

# BONDFLEX

# **Solutions for Gear Grinding**

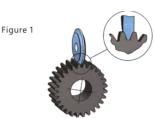
Gear grinding has become increasingly important as the tolerance on the precision of gears has tightened. It is a key working procedure in the production of both automobile gearbox and wind turbine gearbox. Bondflex Sumeng grinding wheels can be used to generate the profile of the gear teeth in a wide range of gear types.

# Solutions for Gear Grinding

# **Main Gear Grinding Methods**

### 1. Form Gear Grinding:

The form grinding by the single wheel to process individual gear teeth is now commonly used. Bondflex desired gear geometry. The wheels Sumeng adopts the highly porous structure with ceramic grains, which makes the grinding more efficient and avoid the burn.





cost.

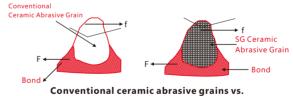
Figure







### **Advantages of SG Ceramic Abrasive Grain**



SG ceramic abrasive grains

### **Example of Gear Grinding Solution**

Bondflex Sumeng is able to provide SG, NQ, TG ceramic abrasive grains for continuous gear generation, which can mitigate the burn while maintain the grinding force.

| Main Grinding Parar      | neters of Continuous Gear Gene     |
|--------------------------|------------------------------------|
| Workpiece material:      | 20CrMnTi                           |
| Hardness of workpiece:   | HRC48-55                           |
| Machining allowance:     | 0.5 for rough grinding, 0.1 for fi |
| Finish:                  | Ra0.4-0.6                          |
| Processing requirements: | no burns and in good tooth sha     |

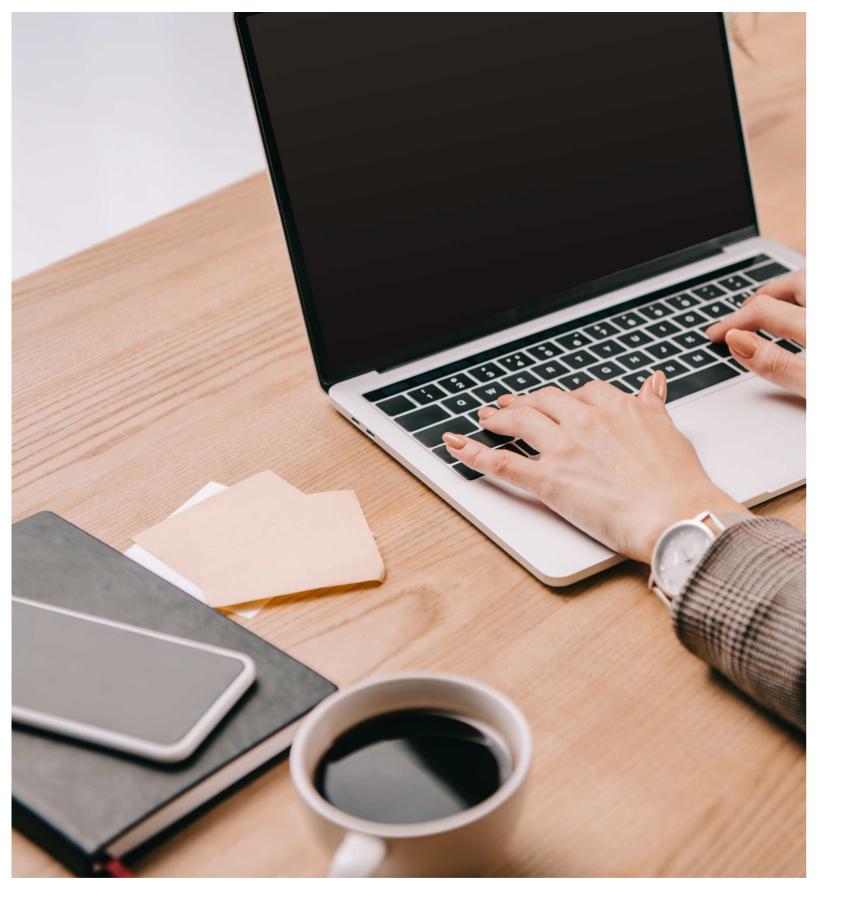
Note: The choice of specifications, such as the adjustment of process parameters, can be optimised by Bondflex Sumeng application engineers to suit customer requirements. Please contact our Sales Department for details.





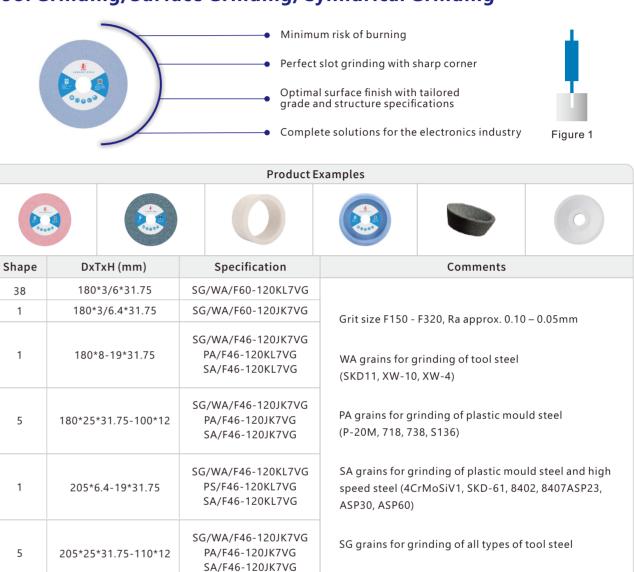






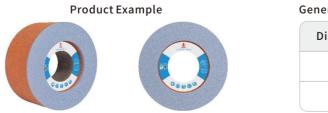
### Solutions for Electronics Industry

# **Tool Grinding/Surface Grinding/Cylindrical Grinding**



# **Centerless Grinding**

the workpiece can be processed simultaneously.



Note: The choice of specifications, such as the adjustment of process parameters, can be optimised by Bondflex Sumeng application engineers to suit customer requirements. Please contact our Sales Department for details.



# **Solutions for Electronics Industry**

Electronics industry is playing a vital role in the 21st century. The sector produces electronic equipment and consumer electronics, and manufactures electrical components for a variety of products, which majority of them need to be produced by mold. Bondflex Sumeng offers a portfolio of grinding solutions for the industry.



### The centerless grinding wheel contains double-layered abrasives, which can ensure that the different parts of

### General Dimensions

| Diameter (mm) | Thickness (mm) | Bore Diameter (mm) |
|---------------|----------------|--------------------|
| 350           | 150/10         | 120                |
| 350           | 80/10          | 120                |



# Crankshaft Grinding Wheel

### **Advantages of Crankshaft Grinding Wheels**



### **Industry Solutions**

| Examples of commonly us               | ed specific            |
|---------------------------------------|------------------------|
| *1067*47*304.8 19A60MV                | Mixed ab               |
| *1067*47*304.8 PA/WA/PA/F54/70/L/K/7V | "Sandwic<br>of the bot |
| *1067*47*304.8 SG54LV                 | SG abrasi              |
| Examples of commonly use              | d specifica            |
| *1065                                 | *25*304.8              |
| *1065                                 | *25*304.8 \$           |



# **Crankshaft Grinding Wheel**

The crankshaft grinding wheel is used in the grinding of crankshafts for automobile, motorcycle and marine diesel engines. The crankshafts are made by a variety of materials, including highstrength wear-resistant alloy steel, forged steel, cast steel and nodular iron. Bondflex Sumeng can design and develop group products for crankshaft grinding according to customer needs.



Note: The choice of specifications, such as the adjustment of process parameters, can be optimised by Bondflex Sumeng application engineers to suit customer requirements. Please contact our Sales Department for details.



### • Excellent heat dissipation in grinding

The shape of the product is single or double-sided concave. Slotted wheels can be designed upon request. These enable the wheels to transfer the heat and to grind without burns.

### High grinding efficiency and Self-sharpening

Using PA, PA/WA, FA and SG abrasive grains, the product is self-sharpening with high grinding efficiency.

### Well-balanced

The company adopts fully automatic presser and diamond grinding machine, to ensure the uniformity and flatness of the products. This, in particular, is suitable for grouped crankshaft grinding.

### Sandwich multi-layered abrasives design

The sandwich multi-layered grinding wheel can ensure the precision and roughness requirements of the crankshaft journal and the R-angle simultaneously. The grinding process is completed at one time to prevent problems such as the radius shoulder and side burns.

### cations for diesel engine crankshaft

brasive grains; used for standard crankshaft grinding

ch grinding wheel" - used to improve the shape retention ottom R-angle and maintain the roughness of the journal.

sive grain - stable grinding performance; mitigate the burns

ations for gasoline engine crankshaft

PA60L~PA60MV

SG60L~SG60MV







# **Solutions for Steel Industry**

Bondflex Sumeng has extensive expertise and experience in offering cutting and grinding solutions in the steel industry. The company offers a wide product portfolio of roll grinding wheels, heavy-duty grinding wheels, and extra-large cut-off wheels, which are highly competitive in the market.

# Solutions for Steel Industry

### **Roll Grinding Wheel**

Roll grinding wheels are used in the regrinding and production of rolls in the steel, aluminum, and other industries. While rolls degrade during the rolling process, the rolls need to be constantly reground due to cracks, wear, and dimensional change.

### $\gg$ Excellent surface finishes

Adopts Type B2 – B24 resin bonds to improve each grain's grinding behaviour and to avoid early-releasing of grains which would cause the surface scratch.

### $\gg$ Enhanced grinding efficiency

Uses GC, 23AC, PA, PA/WA, FA and SG abrasive grains. Tailored solutions designed for different roll materials, to achieve the best results.

### $\gg$ Optimised grinding cost

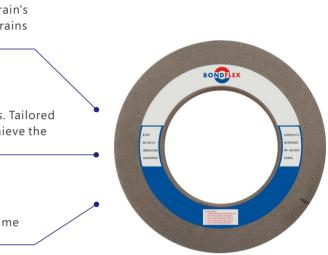
Shortens grinding time and improves the wheel lifetime by unique formulas.

# **Industry solutions**

### **Recommendations for the Selection of Grinding Wheels**

| Application        |                   | Steel Types                          | Product Specifications           |  |
|--------------------|-------------------|--------------------------------------|----------------------------------|--|
|                    |                   | Infinitely chilled ductile cast iron | GC/F36/F46IJ7B or GC/F36/F46LM6B |  |
|                    | Work roll         | High chromium cast iron              | GC/F46JK7B or 3RA/F46JK7B        |  |
| Hot rolling mill   |                   | High chromium cast steel             | SA/WA/F36/F46IJ7B                |  |
| notroning init     |                   | Above-mentioned mixed material       | N3A/F46I7B or 3RA/F46JK7B        |  |
|                    |                   | High speed steel (HSS)               | SG/NQ/F36/F46/K7B24              |  |
|                    | Back-up roll      | Cast Steel                           | WA/F36/F4617B                    |  |
|                    | Work roll<br>mill | Cast steel                           | SA/F80HI7B                       |  |
| Cold rolling mill  |                   | High chromium cast steel             | SA/WA/F80HI7B                    |  |
| cota rotting initi |                   | Alloy steel                          | WA/F80HI7B                       |  |
| Back-up rol        |                   | Cast Steel                           | WA/F46/F60IJ7B                   |  |





### Solutions for Steel Industry



### **Heavy-duty Grinding Wheel**

The heavy-duty grinding wheel is used to remove the defects of the billet i.e. crack, scale, hard spots, before conveying to the rolling mill. The grinding wheels, with excellent grinding power and high production output, are widely adopted by major domestic steel factories.

### >> Rapid stock removal and high production output

Adopts zirconia alumina and sintered alumina abrasive grains, which have additional strength, toughness, hardness and wear resistance. Zirconia alumina is suitable for use on low and middle-alloy steel, highspeed steel, and titanium alloy, while sintered alumina is commonly used for stainless steel which has higher requirement on surface finish.

### >> Additional strength and maximum safety

The grinding wheel is more balanced and closely compacted due to special formula, self-developed microwave heating system and fully automated production line. This ensures the safety use under high pressure.

### >> Longer lifetime and high cost efficiency

Bondflex Sumeng is constantly focusing on the formula upgrade, while maximizing the grinding power, stock removal capability, as well as optimising the grinding cost.

# **Main Product Specifications**

| Diameter (mm) | Thickness (mm) | Bore Diameter(mm) | Grit size (mesh)      |
|---------------|----------------|-------------------|-----------------------|
| 610           | 76/102         | 203.2/304.8       |                       |
| 760           | 76/102/125     | 203.2/304.8       | 8, 10, 12, 16, 20, 24 |
| 915           | 102/125/150    | 304.8             |                       |

### Zirconia Alumina



### Sintered Alumina



# Solutions for Steel Industry

### Large Diameter Cut-off Wheel

The large diameter cut-off wheel is specially designed for the steel industry, which requires high performance reinforced wheels to ensure good profile retention, clean cut, no burrs and no burns.

### ≫ Superior cutting performance

Adopt zirconium corundum and new type abrasive grains with high toughness, high heat resistance and high wear resistance.

# ➢ Good surface finish The cut surface is smooth, without surface hardening, and less burrs.

|    |   | Diameter<br>(mm) | Thickness<br>(mm) | Bore Dia<br>(mi |
|----|---|------------------|-------------------|-----------------|
|    | E | 2000             | 17/16             | 152.4/          |
|    | E | 1800             | 17/16             | 152.4/          |
|    | E | 1600             | 16/15             | 100/127/15      |
|    |   | 1500             | 15/14             | 100/127/15      |
|    |   | 1380             | 14/13             | 100/127/15      |
| D  |   | 1250             | 13/12             | 100/127/15      |
|    | E | 1220             | 12/11             | 100/127/15      |
|    | E | 1000             | 11/10             | 100/12          |
|    |   | 800              | 8/7               | 80/100/         |
|    | E | 750              | 8/7               | 80/100/         |
| _T |   |                  |                   |                 |

Note: Special specifications can be produced upon client request

### **Main Applications**

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The extra-large cut-off wheel is designed to cut large workpieces in materials with high internal stresses.

| Cold cutting-off 20-100C                | Warm cutting-off 100-600C  | Hot cutting-off 600 -1100C                                  |
|---|--|---|
| , | mainly used in steel rolling mills to cut steel materials off from the cooling bed | mainly used in steel rolling mills<br>and casting factories |

Note: The choice of specifications, such as the adjustment of process parameters, can be optimised by Bondflex Sumeng application engineers to suit customer requirements. Please contact our Sales Department for details.

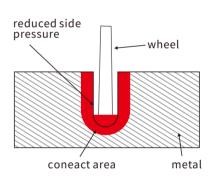


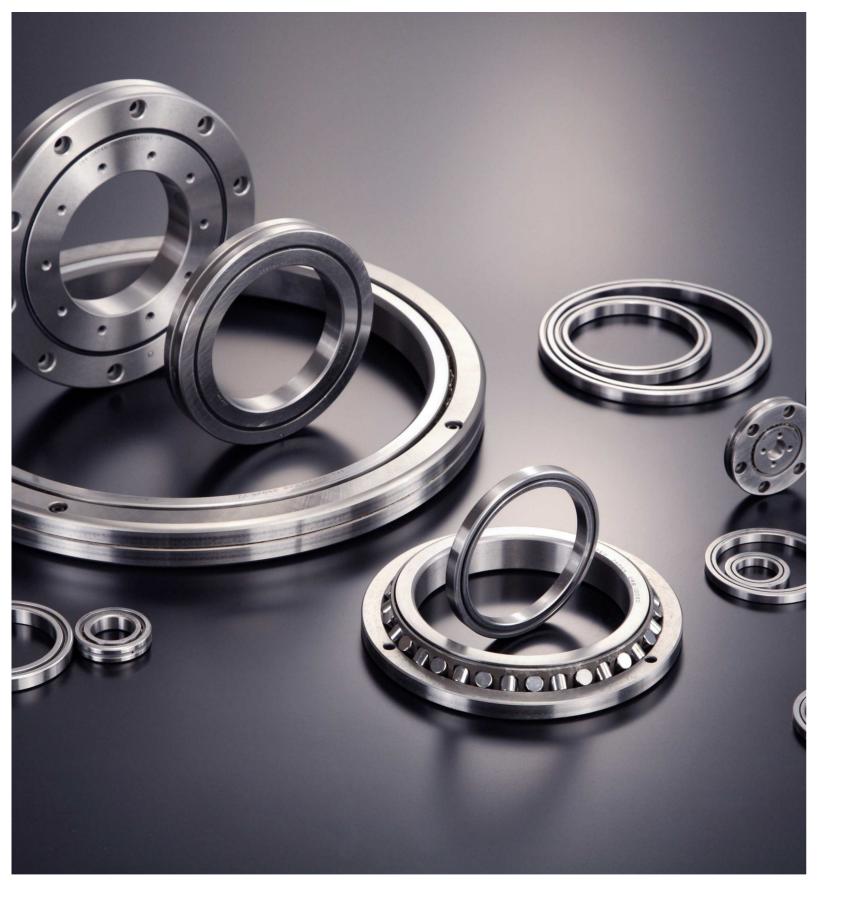
➢ High stability, safe operation and low noise Adopt advanced formula, the speed can reach 100m/s. No oblique cutting and no scrap.

> Long lifetime and economic efficiency Use more durable abrasive blend with longer lifetime and therefore cost-effective.

➢ Tapered shape wheel Decrease heat generation and avoid clogging.

Viameter nm) 4/203/230 52.4/203.2/230 52.4/203.2/230 52.4/203.2/230 52.4/203.2/230 52.4/203.2/230 127/152.4 0/127/152.4





# Solutions for Bearing Industry

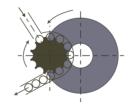
### **Requirements for Bearing Grinding**

- · The rolling part include rings and rollers require high dimensional accuracy, excellent surface finish, and coefficient of friction
- · Automated bearing production line needs grinding wheel with improved economic efficiency and process stability

# **Requirements for Grinding Tools**

- · Long life, high production, and no burning
- · Trend of high speed grinding which leads to better surface finish and economic efficiency
- · High precision of grinding wheels for better dimensional accuracy
- · Customised products for high quality requirements
- · Process stability for industrial automated applications

# **Applications of Bear Grinding**



① Inner and outer rings face grinding



② Inner ring raceway grinding





# **Solutions for Bearing Industry**

Bearings are vital mechanical devices used to enable movements in modern industries. Regardless of the shapes, sizes, and types of bearings, surface quality and dimensional accuracy are the key requirements, which illustrates the importance of having top quality abrasive products. Bondflex Sumeng offers complete range of solutions for bearing industry.





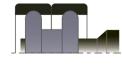


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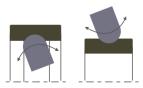




③ Outer ring raceway grinding



(5) Centreless grinding of outer ring



<sup>(6)</sup> Superfinishing of inner and outer raceways

### Solutions for Bearing Industry



### **Centerless Grinding**

All types of bearing rings, rollers, and needles can be ground by centerless grinding. The centreless grinding wheel can also be applied to the grinding of outside diameter of piston pin, drill, and round bar.



### > Uniform Quality

Double-sided pressing from automated production equipment ensures the grinding wheel in uniform quality

### >> High productivity and long lifetime

The advanced kiln installation ensures the bond completely holds the abrasive grains within the wheel structure, providing bulk strength

### ≫ High consistency

The grinding wheels are produced from automated CNC grinding machine, which ensures the coxiality and flatness. A perfect solution for centreless grinding in volume production

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### **Reference Table for Grinding Machine and Centerless Grinding Wheel**

| Grinding<br>Machine<br>Model | Grinding Wheel<br>Specifications | Regulating wheel<br>Specifications | Grinding<br>Machine<br>Model | Grinding Wheel<br>Specifications | Regulating wheel<br>Specifications |
|------------------------------|----------------------------------|------------------------------------|------------------------------|----------------------------------|------------------------------------|
| M1040                        | 7-350*125*127                    | 7-250*125*75                       | M1050                        | 1-400*150*203                    | 7-300*150*127                      |
| M1080                        | 1-500*150*305                    | 7-300*150*127                      | M1083                        | 1-600*200*305                    | 7-350*200*127                      |
| M10100                       | 1-500*200*305                    | 7-350*200*127                      | M10200                       | 1-600*400*306                    | 1-350*400*203                      |
| JHC-12S                      | 7-305*150*120                    | 7-205*150*90                       | JHC-18S                      | 7-455*205*228.6                  | 7-255*205*111.2                    |
| JHC-18AS                     | 7-455*255*228.6                  | 7-255*255*111.2                    | JHC-20S                      | 7-510*205*254                    | 7-305*205*127                      |

### **Complete Solution for Centerless Grinding**

Bondflex Sumeng also offers rubber grinding wheel and regulating wheel, which provides customers with a one-stop solution service in centreless grinding.



Product Example

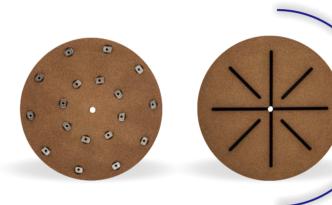
| Example of Centerless Grinding Solutions |                        |                    |  |  |
|--|------------------------|--------------------|--|--|
| Workpiece                                | Gudgeon pin            | Bearing outer ring |  |  |
| Material                                 | Low carbon alloy steel | Alloy steel        |  |  |
| Hardness                                 | HRC55                  | HRC62              |  |  |
| Grinding requirement                     | Fine grinding          | Fine Grinding      |  |  |
| Product Specification                    | 38A80L7V               | FA100L7V           |  |  |

# Solutions for Bearing Industry

### **Disc Grinding**

Bondflex Sumeng offers a portfolio of conventional resin-bonded grinding wheels for disc grinding. The product has been widely adopted by the bearing industry due to its high grinding precision, long service time, and economic efficiency. It also ensures the plane parallelism and flatness of the face. The wheels can also be used for the production of vehicle cylinder head, piston ring, spring and compressor parts etc.





### **General specifications**

**Recommendations for the Selection of Bolted Grinding Wheels** 

**Grinding Object** 

Bearing ring and roller end face, Sealing valve plate, Automobile friction plate

**Bearing ring** 

Engine cylinder block double-side face grinding and four-side face grinding etc.





Face designed in slotting and honeycomb type to prevent wheel loading

Advanced bond formula to allow wheels to become more elastic, cool grinding and no burning

The bolts are firmly fastened to ensure safety use

| Grinding Wheel Specifications      |
|------------------------------------|
| 37-540*100*60-C/F30/F36LK7B-35m/s  |
| 36-750*75*20-A/F80KLM7B-35m/s      |
| 36-350*60*16-A/F60PQ4B-35m/s       |
| 36-609.6*120*355.6-C/F16PQ6B-45m/s |
| 37-773*75*93-C/F24PQ6B-40m/s       |

BONDEL

# **Inner Ring and Outer Ring Race Grinding**

Bondflex Sumeng has developed a high-strength bond for bearing ring race grinding, which is suitable for high-speed grinding. It concentrates on the advantages of various grinding solutions, and uses mixed abrasive grains to enhance the grinding precision and efficiency, minimise the dressing times, extend lifetime, with a leading position in China.









### **Main Techniques**



### **General Specifications**

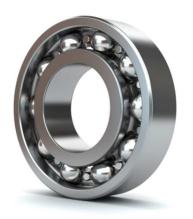
**Recommendation for Bearing Ring Raceway Grinding** 

| Grinding Object                        | Grinding Wheel Specifications |
|--|-------------------------------|
|  | Diameter 500 – 600mm          |
| External raceway of bearing inner ring | A/WA/F120JK7VG-63m/s          |
|  | SG/WA/PA/F120JK7VG-63m/s      |
|  | Diameter 25 – 75mm            |
| Internal raceway of bearing inner ring | A/WA/F120KL7VG-63m/s          |
| internatiaceway of bearing inner ring  | SG/PA/F100/F120KL7VG-63m/s    |
|  | WA/F120M6R-60m/s              |

# Solutions for Bearing Industry

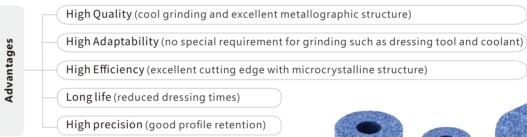
### **Internal Grinding**

The internal grinding process is used for most types of bearings.





### Key Technology I: Production of Internal Grinding Wheel with SG Abrasive Grains



Product example: P 65\*20\*20 3SG100L8V 60m/s Grit size and hardness can be tailored according to surface roughness requirement and grinding allowance.

### Key Technology II: Production of Vitrified CBN Internal Cylindrical Grinding Wheel

|            | Sharp grinding with high production efficiency |
|------------|--|
| tages      | No burning                                     |
| Advantages | Good profile retention                         |
|            | Reduced adjustment and replacement times       |

grinding wheels.

provide complete solutions for customers.

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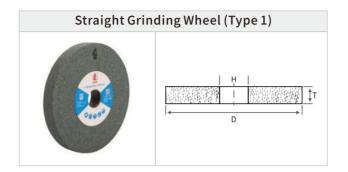
- It is the trend that CBN grinding wheel will replace conventional grinding wheel in the long run. However, CBN grinding wheel has higher requirements for grinding machines, with special criteria on spindle rigidity, coolant pressure and nozzles, on top of high rotation speed. Therefore, the market still uses conventional grinding wheels, and will upgrade to SG vitrified
  - Bondflex Sumeng has accumulated vast experience in both conventional and SG vitrified grinding wheels, which can

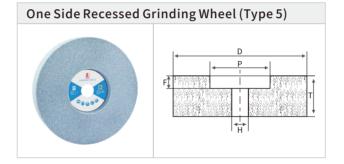


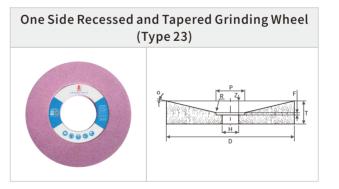
# Solutions for General Industry

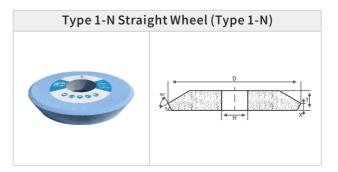
# Cylindrical Grinding, Internal Grinding and Surface Grinding

These are most commonly used grinding methods, which covers almost all industry sectors.









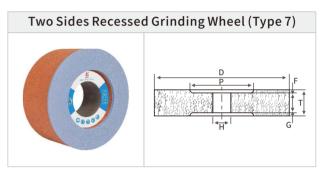


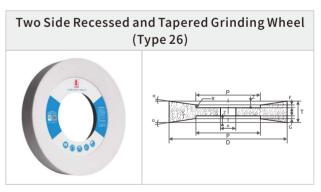
# **Solutions for General Industry**

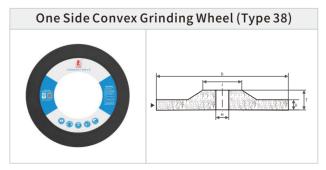
Bondflex Sumeng offer a portfolio of products, including vitrified, resin and rubber bonded grinding wheels, as well as grinding segments, mounted points, and oil stones, in a variety of shapes and specifications for general industrial applications. The products are widely used in different types of grinding requirement.



| Cylinder Grinding Wheel (Type 2) |  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|--|
| 00                               |  |  |  |  |  |  |



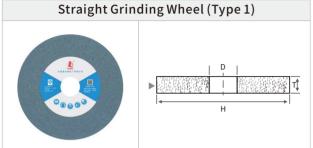


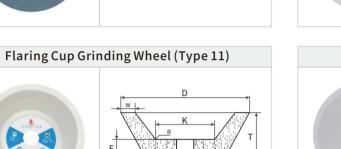




# **Tool Grinding**

With the characteristics of reasonable structure, homogeneous organization, high stock removal rate cool grinding, these are commonly used for mold processing, all kinds of cutting tolls, drills and sawtooth, etc.







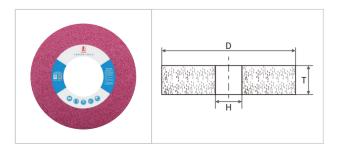
Type 8 Grinding Wheel (Type 8)

One Side Tapered Grinding Wheel (Type 1-C)



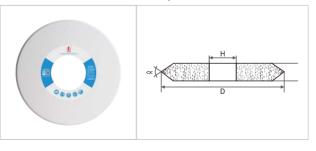
# **Guideway Grinding Wheel**

The grinding wheel is produced by newly developed formula for high grinding efficiency due to the high porosity and more even structure.



# **Thread Grinding Wheel**

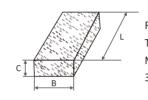
The grinding wheel is mainly used for grinding of diff erent types of screw rods and taps. It has well-balanc ed structure, with high profile retention, high precisi on and will not burn the workpiece.



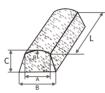
# Solutions for General Industry

### **Grinding Segments**

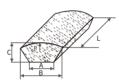
and surface finishing etc.



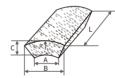
**Flat segments** Type:3101 Marking of the shape and size 3101-B\*C\*L



Flat-convex segments Type:3102 Marking of the shape and size 3102-B/A\*C\*L



Convex-flat segments Type:3103 Marking of the shape and size 3103-B/A\*C\*L



Convex-concave segments Type:3104 Marking of the shape and size 3104-B/A\*C\*L



Trapezoidal segments Type:3109 Marking of the shape and size 3109-B/A\*C\*L

# **Mounted Point Grinding Wheel**

Mounted wheels are offered primarily in three groups (A,B,and W)

- · Group A is mainly used in foundries, steel mill, metal processing and stone industries.
- · Group B is normally used in the tool and mould industries.
- · Group W is suitable for precision grinding.



### Segments are used for surface grinding and could achieve more stock removal, better dimensional accuracy,

| B(mm) | C(mm) | L(mm) |
|-------|-------|-------|
| 50/80 | 25    | 150   |
| 90    | 35    | 150   |
| 80    | 50    | 200   |

| B(mm) | A(mm) | C(mm) | R(mm) | L(mm) |
|-------|-------|-------|-------|-------|
| 100   | 85    | 38    | 230   | 150   |

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

| B(mm) | A(mm) | C(mm) | R(mm) | L(mm) |
|-------|-------|-------|-------|-------|
| 115   | 80    | 45    | 250   | 150   |

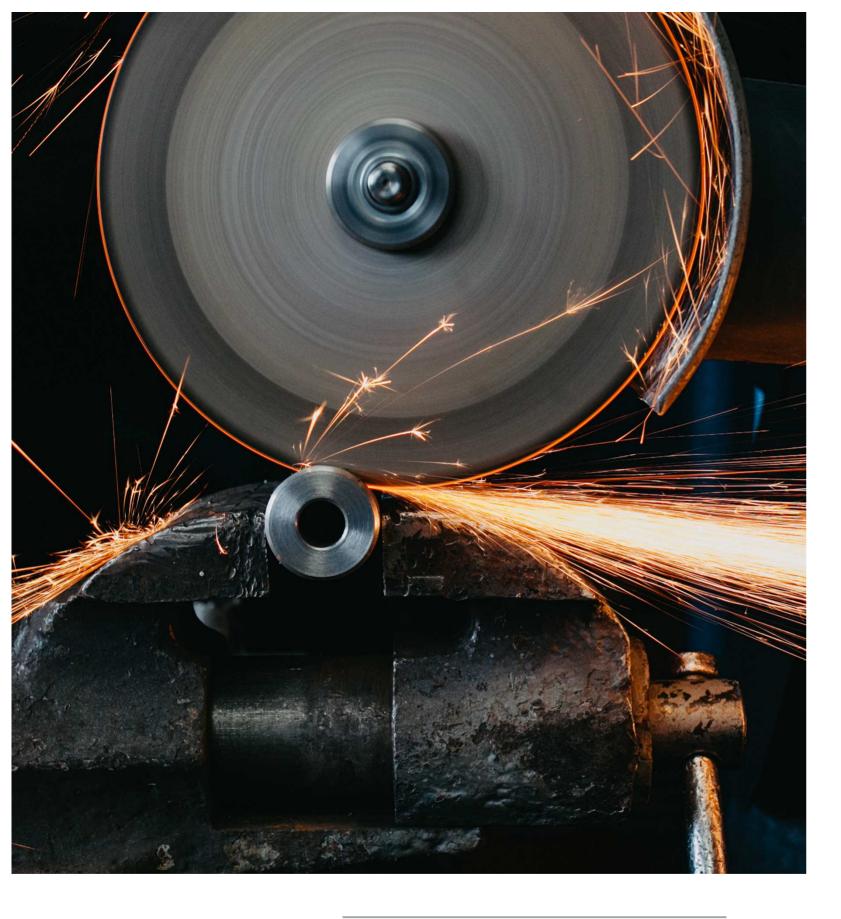
| B(mm) | A(mm) | C(mm) | R(mm) | L(mm) |
|-------|-------|-------|-------|-------|
| 60    | 40    | 85    | 60    | 75    |
| 125   | 85    | 225   | 190   | 125   |

| B(mm) | A(mm) | C(mm) | L(mm) |
|-------|-------|-------|-------|
| 60    | 50    | 15    | 125   |
| 100   | 85    | 35    | 150   |





\_\_\_\_\_





|   | Cutting Disc and Grinding Disc Product Range |                                     |  |  |  |
|---|--|-------------------------------------|--|--|--|
|   | Cutting disc                                 | D≤400mm,T≤3.0mm,H≤32.0mm,V≤100m/s   |  |  |  |
|   | Grinding disc                                | D≤230mm, T≤8.0mm, H≤25.4mm, V≤80m/s |  |  |  |
|   | Grit size                                    | F24-F60                             |  |  |  |
|   | Hardness                                     | S, Q, T                             |  |  |  |
| _ |  | -                                   |  |  |  |

# Solutions for Cutting and Grinding

### **DISC LABEL**



### **PICTOGRAMS: MATERIALS**





Stainless steel

Non-ferrous Stone, universal metals building material building materials

### **SAFETY INFORMATION**



Personal safety

Use dust mask Use eye protection Use ear protection

the safety recommendations



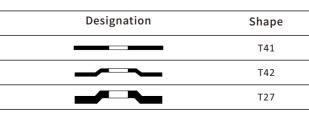


0

Not permitted for No freehand work side grinding

Dry grinding

### SHAPE















paints

Plastics, lacquers, Concrete











Do not use damaged wheels

| Description                             |
|---|
| Cut-off wheel (staight design)          |
| Cut-off wheel (depressed-centre design) |
| Rough grinding wheel                    |
|   |



# Steel Cutting (incl. chop saw and petrol saw)

| Material<br>Structural ste<br>Tool steels<br>Hardened ste<br>High tensile/<br>alloyed steels | els Soli<br>Thir<br>els Pip<br>High- We | cation<br>id materials<br>n metal sheets<br>es&profile<br>Iding grinding<br>ge grinding | Advantage<br>High speed<br>Long lifetin<br>Lower odor<br>High flexibi | ne           |         |        |
|--|---|---|---|--------------|---------|--------|
| Art No.  | Specification                           | Dimension<br>(DxTxH mm)   | Туре  | Speed( m/s ) | Max.rpm | P.Qty. |
| MEF401052  | A46T5BF                                 | 100X1.0X16.00   | T41   | 80           | 15300   | 400    |
| MEF402552  | A36S5BF                                 | 100X2.5X16.00   | T41   | 80           | 15300   | 400    |
| MEF451072  | A46T5BF                                 | 115X1.0X22.23   | T41   | 80           | 13300   | 400    |
| MEF501072  | A46T5BF                                 | 125X1.0X22.23   | T41   | 80           | 12250   | 400    |
| MEF501672  | A36T5BF                                 | 125X1.6X22.23   | T41   | 80           | 12250   | 400    |
| MEF701672  | A36T5BF                                 | 180X1.6X22.23   | T41   | 80           | 8500    | 200    |
| MEF702572  | A30S5BF                                 | 180X2.5X22.23   | T41   | 80           | 8500    | 100    |
| MED702572  | A30S5BF                                 | 180X2.5X22.23   | T42   | 80           | 8500    | 100    |
| MEF901972  | A36T5BF                                 | 230X1.9X22.23   | T41   | 80           | 6650    | 100    |
| MEF902572  | A30S5BF                                 | 230X2.5X22.23   | T41   | 80           | 6650    | 100    |
| MED902572  | A30S5BF                                 | 230X2.5X22.23   | T42   | 80           | 6650    | 100    |
| MEF123082  | A30R5BF                                 | 300X3.0X25.40   | T41   | 100          | 6400    | 25     |
| MEF144063  | A24T5BF                                 | 350X3.5X20.00   | T41   | 100          | 5500    | 25     |
| MEF164083  | A30R5BF                                 | 400X4.0X25.4  | T41   | 100          | 4800    | 25     |

# Common Disc Sizes

# Stainless Steel Cutting (incl. chop saw and petrol saw)

| Material<br>Rust and acid<br>Hardened stee<br>Tool steels<br>High-alloyed | els           | Application<br>Cutting<br>Beveling<br>Burr removir<br>Dressing | ng |
|---|---------------|--|----|
| Art No.   | Specification | Dimension<br>(DxTxH mm)  |    |
| SSF401052   | WA46T5BF      | 100X1.0X16.00  |    |
| SSF401252   | WA46T5BF      | 100X1.2X16.00  |    |
| SSF451072   | WA46T5BF      | 115X1.0X22.23  |    |
| SSE451672   | W/A26T5RE     | 115 1 6 2 2 2  |    |

| Art No.   | Specification | Dimension<br>(DxTxH mm) | Туре | Speed( m/s ) | Max.rpm | P.Qty. |
|-----------|---------------|-------------------------|------|--------------|---------|--------|
| SSF401052 | WA46T5BF      | 100X1.0X16.00           | T41  | 80           | 15300   | 400    |
| SSF401252 | WA46T5BF      | 100X1.2X16.00           | T41  | 80           | 15300   | 400    |
| SSF451072 | WA46T5BF      | 115X1.0X22.23           | T41  | 80           | 13300   | 400    |
| SSF451672 | WA36T5BF      | 115X1.6X22.23           | T41  | 80           | 13300   | 400    |
| SSF501072 | WA46T5BF      | 125X1.0X22.23           | T41  | 80           | 12250   | 400    |
| SSF501672 | WA36T5BF      | 125X1.6X22.23           | T41  | 80           | 12250   | 400    |
| SSF701672 | WA36T5BF      | 180X1.6X22.23           | T41  | 80           | 8500    | 200    |
| SSF301972 | WA36T5BF      | 230X1.9X22.23           | T41  | 80           | 6650    | 100    |
| SSF122483 | WA30S5BF      | 300X2.4X25.4            | T41  | 80           | 5100    | 25     |
| SSF142683 | WA30S5BF      | 350X2.6X25.4            | T41  | 80           | 4400    | 25     |
| SSF143082 | WA30S5BF      | 350X3.0X25.4            | T41  | 80           | 4400    | 25     |
| SSF163082 | WA30S5BF      | 400X3.0X25.4            | T41  | 80           | 3850    | 25     |

# **Steel Grinding**

MEC907073

| Material<br>Hardened ste<br>High-alloyed<br>Tool steels<br>Structural ste | steels Edge<br>Surfa | ation<br>ing seam preparat<br>grinding<br>ice grinding<br>grinding | Advantage<br>on Long lifetime<br>High efficient<br>High stock removal<br>High flexibility |              |  |
|---|----------------------|--|---|--------------|--|
| Art No.   | Specification        | Dimension<br>(DxTxH mm)  | Туре  | Speed( m/s ) |  |
| MEC407053   | A30S5BF              | 100X7.0X16.00  | T27   | 80           |  |
| MEC457073   | A30S5BF              | 115X7.0X22.23  | T27   | 80           |  |
| MEC507073   | A30S5BF              | 125X7.0X22.23  | T27   | 80           |  |
| MEC707073   | A24S5BF              | 180X7.0X22.23  | T27   | 80           |  |

230X7.0X22.23

T27

A24S5BF



Max.rpm

15300

13300

12250

8500

6650

80

P.Qty.

160

160

160

40

40

| Stain   | less | Stee |
|---------|------|------|
| Materia | ıl   |      |

| Stainless <b>S</b>  | Steel Grin    | ding                    |  |            |         | BONDREX' |
|---|---------------|-------------------------|--|------------|---------|----------|
| MaterialApplicationRust and acid proofed steelsWelding seam prepareHardened steelsEdge grindingHigh-alloyed steelsSurface grindingTools steelsBurr grinding |               | reparation              | Advantage<br>Long lifetime<br>Minimum development of burrs<br>High efficient<br>High stock |            |         |          |
| Art No.   | Specification | Dimension<br>(DxTxH mm) | Туре   | Speed(m/s) | Max.rpm | P.Qty.   |
| SSC407053   | WA30Q5BF      | 100X7.0X16.00           | T27  | 80         | 15300   | 160      |
| SSC457073   | WA30Q5BF      | 115X7.0X22.23           | T27  | 80         | 13300   | 160      |
| SSC507073   | WA30Q5BF      | 125X7.0X22.23           | T27  | 80         | 12250   | 160      |
| SSC707073   | WA24Q5BF      | 180X7.0X22.23           | T27  | 80         | 8500    | 40       |
| SSC907073   | WA24Q5BF      | 230X7.0X22.23           | T27  | 80         | 6650    | 40       |



### Advantage

- Low development
- ofburrs
- High cutting speed
- Very long lifetime





# **Aluminum Cutting**

| MaterialApplicationNon-ferrous metalsRain gutteringBrassCorrugated sheetsBearing metalThin-walled tubesAl-alloySurface grindingBurrgrinding |               | Advantage<br>Low development of burrs<br>Long lifetime<br>Cool cut<br>Cool grinding<br>performance |      |              |         |        |
|---|---------------|--|------|--------------|---------|--------|
| Art No.   | Specification | Dimension<br>(DxTxH mm)  | Туре | Speed( m/s ) | Max.rpm | P.Qty. |
| ALF401652   | A36P5BF       | 100X1.6X16.00  | T41  | 80           | 15300   | 400    |
| ALD402552   | A36P5BF       | 100X2.5X16.00  | T42  | 80           | 15300   | 200    |
| ALF451672   | A36P5BF       | 115X1.6X22.23  | T41  | 80           | 13300   | 400    |
| ALD452572   | A36P5BF       | 115X2.0X22.23  | T42  | 80           | 13300   | 200    |
| ALF501672   | A36P5BF       | 125X1.6X22.23  | T41  | 80           | 12250   | 400    |
| ALF502072   | A36P5BF       | 125X2.0X22.23  | T41  | 80           | 12250   | 400    |
| ALD502072   | A36P5BF       | 125X2.0X22.23  | T42  | 80           | 12250   | 200    |
| ALF701672   | A36P5BF       | 180X1.6X22.23  | T41  | 80           | 8500    | 200    |
| ALF901672   | A36P5BF       | 230X1.9X22.23  | T41  | 80           | 6650    | 100    |
| ALF902572   | A36P5BF       | 230X2.5X22.23  | T41  | 80           | 6650    | 100    |
| ALD902572   | A36P5BF       | 230X2.5X22.23  | T42  | 80           | 6650    | 100    |

# Common Disc Sizes

# **Stone Cutting**

| Material<br>Mardle<br>Natural stone<br>Limestone<br>Artificial ston<br>Asphalt | e Floc        |           | Advan<br>High<br>Long<br>Coo<br>High |
|--|---------------|-----------|--------------------------------------|
| Art No   | Specification | Dimension | Typ                                  |

| Art No.   | Specification | Dimension<br>(DxTxH mm) | Туре | Speed( m/s ) | Max.rpm | P.Qty. |
|-----------|---------------|-------------------------|------|--------------|---------|--------|
| STF401652 | C36T5BF       | 100X1.6X16.00           | T41  | 80           | 15300   | 400    |
| STD402552 | C36T5BF       | 100X2.0X16.00           | T42  | 80           | 15300   | 200    |
| STF402552 | C36T5BF       | 100X2.5X16.00           | T41  | 80           | 15300   | 400    |
| STF451672 | C36T5BF       | 115X1.6X22.23           | T41  | 80           | 13300   | 400    |
| STF453072 | C36T5BF       | 115X3.0X22.23           | T41  | 80           | 13300   | 400    |
| STD453072 | C36T5BF       | 115X3.0X22.23           | T42  | 80           | 13300   | 200    |
| STD503072 | C36T5BF       | 125X3.0X22.23           | T42  | 80           | 12250   | 200    |
| STF701972 | C36T5BF       | 180X1.9X22.23           | T41  | 80           | 8500    | 200    |
| XTF703072 | C36T5BF       | 180X3.0X22.23           | T41  | 80           | 8500    | 100    |
| STD903072 | C36T5BF       | 230X3.0X22.23           | T42  | 80           | 6650    | 100    |

# **Aluminum Grinding**

| MaterialApplicationNon-ferrous metalsWelding seam preparationBrassEdge grindingBearing metalSurface grindingAl-alloyBurr grinding |               | tion No clos<br>High fl<br>Cool g | Advantage<br>No clogging<br>High flexibility<br>Cool grinding performand<br>High efficient |              | ice     |        |
|---|---------------|-----------------------------------|--|--------------|---------|--------|
| Art No.   | Specification | Dimension<br>(DxTxH mm)           | Туре   | Speed( m/s ) | Max.rpm | P.Qty. |
| ALC407053   | A30N5BF       | 100X7.0X16.00                     | T27  | 80           | 15300   | 160    |
| ALC457073   | A30N5BF       | 115X7.0X22.23                     | T27  | 80           | 13300   | 160    |
| ALC507073   | A30N5BF       | 125X7.0X22.23                     | T27  | 80           | 12250   | 160    |
| ALC707073   | A24N5BF       | 180X7.0X22.23                     | T27  | 80           | 8500    | 40     |
| ALC907073   | A24N5BF       | 230X7.0X22.23                     | T27  | 80           | 6650    | 40     |

# Stone Grinding Material Concret

| MaterialApplicationConcrete productsCorner and edge grindingNatural stonesSurface grindingLime stonesCleaningArtificial stonesEdge grindingTile |               | ng High stoo<br>No clogg<br>High effic<br>High flexi | Advantage<br>High stock removal<br>No clogging<br>High efficient<br>High flexibility<br>Cool grinding performance |              |         |        |
|---|---------------|--|---|--------------|---------|--------|
| Art No.   | Specification | Dimension<br>(DxTxH mm)                              | Туре  | Speed( m/s ) | Max.rpm | P.Qty. |
| STC407053   | C30S5BF       | 100X7.0X16.00  | T27   | 80           | 15300   | 160    |
| STC457073   | C30S5BF       | 115X7.0X22.23  | T27   | 80           | 13300   | 160    |
| STC507073   | C30S5BF       | 125X7.0X22.23  | T27   | 80           | 12250   | 160    |
| STC707073   | C24S5BF       | 180X7.0X22.23  | T27   | 80           | 8500    | 40     |
| STC907073   | C24S5BF       | 230X7.0X22.23  | T27   | 80           | 6650    | 40     |



### antage

gh cutting speed ng lifetime ol cut gh stock removal



### Advantage

