

RESIDENTIAL  
& COMMERCIAL

INDUSTRIAL  
& MARINE

ART  
& CRAFT

**SHIMICOAT**  
SURFACE SOLUTIONS



## Description

### Diamond Cup Grinding Wheels 5" - 125mm

- For Concrete, Masonry, Stone, Tile and Brick grinding and resurfacing.
- Offering high accuracy and smooth surface and easy to install and work with.
- Sharp and long lifespan, suitable for use on hand held grinder and floor grinders.
- Lightweight and vibration-free design
- Wet and Dry Performance

### SPECIFICATIONS:

Shapes	Single Raw, Double Raw, Fan, Turbo, Arrow
Diameter	5 Inch
Bore Diameter	22.23mm
Grits	16# – 30# – 80# – 120# & PCDs
Bond	Medium Bond
Package Quantity	1 Piece
Colour	All Grits Blue – PCDs Gold
Material	Steel & Impregnated Diamonds

## Life Expectancy / Grinding Capacity

5-8 Hours constant grinding lifespan time  
Depending on concrete conditions

## Features

SHIMICOAT metal bond range is an outstanding Grits, Bond & Shape designed to deliver incomparable high impact productivity. An excellent choice for surface preparation through to high end polishing applications where outstanding results are required.

- Incomparable production rates
- Outstanding surface materials removal capacity
- Extended tool longevity
- Performance validated with extensively field trials
- Streamlined 3 bond system to cover very soft to very hard concrete.
- Economical



**MATERIALS**



**CHEMICALS**



**RESINS**



**EQUIPMENT**

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## Applications

SHIMICOAT Cup Grinding Wheels are designed for dry grinding and smoothing of concrete, as part of surface preparation, prior to coat.

- Ideal for surface preparation prior to coat
- Suitable for grinding machines and angle grinders
- Leveling shaping and smoothing concrete surfaces
- Pre-Polish Preparation
- Surface Preparation Concrete
- Levelling Compound Material Removal
- Carpet Glue, Ceramic Glue & Epoxy Coating Removal
- Polishing Terrazzo & Natural stone
- Wet & Dry use
- 5-8hrs usage Lifetime

## Specifications

SHIMICOAT Cup Grinding Wheels provide maximum cutting speed and optimal wear resistance in heavy grinding applications. Working speed and tool life of your Cup Grinding Wheels can be improves significantly by choosing the right diamond shoes. Three parameters to consider when choosing your Cup Grinding Wheels:

NO	Parameter	Specification
1	Grit sizes	16, 20, 30, 60, 80, 120
2	Simplified 3 bond system	Soft, Medium & Hard
3	Shape	Single Raw, Double Raw, Fan, Turbo, Arrow

### Applications of Grit:

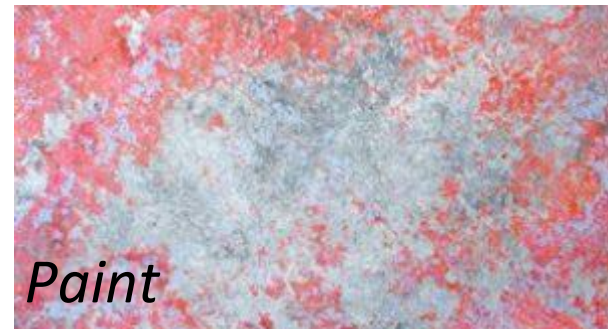
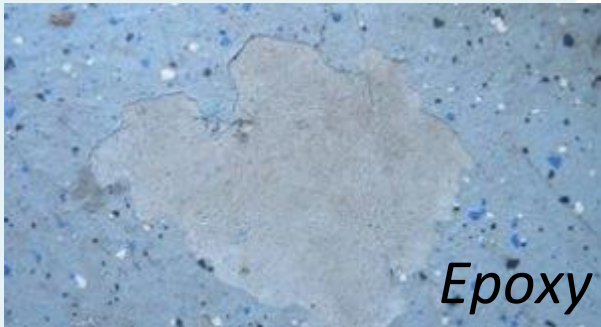
Grit size of Cup Grinding Wheels define how abrasive and coarse the Cup Grinding Wheels are. The lower the grit, the higher the concentration of Impregnated Diamond within the body of metal wheels, hence the more aggressive.

<b>Grits</b>	<b>16</b>	<b>30</b>	<b>60</b>	<b>80</b>	<b>120</b>
<b>Concrete Surface</b>	Super Hard	Medium	Soft-Clean Up	Polishing	Polishing
<b>Diamond Concentration</b>	Intense	Medium	Average	Low	Very Low

### Applications of PCDs:

PCDs or Polycrystalline Diamonds are used ONLY, if Grit Size 16 is unable to cut and remove certain surface materials. PCDs scratch the surface aggressively and once used, a surface grinding with grit sizes of 16, 20 or 30 is required to smooth off the surface.

Surface coatings materials such as epoxy resin, glue, mastic or paint can easily be removed with PCDs. In general, these materials are sticky and typical diamond plates tend to get blunt. PCD grinding discs are ideal tools to remove them. Below are the normal coating materials.



### Features of PCD Cup Grinding Wheels

1. PCDs are designed for fast removal of paint, urethane, epoxy, adhesives and residues.

### Why PCDs:

- Due to special hardness of PCD grinding disc is more aggressive and long-lasting service, especially useful when conventional diamond cup wheels (Grits) cannot grind the material quick enough or when they get clogged up with the sticky coating.
- PCD diamond particles are ultra rough and have three times the surface area of diamond.
- The PCD segment scrapes and rips the coating from the surface.
- Can be used wet or dry.
- Re-designed with larger and stronger PCDs
- Re-designed PCD shape to prevent from falling off during high speed grinding

### Metal Bond:

SHIMICOAT offers three types of metal bonds (Soft, Medium and Hard) to ensure the pads stay opened and sharp even on the hardest top layers. Selection of only three metal bond types make your selection tools very easy, allowing quick choice of toolkit for both professional and occasional use.

SHIMICOAT Cup Grinding Wheels will get to the same level of aggregates exposure in less passes, shorter time and less labour cost when compared to many others in market.

- Soft bond: For very hard concrete.
- Medium bond: For medium to hard concrete.
- Hard bond: For medium to soft concrete.

For Hard Concrete Surface	For Medium Concrete Surface	For Soft Concrete Surface
<b>SOFT</b>	<b>MEDIUM</b>	<b>HARD</b>
Soft Metal Bond	Medium Metal Bond	Hard Metal Bond

With a simplified 3 bond system covering soft to hard concrete surfaces, satisfaction guarantee.

### Segment Shapes:

SHIMICOAT offers Cup Grinding Wheels in two segment types, Single and Double.

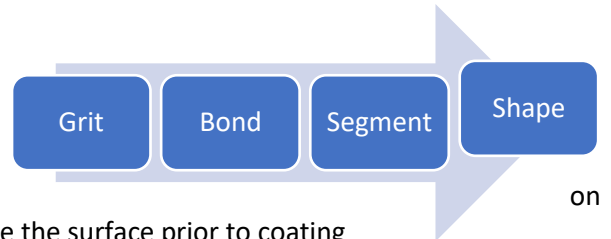
- Single Raw:** Less contact point, hence more aggressive and more pressure per square centimetre – Faster Grind. Your Cup Grinding Wheels wear out quicker than double Raw.
- Double Raw:** More contact point, hence less pressure per square centimetre – Longer Grinding Time. Your Cup Grinding Wheels last longer than single raw Cup Grinding Wheels.
- Fan Shape:** Multi- Purpose Applications
- Turbo Cut:** Ideal for general cleaning and smoothing the surface.
- Arrow:** Effective in glue (Under Carpet/Vinyl) removal as it less susceptible to clogging.

Three options of Grit Size, Bond Type and Segment Shape/Designs ensure optimal applications for quick surface grind to intense professional use in specialist applications. SHIMICOAT Diamond Grinding Plates provide maximum cutting speed and wear resistance in heavy grinding.

## Direction

### Cup Grinding Wheels

The arrow shows the Hierarchy importance of Diamond Plates selection. The first most important parameter is Grit size. Shape has little to no effect on grinding performance.



Grinding machines with diamond impregnated metal segments steel discs, are used to remove the top layer of concrete and profile the surface prior to coating application.

The operator should run the grinding machine in one direction then coming back perpendicular across the first series of cuts (Criss cross Motion).

There are a large number of diamond grits and metal bond segments and it is important to choose the right selection for your effective concrete preparation. These are as follow:

**Hard Metal Bond:** Used on soft, chalky and porous concrete as well as broom finished and rough concrete surface.

**Medium Metal bond:** Used for general purpose concrete

**Soft Metal Bond:** Used for hard, Steel-Troweled and/or Burnished Slabs.  
Soft or Super-Soft Metal Bond can be used for extremely hard, power-Troweled and/or sealed slabs. Ideal choice for removing acrylic sealers.

**PCDs:** Used for removal of coating materials, mastic and glue. PCDs scratch the surface, grit grinding may be advisable afterwards to smoothen the surface.

Extra care shall be taken to ensure high points or edges are correctly removed.

We recommend dry grinding for the following reasons:

- No exposure to water, so minimizing corrosion of Diamond Plates and Machineries
- Improve the life span of the tools
- Faster progress and no time wasting on cleaning up slurry

In certain applications where disposal of slurry is easy and hassle free, wet grinding can be considered. Flush and rinse all tools and parts with fresh water once completed.

For further information, please refer to SHIMICOAT Instruction for "Surface Preparations"

### Storage

SHIMICOAT Cup Grinding Wheels shall be cleaned and stored in toolbox with minimal exposure to moisture while not-in-use.

### DISCLAIMER

Material Safety Data Sheet, Technical and Environmental Data Sheet can be provided upon request.

The information provided in this document is guidance only and considering the uses of this product are beyond the seller's control, the product is sold without guarantees or warranties. Warranties and guarantees shall be governed by SHIMICOAT Standard Terms of Sale. The purchaser shall make its own tests to determine the suitability for their specific application, and Shimicoat Pty Ltd is taking no responsibility for misuse of the product. The purchaser assumes all risk of use and handling of this product. This product will be happily replaced or credited back if defective. Beyond this, Shimicoat Pty Ltd is not liable for any damages caused by this product or its use.

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