae Grinding.

Magnification x 100



SPECIFICATIONS:

- Standard Wheel Sizes
 - 405 x 125 x 127mm
 - 450 x 40 x 203.2mm
 - 455 x 40 x 127mm
 - 455 x 80 x 127mm
- Special Grit Sizes
 - FEPA, ANSI, JIS
 - GC600 to GC1200
- Special Bond Systems
 - Proprietary Resin Bonds
- Wheel Grades
 - Grades designed for different diameter tubes.
 - Thin wall (less than 0.15mm)
 - Normal (0.15 to 0.70mm)
 - Large (over 0.80mm)



Special Two Zone Wheels for Spherical End Grinding of Tapered Roller Bearings

- Grinding and polishing in one process. This is possible with a special proprietary bonded 2-zone cup wheel. The inner zone grinds while the outer zone polishes.
- Our wheels last longer, need less frequent dressing and give an excellent finish for the same stock removal.
- Cups come with appropriate inserted nuts for easy mounting.
- A predetermined concave shape gives the work piece the required form. This will be unique to each size of Bearing.



APPLICATIONS:

Spherical end grinding of Tapered Roller Bearings

SPECIFICATIONS:

Materials

- Bearing steel

Finishes

- Grit sizes from A80 to A500
- Mirror Finishes to 2 Rms with A500
- Finer grit sizes available for better finish
- Stock removal of 0.0508mm with A120



- For Precision Grinding, Deburring & Polishing
- Layered Rubber & Plastic Bonded Abrasive Wheels
- High Performance Resilient Products
- Grind with the speed of Epoxy Plastic wheels while the outer Rubber zone will polish the blade.
- Suberb finish with excellent corrosion resistance.
- Suitable for Berger & Siepmann Machines
- High Finish Tolerances without Discolouration.

APPLICATIONS:

Cutlery

- Professional & Table Knives
- Pen Knives / Pocket Knives
- Scissors

Hand Tools

- Chisels
- Scraper Blades
- Putty Knives & Scrapers
- Woodworking Tools

Medical

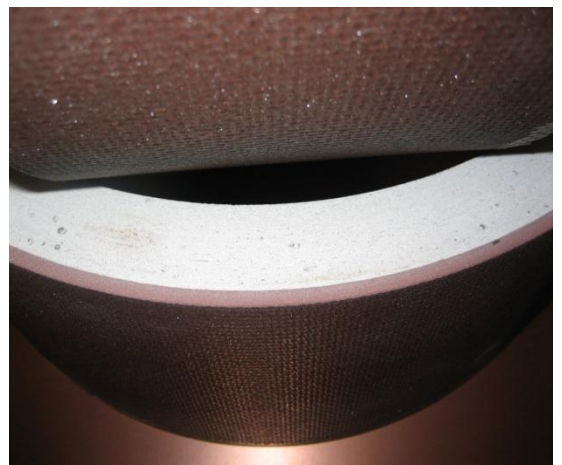
- Surgical Knives
- Blades & Scalpels
- Surgical Scissors & Tools

Grinding Miscellany

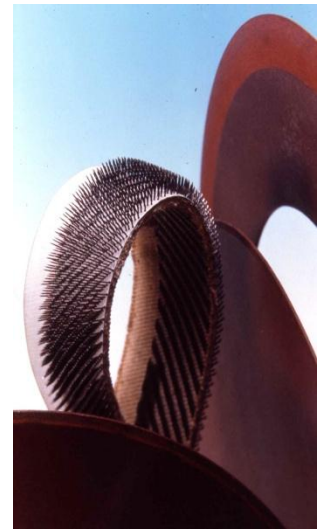
- Flat Grinding
- Hollow Grinding
- Back Grinding & Colouring

Grinding Wheels & Cups

- Types 1, 2 and 6
- Plain and Nut Inserted
- Type 1 to 500mm Type 2 to 450mm



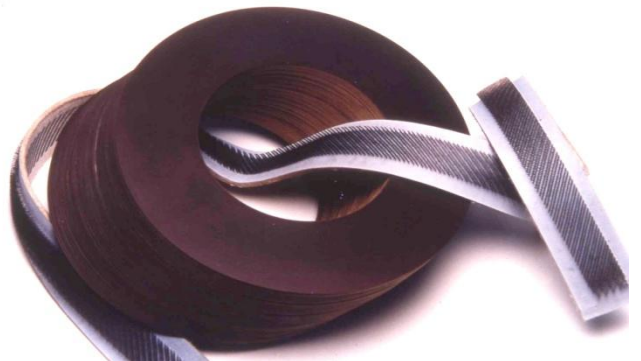
- For Precision Grinding of Carding Cloth.
- Controlled Diameters, Thickness & Bore Size
- Available in all Diameters and Thicknesses.
- Burr Free and Cool Grinding of all Types of Wire.
- Dimensional accuracy ensures best results in gang formations.
- Resilient bonds ensure no cracking, chipping or breaking.
- Superior production techniques ensure smooth and constant wear of the wheels in gang formation.



APPLICATIONS:

Carding

- Rubber bonded wheels for use on Low Carbon, High Carbon and Stainless Steel Wires.
- Special grades available for use on special metals and alloys.
- Standard shapes and sizes are readily available.
- Special tapered sides available to the customers specification.
- Abrasive grit sizes available from 60 to 800.
- Grades available from flexible to rigid and from soft to hard in grinding applications.
- Fast turnaround on trials in any dimension or grit size.



Cork Wheels for Grinding, Polishing and Superfinishing

- Cork wheels are Grinding wheels for finishing operations.
- The abrasive grain is contained in an elastomer bond and sized for grinding & polishing.
- A high concentration of cork particles are used as a filler.
- Resilient bonds in Cork gives a mild polishing action, which gives a bright finish of superb quality.
- With the abrasive evenly distributed you get steady wheel wear and consistent fine finishing for part after part.
- Sensitive on light cuts with free and cool cutting action giving a true ground finish
- Use of a cork finishing wheel allows faster cutting on the first operation.

APPLICATIONS:

Roll Grinding

- Chilled Iron
- Chrome Plated
- Stainless Steel
- Bronze, Granite & Stonite

Polishing

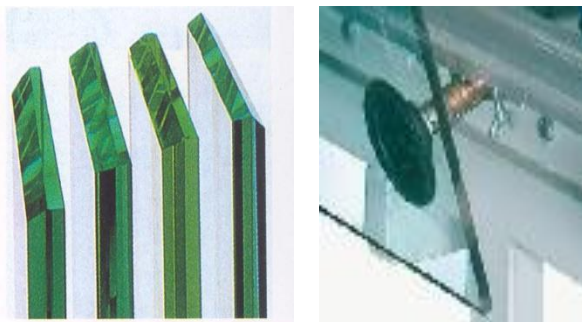
- Circular Saw Blades & Cores
- Hydraulic Piston Rods
- Shock Absorber Rods
- Turned, Ground & Polished Bars
- Linear Bearing Bars & Roller Bearings
- Syringe Needles & Surgical Instruments
- Glass & Ceramic Rods

Finishes

- Grit sizes from A80 to A500
- Mirror Finishes to 2 Rms with A500
- Stock removal of 0.0508mm with A120



- For Polishing Excellence & Long Wheel Life.
- Rubber Bonded Abrasive Wheels
- High Performance Resilient Products
- Special Bonds Designed for High Stock Removal Rates.
- High Finish Tolerances without Discolouration.



APPLICATIONS:

Glass Industry

- Grinding
- Polishing
- Deburring

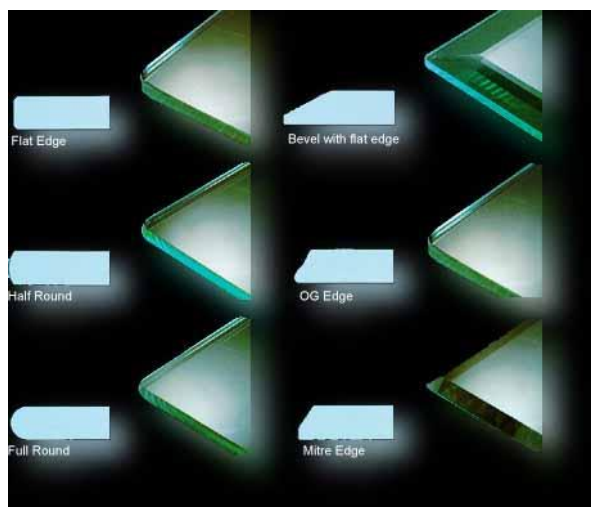
SPECIFICATIONS:

Sizes

- **Diameters**
100-150-170-200-250-
300-350 mm
- **Thickness**
10-15-20-25-30-40 mm
- **Bore**
20-22-25-50-60-90-100-
110-130 mm

Grades

- A60-N-R13P2
- A180-N-R13P2
- A220-N-R13P2
- Also available specially formulated for any glass application.



- Regulating wheels are Control or Feed wheels for Centreless Grinding.
- The abrasive grain is contained in a proprietary bond and sized for braking power & control.
- Kerry Abrasives Regulating Wheels are made by a special process that enhances the gripping power and life of the wheel.
- Our bond offers the ultimate in consistency and versatility with high wear resistance.
- All standard sizes available up to 500mm diameter. Types 1, 5 and 7 available with recesses to suit.
- A single specification A80-R covers 98% of all applications. This gives superior traction with long life and long runs.
- Special sizes and shapes available on request.

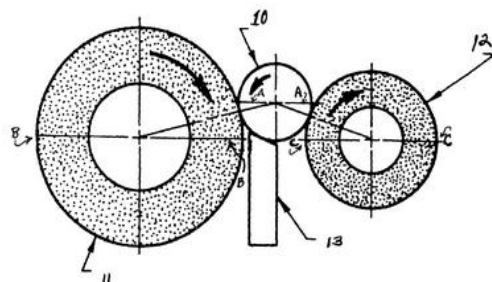
APPLICATIONS:

Through Feed

- Gudgeon Pins
- Shock Absorber Shafts
- Bearing Rings
- Valve Tappets and Guides
- Cylinder Rods
- Gear Selector Rods
- Twist Drills
- Magnet Cores
- Rocker Shafts
- Tungsten Carbide Rods
- Bar Grinding
- Diesel Injector Needles

In Feed

- Compressor Crankshafts
- Cam Shafts
- Electric Motor Armature Shafts
- Automobile Valves (Exhaust)



Dimensional Availability for Type 1 Soft Rubber Products - Grinding Wheels

Diameter		Wheel Thickness									
	(mm)	3	5	6	10	13	16	19	22	25	38
(mm)	(inches)	0.125	0.188	0.250	0.375	0.500	0.625	0.750	0.875	1.000	1.500
10											
20											
25	1.0										
30											
38	1.5										
40											
50	2.0										
63	2.5										
75	3.0										
90	3.5										
100	4.0										
115	4.5										
125	5.0										
150	6.0										
180	7.0										
200	8.0										
225	9.0										
250	10.0										
300	12.0										
350	14.0										
400	16.0										
450	18.0										
500	20.0										

Hole Size: As specified by client. It is advisable not to have a bore size greater than 1/3 of the wheel diameter.

Special Sizes: Other sizes are available on request.

Reinforcement: Wheels can be made with reinforcement to run safely at higher speeds.

- Side Reinforced
- Centre Reinforced
- Side & Centre Reinforced

Side Texture: Wheels can be made with rough or smooth side finishes if requested.

Dimensional Availability for Hard Rubber & Resin Products - Cut Off Wheels

Diameter		Wheel Thickness														
	(mm)	0.2	0.3	0.4	0.5	0.8	1	1.2	1.5	2	2.5	3	4	5	6	7
(mm)	(inches)	0.008	0.012	0.015	0.02	0.03	0.04	0.05	0.06	0.075	0.1	0.12	0.16	0.20	0.24	0.27
10																
20																
25	1.0															
30																
35	1.5															
40																
50	2.0															
63	2.5															
75	3.0															
90	3.5															
100	4.0															
115	4.5															
125	5.0															
150	6.0															
180	7.0															
200	8.0															
225	9.0															
250	10.0															
300	12.0															
350	14.0															
400	16.0															
450	18.0															
500	20.0															

Hole Size: As specified by client. It is advisable not to have a bore size greater than 1/3 of the wheel diameter.

Special Sizes: Other sizes are available on request.

Dimensional Availability for Fine Grit Resin Products - Regulating Wheels

Wheel Width		Wheel Diameter									
	(mm)	100	180	200	225	250	300	350	400	450	500
(mm)	(inches)	4	7	8	9	10	12	14	16	18	20
10											
20											
25	1.0										
30											
38	1.5										
40											
50	2.0										
63	2.5										
75	3.0										
100	4.0										
125	5.0										
150	6.0										
180	7.0										
200	8.0										
225	9.0										
250	10.0										
300	12.0										
350	14.0										
400	16.0										
450	18.0										
500	20.0										

Manufactured in ONE piece

Manufactured in TWO or MORE pieces

Hole Size: As specified by client.

Special Sizes: Other sizes are available on request.

Application Index For Rubber Bonded Grinding Wheels

	HARD BONDS			SEMI-FLEXIBLE BONDS			FLEXIBLE BONDS		
	Grind	Deburr	Polish	Grind	Deburr	Polish	Grind	Deburr	Polish
Aluminium Welds									
Brass									
Copper									
Cutlery (Hollow Grind)									
Gold - Jewellery									
Glass Edging									
Hastaloy									
High Temp. Alloys									
Inconel									
Stainless Steel									
Steel									
Steel Forgings									
Titanium									
Weld Grinding									

These applications are mainly Aircraft Turbine Blade & Vane Applications

What is a Rubber Bonded Grinding Wheel ?

It is a cutting tool made up of thousands of sharp abrasive particles suitably bonded in the required size and shape.

The abrasive particle cuts much in the same manner as does any single point cutting tool, but the major difference is that the abrasive particle fractures on numerous occasions during the cutting or grinding operation. In this manner, new cutting edges are made available to continue the cutting job. The bond keeps the abrasive grains together, and supports them from the pressure of the wheel against the work. The bond must have the ability to break down at the proper time to allow the worn grains to be discarded and the new ones to come into play. When this action is accomplished in proper proportion and relation to the given job, these abrasive particles remove stock in a shorter length of time, at a lower cost, to very close size tolerances and/or to a high degree of finish than can be accomplished by any other tool, or combination of tools.

Basically, there are two main types of abrasives being used in these products today. These are aluminium oxide and silicon carbide. Also, you have other abrasives such as zirconia and ceramic grain for more specialized applications. The aluminium oxide comes in regular, semi-friable and friable groups.

Silicon carbide is available in black (regular) and green types. Silicon carbide abrasives are used for grinding low tensile materials, (cast iron or aluminium) and also extremely hard materials like glass or cemented carbides.

In Kerry's proprietary rubber compound, the abrasive is distributed evenly throughout. The rubber bond cushions the abrasive and gives the Kerry wheels a tremendous versatility. In many operations this means deburring, finishing and polishing in one operation.



Kerry Abrasives
Clieveragh Industrial Estate
Listowel, Co. Kerry, Irl

Phone: +353 68 23766
Fax: +353 68 23870
Email: info@kerryabrasives.com

TRIAL REQUEST FORM

Customer:	<div></div>	Date:	<div></div>
Address:	<div></div>	Requested Date:	<div></div>
	<div></div>	Contact Email:	<div></div>
	<div></div>	Contact Phone:	<div></div>
Contact:	<div></div>	Contact Fax:	<div></div>

*In order to better enable us to furnish the best possible wheel for this test
please complete the following information*

Details of Wheel Required

Wheel Size:	<div></div>	Type:	<div></div>
Comments:	<div></div>	Quantity:	<div></div>
	<div></div>	(If possible please complete relevant drawing on next page)	

Details of Current Wheel in Use

Specification:	<div></div>	Manufacturer:	<div></div>
MOS:	<div></div>	Annual Usage:	<div></div>
		Normal Order Qty:	<div></div>

Details of Material Being Ground/Cut

Material:	<div></div>	Dimensions:	<div></div>
Hardness:	<div></div>	Finish Required:	<div></div>

Details of Machine in Use

Make:	<div></div>	Speed:	<div></div>
Model:	<div></div>	Coolant:	<div></div>

Comments