



**Tec-Spiral**®

**Better Tool, Better Work**

# Abrasive Tool

**High Performance Quality For Industrial Applications**



## Introduction

Tec-Spiral, with state-of-the-art technology and certificated quality control system, supplies a full range of top-quality abrasive tools in China.

With the spirit of continual innovation, unceasing improvement, we are able to provide not only various standard abrasives, but also customized ones.

We are always following the strictest international standard in our production, inspection and quality control. The ISO9001-2008 certification granted by LRQA resulted from our strict quality control system and excellent business management. We never stop the pursuit of constant improvement.

By using high quality abrasive raw material and advanced assembling machine, we offer the first class abrasives in modern plant. With remarkable R&D capability and flexibility in supply chain, we can meet customers' various demands in very short time.

Our staff members all bear in mind the importance of customer satisfaction. Advanced technology, stable quality and quick response are the keys to our customer satisfaction.

We are leading pioneer in the field of abrasives in China. Our products are widely used in the global fields of aviation, ship building, railway construction, automotive industry, heavy industry, mould making, etc. We are providing the best solutions for deburring metal and nonmetal. Great passion is always our inspiration to fulfill the desire of mutual development with our customers and to meet the new challenges.





Warmly welcome your visit at Tec-Spiral. We will be at your service at anywhere and anytime!



## Product Features

- ◆ For use on portable power tools for all metal removal and surface finishing needs
- ◆ Made according to the strict manufacturing method
- ◆ Combine fast material removal with long operating life
- ◆ Highly efficient, less vibrating, cool cutting, and less loading
- ◆ Quality and performance combined with safety and operator comfort

## Abrasive Material

<p><b>Aluminum Oxide</b> </p>	<p><b>Zirconia Alumina</b> </p>
<ul style="list-style-type: none"> <li>◆ The most commonly used abrasive</li> <li>◆ Best-suited for general purpose deburring and blending</li> <li>◆ Tough, economical and fracture-resistant.</li> <li>◆ <b>Long life and stock removal</b></li> <li>◆ Commonly used on ferrous alloys, high-tensile materials and wood.</li> </ul>	<ul style="list-style-type: none"> <li>◆ More durable than aluminum oxide</li> <li>◆ Best for medium- to heavy-material removal</li> <li>◆ The material grains constantly fracture to produce new sharp edges</li> <li>◆ <b>High stock removal</b></li> <li>◆ Commonly used on carbon steels, aerospace alloys, nickel alloys, aluminum, cast iron, forgings, and some stainless steels.</li> </ul>
<p><b>Ceramic Abrasive</b> </p>	<p><b>Silicon Carbide</b> </p>
<ul style="list-style-type: none"> <li>◆ Cooler-cutting and more durable than natural aluminum-based products</li> <li>◆ Provides a sharp, high-purity grain.</li> <li>◆ <b>Superior work, extremely long life, and high stock removal</b></li> <li>◆ Commonly used for precision grinding of steels, hard alloys and exotic materials.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Fast-cutting abrasive.</li> <li>◆ <b>Fast stock removal</b></li> <li>◆ Commonly used on nonferrous metal and in low-pressure applications.</li> </ul>

## Selection Of The Abrasive

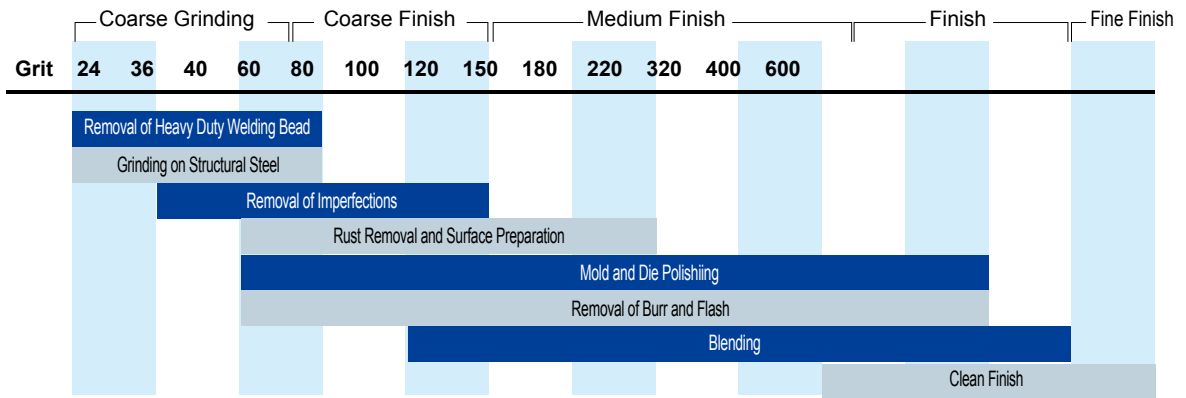
		Aluminum Oxide		Silicon Carbide		Zirconia-Alumina	Ceramic	
		Coated	Non-woven	Coated	Non-woven	Coated	Coated	Non-woven
Surface material	<b>Ferrous</b>							
	Carbon steel	●	●		√	●	★	★
	Alloy steel	√	●		√	●	★	★
	Stainless steel	√	●		√	●	★	★
	Cast iron	●	●		√	●	★	★
	<b>Non ferrous</b>							
	Aluminum Alloys	★	★	●		√	●	★
	Brass bronzed, copper, Zinc	★	★	★		√	●	★
	Titanium			●	★	●	★	★
	Nickel alloys	√	●		√	●	★	★
	Plastic	★	★	★	●	●	√	
	Ceramics		★	√	●		●	
	Wood	★		●			√	
Stone		★	●	●				

Note: The Possible Choice √

The Good Choice ●

The Optimal Choice ★

## Match The Grit To Your Application



## Safety First

- ◆ Always handle abrasives with great care, they are easily damaged.
- ◆ Examine all products for defects or damage before use.
- ◆ Keep abrasives in their original packaging, protect from water and excessive heat. Store flat and protect from mechanical damage.
- ◆ Coated abrasives, such as fiber discs, flap discs and cloth belts perform best when stored in an area with 45-60% relative humidity at 65-70° F (18-22° C)
- ◆ Never use an abrasive product beyond its expiry date where marked.
- ◆ Observe the recommended shelf life for the following specific products:  
Resinoid and Shellac products 3 years  
Rubber products 5 years  
Vitrified products 10 years
- ◆ Check MAX RPM on abrasive and check the spindle speed of the tool. Never run an abrasive faster than its MAX RPM (or M.R.S. = Maximum Rated Speed).
- ◆ Do not use abrasives and tools over their rated capacity, Check abrasive product or package for any warnings or other safety information:



Not permitted for hand-held machines



Read the instructions



Not permitted for wet grinding



Wear eye protection



Not permitted for face grinding



Wear hearing protection



Do not use if damaged



Wear gloves



Only permitted with a back-up pad



Wear a respirator

## Safest And Most Effective Work Methods



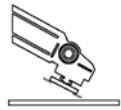
### Grinding

Type 27 depressed center grinding wheels are designed to be used at a 15 to 20 working angle



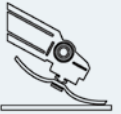
### Flexible Grinding

Flexible Grinding Wheels are best used with a working angle of 10° to 15°



### Flap Disc

Flap discs are designed to be used at a working angle of 4° to 10°



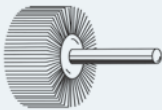
### Sanding Disc

Fiber backed sanding discs work best at a working angle of space 4° to 10° They must be used on a full size flexible backing pad



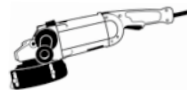
### Cutting Off

Choose direction of cut to present the narrowest cross section of the material to the wheel. Cut large solids with a moderate rocking motion, Avoid twisting and bending of the wheel in the cut, Do not use a cut-off wheel for deburring and other side grinding applications



### Flap Wheel

Apply moderate working pressure when working with flap wheels - let the flaps do the work



### Wire Brush

Work with the face of a wire brush, Apply moderate working pressure to let the wire tips do the work and prevent excessive bending of the wire



INDEX

**Non-Woven Abrasive**



Hand Using.....	07
Surface Condition Disc.....	08~10
Surface Condition Belt.....	11

**Cutting**



For Metal.....	13~15
For Cast And Stainless Steel.....	16~17
With Chop Saw For Metal.....	18
With Stationary Machines For Metal.....	19
With Petrol Saw For Metal.....	20
With Petrol Saw For Rail.....	21
Mini Size For Metal.....	21
Ultra Thin For Inox.....	22
For Aluminum.....	23
For Stone.....	24
With Petrol Saw For Stone.....	25

**Grinding**



For Metal.....	26
For Aluminum.....	27
For Stone.....	28
Flexible.....	29
Mounted Points.....	30~39

**Blending**

Flap Disc.....	40~56
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**Sanding**



Fiber Disc.....	57~62
Quick Change Disc.....	63~66
Sand Band & Drum.....	67~69
Clean And Strip Disc.....	70~72
Flap Wheel.....	73~85

**Finishing**



Felt Flap Wheel.....	86
Felt Bob.....	87~90
Polishing Compound.....	91~92

**Brushing**



Cup Brush.....	94~95
Wheel Brush.....	96~98
Mounted Brush.....	99~100
Hand Brush.....	101
Tube Brush.....	102~103
Flex Hone Brush.....	104~106

**Accessories**



Angle Grinder Pad.....	107~110
Quick Change Disc Holder.....	111
Dual Action Orbital Sander Pad.....	112~113

## Non-Woven Abrasive

- ◆ Combined strong synthetic mesh and quality abrasives by a smear-resistant adhesive.
- ◆ Open construction enables aggressive cutting action
- ◆ Non-loading feature improved surface finish
- ◆ Light- to heavy-duty cleaning, deburring, blending, polishing, and finishing of metal, wood, composite, plastics, stone, solid surface and painted surfaces.



## Non-Woven Hand Abrasive Application Recommendation Guide



Abrasive	Color	Grit	Application
Aluminum oxide	<b>Brown</b>	Coarse	Extra heavy stripping and cleaning
Silicon carbide	<b>Black</b>	Medium	Blending and deburring
Aluminum oxide	<b>Maroon</b>	Fine	Cleaning and deburring
Aluminum oxide	<b>Green</b>	Very Fine	Light cleaning, deburring and finishing
Silicon carbide	<b>Gray</b>	Ultra fine	Final finishing
Non-abrasive	<b>White</b>	Non-abrasive	Without abrasives, Scratch-free cleaning



### Non-woven Hand Pads

- ◆ Flexible, conform to work surface
- ◆ Easily removes flashing or burrs without affecting dimension of workpiece
- ◆ Non-loading, constant supply of new cutting edges
- ◆ Non-rusting, no workpiece contamination
- ◆ Long life, waterproof, solvent resistant



Size (W×L)		Abrasive	Color	Grit	Application	Order Number
Inch	mm					
6×9	155×225	Aluminum oxide	Brown	Coarse	Extra heavy stripping and cleaning	19NL00001
6×9	155×225	Silicon carbide	Black	Medium	Blending and deburring	19NL00002
6×9	155×225	Aluminum oxide	Maroon	Fine	Cleaning and deuburring	19NL00003
6×9	155×225	Aluminum oxide	Green	Very Fine	Light cleaning, deburring and finishing	19NL00004
6×9	155×225	Silicon carbide	Gray	Ultra fine	Final finishing	19NL00005
6×9	155×225	Non-abrasive	White	Non-abrasive	Without abrasives, Scratch-free cleaning	19NL00006

### Non-woven Hand Rolls

- ◆ Economical alternative to cut pads
- ◆ Can be cut to specific sizes



Size (W×L)		Abrasive	Color	Grit	Application	Order Number
Inch	mm					
4×10	.914×10M	Silicon carbide	Black	Medium	Blending and deburring	19NR00001
4×10	.914×10M	Aluminum oxide	Maroon	Fine	Cleaning and deuburring	19NR00002
4×10	.914×10M	Aluminum oxide	Green	Very Fine	Light cleaning, deburring and finishing	19NR00003
4×10	.914×10M	Silicon carbide	Gray	Ultra fine	Final finishing	19NR00004

## Non-Woven Surface Conditioning Abrasive Application Recommendation Guide



Abrasive	Color	Grit	Application
Aluminum oxide	<b>Brown</b>	Coarse	Grit60#-80#, Ideal for removing grinding marks and scratches
Aluminum oxide	<b>Maroon</b>	Medium	Grit120#-150# Ideal for cleaning and deburring
Aluminum oxide	<b>Blue</b>	Very Fine	Grit240#-320# Ideal for finishing
Silicon carbide	<b>Gray</b>	Ultra fine	Grit 600#-800#, Ideal for final polishing

### Non-Woven Surface Condition Disc - Hook & Loop

- ◆ Hook and loop discs are best for finishing, cleaning and light deburring on flat metal surfaces.
- ◆ Firm backing, low stretch
- ◆ Used on right angle (high and low speed), orbital, and dual action power hand tools.



Size (D)		Abrasive	Max. rpm	Order Number			
inch	mm			Coarse	Medium	Very Fine	Ultra Fine
				<b>Brown</b>	<b>Maroon</b>	<b>Blue</b>	<b>Gray</b>
2	50	Aluminum oxide	23000	<b>19NH00001</b>	<b>19NH03001</b>	<b>19NH06001</b>	<b>19NH09001</b>
3	75	Aluminum oxide	20000	<b>19NH00002</b>	<b>19NH03002</b>	<b>19NH06002</b>	<b>19NH09002</b>
4	100	Aluminum oxide	13000	<b>19NH00003</b>	<b>19NH03003</b>	<b>19NH06003</b>	<b>19NH09003</b>
4-1/2	115	Aluminum oxide	13000	<b>19NH00004</b>	<b>19NH03004</b>	<b>19NH06004</b>	<b>19NH09004</b>
5	125	Aluminum oxide	10000	<b>19NH00005</b>	<b>19NH03005</b>	<b>19NH06005</b>	<b>19NH09005</b>
6	150	Aluminum oxide	8000	<b>19NH00006</b>	<b>19NH03006</b>	<b>19NH06006</b>	<b>19NH09006</b>
7	180	Aluminum oxide	6000	<b>19NH00007</b>	<b>19NH03007</b>	<b>19NH06007</b>	<b>19NH09007</b>
8	200	Aluminum oxide	6000	<b>19NH00008</b>	<b>19NH03008</b>	<b>19NH06008</b>	<b>19NH09008</b>

### Non-Woven Surface Condition Disc - With Center Hole

- ◆ For removing grinding marks and scratches leaving a great improved surface finish
- ◆ Uniform, cool polish rate for longer life
- ◆ For use with a regular(sanding disc) flexible backing pad

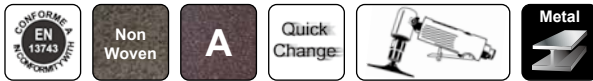




Size (D)		Abrasive	Max. rpm	Order Number			
inch	mm			Coarse	Medium	Very Fine	Ultra Fine
				Brown	Maroon	Blue	Gray
4	100mm	Aluminum oxide	13000	19NC00001	19NC03001	19NC06001	19NC09001
4-1/2	115mm	Aluminum oxide	13000	19NC00002	19NC03002	19NC06002	19NC09002
5	125mm	Aluminum oxide	10000	19NC00003	19NC03003	19NC06003	19NC09003
6	150mm	Aluminum oxide	8000	19NC00004	19NC03004	19NC06004	19NC09004
7	180mm	Aluminum oxide	6000	19NC00005	19NC03005	19NC06005	19NC09005
8	200mm	Aluminum oxide	6000	19NC00006	19NC03006	19NC06006	19NC09006

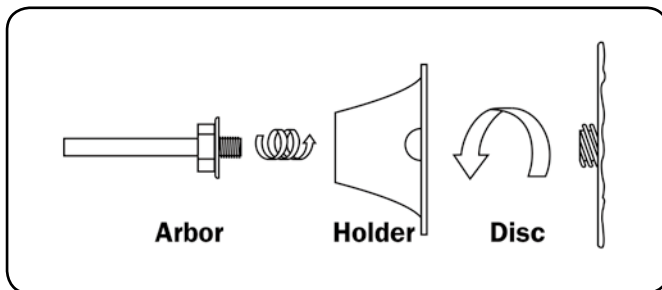


## Quick-Change Non-woven Surface Conditioning Discs

- ◆ For use with a variety of electric and pneumatic power tools for general purpose deburring, blending, cleaning and finishing.
- ◆ Provide burr-free surface suitable for painting and coating.



Size (W×L)		Abrasive	Color	Grit	Max. rpm	Order Number	
Inch	mm					Type TR	Type TS
							
2	50	Aluminum oxide	Brown	Coarse	25000	19NS00002	19NS00502
2	50	Aluminum oxide	Maroon	Medium	25000	19NS03002	19NS03502
2	50	Aluminum oxide	Blue	Very Fine	25000	19NS06002	19NS06502
2	50	Aluminum oxide	Gray	Ultra fine	25000	19NS09002	19NS09502
3	75	Aluminum oxide	Brown	Coarse	20000	19NS00003	19NS00503
3	75	Aluminum oxide	Maroon	Medium	20000	19NS03003	19NS03503
3	75	Aluminum oxide	Blue	Very Fine	20000	19NS06003	19NS06503
3	75	Aluminum oxide	Gray	Ultra fine	20000	19NS09003	19NS09503



### Non-woven Surface Conditioning Belts







- ◆ Designed for cleaning, finishing and light deburring operations using standard abrasive belt equipment.
- ◆ Resists loading and reduces heat build-up, increasing life and improving performance.
- ◆ High performance belts feature a tougher, more aggressive non-woven nylon abrasive-impregnated web construction than regular belts.



Size (D)		Abrasive	Order Number			
inch	mm		Coarse	Medium	Very Fine	Ultra Fine
			Brown	Maroon	Blue	Gray
1/4×18	6×450	Aluminum oxide	19NB00001	19NB03001	19NB06001	19NB09001
1/4×24	6×600	Aluminum oxide	19NB00002	19NB03002	19NB06002	19NB09002
1/2×12	12×300	Aluminum oxide	19NB00003	19NB03003	19NB06003	19NB09003
1/2×18	12×450	Aluminum oxide	19NB00004	19NB03004	19NB06004	19NB09004
1/2×24	12×600	Aluminum oxide	19NB00005	19NB03005	19NB06005	19NB09005
3/4×18	19×450	Aluminum oxide	19NB00006	19NB03006	19NB06006	19NB09006
3/4×20-1/2	19×520	Aluminum oxide	19NB00007	19NB03007	19NB06007	19NB09007
1×42	25×1066	Aluminum oxide	19NB00008	19NB03008	19NB06008	19NB09008
1-1/2×60	38×1520	Aluminum oxide	19NB00009	19NB03009	19NB06009	19NB09009
2×48	50×1200	Aluminum oxide	19NB00010	19NB03010	19NB06010	19NB09010
2×60	50×1500	Aluminum oxide	19NB00011	19NB03011	19NB06011	19NB09011
2×72	50×1800	Aluminum oxide	19NB00012	19NB03012	19NB06012	19NB09012
2-1/2×60	63×1500	Aluminum oxide	19NB00013	19NB03013	19NB06013	19NB09013
3×21	75×530	Aluminum oxide	19NB00014	19NB03014	19NB06014	19NB09014
4×24	100×600	Aluminum oxide	19NB00015	19NB03015	19NB06015	19NB09015
4×36	100×900	Aluminum oxide	19NB00016	19NB03016	19NB06016	19NB09016
6×48	150×1200	Aluminum oxide	19NB00017	19NB03017	19NB06017	19NB09017

# Cutting & Grinding Disc

## Cutting Disc Tech Tip

Power Tool Used	Diameters	Safest And Most Effective Work Methods
 <b>Drill/Straight Grinder</b>	2, 3 & 4	<ul style="list-style-type: none"> <li>◆ Choose direction of cut to present the narrowest cross section of the material to the wheel</li> <li>◆ Cut large solids with a moderate rocking motion.</li> <li>◆ Avoid twisting and bending of the wheel in the cut.</li> <li>◆ Do not use a cut-off wheel for deburring and other side grinding applications.</li> </ul>
 <b>Angle Grinder</b>	4-1/2, 5, 6, 7 & 9	
 <b>Circular Saw</b>	7 & 8	
 <b>High Speed Gas/Electric Saw</b>	12 & 14	
 <b>Chop Saw</b>	12, 14 & 16	
 <b>Stationary Saw</b>	12, 14, 16, 18, 20 & 24	

## Application Chart

	Ferrous metal									Casting	Non-Ferrous metal					Masonry							
A	√	√	√	√	√	•	•	•	•	•	•	•	•	•	•								
WA	•	•	•	•	•	•	√	√		•	•	•	•	•	•								
ZA	•	•	•	•	•	•	√	√		•	•	•	•	•	√								
C										√		√	√	√	√	√	√	√	√	√	√	√	√

Remark: √ = Recommended  
 • = May be used

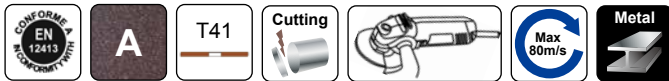


## Metal Cutting Disc -Aluminum Oxide Abrasive For Metal

- ◆ For metal and steel
- ◆ High performance and long tool life
- ◆ Fast cutting
- ◆ General purpose applications



### Flat Type (T41 Type)



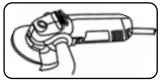
Diameter mm	Diameter inch	Max rpm	Order Number
100×2.0×16	4×5/64×5/8	15300	19ZC00001
100×2.5×16	4×3/32×5/8	15300	19ZC00002
100×3.0×16	4×1/8×5/8	15300	19ZC00003
115×2.0×22.2	4-1/2×5/64×7/8	13300	19ZC00004
115×2.5×22.5	4-1/2×3/32×7/8	13300	19ZC00005
115×3.0×22.2	4-1/2×1/8×7/8	13300	19ZC00006
125×2.0×22.2	5×5/64×7/8	12200	19ZC00007
125×2.5×22.2	5×3/32×7/8	12200	19ZC00008
125×3.0×22.2	5×1/8×7/8	12200	19ZC00009
150×2.0×22.2	6×5/64×7/8	10200	19ZC00010
150×3.0×22.2	6×1/8×7/8	10200	19ZC00011
180×2.0×22.2	7×5/64×7/8	8500	19ZC00012
180×3.0×22.2	7×1/8×7/8	8500	19ZC00013
230×2.0×22.2	9×5/64×7/8	6650	19ZC00014
230×3.0×22.2	9×1/8×7/8	6650	19ZC00015

## Metal Cutting Disc -Aluminum Oxide Abrasive For Metal

- ◆ For metal and steel
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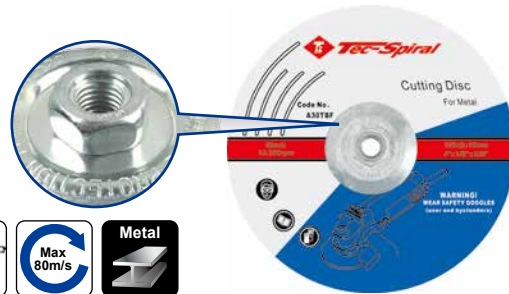
### Depressed Type (T42 Type)



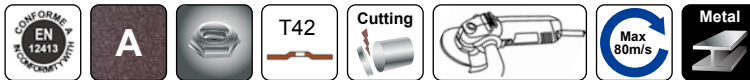
Diameter mm	Diameter inch	Max. rpm	Order Number
100×2.0×16	4×5/64×5/8	15300	19ZC00501
100×2.5×16	4×3/32×5/8	15300	19ZC00502
100×3.0×16	4×1/8×5/8	15300	19ZC00503
115×2.0×22.2	4-1/2×5/64×7/8	13300	19ZC00504
115×2.5×22.5	4-1/2×3/32×7/8	13300	19ZC00505
115×3.0×22.2	4-1/2×1/8×7/8	13300	19ZC00506
125×2.0×22.2	5×5/64×7/8	12200	19ZC00507
125×2.5×22.2	5×3/32×7/8	12200	19ZC00508
125×3.0×22.2	5×1/8×7/8	12200	19ZC00509
150×2.0×22.2	6×5/64×7/8	10200	19ZC00510
150×3.0×22.2	6×1/8×7/8	10200	19ZC00511
180×2.0×22.2	7×5/64×7/8	8500	19ZC00512
180×3.0×22.2	7×1/8×7/8	8500	19ZC00513
230×2.0×22.2	9×5/64×7/8	6650	19ZC00514
230×3.0×22.2	9×1/8×7/8	6650	19ZC00515

**Metal Cutting Disc -Aluminum Oxide Abrasive**  
For Metal

- ◆ For metal and steel
- ◆ High performance and long tool life
- ◆ Fast cutting
- ◆ General purpose applications



**Depressed Type (T42 Type) W/Hub**



Diameter mm	Diameter inch	Max rpm	Order Number
115×3×HUB	4-1/2×1/8×5/8-11	13300	19ZC00801
125×3×HUB	5×1/8×5/8-11	12200	19ZC00802
150×3×HUB	6×1/8×5/8-11	10200	19ZC00803
180×3×HUB	7×1/8×5/8-11	8500	19ZC00804
230×3×HUB	9×1/8×5/8-11	6500	19ZC00805

## Metal Cutting Disc - Zirconia Aluminum Oxide Abrasive

For Tungsten Carbide, Ferrous Metal, Casting And Stainless Steel etc

- ◆ Extra-high performance and long tool life
- ◆ Fast cutting



### Flat Type (T41 Type)



Diameter mm	Diameter inch	Max rpm	Order Number
100×1.0×16	4×3/64×5/8	15300	19ZC02001
100×1.6×16	4×1/16×5/8	15300	19ZC02002
100×3.0×16	4×1/8×5/8	15300	19ZC02003
115×1.0×22.2	4-1/2 ×3/64×7/8	13300	19ZC02004
115×1.6×22.2	4-1/2 ×1/16×7/8	13300	19ZC02005
115×3.0×22.2	4-1/2×1/8×7/8	13300	19ZC02006
125×1.0×22.2	5 ×3/64×7/8	12200	19ZC02007
125×1.6×22.2	5×1/16×7/8	12200	19ZC02008
125×3.0×22.2	5×1/8×7/8	12200	19ZC02009
150×1.0×22.2	6×3/64×7/8	10200	19ZC02010
150×1.6×22.2	6×1/16×7/8	10200	19ZC02011
150×3.0×22.2	6×1/8×7/8	10200	19ZC02012
180×1.6×22.2	7×1/16×7/8	8500	19ZC02013
180×3.0×22.2	7×1/8×7/8	8500	19ZC02014
230×1.6×22.2	9×1/16×7/8	6500	19ZC02015
230×3.0×22.2	9×1/8×7/8	6650	19ZC02016

### Metal Cutting Disc - Zirconia Aluminum Oxide Abrasive

For Tungsten Carbide, Ferrous Metal, Casting And Stainless Steel etc

- ◆ Extra-high performance and long tool life
- ◆ Fast cutting

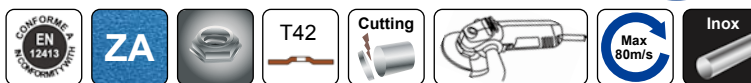


#### Depressed Type (T42 Type)



Diameter mm	Diameter inch	Max rpm	Order Number
100×3×16mm	4×1/8×5/8	15300	19ZC02501
115×3.0×22.2mm	4-1/2×1/8×7/8	13300	19ZC02502
125×3.0×22.2mm	5×1/8×7/8	12200	19ZC02503
150×3.0×22.2mm	6×1/8×7/8	10200	19ZC02504
180×3.0×22.2mm	7×1/8×7/8	8500	19ZC02505
230×3.0×22.2mm	9×1/8×7/8	6650	19ZC02506

#### Depressed Type (T42 Type) W/Hub



Diameter mm	Diameter inch	Max rpm	Order Number
115×3×HUB	4-1/2×1/8×5/8-11	13300	19ZC02801
125×3×HUB	5×1/8×5/8-11	12200	19ZC02802
150×3×HUB	6×1/8×5/8-11	10200	19ZC02803
180×3×HUB	7×1/8×5/8-11	8500	19ZC02804
230×3×HUB	9×1/8×5/8-11	6500	19ZC02805

## Flat Metal Cutting Disc ø 300 - 400mm - Flat Type (T41 Type) - Use On Chop Saw For Metal

- ◆ For metal and steel
- ◆ High performance and long tool life
- ◆ Designed for high power electric table and fixed machines



Diameter mm	Diameter inch	Max rpm	Order Number
305×2.5×2.4	12×3/32×1	5100	19ZC00051
305×3.0×25.4	12×1/8×1	5100	19ZC00052
305×4.0×25.4	12×5/32×1	5100	19ZC00053
350×3.0×25.4	14×1/8×1	4400	19ZC00054
350×4.0×25.4	14×5/32×1	4400	19ZC00055
400×3.0×25.4mm	16×1/8×1	3850	19ZC00056
400×3.5×25.4mm	16×9/64×1	3850	19ZC00057
400×4.0×25.4mm	16×5/32×1	3850	19ZC00058
400×5.0×25.4mm	16×3/16×1	3850	19ZC00059



**Flat Metal Cutting Disc ø 300 - 400mm - Flat Type (T41 Type)  
- Use On Stationary Machine For Metal**

- ◆ For metal and steel
- ◆ High performance and long tool life
- ◆ Quick and free cutting
- ◆ Designed for high power machines



Diameter	Diameter inch	Max rpm	Order Number
250×3.0×25.4	10×1/8×1	6100	19ZC00081
250×3.0×40.0	10×1/8×1-9/16	6100	19ZC00082
300×3.0×25.4	12×1/8×1	5500	19ZC00083
300×3.0×40.0	12×1/8×1-9/16	5500	19ZC00084
350×3.0×25.4	14×1/8×1	4400	19ZC00085
350×3.0×40.0	14×1/8×1-9/16	4400	19ZC00086
400×4.0×25.4	16×5/32×1	3850	19ZC00087
400×4.0×40.0	16×5/32×1-9/16	3850	19ZC00088
400×5.0×40.0	16×13/64×1-9/16	3850	19ZC00089

## Flat Metal Cutting Disc $\varnothing$ 300 - 400mm - Flat Type (T41 Type) - Use On Petrol Saw For Metal

- ◆ For metal and steel
- ◆ High performance and long tool life
- ◆ Quick and free cutting
- ◆ Designed for petrol and electrical handheld saws (80 m/s)
- ◆  $\varnothing$  350mm up to 100 m/s

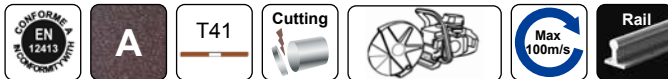


Diameter mm	Diameter inch	Max rpm	Order Number
300x4.0x20.0	12x5/32x3/4	6400	19ZC00090
300x4.0x22.2	12x5/32x7/8	6400	19ZC00091
300x4.0x25.4	12x5/32x1	6400	19ZC00092
350x4.0x20.0	14x5/32x3/4	5500	19ZC00093
350x4.0x22.2	14x5/32x7/8	5500	19ZC00094
350x4.0x25.4	14x5/32x1	5500	19ZC00095
400x4.5x25.4	16x11/64x1	4800	19ZC00096

### Rail Cutting Disc

Use On Petrol Saw For Rail

- ◆ For rail
- ◆ High performance and long tool life
- ◆ High Consolidation strength and bending strength
- ◆ The safe speed up to 100m/s



Diameter mm	Diameter inch	Max rpm	Order Number
305×4×25.4	12×5/32×1	6400	19ZC03001
355×4×25.4	14×5/32×1	5500	19ZC03002
400×4×25.4	16×5/32×1	4800	19ZC03003

### Mini Size Metal Cutting Disc

For Metal

- ◆ For Sharp, clean cutting action on metal and steel
- ◆ Best on pneumatic machines

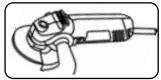


Diameter mm	Diameter inch	Max rpm	Order Number
50×1.0×10	2×3/64×3/8	30600	19ZC03004
76×1.0×10	3×3/64×3/8	20150	19ZC03005

## Ultra Thin Metal Cutting Disc—White Aluminium Oxide Abrasive

For Metal/Inox

- ◆ Particularly on tool and stainless steel
- ◆ Lower power required
- ◆ Thin sheet applications
- ◆ Easy steering (1.0 mm)
- ◆ Comfortable cutting
- ◆ Burn-free and Burr-free cutting result
- ◆ High stability



Diameter mm	Diameter inch	Max rpm	Order Number
100×1.0×16	4×3/64×5/8	15300	19ZC04001
100×1.6×16	4×1/16×5/8	15300	19ZC04002
115×1.0×22.2	4-1/2×3/64×7/8	13300	19ZC04003
115×1.6×22.2	4-1/2×1/16×7/8	13300	19ZC04004
125×1.0×22.2	5×3/64×7/8	12200	19ZC04005
125×1.6×22.2	5×1/16×7/8	12200	19ZC04006
150×1.0×22.2	6 ×3/64×7/8	10200	19ZC04007
150×1.6×22.2	6×1/16×7/8	10200	19ZC04008
180×1.6×22.2	7×1/16×7/8	8500	19ZC04009
230×1.6×22.2	9×1/16×7/8	6500	19ZC04010

### Aluminium Cutting Disc

For Aluminium and Non-Ferrous

- ◆ For aluminium/non-ferrous metal
- ◆ Special combination counteracts loading and wheel glazing

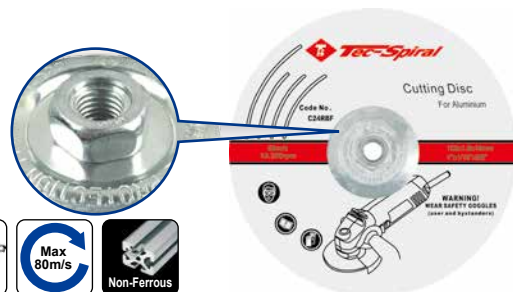
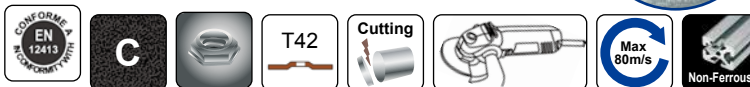


#### Flat Type (T41 Type)



Diameter mm	Diameter inch	Max rpm	Order Number
100×3×16	4×1/8×5/8	15300	19ZC05001
115×3×22.2	4-1/2×1/8×7/8	13300	19ZC05002
125×3×22.2	5×1/8×7/8	12200	19ZC05003
150×3×22.2	6×1/8×7/8	10200	19ZC05004
180×3×22.2	7×1/8×7/8	8500	19ZC05005
230×3×22.2	9×1/8×7/8	6500	19ZC05006

#### Depressed Type (T42 Type)— W/Hub



Diameter mm	Diameter inch	Max rpm	Order Number
115×3×HUB	4-1/2×1/8×5/8-11	13300	19ZC05501
125×3×HUB	5×1/8×5/8-11	12200	19ZC05502
150×3×HUB	6×1/8×5/8-11	10200	19ZC05503
180×3×HUB	7×1/8×5/8-11	8500	19ZC05504
230×3×HUB	9×1/8×5/8-11	6500	19ZC05505

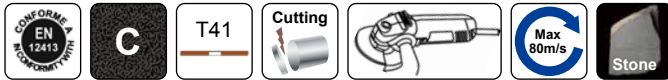
## Stone Cutting Disc

For Stone / Masonry

- ◆ For stone/masonry
- ◆ High performance and long tool life
- ◆ Fast cutting
- ◆ General purpose applications

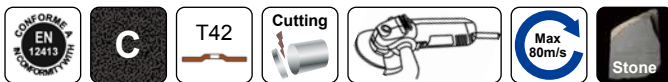


### Flat Type (T41 Type)



Diameter mm	Diameter inch	Max rpm	Order Number
100×2.5×16.0	4×3/32×7/8	15300	19ZC06001
115×2.5×22.2	4-1/2×3/32×7/8	13300	19ZC06002
125×2.5×22.2	5×3/32×7/8	12200	19ZC06003
180×3.0×22.2	7×1/8×7/8	8500	19ZC06004
230×3.0×22.2	9×1/8×7/8	6500	19ZC06005

### Depressed Type (T42 Type)



Diameter mm	Diameter inch	Max rpm	Order Number
100×2.5×16.0	4×3/32×7/8	15300	19ZC06006
115×2.5×22.2	4-1/2×3/32×7/8	13300	19ZC06007
125×2.5×22.2	5×3/32×7/8	12200	19ZC06008
180×3.0×22.2	7×1/8×7/8	8500	19ZC06009
230×3.0×22.2	9×1/8×7/8	6500	19ZC06010

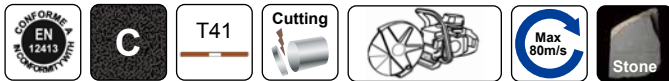


**Flat Stone Cutting Disc ø 300 - 400mm  
- Use On Petrol Saw For Stone**

- ◆ For stone/concrete/masonry
- ◆ High performance and long tool life
- ◆ Quick and free cutting
- ◆ Designed for petrol and electrical handheld saws



**Flat Type (T41 Type)**



Diameter mm	Diameter inch	Max rpm	Order Number
300×3.5×20.0	12×9/64×3/4	5500	19ZC06051
300×3.5×22.2	12×9/64×7/8	5500	19ZC06052
300×4.0×20.0	12×5/32×3/4	5500	19ZC06053
300×4.0×22.2	12×5/32×7/8	5500	19ZC06054
300×3.5×25.4	12×9/64×1	5500	19ZC06055
300×4.0×25.4	12×5/32×1	5500	19ZC06056
350×4.0×20.0	14×5/32×3/4	4400	19ZC06057
350×4.0×22.2	14×5/32×7/8	4400	19ZC06058
350×3.5×25.4	14×9/64×1	4400	19ZC06059
350×4.0×25.4	14×5/32×1	4400	19ZC06060

## Metal Grinding Disc

For Metal

- ◆ For metal and steel
- ◆ High performance and long tool life
- ◆ Fast material removal
- ◆ General purpose applications

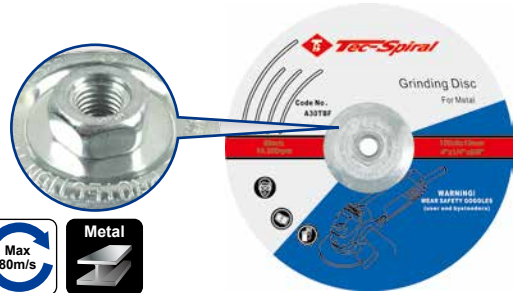


### T27 Type



Diameter mm	Diameter inch	rpm	Order Number
100×6×16	4×1/4×5/8	15300	19ZB00001
115×6×22	4-1/2×1/4×7/8	13300	19ZB00002
125×6×22	5×1/4×7/8	12200	19ZB00003
150×6×22	6×1/4×7/8	10200	19ZB00004
180×6×22.2	7×1/4×7/8	8500	19ZB00005
180×8×22.2	7×5/16×7/8	8500	19ZB00006
230×6×22.2	9×1/4×7/8	6500	19ZB00007
230×8×22.2	9×5/16×7/8	6500	19ZB00008

### T27 Type— W/Hub



Diameter mm	Diameter inch	Max rpm	Order Number
115×6×HUB	4-1/2×1/4×5/8-11	13300	19ZB00051
125×6×HUB	5×1/4×5/8-11	12200	19ZB00052
150×6×HUB	6×1/4×5/8-11	10200	19ZB00053
180×6×HUB	7×1/4×5/8-11	8500	19ZB00054
230×6×HUB	9×1/4×5/8-11	6500	19ZB00055

## Aluminium Grinding Disc

For Aluminium and Non-Ferrous

- ◆ For aluminium/non-ferrous metal
- ◆ Fast material removal
- ◆ Special combination counteracts loading and wheel glazing

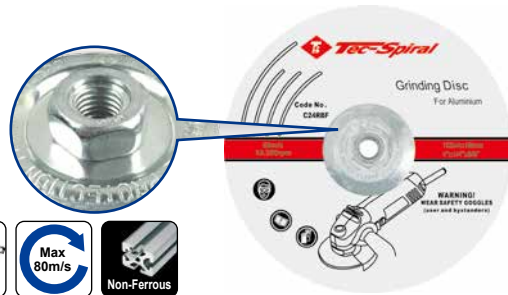


### T27 Type



Diameter mm	Diameter inch	Max rpm	Order Number
100×6×16	4×1/4×5/8	rpm	19ZB05001
115×6×22	4-1/2×1/4×7/8	13300	19ZB05002
125×6×22	5×1/4×7/8	12200	19ZB05003
150×6×22	6×1/4×7/8	10200	19ZB05004
180×6×22.2	7×1/4×7/8	8500	19ZB05005
180×8×22.2	7×5/16×7/8	8500	19ZB05006
230×6×22.2	9×1/4×7/8	6500	19ZB05007
230×8×22.2	9×5/16×7/8	6500	19ZB05008

### T27 Type— W/Hub



Diameter mm	Diameter inch	Max rpm	Order Number
115×6×HUB	4-1/2×1/4×5/8-11	13300	19ZB05051
125×6×HUB	5×1/4×5/8-11	12200	19ZB05052
150×6×HUB	6×1/4×5/8-11	10200	19ZB05053
180×6×HUB	7×1/4×5/8-11	8500	19ZB05051
230×6×HUB	9×1/4×5/8-11	6500	19ZB05052

## Stone Grinding Disc

For Stone / Masonry

- ◆ For stone/masonry
- ◆ High performance and long tool life
- ◆ Fast material removal
- ◆ General purpose applications

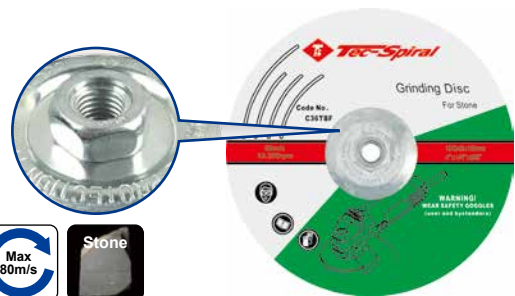


### T27 Type



Diameter mm	Diameter inch	Max rpm	Order Number
100×6×16	4×1/4×5/8	15300	19ZB06001
115×6×22	4-1/2×1/4×7/8	13300	19ZB06002
125×6×22	5×1/4×7/8	12200	19ZB06003
150×6×22	6×1/4×7/8	10200	19ZB06004
180×6×22.2	7×1/4×7/8	8500	19ZB06005
230×6×22.2	9×1/4×7/8	6500	19ZB06006

### T27 Type— W/Hub

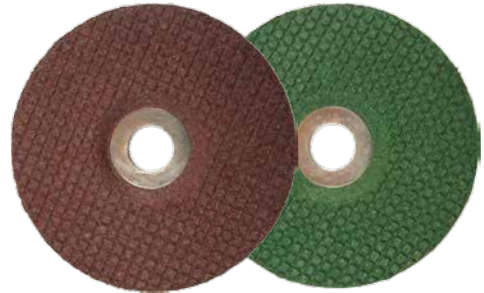


Diameter mm	Diameter inch	Max rpm	Order Number
115×6×HUB	4-1/2×1/4×5/8-11	13300	19ZB06051
125×6×HUB	5×1/4×5/8-11	12200	19ZB06052
150×6×HUB	6×1/4×5/8-11	10200	19ZB06053
180×6×HUB	7×1/4×5/8-11	8500	19ZB06051
230×6×HUB	9×1/4×5/8-11	6500	19ZB06052

### Flexible Grinding Disc

For All Application In The Construction And Tanks

- ◆ For metal, stainless steel, non-ferrous metal, stone, thermosetting plastic, glass etc.
- ◆ High stock strength and bending strength
- ◆ High material removal
- ◆ High grade surface finishing result
- ◆ Used in the construction of process equipment and tanks
- ◆ Best used with a working angle of 10° to 15°

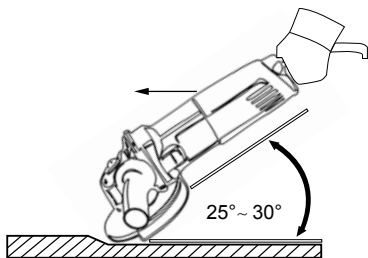


#### T27 Type

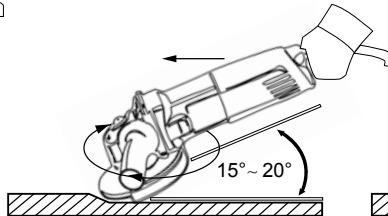


Diameter mm	Diameter inch	Abrasive	Max. rpm	Order Number
100*3*16	4*1/8*5/8	AC	13700	19ZB07001
100*3*16	4*1/8*5/8	WA	13700	19ZB07002
100*3*16	4*1/8*5/8	GC	13700	19ZB07003

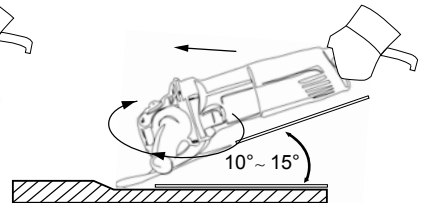
### Grinding Tip



- ◆ For fast stock removal, keep the grinding angle between 25° and 30°.



- ◆ For finishing and blending, decrease the grinding angle to between 15° and 20°.



- ◆ Flexible Grinding Wheel be best used with a working angle of 10° to 15°

## Mounted Points

- ◆ For best mounted point performance, always run the mounted point at the maximum allowable speed according to ANSI B7.1.



### Shape

- ◆ **“A” shapes:** For medium- to heavy-duty blending.
- ◆ **“B” shapes:** For light deburring and finishing/polishing.
- ◆ **“W” shapes:** For offhand and precision grinding of medium to heavy stock.

### Abrasives

- ◆ **A:** Regular Aluminum Oxide - soft steel & cast iron
- ◆ **WA:** White Aluminum Oxide - hard steel, general purpose
- ◆ **PA:** Pink Aluminum Oxide - cool cutting works for hardened steel
- ◆ **C:** Dark Silicon Carbide - cast iron, non-ferrous, non metal
- ◆ **GC:** Green Silicon Carbide - cemented carbide



### Grit

- ◆ **46 grit and coarse:** For medium- to heavy-duty blending.
- ◆ **60 grits and fine:** For imparting fine finishes or when grinding on narrow surfaces.



### Different Granularity Applicable Scope

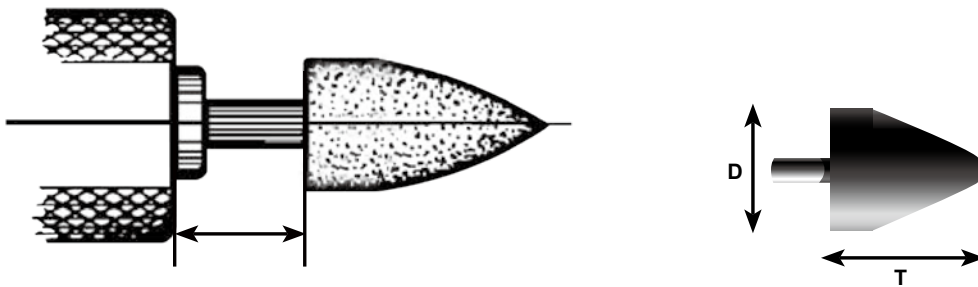
- ◆ 12~24# The uncultivated land rubs the steel ingot, to hammer the casting, the leather, the lumber, the cut-off copper billets and so on
- ◆ 30~46# Generally uses in outside the flat stone mill the cone crusher, in the cone crusher rubbing and so on rough grinding processings unintentionally
- ◆ 60~100# In uses in the cone crusher, outside the cone crusher, the flat stone mill, rubbing, the tool to rub, the grinder and each kind of special-purpose grinder half correct grinding, the correct grinding unintentionally and so on
- ◆ 120# The above uses in the correct grinding, the honing, the thread rubbing and so on

### Grade

H,I,J,K,L,M,N,O,P,Q,R,S,T

### Description

#### Measurement Guide



#### Description of Overhang

- ◆ Overhang is the distance between the grinder chuck and the abrasive on the spindle.
- ◆ The larger the overhang, the lower the maximum safe operating speed.
- ◆ Maximum operating speed based on 13mm or 1/2 overhang

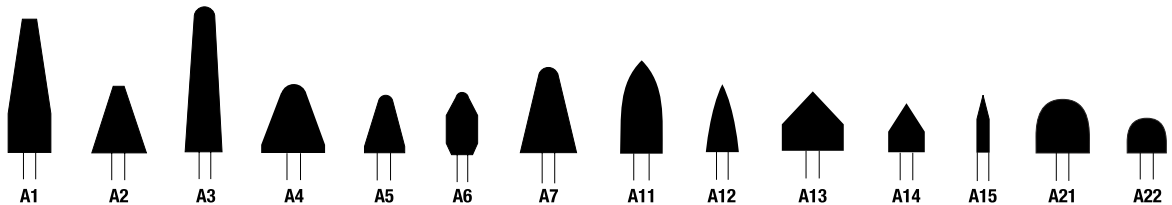
#### Size

- ◆ Measured by diameter(D)×thickness(T)
- ◆ Standard Shank length 35mm or 1-1/2

## Vitrified Bond Mounted Points

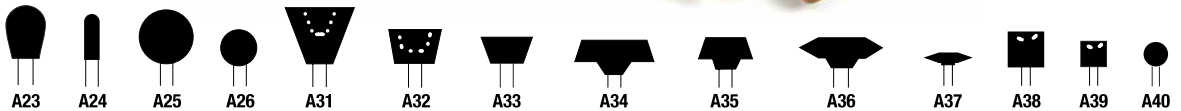
### A Shapes

- ◆ For fitting, shaping, enlarging holes and finishing work in confined spaces
- ◆ Cool cutting, less burn
- ◆ Diverse shapes and sizes
- ◆ For use on die grinders, point grinders, flexible Shank machines, etc.



Shape	SIZE inches	Shank Dia.	Order Number	SIZE mm	Shank DIA.	Order Number	MAX.
	D×T	inch	Imperial	D×T	mm	Metric	RPM
A1	3/4×2-1/2	1/4	19DA05001	19×65	6	19DA00001	20,960
A2	1×1-1/4	1/4	19DA05002	25×32	6	19DA00002	35,510
A3	1×2-3/4	1/4	19DA05003	25×70	6	19DA00003	15,530
A4	1-1/4×1-1/4	1/4	19DA05004	32×32	6	19DA00004	28,550
A5	3/4×1-1/8	1/4	19DA05005	19×28	6	19DA00005	38,550
A6	3/4×1-1/8	1/4	19DA05006	19×28	6	19DA00006	38,550
A11	7/8×2	1/4	19DA05007	21×45	6	19DA00007	25,420
A12	11/16×1-1/4	1/4	19DA05008	18×32	6	19DA00008	38,050
A13	1-1/8×1-1/8	1/4	19DA05009	28×28	6	19DA00009	31,850
A14	11/16×7/8	1/4	19DA05010	18×22	6	19DA00010	43,440
A15	1/4×1-1/16	1/4	19DA05011	6×27	6	19DA00011	50,510
A21	1×1	1/4	19DA05012	25×25	6	19DA00012	35,510
A22	3/4×5/8	1/4	19DA05013	19×16	6	19DA00013	38,550

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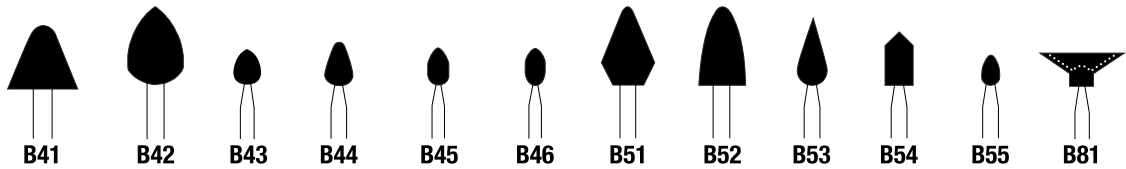
Shape	SIZE inches	Shank Dia.	Order Number	SIZE mm	Shank DIA.	Order Number	MAX.
	D×T	inch	Imperial	D×T	mm	Metric	RPM
A23	3/4×1	1/4	19DA05014	19×25	6	19DA00014	40,300
A24	1/4×3/4	1/4	19DA05015	6×19	6	19DA00015	56,000
A25	1 Ball	1/4	19DA05016	25 Ball	6	19DA00016	35,510
A26	5/8 Ball	1/4	19DA05017	16 Ball	6	19DA00017	48,980
A31	1-3/8×1	1/4	19DA05018	35×25	6	19DA00018	27,780
A32	1×5/8	1/4	19DA05019	25×16	6	19DA00019	35,510
A33	1×1/2	1/4	19DA05020	25×13	6	19DA00020	35,510
A34	1-1/2×3/8	1/4	19DA05021	38×10	6	19DA00021	25,460
A35	1×3/8	1/4	19DA05022	25×10	6	19DA00022	35,510
A36	1-5/8×3/8	1/4	19DA05023	42×10	6	19DA00023	23,510
A37	1-1/4×1/4	1/4	19DA05024	32×6	6	19DA00024	30,560
A38	1×1	1/4	19DA05025	25×25	6	19DA00025	35,510
A39	3/4×3/4	1/4	19DA05026	19×19	6	19DA00026	44,030
A40	3/4 Ball	1/4	19DA05027	19 Ball	6	19DA00027	44,030

Remark: Standard grit is 60 A, WA, PA(RA),32A ,CG are available according to order

## Vitrified Bond Mounted Points

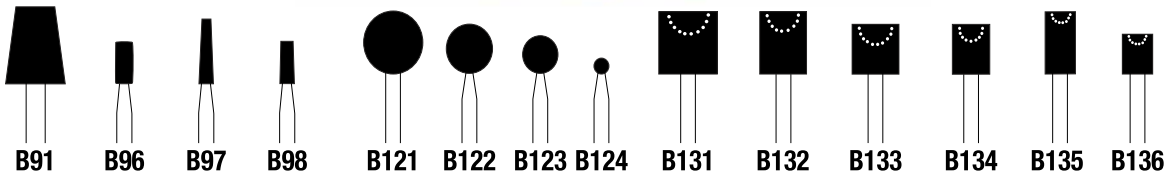
### B Shapes

- ◆ For fitting, shaping, enlarging holes and finishing work in confined spaces
- ◆ Cool cutting, less burn
- ◆ Diverse shapes and sizes
- ◆ For use on die grinders, point grinders, flexible Shank machines, etc.



Shape	SIZE inches	Shank Dia.	Order Number	SIZE mm	Shank DIA.	Order Number	MAX.
	D×T	inch	Imperial	D×T	mm	Metric	RPM
B41	5/8×5/8	1/8	19DB05001	16×16	3	19DB00001	59,560
B42	1/2×3/4	1/8	19DB05002	13×19	3	19DB00002	61,320
B43	1/4×5/16	1/8	19DB05003	6×8	3	19DB00003	76,160
B44	7/32×3/8	1/8	19DB05004	6×10	3	19DB00004	75,840
B45	3/16×5/16	1/8	19DB05005	5×8	3	19DB00005	79,600
B46	1/8×5/16	1/8	19DB05006	3×8	3	19DB00006	83,530
B51	7/16×3/4	1/8	19DB05007	12×19	3	19DB00007	62,820
B52	3/8×3/4	1/8	19DB05008	10×19	3	19DB00008	64,810
B52	3/8×3/4	1/4	19DB05009	10×19	6	19DB00009	78,340
B53	5/16×5/8	1/8	19DB05010	8×16	3	19DB00010	67,070
B54	1/4×1/2	1/8	19DB05011	6×13	3	19DB00011	71,340
B55	1/8×1/4	1/8	19DB05012	3×6	3	19DB00012	85,900
B81	3/4×3/16	1/8	19DB05013	19×5	3	19DB00013	50,930

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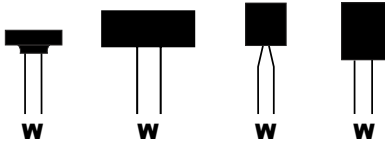
Shape	SIZE inches	Shank Dia.	Order Number	SIZE mm	Shank DIA.	Order Number	MAX.
	D×T	inch	Imperial	D×T	mm	Metric	RPM
B91	1/2×5/8	1/8	19DB05014	13×16	3	19DB00014	61,110
B96	1/8×1/4	1/8	19DB05015	3×6	3	19DB00015	85,900
B97	1/8×3/8	1/8	19DB05016	3×10	3	19DB00016	81,550
B98	3/32×1/4	1/8	19DB05017	2.5×6	3	19DB00017	88,040
B121	1/2 Ball	1/8	19DB05018	13 Ball	3	19DB00018	62,420
B122	3/8 Ball	1/8	19DB05019	10 Ball	3	19DB00019	68,740
B123	3/16 Ball	1/8	19DB05020	5 Bail	3	19DB00020	84,720
B124	1/8 Ball	1/8	19DB05021	3 Bail	3	19DB00021	91,770
B131	1/2×1/2	1/8	19DB05022	13×13	3	19DB00022	62,420
B132	3/8×1/2	1/8	19DB05023	10×13	3	19DB00023	65,910
B133	3/8×3/8	1/8	19DB05024	10×10	3	19DB00024	68,740
B134	5/16×3/8	1/8	19DB05025	8×10	3	19DB00025	71,220
B135	1/4×1/2	1/8	19DB05026	6×13	3	19DB00026	71,340
B136	1/4×5/16	1/8	19DB05027	6×8	3	19DB00027	76,160

Remark: Standard grit is 60 A, WA, PA(RA),32A ,CG are available according to order

## Vitrified Bond Mounted Points

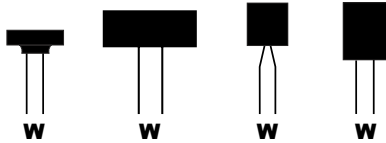
### W Shapes

- ◆ For fitting, shaping, enlarging holes and finishing work in confined spaces
- ◆ Cool cutting, less burn
- ◆ Diverse shapes and sizes
- ◆ For use on die grinders, point grinders, flexible Shank machines, etc.



Shape	SIZE inches	Shank Dia.	Order Number	SIZE mm	Shank DIA.	Order Number	MAX.
	D×T	inch	Imperial	D×T	mm	Metric	RPM
W144	1/8×1/4	1/8	19DW05001	3×6	3	19DW00001	92,460
W145	1/8×3/8	1/8	19DW05002	3×10	3	19DW00002	84,190
W146	1/8×1/2	1/8	19DW05003	3×13	3	19DW00003	76,820
W152	3/16×1/4	1/8	19DW05004	5×6	3	19DW00004	82,070
W153	3/16×3/8	1/8	19DW05005	5×10	3	19DW00005	73,880
W154	3/16×1/2	1/8	19DW05006	5×13	3	19DW00006	66,580
W160	1/4×1/4	1/8	19DW05007	6×6	3	19DW00007	75,330
W162	1/4×3/8	1/8	19DW05008	6×10	3	19DW00008	67,210
W163	1/4×1/2	1/8	19DW05009	6×13	3	19DW00009	59,990
W164	1/4×3/4	1/8	19DW05010	6×19	3	19DW00010	47,880
W170	5/16×1/2	1/8	19DW05011	8×13	3	19DW00011	54,860
W175	3/8×3/8	1/8	19DW05012	10×10	3	19DW00012	57,530
W176	3/8×1/2	1/8	19DW05013	10×13	3	19DW00013	50,460
W177	3/8×3/4	1/8	19DW05014	10×19	3	19DW00014	38,640
W185	1/2×1/2	1/8	19DW05015	13×13	3	19DW00015	42,750
W185	1/2×1/2	1/4	19DW05016	13×13	6	19DW00016	44,470
W186	1/2×3/4	1/4	19DW05017	13×19	6	19DW00017	40,500
W188	1/2×1-1/2	1/4	19DW05018	13×38	6	19DW00018	31,070

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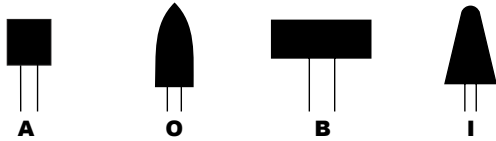


Shape	SIZE inches	Shank Dia.	Order Number	SIZE mm	Shank DIA.	Order Number	MAX.
	D×T	inch	Imperial	D×T	mm	Metric	RPM
W189	1/2×2	1/4	19DW05019	13×50	6	19DW00019	26,830
W196	5/8×1	1/4	19DW05020	16×25	6	19DW00020	34,670
W200	3/4×1/8	1/8	19DW05021	19×3	3	19DW00021	50,930
W204	3/4×3/4	1/4	19DW05022	19×19	6	19DW00022	36,510
W205	3/4×1	1/4	19DW05023	19×25	6	19DW00023	32,950
W208	3/4×2	1/4	19DW05024	19×50	6	19DW00024	22,830
W215	1×1/8	1/8	19DW05025	25×3	3	19DW00025	38,200
W216	1×1/4	1/4	19DW05026	25×6	6	19DW00026	38,200
W218	1×1/2	1/4	19DW05027	25×13	6	19DW00027	37,890
W220	1×1	1/4	19DW05028	25×25	6	19DW00028	30,370
W221	1×1-1/2	1/4	19DW05029	25×38	6	19DW00029	24,490
W222	1×2	1/4	19DW05030	25×50	6	19DW00030	20,250
W230	1-1/4×1-1/4	1/4	19DW05031	32×32	6	19DW00031	25,200
W235	1-1/2×1/4	1/4	19DW05032	38×6	6	19DW00032	25,460
W236	1-1/2×1/2	1/4	19DW05033	38×13	6	19DW00033	25,460
W237	1-1/2×1	1/4	19DW05034	38×25	6	19DW00034	25,460
W238	1-1/2×1-1/2	1/4	19DW05035	38×38	6	19DW00035	20,720
W242	2×1	1/4	19DW05036	50×25	6	19DW00036	19,100

Remark: Standard grit is 60 A, WA, PA(RA),32A ,CG are available according to order

## Resinoid Bond Mounted Points

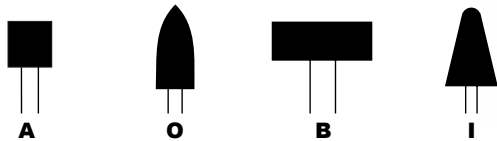
- ◆ Ensure excellent ability on weld portions and deburring in confined spaces
- ◆ Sharp cutting edge, Cool cut, less burn
- ◆ Diverse shapes and sizes
- ◆ For use on die grinders, point grinders, flexible Shank machines, etc.



Shape	SIZE inches	Shank Dia.	Order Number	SIZE mm	Shank DIA.	Order Number	MAX.
	D×T	inch	Imperial	D×T	mm	Metric	RPM
A	3/8"×3/4"	1/4"	19DR15001	10×19	6	19DR10001	95540
A	3/8"×1"	1/4"	19DR15002	10×25	6	19DR10002	95540
A	3/8"×1-1/4"	1/4"	19DR15003	10×32	6	19DR10003	95540
A	1/2"×1"	1/4"	19DR15004	13×25	6	19DR10004	73490
A	1/2"×1-1/2"	1/4"	19DR15005	13×38	6	19DR10005	73490
A	5/8"×1"	1/4"	19DR15006	16×25	6	19DR10006	59710
A	5/8"×1-1/4"	1/4"	19DR15007	16×32	6	19DR10007	59710
O	5/8"×1-1/4"	1/4"	19DR15008	16×32	6	19DR10008	59710
A	5/8"×1-1/2"	1/4"	19DR15009	16×38	6	19DR10009	59710
A	3/4"×3/4"	1/4"	19DR15010	19×19	6	19DR10010	50285
A	3/4"×1"	1/4"	19DR15011	19×25	6	19DR10011	50285
A	3/4"×1-1/4"	1/4"	19DR15012	19×32	6	19DR10012	50285
A	3/4"×1-1/2"	1/4"	19DR15013	19×38	6	19DR10013	50285
O	3/4"×1-1/2"	1/4"	19DR15014	19×38	6	19DR10014	50285
I	3/4"×1-1/2"	1/4"	19DR15015	19×38	6	19DR10015	50285
A	1"×3/8"	1/4"	19DR15016	25×10	6	19DR10016	38210
A	1"×1"	1/4"	19DR15017	25×25	6	19DR10017	38210
A	1"×1-1/4"	1/4"	19DR15018	25×32	6	19DR10018	38210
A	1"×1-1/2"	1/4"	19DR15019	25×38	6	19DR10019	38210
O	1"×1-1/2"	1/4"	19DR15020	25×38	6	19DR10020	38210
A	1"×2"	1/4"	19DR15021	25×50	6	19DR10021	38210

Continued... ..





Shape	SIZE inches	Shank Dia.	Order Number	SIZE mm	Shank DIA.	Order Number	MAX.
	D×T	inch	Imperial	D×T	mm	Metric	RPM
O	1×2	1/4	19DR15022	25×50	6	19DR10022	38210
A	1-1/8×1-1/4	1/4	19DR15023	28×32	6	19DR10023	34120
A	1-1/4×3/8	1/4	19DR15024	32×10	6	19DR10024	29860
A	1-1/4×1/2	1/4	19DR15025	32×13	6	19DR10025	29860
A	1-1/4×1	1/4	19DR15026	32×25	6	19DR10026	29860
A	1-1/4×1-1/4	1/4	19DR15027	32×32	6	19DR10027	29860
A	1-1/4×1-1/2	1/4	19DR15028	32×38	6	19DR10028	29860
A	1-1/4×2	1/4	19DR15029	32×50	6	19DR10029	29860
B	1-1/2×5/16	1/4	19DR15030	38×8	6	19DR10030	25140
A	1-1/2×1/2	1/4	19DR15031	38×13	6	19DR10031	25140
A	1-1/2×3/4	1/4	19DR15032	38×19	6	19DR10032	25140
A	1-1/2×1	1/4	19DR15033	38×25	6	19DR10033	25140
A	1-1/2×1-1/2	1/4	19DR15034	38×38	6	19DR10034	25140
B	1-3/4×1/4	1/4	19DR15035	45×6	6	19DR10035	21230
B	1-1/2×3/8	1/4	19DR15036	45×10	6	19DR10036	21230
B	2×1/4	1/4	19DR15037	50×6	6	19DR10037	19108
B	2×3/8	1/4	19DR15038	50×10	6	19DR10038	19108
B	2×1/2	1/4	19DR15039	50×13	6	19DR10039	19108
B	2×3/4	1/4	19DR15040	50×19	6	19DR10040	19108
B	2×1	1/4	19DR15041	50×25	6	19DR10041	19108
B	2-1/2×1/4	1/4	19DR15042	60×6	6	19DR10042	15925

Remark: Standard grit is 60 A, WA, PA(RA),32A ,CG are available according to order

## Flap Disc

- ◆ Flap Discs offer an unbeatable system for grinding and blending in one easy step.
- ◆ The construction wears away, exposing fresh mineral to extend disc life and provide consistent cut rates.

### Flap Disc Shapes

Type 27 Flat



- ◆ Great for blending and smooth Finishing
- ◆ Used primarily on flat surfaces

Grind at flatter angles  $0^{\circ}\sim 15^{\circ}$

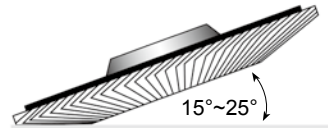


Type 29 Conical



- ◆ Great for Aggressive Stock Removal
- ◆ Used on both contoured and edge work
- ◆ The angle provides greater surface contact for stock removal on flat surfaces

Grind at steeper angles  $15^{\circ}\sim 25^{\circ}$



### Abrasive Flap Densities

Standard Density



- ◆ Excellent for heavy-duty applications and rapid stock removal

High Density



- ◆ Ideal when working on uneven or curved surfaces, as well as finer grit blending

Material-To-Product Recommendation Guide



Aluminium Oxide Flap Disc



Heat Treated Flap Disc



Zirconium Oxide Flap Disc



Ceramic Corundum Flap Disc



Silicon Carbide Flap Disc

Abrasive kind	Shape	Backing plate	Use of function							
			Mild steel	Cast iron	Stainless steel	High-speed steel	Cooper	Aluminum	Plastic/Rubber	Glass/Masonry
Aluminum oxide	Convex T29	Glass fiber	√	√	•		•	•	•	
Aluminum oxide	Convex T29	Plastic-glass fiber	√	√	•		•	•	•	
Aluminum oxide	Flat T27	Glass fiber	√	√	•		•	•	•	
Aluminum oxide	Flat T27	Plastic-glass fiber	√	√	•		•	•	•	
Heat Treated Aluminum oxide	Convex T29	Glass fiber	√	√	√		√	√		
Heat Treated Aluminum oxide	Convex T29	Plastic-glass fiber	√	√	√		√	√		
Heat Treated Aluminum oxide	Flat T27	Glass fiber	√	√	√		√	√		
Heat Treated Aluminum oxide	Flat T27	Plastic-glass fiber	√	√	√		√	√		
Zirconium oxide	Convex T29	Glass fiber	√	√	√	√				•
Zirconium oxide	Convex T29	Plastic-glass fiber	√	√	√	√				•
Zirconium oxide	Flat T27	Glass fiber	√	√	√	√				•
Zirconium oxide	Flat T27	Plastic-glass fiber	√	√	√	√				•
Silicon carbide	Convex T29	Glass fiber			•		√	√		√
Silicon carbide	Convex T29	Plastic-glass fiber			•		√	√		√
Silicon carbide	Flat T27	Glass fiber			•		√	√		√
Silicon carbide	Flat T27	Plastic-glass fiber	√		•		√	√		√
Ceramic Corundum	Convex T29	Glass fiber	√	√	√		√	√		•
Ceramic Corundum	Convex T29	Plastic-glass fiber	√	√	√		√	√		•
Ceramic Corundum	Flat T27	Glass fiber	√	√	√		√	√		•
Ceramic Corundum	Flat T27	Plastic-glass fiber	√	√	√		√	√		•

**Remarks:** metal backing pad available. √ = Recommended • = May be used

Zirconia grains are mainly used for the rapid cutting and polishing of all kinds of extremely hard metal surfaces

## Description Guide

Size (mm)	Size (inch)	Abrasive material	max operate speed	max. rotating speed	Temperature limitation	Available grit	Abrasive Grit	Flap size	Normal Flap quantity	High density Flap quantity
100×16	4×5/8	A, ZA.C	80m/s	15300rpm	80	P36-320	40#	23×18	65	90
100×16	4×5/8	A, ZA.C	80m/s	15300rpm	80	P36-320	60# and finer	23×18	72	90
115×22	4-1/2×7/8	A, ZA.C	80m/s	13300rpm	80	P36-320	40#	24×18	72	84
115×22	4-1/2×7/8	A, ZA.C	80m/s	13300rpm	80	P36-320	60# and finer	24×20	72	84
125×22	5×7/8	A, ZA.C	80m/s	12200rpm	80	P36-320	40#	28×17	90	96
125×22	5×7/8	A, ZA.C	80m/s	12200rpm	80	P36-320	60# and finer	28×18	90	96
150×22	6×7/8	A, ZA.C	80m/s	10200rpm	80	P36-320	40#	32×20	100	110
150×22	6×7/8	A, ZA.C	80m/s	10200rpm	80	P36-320	60# and finer	32×20	100	110
180×22	7×7/8	A, ZA.C	80m/s	8500rpm	80	P36-320	40#	35×18	120	140
180×22	7×7/8	A, ZA.C	80m/s	8500rpm	80	P36-320	60# and finer	35×20	120	140

Remarks: normal grit available: P36,P40,P60,P80,P100,P120,P150,P180,P240,P320

## Backing Plate Materials

Fiberglass Backing Plate



- ◆ The most popular material
- ◆ High strength
- ◆ Light weight

Plastic Backing Plate

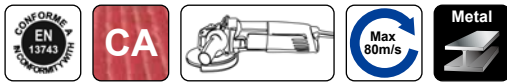




- ◆ Additional conformability
- ◆ Can be trimmable

### Flap Disc With Center Hole – Ceramic Abrasive

Great For High-Alloyed Steel, Stainless Steel & Non-Ferrous Metal

- ◆ Great for high-alloy steel,chrome &chrome-nickel steel,stainless steel and non-ferrous metal
- ◆ VSM Ceramics abrasive ensure aggressive cutting action,Self-sharpening grain & excellent adhesion
- ◆ High,Consistent stock removal
- ◆ No discolouring of the workpiece
- ◆ Ultra-long life



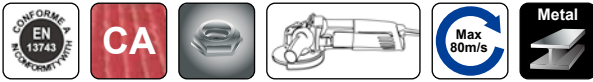
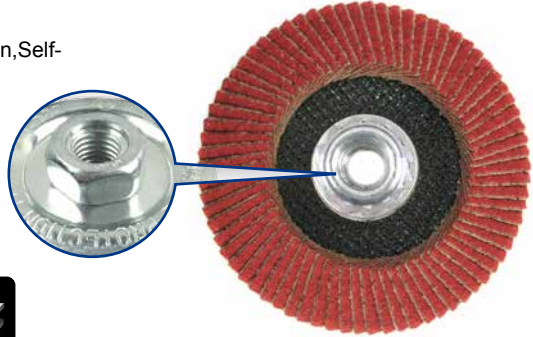
Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4×5/8"	100×16	40	15300	<b>19FD06001</b>	<b>19FD16001</b>
4×5/8	100×16	60	15300	<b>19FD06002</b>	<b>19FD16002</b>
4×5/8	100×16	80	15300	<b>19FD06003</b>	<b>19FD16003</b>
4×5/8	100×16	120	15300	<b>19FD06004</b>	<b>19FD16004</b>
4-1/2×7/8	115×22	40	13300	<b>19FD06005</b>	<b>19FD16005</b>
4-1/2×7/8	115×22	60	13300	<b>19FD06006</b>	<b>19FD16006</b>
4-1/2×7/8	115×22	80	13300	<b>19FD06007</b>	<b>19FD16007</b>
4-1/2×7/8	115×22	120	13300	<b>19FD06008</b>	<b>19FD16008</b>
5×7/8	125×22	40	12000	<b>19FD06009</b>	<b>19FD16009</b>
5×7/8	125×22	60	12000	<b>19FD06010</b>	<b>19FD16010</b>
5×7/8	125×22	80	12000	<b>19FD06011</b>	<b>19FD16011</b>
5×7/8	125×22	120	12000	<b>19FD06012</b>	<b>19FD16012</b>
6×7/8	150×22	40	10200	<b>19FD06013</b>	<b>19FD16013</b>
6×7/8	150×22	60	10200	<b>19FD06014</b>	<b>19FD16014</b>
6×7/8	150×22	80	10200	<b>19FD06015</b>	<b>19FD16015</b>
6×7/8	150×22	120	10200	<b>19FD06016</b>	<b>19FD16016</b>
7×7/8	180×22	40	8600	<b>19FD06017</b>	<b>19FD16017</b>
7×7/8	180×22	60	8600	<b>19FD06018</b>	<b>19FD16018</b>
7×7/8	180×22	80	8600	<b>19FD06019</b>	<b>19FD16019</b>
7×7/8	180×22	120	8600	<b>19FD06020</b>	<b>19FD16020</b>

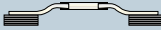

**Remark:** • Please indicate the grit when ordering  
 • Other grit and other size are available

## Flap Disc With Hub – Ceramic Abrasive

Great For High-Alloyed Steel, Stainless Steel & Non-Ferrous Metal

- ◆ Great for high-alloy steel,chrome &chrome-nickel steel,stainless steel and non-ferrous metal
- ◆ VSM Ceramics abrasive ensure aggressive cutting action,Self-sharpening grain & excellent adhesion
- ◆ High,Consistent stock removal
- ◆ No discolouring of the workpiece
- ◆ Ultra-long life



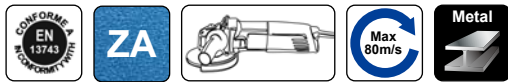
Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4-1/2×5/8-11	115×5/8-11	40	13300	<b>19FD06501</b>	<b>19FD16501</b>
4-1/2×5/8-11	115×5/8-11	60	13300	<b>19FD06502</b>	<b>19FD16502</b>
4-1/2×5/8-11	115×5/8-11	80	13300	<b>19FD06503</b>	<b>19FD16503</b>
4-1/2×5/8-11	115×5/8-11	120	13300	<b>19FD06504</b>	<b>19FD16504</b>
5×5/8-11	125×5/8-11	40	12000	<b>19FD06505</b>	<b>19FD16505</b>
5×5/8-11	125×5/8-11	60	12000	<b>19FD06506</b>	<b>19FD16506</b>
5×5/8-11	125×5/8-11	80	12000	<b>19FD06507</b>	<b>19FD16507</b>
5×5/8-11	125×5/8-11	120	12000	<b>19FD06508</b>	<b>19FD16508</b>
6×5/8-11	150×5/8-11	40	10200	<b>19FD06509</b>	<b>19FD16509</b>
6×5/8-11	150×5/8-11	60	10200	<b>19FD06510</b>	<b>19FD16510</b>
6×5/8-11	150×5/8-11	80	10200	<b>19FD06511</b>	<b>19FD16511</b>
6×5/8-11	150×5/8-11	120	10200	<b>19FD06512</b>	<b>19FD16512</b>
7×5/8-11	180×5/8-11	40	8600	<b>19FD06513</b>	<b>19FD16513</b>
7×5/8-11	180×5/8-11	60	8600	<b>19FD06514</b>	<b>19FD16514</b>
7×5/8-11	180×5/8-11	80	8600	<b>19FD06515</b>	<b>19FD16515</b>
7×5/8-11	180×5/8-11	120	8600	<b>19FD06516</b>	<b>19FD16516</b>

**Remark:** • Please indicate the grit when ordering  
• Other grit and other size are available

### Flap Disc With Center Hole – Zirconium Abrasive

Great For Stainless Steel & Non-Ferrous Metal

- ◆ Great for stainless steel, high tensile alloys, ferrous and non-ferrous metal
- ◆ Fast stock removal
- ◆ Constant performance
- ◆ Long life
- ◆ Low noise
- ◆ Low vibration



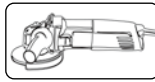
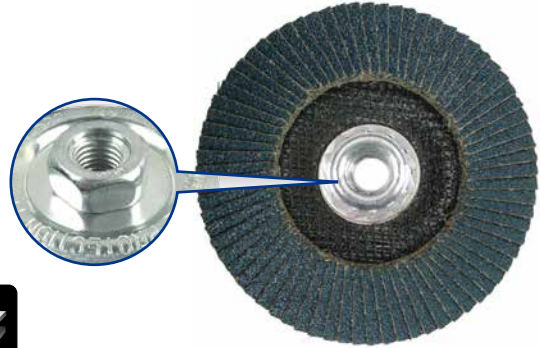
Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
4×5/8"	100×16	40	15300	<b>19FD02001</b>	<b>19FD12001</b>
4×5/8	100×16	60	15300	<b>19FD02002</b>	<b>19FD12002</b>
4×5/8	100×16	80	15300	<b>19FD02003</b>	<b>19FD12003</b>
4×5/8	100×16	120	15300	<b>19FD02004</b>	<b>19FD12004</b>
4-1/2×7/8	115×22	40	13300	<b>19FD02005</b>	<b>19FD12005</b>
4-1/2×7/8	115×22	60	13300	<b>19FD02006</b>	<b>19FD12006</b>
4-1/2×7/8	115×22	80	13300	<b>19FD02007</b>	<b>19FD12007</b>
4-1/2×7/8	115×22	120	13300	<b>19FD02008</b>	<b>19FD12008</b>
5×7/8	125×22	40	12000	<b>19FD02009</b>	<b>19FD12009</b>
5×7/8	125×22	60	12000	<b>19FD02010</b>	<b>19FD12010</b>
5×7/8	125×22	80	12000	<b>19FD02011</b>	<b>19FD12011</b>
5×7/8	125×22	120	12000	<b>19FD02012</b>	<b>19FD12012</b>
6×7/8	150×22	40	10200	<b>19FD02013</b>	<b>19FD12013</b>
6×7/8	150×22	60	10200	<b>19FD02014</b>	<b>19FD12014</b>
6×7/8	150×22	80	10200	<b>19FD02015</b>	<b>19FD12015</b>
6×7/8	150×22	120	10200	<b>19FD02016</b>	<b>19FD12016</b>
7×7/8	180×22	40	8600	<b>19FD02017</b>	<b>19FD12017</b>
7×7/8	180×22	60	8600	<b>19FD02018</b>	<b>19FD12018</b>
7×7/8	180×22	80	8600	<b>19FD02019</b>	<b>19FD12019</b>
7×7/8	180×22	120	8600	<b>19FD02020</b>	<b>19FD12020</b>



**Remark:** • Please indicate the grit when ordering  
 • Other grit and other size are available

## Flap Disc With Hub – Zirconium Abrasive

Great For Stainless Steel & Non-Ferrous Metal

- ◆ Great for stainless steel, high tensile alloys, ferrous and non-ferrous metal
- ◆ Fast stock removal
- ◆ Constant performance
- ◆ Long life
- ◆ Low noise
- ◆ Low vibration



Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4-1/2×5/8-11	115×5/8-11	40	13300	<b>19FD02501</b>	<b>19FD12501</b>
4-1/2×5/8-11	115×5/8-11	60	13300	<b>19FD02502</b>	<b>19FD12502</b>
4-1/2×5/8-11	115×5/8-11	80	13300	<b>19FD02503</b>	<b>19FD12503</b>
4-1/2×5/8-11	115×5/8-11	120	13300	<b>19FD02504</b>	<b>19FD12504</b>
5×5/8-11	125×5/8-11	40	12000	<b>19FD02505</b>	<b>19FD12505</b>
5×5/8-11	125×5/8-11	60	12000	<b>19FD02506</b>	<b>19FD12506</b>
5×5/8-11	125×5/8-11	80	12000	<b>19FD02507</b>	<b>19FD12507</b>
5×5/8-11	125×5/8-11	120	12000	<b>19FD02508</b>	<b>19FD12508</b>
6×5/8-11	150×5/8-11	40	10200	<b>19FD02509</b>	<b>19FD12509</b>
6×5/8-11	150×5/8-11	60	10200	<b>19FD02510</b>	<b>19FD12510</b>
6×5/8-11	150×5/8-11	80	10200	<b>19FD02511</b>	<b>19FD12511</b>
6×5/8-11	150×5/8-11	120	10200	<b>19FD02512</b>	<b>19FD12512</b>
7×5/8-11	180×5/8-11	40	8600	<b>19FD02513</b>	<b>19FD12513</b>
7×5/8-11	180×5/8-11	60	8600	<b>19FD02514</b>	<b>19FD12514</b>
7×5/8-11	180×5/8-11	80	8600	<b>19FD02515</b>	<b>19FD12515</b>
7×5/8-11	180×5/8-11	120	8600	<b>19FD02516</b>	<b>19FD12516</b>

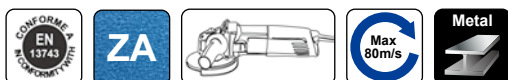
**Remark:** • Please indicate the grit when ordering  
• Other grit and other size are available



### Flap Disc With Center Hole – High Density Zirconium Abrasive

Great For Stainless Steel, High Tensile Alloyed Steel & Non-Ferrous Metal

- ◆ Great for stainless steel, high tensile alloys, ferrous and non-ferrous metal
- ◆ High density flaps with extra-long flaps allow heavy duty applicators
- ◆ Faster and better stock removal
- ◆ Extra-long life
- ◆ Low vibration & low noise



Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
4×5/8"	100×16	40	15300	19FD03001	19FD13001
4×5/8	100×16	60	15300	19FD03002	19FD13002
4×5/8	100×16	80	15300	19FD03003	19FD13003
4×5/8	100×16	120	15300	19FD03004	19FD13004
4-1/2×7/8	115×22	40	13300	19FD03005	19FD13005
4-1/2×7/8	115×22	60	13300	19FD03006	19FD13006
4-1/2×7/8	115×22	80	13300	19FD03007	19FD13007
4-1/2×7/8	115×22	120	13300	19FD03008	19FD13008
5×7/8	125×22	40	12000	19FD03009	19FD13009
5×7/8	125×22	60	12000	19FD03010	19FD13010
5×7/8	125×22	80	12000	19FD03011	19FD13011
5×7/8	125×22	120	12000	19FD03012	19FD13012
6×7/8	150×22	40	10200	19FD03013	19FD13013
6×7/8	150×22	60	10200	19FD03014	19FD13014
6×7/8	150×22	80	10200	19FD03015	19FD13015
6×7/8	150×22	120	10200	19FD03016	19FD13016
7×7/8	180×22	40	8600	19FD03017	19FD13017
7×7/8	180×22	60	8600	19FD03018	19FD13018
7×7/8	180×22	80	8600	19FD03019	19FD13019
7×7/8	180×22	120	8600	19FD03020	19FD13020

**Remark:** • Please indicate the grit when ordering  
• Other grit and other size are available

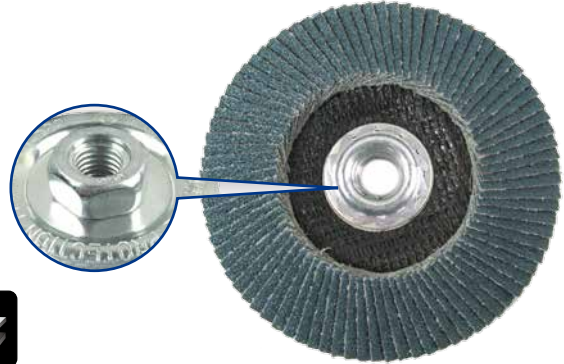
High Density



◆ Ideal when working on uneven or curved surfaces, as well as finer grit blending

## Flap Disc With Hub – High Density Zirconium Abrasive

Great For Stainless Steel, High Tensile Alloyed Steel & Non-Ferrous Metal


- ◆ Great for stainless steel, high tensile alloys, ferrous and non-ferrous metal
- ◆ High density flaps with extra-long flaps allow heavy duty applications
- ◆ Faster and better stock removal
- ◆ Extra-long life
- ◆ Low vibration & low noise



Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4-1/2×5/8-11	115×5/8-11	40	13300	<b>19FD03051</b>	<b>19FD13051</b>
4-1/2×5/8-11	115×5/8-11	60	13300	<b>19FD03052</b>	<b>19FD13052</b>
4-1/2×5/8-11	115×5/8-11	80	13300	<b>19FD03053</b>	<b>19FD13053</b>
4-1/2×5/8-11	115×5/8-11	120	13300	<b>19FD03054</b>	<b>19FD13054</b>
5×5/8-11	125×5/8-11	40	12000	<b>19FD03055</b>	<b>19FD13055</b>
5×5/8-11	125×5/8-11	60	12000	<b>19FD03056</b>	<b>19FD13056</b>
5×5/8-11	125×5/8-11	80	12000	<b>19FD03057</b>	<b>19FD13057</b>
5×5/8-11	125×5/8-11	120	12000	<b>19FD03058</b>	<b>19FD13058</b>
6×5/8-11	150×5/8-11	40	10200	<b>19FD03059</b>	<b>19FD13059</b>
6×5/8-11	150×5/8-11	60	10200	<b>19FD03060</b>	<b>19FD13060</b>
6×5/8-11	150×5/8-11	80	10200	<b>19FD03061</b>	<b>19FD13061</b>
6×5/8-11	150×5/8-11	120	10200	<b>19FD03062</b>	<b>19FD13062</b>
7×5/8-11	180×5/8-11	40	8600	<b>19FD03063</b>	<b>19FD13063</b>
7×5/8-11	180×5/8-11	60	8600	<b>19FD03064</b>	<b>19FD13064</b>
7×5/8-11	180×5/8-11	80	8600	<b>19FD03065</b>	<b>19FD13065</b>
7×5/8-11	180×5/8-11	120	8600	<b>19FD03066</b>	<b>19FD13066</b>

**Remark:** • Please indicate the grit when ordering  
• Other grit and other size are available

High Density

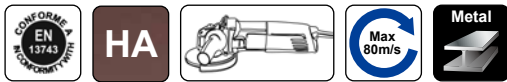




◆ Ideal when working on uneven or curved surfaces, as well as finer grit blending

**Flap Disc With Center Hole – Heat Treated Aluminum Oxide Abrasive**

For General Purpose, Efficient Type For Stainless Steel & Ferrous Metal

- ◆ For variety of metal and applications, work for general purpose
- ◆ Good stock removal
- ◆ Constant performance
- ◆ Low noise
- ◆ Low vibration



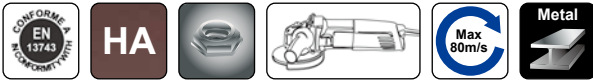
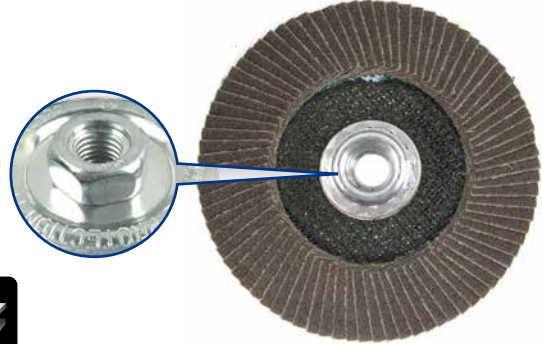
Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4×5/8"	100×16	40	15300	<b>19FD04001</b>	<b>19FD14001</b>
4×5/8	100×16	60	15300	<b>19FD04002</b>	<b>19FD14002</b>
4×5/8	100×16	80	15300	<b>19FD04003</b>	<b>19FD14003</b>
4×5/8	100×16	120	15300	<b>19FD04004</b>	<b>19FD14004</b>
4-1/2×7/8	115×22	40	13300	<b>19FD04005</b>	<b>19FD14005</b>
4-1/2×7/8	115×22	60	13300	<b>19FD04006</b>	<b>19FD14006</b>
4-1/2×7/8	115×22	80	13300	<b>19FD04007</b>	<b>19FD14007</b>
4-1/2×7/8	115×22	120	13300	<b>19FD04008</b>	<b>19FD14008</b>
5×7/8	125×22	40	12000	<b>19FD04009</b>	<b>19FD14009</b>
5×7/8	125×22	60	12000	<b>19FD04010</b>	<b>19FD14010</b>
5×7/8	125×22	80	12000	<b>19FD04011</b>	<b>19FD14011</b>
5×7/8	125×22	120	12000	<b>19FD04012</b>	<b>19FD14012</b>
6×7/8	150×22	40	10200	<b>19FD04013</b>	<b>19FD14013</b>
6×7/8	150×22	60	10200	<b>19FD04014</b>	<b>19FD14014</b>
6×7/8	150×22	80	10200	<b>19FD04015</b>	<b>19FD14015</b>
6×7/8	150×22	120	10200	<b>19FD04016</b>	<b>19FD14016</b>
7×7/8	180×22	40	8600	<b>19FD04017</b>	<b>19FD14017</b>
7×7/8	180×22	60	8600	<b>19FD04018</b>	<b>19FD14018</b>
7×7/8	180×22	80	8600	<b>19FD04019</b>	<b>19FD14019</b>
7×7/8	180×22	120	8600	<b>19FD04020</b>	<b>19FD14020</b>

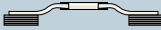

**Remark:** • Please indicate the grit when ordering  
 • Other grit and other size are available

## Flap Disc With Hub – Heat Treated Aluminum Oxide Abrasive

For General Purpose, Efficient Type For Stainless Steel & Ferrous Metal

- ◆ For variety of metal and applications, work for general purpose
- ◆ Good stock removal
- ◆ Constant performance
- ◆ Low noise
- ◆ Low vibration



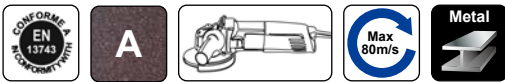
Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4-1/2×5/8-11	115×5/8-11	40	13300	<b>19FD04501</b>	<b>19FD14501</b>
4-1/2×5/8-11	115×5/8-11	60	13300	<b>19FD04502</b>	<b>19FD14502</b>
4-1/2×5/8-11	115×5/8-11	80	13300	<b>19FD04503</b>	<b>19FD14503</b>
4-1/2×5/8-11	115×5/8-11	120	13300	<b>19FD04504</b>	<b>19FD14504</b>
5×5/8-11	125×5/8-11	40	12000	<b>19FD04505</b>	<b>19FD14505</b>
5×5/8-11	125×5/8-11	60	12000	<b>19FD04506</b>	<b>19FD14506</b>
5×5/8-11	125×5/8-11	80	12000	<b>19FD04507</b>	<b>19FD14507</b>
5×5/8-11	125×5/8-11	120	12000	<b>19FD04508</b>	<b>19FD14508</b>
6×5/8-11	150×5/8-11	40	10200	<b>19FD04509</b>	<b>19FD14509</b>
6×5/8-11	150×5/8-11	60	10200	<b>19FD04510</b>	<b>19FD14510</b>
6×5/8-11	150×5/8-11	80	10200	<b>19FD04511</b>	<b>19FD14511</b>
6×5/8-11	150×5/8-11	120	10200	<b>19FD04512</b>	<b>19FD14512</b>
7×5/8-11	180×5/8-11	40	8600	<b>19FD04513</b>	<b>19FD14513</b>
7×5/8-11	180×5/8-11	60	8600	<b>19FD04514</b>	<b>19FD14514</b>
7×5/8-11	180×5/8-11	80	8600	<b>19FD04515</b>	<b>19FD14515</b>
7×5/8-11	180×5/8-11	120	8600	<b>19FD04516</b>	<b>19FD14516</b>



**Remark:** • Please indicate the grit when ordering  
• Other grit and other size are available

### Flap Disc With Center Hole – Aluminum Oxide Abrasive

For General Purpose

- ◆ For variety of metal and applications, work for general purpose
- ◆ Good stock removal
- ◆ Constant performance
- ◆ Low noise
- ◆ Low vibration



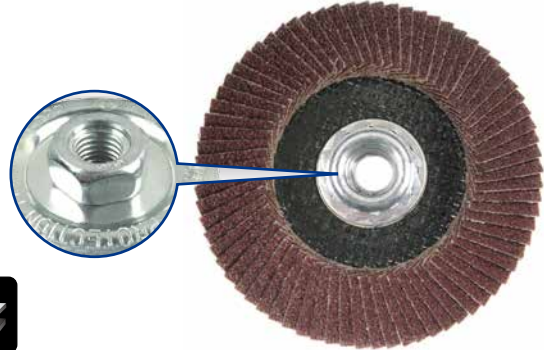
Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4×5/8"	100×16	40	15300	<b>19FD01001</b>	<b>19FD11001</b>
4×5/8	100×16	60	15300	<b>19FD01002</b>	<b>19FD11002</b>
4×5/8	100×16	80	15300	<b>19FD01003</b>	<b>19FD11003</b>
4×5/8	100×16	120	15300	<b>19FD01004</b>	<b>19FD11004</b>
4-1/2×7/8	115×22	40	13300	<b>19FD01005</b>	<b>19FD11005</b>
4-1/2×7/8	115×22	60	13300	<b>19FD01006</b>	<b>19FD11006</b>
4-1/2×7/8	115×22	80	13300	<b>19FD01007</b>	<b>19FD11007</b>
4-1/2×7/8	115×22	120	13300	<b>19FD01008</b>	<b>19FD11008</b>
5×7/8	125×22	40	12000	<b>19FD01009</b>	<b>19FD11009</b>
5×7/8	125×22	60	12000	<b>19FD01010</b>	<b>19FD11010</b>
5×7/8	125×22	80	12000	<b>19FD01011</b>	<b>19FD11011</b>
5×7/8	125×22	120	12000	<b>19FD01012</b>	<b>19FD11012</b>
6×7/8	150×22	40	10200	<b>19FD01013</b>	<b>19FD11013</b>
6×7/8	150×22	60	10200	<b>19FD01014</b>	<b>19FD11014</b>
6×7/8	150×22	80	10200	<b>19FD01015</b>	<b>19FD11015</b>
6×7/8	150×22	120	10200	<b>19FD01016</b>	<b>19FD11016</b>
7×7/8	180×22	40	8600	<b>19FD01017</b>	<b>19FD11017</b>
7×7/8	180×22	60	8600	<b>19FD01018</b>	<b>19FD11018</b>
7×7/8	180×22	80	8600	<b>19FD01019</b>	<b>19FD11019</b>
7×7/8	180×22	120	8600	<b>19FD01020</b>	<b>19FD11020</b>


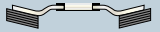
**Remark:** • Please indicate the grit when ordering  
 • Other grit and other size are available

## Flap Disc With Hub – Aluminum Oxide Abrasive

For General Purpose

- ◆ For variety of metal and applications, work for general purpose
- ◆ Good stock removal
- ◆ Constant performance
- ◆ Low noise
- ◆ Low vibration



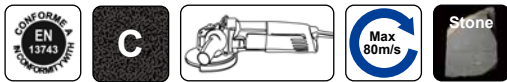
Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4-1/2×5/8-11	115×5/8-11	40	13300	<b>19FD01501</b>	<b>19FD11501</b>
4-1/2×5/8-11	115×5/8-11	60	13300	<b>19FD01502</b>	<b>19FD11502</b>
4-1/2×5/8-11	115×5/8-11	80	13300	<b>19FD01503</b>	<b>19FD11503</b>
4-1/2×5/8-11	115×5/8-11	120	13300	<b>19FD01504</b>	<b>19FD11504</b>
5×5/8-11	125×5/8-11	40	12000	<b>19FD01505</b>	<b>19FD11505</b>
5×5/8-11	125×5/8-11	60	12000	<b>19FD01506</b>	<b>19FD11506</b>
5×5/8-11	125×5/8-11	80	12000	<b>19FD01507</b>	<b>19FD11507</b>
5×5/8-11	125×5/8-11	120	12000	<b>19FD01508</b>	<b>19FD11508</b>
6×5/8-11	150×5/8-11	40	10200	<b>19FD01509</b>	<b>19FD11509</b>
6×5/8-11	150×5/8-11	60	10200	<b>19FD01510</b>	<b>19FD11510</b>
6×5/8-11	150×5/8-11	80	10200	<b>19FD01511</b>	<b>19FD11511</b>
6×5/8-11	150×5/8-11	120	10200	<b>19FD01512</b>	<b>19FD11512</b>
7×5/8-11	180×5/8-11	40	8600	<b>19FD01513</b>	<b>19FD11513</b>
7×5/8-11	180×5/8-11	60	8600	<b>19FD01514</b>	<b>19FD11514</b>
7×5/8-11	180×5/8-11	80	8600	<b>19FD01515</b>	<b>19FD11515</b>
7×5/8-11	180×5/8-11	120	8600	<b>19FD01516</b>	<b>19FD11516</b>

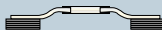

**Remark:** • Please indicate the grit when ordering  
• Other grit and other size are available

### Flap Disc With Center Hole – Silicon Carbide Abrasive

Good Choice For Brass, Bronze & Non-Metal

- ◆ Good for very soft (aluminum) to very hard (concrete) materials
- ◆ Durable, fiberglass back
- ◆ High strength, lightweight, absorbs vibration



Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4×5/8"	100×16	40	15300	<b>19FD01001</b>	<b>19FD11001</b>
4×5/8	100×16	60	15300	<b>19FD01002</b>	<b>19FD11002</b>
4×5/8	100×16	80	15300	<b>19FD01003</b>	<b>19FD11003</b>
4×5/8	100×16	120	15300	<b>19FD01004</b>	<b>19FD11004</b>
4-1/2×7/8	115×22	40	13300	<b>19FD01005</b>	<b>19FD11005</b>
4-1/2×7/8	115×22	60	13300	<b>19FD01006</b>	<b>19FD11006</b>
4-1/2×7/8	115×22	80	13300	<b>19FD01007</b>	<b>19FD11007</b>
4-1/2×7/8	115×22	120	13300	<b>19FD01008</b>	<b>19FD11008</b>
5×7/8	125×22	40	12000	<b>19FD01009</b>	<b>19FD11009</b>
5×7/8	125×22	60	12000	<b>19FD01010</b>	<b>19FD11010</b>
5×7/8	125×22	80	12000	<b>19FD01011</b>	<b>19FD11011</b>
5×7/8	125×22	120	12000	<b>19FD01012</b>	<b>19FD11012</b>
6×7/8	150×22	40	10200	<b>19FD01013</b>	<b>19FD11013</b>
6×7/8	150×22	60	10200	<b>19FD01014</b>	<b>19FD11014</b>
6×7/8	150×22	80	10200	<b>19FD01015</b>	<b>19FD11015</b>
6×7/8	150×22	120	10200	<b>19FD01016</b>	<b>19FD11016</b>
7×7/8	180×22	40	8600	<b>19FD01017</b>	<b>19FD11017</b>
7×7/8	180×22	60	8600	<b>19FD01018</b>	<b>19FD11018</b>
7×7/8	180×22	80	8600	<b>19FD01019</b>	<b>19FD11019</b>
7×7/8	180×22	120	8600	<b>19FD01020</b>	<b>19FD11020</b>

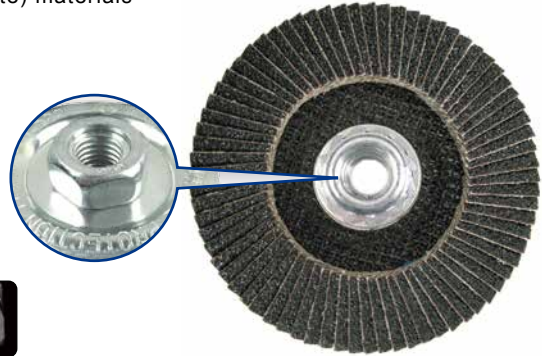
**Remark:** • Please indicate the grit when ordering  
 • Other grit and other size are available





## Flap Disc With Hub – Silicon Carbide Abrasive

Good Choice For Brass, Bronze & Non-Metal

- ◆ Good for very soft (aluminum) to very hard (concrete) materials
- ◆ Durable, fiberglass back
- ◆ High strength, lightweight, absorbs vibration



Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
					
4-1/2×5/8-11	115×5/8-11	40	13300	<b>19FD05501</b>	<b>19FD15501</b>
4-1/2×5/8-11	115×5/8-11	60	13300	<b>19FD05502</b>	<b>19FD15502</b>
4-1/2×5/8-11	115×5/8-11	80	13300	<b>19FD05503</b>	<b>19FD15503</b>
4-1/2×5/8-11	115×5/8-11	120	13300	<b>19FD05504</b>	<b>19FD15504</b>
5×5/8-11	125×5/8-11	40	12000	<b>19FD05505</b>	<b>19FD15505</b>
5×5/8-11	125×5/8-11	60	12000	<b>19FD05506</b>	<b>19FD15506</b>
5×5/8-11	125×5/8-11	80	12000	<b>19FD05507</b>	<b>19FD15507</b>
5×5/8-11	125×5/8-11	120	12000	<b>19FD05508</b>	<b>19FD15508</b>
6×5/8-11	150×5/8-11	40	10200	<b>19FD05509</b>	<b>19FD15509</b>
6×5/8-11	150×5/8-11	60	10200	<b>19FD05510</b>	<b>19FD15510</b>
6×5/8-11	150×5/8-11	80	10200	<b>19FD05511</b>	<b>19FD15511</b>
6×5/8-11	150×5/8-11	120	10200	<b>19FD05512</b>	<b>19FD15512</b>
7×5/8-11	180×5/8-11	40	8600	<b>19FD05513</b>	<b>19FD15513</b>
7×5/8-11	180×5/8-11	60	8600	<b>19FD05514</b>	<b>19FD15514</b>
7×5/8-11	180×5/8-11	80	8600	<b>19FD05515</b>	<b>19FD15515</b>
7×5/8-11	180×5/8-11	120	8600	<b>19FD05516</b>	<b>19FD15516</b>

**Remark:** • Please indicate the grit when ordering  
• Other grit and other size are available



## Flap Disc With Center Hole – Non-Woven Abrasive

Good Choice For Stainless Steel, Aluminum & Non-Ferrous metal

### Non-Woven Abrasive

- ◆ Combined strong synthetic mesh and quality abrasives by a smear-resistant adhesive.
- ◆ Open construction enables aggressive cutting action
- ◆ Non-loading feature improved surface finish
- ◆ Great for clean and remove imperfections on metal surfaces, clean, deburr or finish a variety of surfaces, blend weld seams, or create decorative finishes.

### Non-Woven Flap Disc

- ◆ Aggressive, fast stock removal cut rate while providing a fine finish
- ◆ Consistent performance
- ◆ Smear-free finish
- ◆ Cool cut rate for longer life



Size (D×H)		Grit	Max. rpm	Order Number	
Inch	mm			Type 27	Type 29
4×5/8	100×16	coarse	15300	<b>19FD07001</b>	<b>19FD07501</b>
4×5/8	100×16	medium	15300	<b>19FD07002</b>	<b>19FD07502</b>
4×5/8	100×16	fine	15300	<b>19FD07003</b>	<b>19FD07503</b>
4-1/2×7/8	115×22	coarse	13300	<b>19FD07004</b>	<b>19FD07504</b>
4-1/2×7/8	115×22	medium	13300	<b>19FD07005</b>	<b>19FD07505</b>
4-1/2×7/8	115×22	fine	13300	<b>19FD07006</b>	<b>19FD07506</b>
5×7/8	125×22	coarse	12000	<b>19FD07007</b>	<b>19FD07507</b>
5×7/8	125×22	medium	12000	<b>19FD07008</b>	<b>19FD07508</b>
5×7/8	125×22	fine	12000	<b>19FD07009</b>	<b>19FD07509</b>
6×7/8	150×22	coarse	10200	<b>19FD07010</b>	<b>19FD07510</b>
6×7/8	150×22	medium	10200	<b>19FD07011</b>	<b>19FD07511</b>
6×7/8	150×22	fine	10200	<b>19FD07012</b>	<b>19FD07512</b>
7×7/8	180×22	coarse	8600	<b>19FD07013</b>	<b>19FD07513</b>
7×7/8	180×22	medium	8600	<b>19FD07014</b>	<b>19FD07514</b>
7×7/8	180×22	fine	8600	<b>19FD07015</b>	<b>19FD07515</b>

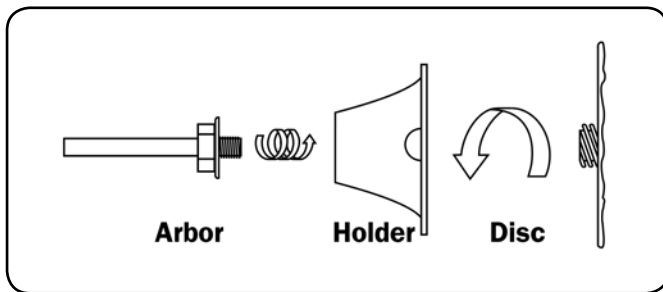
## Quick-Change Mini Flap Disc With Screw – Zirconium Abrasive

Great For Stainless Steel & Non-Ferrous Metal

- ◆ Tool-free, twist-on and -off fastening systems make fast work of disc changes
- ◆ Great for stainless steel, high tensile alloys, ferrous and non-ferrous metal
- ◆ Fast stock removal
- ◆ Allows access to small surface areas
- ◆ Extra long life minimizes disc change-over time
- ◆ Lasts 20 times longer than roloc sanding discs



Size (D×H)		Grit	Max. rpm	Order Number
Inch	mm			
2	50	40	30000	19FQ00001
2	50	60	30000	19FQ00002
2	50	80	30000	19FQ00003
2	50	120	30000	19FQ00004
3	70	40	20000	19FQ00005
3	70	60	20000	19FQ00006
3	70	80	20000	19FQ00007
3	70	120	20000	19FQ00008



## Fiber Disc

- ◆ High speed penetration of tough and high tensile materials combined with long disc life and optimum flexibility.

**ZA.:** ideal for grinding stainless steel and other hard steels

**A:** general purpose, ideal for grinding and welding and removing the irregular surface




**S.C:** ideal for grinding welding , stone, marble ,granite.



## Fiber Disc – Zirconium Abrasive

- ◆ Versatile disc for use on a wide variety of metal,Great for stainless steel, high tensile alloys, ferrous and non-ferrous metal
- ◆ Resin bond aluminum zirconia on vulcanised fibre provides remove more material faster
- ◆ High strength heat resistant,High speed penetration,Optimum flexibility
- ◆ To be used with backing pad on portable angle grinders






Size (D×H)		Grit	Max. rpm	Order Number		
Inch	mm			Round 	4 Slots 	8 Slots 
100×16	4×5/8	36	15200	<b>19DA00001</b>	<b>19DA00301</b>	<b>19DA00601</b>
100×16	4×5/8	50	15200	<b>19DA00002</b>	<b>19DA00302</b>	<b>19DA00602</b>
100×16	4×5/8	60	15200	<b>19DA00003</b>	<b>19DA00303</b>	<b>19DA00603</b>
100×16	4×5/8	80	15200	<b>19DA00004</b>	<b>19DA00304</b>	<b>19DA00604</b>
100×16	4×5/8	100	15200	<b>19DA00005</b>	<b>19DA00305</b>	<b>19DA00605</b>
100×16	4×5/8	120	15200	<b>19DA00006</b>	<b>19DA00306</b>	<b>19DA00606</b>
115×22	4.1/2×7/8	36	13300	<b>19DA00007</b>	<b>19DA00307</b>	<b>19DA00607</b>
115×22	4.1/2×7/8	50	13300	<b>19DA00008</b>	<b>19DA00308</b>	<b>19DA00608</b>
115×22	4.1/2×7/8	60	13300	<b>19DA00009</b>	<b>19DA00309</b>	<b>19DA00609</b>
115×22	4.1/2×7/8	80	13300	<b>19DA00010</b>	<b>19DA00310</b>	<b>19DA00610</b>
115×22	4.1/2×7/8	100	13300	<b>19DA00011</b>	<b>19DA00311</b>	<b>19DA00611</b>
115×22	4.1/2×7/8	120	13300	<b>19DA00012</b>	<b>19DA00312</b>	<b>19DA00612</b>
125×22	5×7/8	36	12200	<b>19DA00013</b>	<b>19DA00313</b>	<b>19DA00613</b>
125×22	5×7/8	50	12200	<b>19DA00014</b>	<b>19DA00314</b>	<b>19DA00614</b>

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## Fiber Disc – Zirconium Abrasive

- ◆ Versatile disc for use on a wide variety of metal, Great for stainless steel, high tensile alloys, ferrous and non-ferrous metal
- ◆ Resin bond aluminum zirconia on vulcanised fibre provides remove more material faster
- ◆ High strength heat resistant, High speed penetration, Optimum flexibility
- ◆ To be used with backing pad on portable angle grinders






SIZE (D×H)		Grit	Max. rpm	Order Number		
Inch	mm			Round 	4 Slots 	8 Slots 
125×22	5×7/8	60	12200	19DA00015	19DA00315	19DA00615
125×22	5×7/8	80	12200	19DA00016	19DA00316	19DA00616
125×22	5×7/8	100	12200	19DA00017	19DA00317	19DA00617
125×22	5×7/8	120	12200	19DA00018	19DA00318	19DA00618
150×22	6×7/8	36	10200	19DA00019	19DA00319	19DA00619
150×22	6×7/8	50	10200	19DA00020	19DA00320	19DA00620
150×22	6×7/8	60	10200	19DA00021	19DA00321	19DA00621
150×22	6×7/8	80	10200	19DA00022	19DA00322	19DA00622
150×22	6×7/8	100	10200	19DA00023	19DA00323	19DA00623
150×22	6×7/8	120	10200	19DA00024	19DA00324	19DA00624
178×22	7×7/8	36	8500	19DA00025	19DA00325	19DA00625
178×22	7×7/8	50	8500	19DA00026	19DA00326	19DA00626
178×22	7×7/8	60	8500	19DA00027	19DA00327	19DA00627
178×22	7×7/8	80	8500	19DA00028	19DA00328	19DA00628
178×22	7×7/8	100	8500	19DA00029	19DA00329	19DA00629
178×22	7×7/8	120	8500	19DA00030	19DA00330	19DA00630

Remark: other grit are available

### Fiber Disc – Aluminum Oxide Abrasive

- ◆ For general purpose, weld and rust removal, sanding, dressing,blending and cleaning
- ◆ Resin bond aluminum oxide on vulcanised fibre provides durability and aggressive stock removal
- ◆ Consistent performance,High speed penetration,Optimum flexibility
- ◆ To be used with backing pad on portable angle grinders




SIZE (D×H)		Grit	Max. rpm	Order Number		
Inch	mm			Round 	4 Slots 	8 Slots 
100×16	4×5/8	36	15200	19DB00001	19DB00301	19DB00601
100×16	4×5/8	50	15200	19DB00002	19DB00302	19DB00602
100×16	4×5/8	60	15200	19DB00003	19DB00303	19DB00603
100×16	4×5/8	80	15200	19DB00004	19DB00304	19DB00604
100×16	4×5/8	100	15200	19DB00005	19DB00305	19DB00605
100×16	4×5/8	120	15200	19DB00006	19DB00306	19DB00606
115×22	4.1/2×7/8	36	13300	19DB00007	19DB00307	19DB00607
115×22	4.1/2×7/8	50	13300	19DB00008	19DB00308	19DB00608
115×22	4.1/2×7/8	60	13300	19DB00009	19DB00309	19DB00609
115×22	4.1/2×7/8	80	13300	19DB00010	19DB00310	19DB00610
115×22	4.1/2×7/8	100	13300	19DB00011	19DB00311	19DB00611
115×22	4.1/2×7/8	120	13300	19DB00012	19DB00312	19DB00612
125×22	5×7/8	36	12200	19DB00013	19DB00313	19DB00613
125×22	5×7/8	50	12200	19DB00014	19DB00314	19DB00614
125×22	5×7/8	60	12200	19DB00015	19DB00315	19DB00615
125×22	5×7/8	80	12200	19DB00016	19DB00316	19DB00616
125×22	5×7/8	100	12200	19DB00017	19DB00317	19DB00617
125×22	5×7/8	120	12200	19DB00018	19DB00318	19DB00618
150×22	6×7/8	36	10200	19DB00019	19DB00319	19DB00619
150×22	6×7/8	50	10200	19DB00020	19DB00320	19DB00620
150×22	6×7/8	60	10200	19DB00021	19DB00321	19DB00621

Continued... ..

## Fiber Disc – Aluminum Oxide Abrasive

- ◆ For general purpose, weld and rust removal, sanding, dressing,blending and cleaning
- ◆ Resin bond aluminum oxide on vulcanised fibre provides durability and aggressive stock removal
- ◆ Consistent performance,High speed penetration,Optimum flexibility
- ◆ To be used with backing pad on portable angle grinders






SIZE (D×H)		Grit	Max. rpm	Order Number		
Inch	mm			Round 	4 Slots 	8 Slots 
150×22	6×7/8	80	10200	<b>19DB00022</b>	<b>19DB00322</b>	<b>19DB00622</b>
150×22	6×7/8	100	10200	<b>19DB00023</b>	<b>19DB00323</b>	<b>19DB00623</b>
150×22	6×7/8	120	10200	<b>19DB00024</b>	<b>19DB00324</b>	<b>19DB00624</b>
178×22	7×7/8	36	8500	<b>19DB00025</b>	<b>19DB00325</b>	<b>19DB00625</b>
178×22	7×7/8	50	8500	<b>19DB00026</b>	<b>19DB00326</b>	<b>19DB00626</b>
178×22	7×7/8	60	8500	<b>19DB00027</b>	<b>19DB00327</b>	<b>19DB00627</b>
178×22	7×7/8	80	8500	<b>19DB00028</b>	<b>19DB00328</b>	<b>19DB00628</b>
178×22	7×7/8	100	8500	<b>19DB00029</b>	<b>19DB00329</b>	<b>19DB00629</b>
178×22	7×7/8	120	8500	<b>19DB00030</b>	<b>19DB00330</b>	<b>19DB00630</b>

**Remark:** other grit are available

### Fiber Disc – Silicon Carbide Abrasive

- ◆ Good for very soft (aluminum) to very hard (concrete) materials
- ◆ Resin bond silicon carbide on vulcanised fibre provides fast stock removal
- ◆ Consistent performance, High speed penetration, Optimum flexibility
- ◆ To be used with backing pad on portable angle grinders



SIZE (D×H)		Grit	Max. rpm	Order Number		
Inch	mm			Round 	4 Slots 	8 Slots 
100×16	4×5/8	36	15200	19DC00001	19DC00301	19DC00601
100×16	4×5/8	50	15200	19DC00002	19DC00302	19DC00602
100×16	4×5/8	60	15200	19DC00003	19DC00303	19DC00603
100×16	4×5/8	80	15200	19DC00004	19DC00304	19DC00604
100×16	4×5/8	100	15200	19DC00005	19DC00305	19DC00605
100×16	4×5/8	120	15200	19DC00006	19DC00306	19DC00606
115×22	4.1/2×7/8	36	13300	19DC00007	19DC00307	19DC00607
115×22	4.1/2×7/8	50	13300	19DC00008	19DC00308	19DC00608
115×22	4.1/2×7/8	60	13300	19DC00009	19DC00309	19DC00609
115×22	4.1/2×7/8	80	13300	19DC00010	19DC00310	19DC00610
115×22	4.1/2×7/8	100	13300	19DC00011	19DC00311	19DC00611
115×22	4.1/2×7/8	120	13300	19DC00012	19DC00312	19DC00612
125×22	5×7/8	36	12200	19DC00013	19DC00313	19DC00613
125×22	5×7/8	50	12200	19DC00014	19DC00314	19DC00614
125×22	5×7/8	60	12200	19DC00015	19DC00315	19DC00615
125×22	5×7/8	80	12200	19DC00016	19DC00316	19DC00616
125×22	5×7/8	100	12200	19DC00017	19DC00317	19DC00617
125×22	5×7/8	120	12200	19DC00018	19DC00318	19DC00618
150×22	6×7/8	36	10200	19DC00019	19DC00319	19DC00619
150×22	6×7/8	50	10200	19DC00020	19DC00320	19DC00620
150×22	6×7/8	60	10200	19DC00021	19DC00321	19DC00621




Continued... ..



## Fiber Disc – Silicon Carbide Abrasive

- ◆ Good for very soft (aluminum) to very hard (concrete) materials
- ◆ Resin bond silicon carbide on vulcanised fibre provides fast stock removal
- ◆ Consistent performance, High speed penetration, Optimum flexibility
- ◆ To be used with backing pad on portable angle grinders





SIZE (D×H)		Grit	Max. rpm	Order Number		
Inch	mm			Round 	4 Slots 	8 Slots 
150×22	6×7/8	80	10200	<b>19DC00022</b>	<b>19DC00322</b>	<b>19DC00622</b>
150×22	6×7/8	100	10200	<b>19DC00023</b>	<b>19DC00323</b>	<b>19DC00623</b>
150×22	6×7/8	120	10200	<b>19DC00024</b>	<b>19DC00324</b>	<b>19DC00624</b>
178×22	7×7/8	36	8500	<b>19DC00025</b>	<b>19DC00325</b>	<b>19DC00625</b>
178×22	7×7/8	50	8500	<b>19DC00026</b>	<b>19DC00326</b>	<b>19DC00626</b>
178×22	7×7/8	60	8500	<b>19DC00027</b>	<b>19DC00327</b>	<b>19DC00627</b>
178×22	7×7/8	80	8500	<b>19DC00028</b>	<b>19DC00328</b>	<b>19DC00628</b>
178×22	7×7/8	100	8500	<b>19DC00029</b>	<b>19DC00329</b>	<b>19DC00629</b>
178×22	7×7/8	120	8500	<b>19DC00030</b>	<b>19DC00330</b>	<b>19DC00630</b>

**Remark:** other grit are available

## Quick-Change Disc

- ◆ Tool-free, twist-on and -off fastening systems make fast work of disc changes

Type TR	Type TS
	
<ul style="list-style-type: none"> <li>◆ Fastener is made of plastic</li> </ul>	<ul style="list-style-type: none"> <li>◆ Fastener is made of metal</li> </ul>

## Quick-Change Non-Woven Disc

- ◆ Combined strong synthetic mesh and quality abrasives, bonded together by a smear-resistant adhesive
- ◆ Ideal for cleaning and removing imperfections on metal surfaces, cleaning, deburring or finishing a variety of surfaces, blending weld seams, or creating decorative finishes
- ◆ The open construction of the non-woven material enables aggressive cutting action and improved surface finish while maintaining its non-loading feature

See **NON-WOVEN DISC** section (Page10) for full product listing and application information



## Quick-Change Clean & Strip Disc

- ◆ Aggressively removes paint, rust and seam sealers
- ◆ Open web construction for cool running and resistance to loading and smearing
- ◆ Fast cut, low noise and soft polish
- ◆ Leave a thoroughly cleaned surface
- ◆ Safer than wire wheels and will not rust
- ◆ Ideal for removing coatings on a variety of substrates, such as wood, metal and plastics.

See **CLEAN AND STRIP DISC** section (Page70) for full product listing and application information



## Quick-Change Mini Flap Disc - Zirconium Abrasive

- ◆ Great for stainless steel, high tensile alloys, ferrous and non-ferrous metal
- ◆ Grind and finish in one operation
- ◆ Allows access to small surface areas
- ◆ Extra long life minimizes disc change-over time
- ◆ Lasts 20 times longer than roloc sanding discs



See **FLAP DISCS** section (Page56) for full product listing and application information



## Quick-Change Fiber Disc - Zirconium Abrasive

- ◆ For welding grinding and blending; heavy metal removal; light deburring and finishing
- ◆ Heavy stock removal, Greater durability, longer life
- ◆ High strength heat resistant, High speed penetration, Optimum flexibility
- ◆ Edge fray resistance on tough applications and stainless steel
- ◆ To be used with backing pad on portable angle grinders



Size (D)		Grit	Max. rpm	Order Number	
Inch	mm			Type TR	Type TS
1-1/2	38	24#	25000	 19FA00001	 19FA00501
1-1/2	38	36#	25000	19FA00002	19FA00502
1-1/2	38	40#	25000	19FA00003	19FA00503
1-1/2	38	50#	25000	19FA00004	19FA00504
1-1/2	38	60#	25000	19FA00005	19FA00505
1-1/2	38	80#	25000	19FA00006	19FA00506
1-1/2	38	120#	25000	19FA00007	19FA00507
2	50	24#	25000	19FA00008	19FA00508
2	50	36#	25000	19FA00009	19FA00509
2	50	40#	25000	19FA00010	19FA00510
2	50	50#	25000	19FA00011	19FA00511
2	50	60#	25000	19FA00012	19FA00512
2	50	80#	25000	19FA00013	19FA00513
2	50	120#	25000	19FA00014	19FA00514
3	75	24#	20000	19FA00015	19FA00515
3	75	36#	20000	19FA00016	19FA00516
3	75	40#	20000	19FA00017	19FA00517
3	75	50#	20000	19FA00018	19FA00518
3	75	60#	20000	19FA00019	19FA00519
3	75	80#	20000	19FA00020	19FA00520
3	75	120#	20000	19FA00021	19FA00521

Remark: other grit are available

### Quick-Change Fiber Disc - Aluminum Oxide Abrasive

- ◆ For welding grinding and blending; heavy metal removal; light deburring and finishing
- ◆ Heavy stock removal, Greater durability, longer life
- ◆ High strength heat resistant, High speed penetration, Optimum flexibility
- ◆ Edge fray resistance on tough applications and stainless steel
- ◆ To be used with backing pad on portable angle grinders





Size (D)		Grit	Max. rpm	Order Number	
Inch	mm			Type TR	Type TS
1-1/2	38	24#	25000	19FA01001	19FA01501
1-1/2	38	36#	25000	19FA01002	19FA01502
1-1/2	38	40#	25000	19FA01003	19FA01503
1-1/2	38	50#	25000	19FA01004	19FA01504
1-1/2	38	60#	25000	19FA01005	19FA01505
1-1/2	38	80#	25000	19FA01006	19FA01506
1-1/2	38	120#	25000	19FA01007	19FA01507
2	50	24#	25000	19FA01008	19FA01508
2	50	36#	25000	19FA01009	19FA01509
2	50	40#	25000	19FA01010	19FA01510
2	50	50#	25000	19FA01011	19FA01511
2	50	60#	25000	19FA01012	19FA01512
2	50	80#	25000	19FA01013	19FA01513
2	50	120#	25000	19FA01014	19FA01514
3	75	24#	20000	19FA01015	19FA01515
3	75	36#	20000	19FA01016	19FA01516
3	75	40#	20000	19FA01017	19FA01517
3	75	50#	20000	19FA01018	19FA01518
3	75	60#	20000	19FA01019	19FA01519
3	75	80#	20000	19FA01020	19FA01520
3	75	120#	20000	19FA01021	19FA01521

Remark: other grit are available

## Quick-Change Fiber Disc - Silicon Carbide Abrasive

- ◆ For welding grinding and blending; heavy metal removal; light deburring and finishing
- ◆ Heavy stock removal, Greater durability, longer life
- ◆ High strength heat resistant, High speed penetration, Optimum flexibility
- ◆ Edge fray resistance on tough applications and stainless steel
- ◆ To be used with backing pad on portable angle grinders



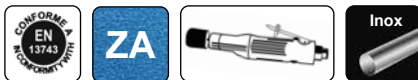
Size (D)		Grit	Max. rpm	Order Number	
Inch	mm			Type TR	Type TS
1-1/2	38	24#	25000	 19FA02001	 19FA02501
1-1/2	38	36#	25000	19FA02002	19FA02502
1-1/2	38	40#	25000	19FA02003	19FA02503
1-1/2	38	50#	25000	19FA02004	19FA02504
1-1/2	38	60#	25000	19FA02005	19FA02505
1-1/2	38	80#	25000	19FA02006	19FA02506
1-1/2	38	120#	25000	19FA02007	19FA02507
2	50	24#	25000	19FA02008	19FA02508
2	50	36#	25000	19FA02009	19FA02509
2	50	40#	25000	19FA02010	19FA02510
2	50	50#	25000	19FA02011	19FA02511
2	50	60#	25000	19FA02012	19FA02512
2	50	80#	25000	19FA02013	19FA02513
2	50	120#	25000	19FA02014	19FA02514
3	75	24#	20000	19FA02015	19FA02515
3	75	36#	20000	19FA02016	19FA02516
3	75	40#	20000	19FA02017	19FA02517
3	75	50#	20000	19FA02018	19FA02518
3	75	60#	20000	19FA02019	19FA02519
3	75	80#	20000	19FA02020	19FA02520
3	75	120#	20000	19FA02021	19FA02521

Remark: other grit are available

## Sand Band & Drum

- ◆ For finishing hard-to-reach areas, removing parting lines, imperfections, and burrs
- ◆ Spiral construction avoids shadow marks and provides smooth, chatter-free cutting action
- ◆ Achieves close tolerances when finishing curved, contoured, and hard-to-reach areas
- ◆ Fast cut and long life
- ◆ Easy removed and replaced
- ◆ Use with rubber expanding drum

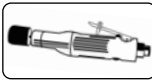
### Sand Band – Zirconium Abrasive



Size (D×W) mm	Order Number			Size (D×W) inch	Order Number			Max. rpm
	60#	80#	120#		60#	80#	120#	
10×10	19IA03001	19IA03051	19IA03101	3/8×3/8	19IA03501	19IA03551	19IA03601	38000
10×20	19IA03002	19IA03052	19IA03102	3/8×3/4	19IA03502	19IA03552	19IA03602	38000
13×25	19IA03003	19IA03053	19IA03103	1/2×1	19IA03503	19IA03553	19IA03603	30000
15×10	19IA03004	19IA03054	19IA03104	5/8×3/8	19IA03504	19IA03554	19IA03604	26000
15×30	19IA03005	19IA03055	19IA03105	5/8×1-1/4	19IA03505	19IA03555	19IA03605	26000
19×25	19IA03006	19IA03056	19IA03106	3/4×1	19IA03506	19IA03556	19IA03606	20000
22×20	19IA03007	19IA03057	19IA03107	7/8×3/4	19IA03507	19IA03557	19IA03607	17000
25×25	19IA03008	19IA03058	19IA03108	1×1	19IA03508	19IA03558	19IA03608	15000
30×20	19IA03009	19IA03059	19IA03109	1-1/4×3/4	19IA03509	19IA03559	19IA03609	13000
30×30	19IA03010	19IA03060	19IA03110	1-1/4×1-1/4	19IA03510	19IA03560	19IA03610	13000
38×25	19IA03011	19IA03061	19IA03111	1-1/2×1	19IA03511	19IA03561	19IA03611	10000
45×30	19IA03012	19IA03062	19IA03112	1-3/4×1-1/4	19IA03512	19IA03562	19IA03612	8500
51×25	19IA03013	19IA03063	19IA03113	2×1	19IA03513	19IA03563	19IA03613	7500
60×30	19IA03014	19IA03064	19IA03114	2-1/2×1-1/4	19IA03514	19IA03564	19IA03614	6500
75×30	19IA03015	19IA03065	19IA03115	3×1-1/4	19IA03515	19IA03565	19IA03615	5000

Remark: other grit are available

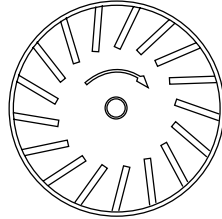
## Sand Band – Aluminum Oxide Abrasive



Size (D×W) mm	Order Number			Size (D×W) inch	Order Number			Max. rpm
	40#	60#	120#		40#	60#	120#	
10×10	19IA00001	19IA00051	19IA00101	3/8×3/8	19IA00501	19IA00551	19IA00601	38000
10×20	19IA00002	19IA00052	19IA00102	3/8×3/4	19IA00502	19IA00552	19IA00602	38000
13×25	19IA00003	19IA00053	19IA00103	1/2×1	19IA00503	19IA00553	19IA00603	30000
15×10	19IA00004	19IA00054	19IA00104	5/8×3/8	19IA00504	19IA00554	19IA00604	26000
15×30	19IA00005	19IA00055	19IA00105	5/8×1-1/4	19IA00505	19IA00555	19IA00605	26000
19×25	19IA00006	19IA00056	19IA00106	3/4×1	19IA00506	19IA00556	19IA00606	20000
22×20	19IA00007	19IA00057	19IA00107	7/8×3/4	19IA00507	19IA00557	19IA00607	17000
25×25	19IA00008	19IA00058	19IA00108	1×1	19IA00508	19IA00558	19IA00608	15000
30×20	19IA00009	19IA00059	19IA00109	1-1/4×3/4	19IA00509	19IA00559	19IA00609	13000
30×30	19IA00010	19IA00060	19IA00110	1-1/4×1-1/4	19IA00510	19IA00560	19IA00610	13000
38×25	19IA00011	19IA00061	19IA00111	1-1/2×1	19IA00511	19IA00561	19IA00611	10000
45×30	19IA00012	19IA00062	19IA00112	1-3/4×1-1/4	19IA00512	19IA00562	19IA00612	8500
51×25	19IA00013	19IA00063	19IA00113	2×1	19IA00513	19IA00563	19IA00613	7500
60×30	19IA00014	19IA00064	19IA00114	2-1/2×1-1/4	19IA00514	19IA00564	19IA00614	6500
75×30	19IA00015	19IA00065	19IA00115	3×1-1/4	19IA00515	19IA00565	19IA00615	5000

Remark: other grit are available

**Rubber Sand Drum — With Steel Shank**





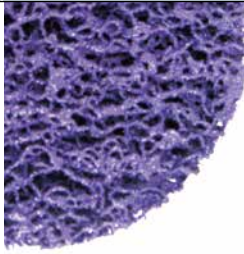
Size (D×W)		Shank mm	Max. rpm	Order Number
mm	inch			
10×10	3/8×3/8	6	38000	19IC00001
10×20	3/8×3/4	6	38000	19IC00002
13×25	1/2×1	6	30000	19IC00003
15×10	5/8×3/8	6	26000	19IC00004
15×30	5/8×1-1/4	6	26000	19IC00005
19×25	3/4×1	6	20000	19IC00006
22×20	7/8×3/4	6	17000	19IC00007
25×25	1×1	6	15000	19IC00008
30×20	1-1/4×3/4	6	13000	19IC00009
30×30	1-1/4×1-1/4	6	13000	19IC00010
38×25	1-1/2×1	6	10000	19IC00011
45×30	1-3/4×1-1/4	6	8500	19IC00012
51×25	2×1	6	7500	19IC00013
60×30	2-1/2×1-1/4	6	6500	19IC00014
75×30	3×1-1/4	6	5000	19IC00015



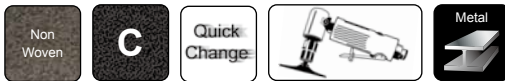
## Clean & Strip Disc

- ◆ Aggressively removes paint, rust and seam sealers
- ◆ Open web construction for cool running and resistance to loading and smearing
- ◆ Fast cut, low noise and soft polish
- ◆ Leave a thoroughly cleaned surface
- ◆ Safer than wire wheels and will not rust
- ◆ Ideal for removing coatings on a variety of substrates, such as wood, metal and plastics.



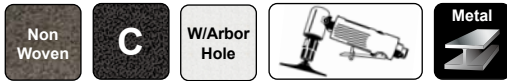
Black Clean and Strips	Blue Clean and Strips	Purple Clean and Strips
		
<ul style="list-style-type: none"> <li>◆ General purpose CNS</li> <li>◆ High cost-effective</li> </ul>	<ul style="list-style-type: none"> <li>◆ Efficient CNS</li> <li>◆ Stronger, tougher and longer lasting than the original discs</li> </ul>	<ul style="list-style-type: none"> <li>◆ Extra coarse for faster cutting</li> <li>◆ Durable, Longer life than the original discs</li> </ul>

## CNS Disc - Quick-Change Type With Screw



Size (D × W)		Quick Change		Grit	Max. rpm	Order Number		
inch	mm	Inch	mm			Black	Blue	Purple
2×1/2	50×13	—	—	46#	8000	19SQ03001	19SQ06001	19SQ09001
3×1/2	75×13	—	—	46#	6000	19SQ03002	19SQ06002	19SQ09002
4×1/2	100×13	—	—	46#	4000	19SQ03003	19SQ06003	19SQ09003

**CNS Disc - Flat Type**



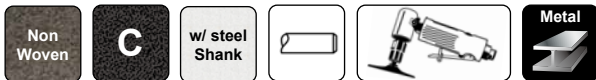
Size (D × W)		Bore		Grit	Max. rpm	Order Number		
inch	mm	Inch	mm			Black	Blue	Purple
2-1/2×1/2	63×13	1/4	6	46#	10000	19SF03001	19SF06001	19SF09001
2-1/2×1/2	63×13	1/2	12	46#	10000	19SF03002	19SF06002	19SF09002
3×1/2	75×13	1/4	6	46#	9000	19SF03003	19SF06003	19SF09003
3×1/2	75×13	1/2	12	46#	9000	19SF03004	19SF06004	19SF09004
4×1/2	100×13	1/4	6	46#	8000	19SF03005	19SF06005	19SF09005
4×1/2	100×13	1/2	12	46#	8000	19SF03006	19SF06006	19SF09006
4×1/2	100×13	5/8	16	46#	8000	19SF03007	19SF06007	19SF09007
4-1/2×1/2	115×13	1/4	6	46#	7000	19SF03008	19SF06008	19SF09008
4-1/2×1/2	115×13	1/2	12	46#	7000	19SF03009	19SF06009	19SF09009
4-1/2×1/2	115×13	5/8	16	46#	7000	19SF03010	19SF06010	19SF09010
5×1/2	125×13	1/4	6	46#	6000	19SF03011	19SF06011	19SF09011
5×1/2	125×13	1/2	12	46#	6000	19SF03012	19SF06012	19SF09012
5×1/2	125×13	5/8	16	46#	6000	19SF03013	19SF06013	19SF09013
6×1/2	150×13	1/2	12	46#	5000	19SF03014	19SF06014	19SF09014
6×1/2	150×13	5/8	16	46#	5000	19SF03015	19SF06015	19SF09015
6×1/2	150×13	7/8	22	46#	5000	19SF03016	19SF06016	19SF09016
7×1/2	180×13	1/2	12	46#	4000	19SF03017	19SF06017	19SF09017
7×1/2	180×13	5/8	16	46#	4000	19SF03018	19SF06018	19SF09018
7×1/2	180×13	7/8	22	46#	4000	19SF03019	19SF06019	19SF09019
9×1/2	200×13	1/2	12	46#	3000	19SF03020	19SF06020	19SF09020
9×1/2	200×13	5/8	16	46#	3000	19SF03021	19SF06021	19SF09021
9×1/2	200×13	7/8	22	46#	3000	19SF03022	19SF06022	19SF09022

## CNS Disc - With Backing Type



Size (D × W)		Bore		Grit	Max. rpm	Order Number		
inch	mm	Inch	mm			Black	Blue	Purple
3-1/2 × 1/2	90×13	5/8	16	46#	13000	19SD03001	19SD06001	19SD09001
4×1/2	100×13	5/8	16	46#	12000	19SD03002	19SD06002	19SD09002
4×1/2	100×13	7/8	22	46#	12000	19SD03003	19SD06003	19SD09003
4-1/2×1/2	115×13	7/8	22	46#	11500	19SD03004	19SD06004	19SD09004
5×1/2	125×13	7/8	22	46#	10500	19SD03005	19SD06005	19SD09005
6×1/2	150×13	7/8	22	46#	9500	19SD03006	19SD06006	19SD09006
7×1/2	180×13	7/8	22	46#	9000	19SD03007	19SD06007	19SD09007

## CNS Disc - With Steel Shank Type

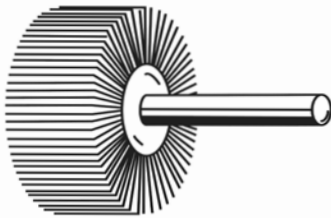


Size (D × W)		Shank		Grit	Max. rpm	Order Number		
inch	mm	Inch	mm			Black	Blue	Purple
2×1/2	50×13	1/4	6	46#	12000	19SK03001	19SK06001	19SK09001
2-1/2×1/2	63×13	1/4	6	46#	10000	19SK03002	19SK06002	19SK09002
3×1/2	75×13	1/4	6	46#	9000	19SK03003	19SK06003	19SK09003
4×1/2	100×13	1/4	6	46#	8000	19SK03004	19SK06004	19SK09004
5×1/2	125×13	1/2	13	46#	6000	19SK03005	19SK06005	19SK09005

## Flap Wheel

- ◆ Coated Abrasives flap wheels are the ideal choice for a wide variety of light grinding, blending, graining and scale removal on a variety of metal.
- ◆ Continually exposing fresh abrasives, consistent finish with a uniform rate of cut.
- ◆ Conformable to intricate shapes and contours

Flap Wheels With Mounted Steel Shanks



Flap Wheels With Arbor Holes



- ◆ With a 1/8 or 1/4 steel Shank
- ◆ Run creating better balance
- ◆ Reduced chatter and operator fatigue.
- ◆ Permit quick changes

- ◆ With a arbor hole
- ◆ Must fit on an existing arbor
- ◆ For use on larger portable and fixed-base tools

## Non-Woven Abrasive Flap Wheel

- ◆ For a wide variety of blending and finishing applications common in the metal fabrication
- ◆ Conformable to intricate shapes and contours
- ◆ Open construction enables aggressive cutting action
- ◆ Consistent finish with a uniform rate of cut
- ◆ Non-loading feature improved surface finish

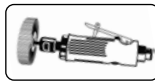
## Interleaved Flap Wheel

- ◆ Coated abrasive inserted between the non-woven abrasive, combined two finishing steps into one wheel
- ◆ Remove material nearly as fast as a flap wheel while leaving a uniform satin finish.
- ◆ Excellent for final weld blending and graining
- ◆ Cool cutting on heat sensitive metal



## Mini Flap Wheels with Mounted Steel Shank - Metric

- ◆ Excellent for small finishing and blending
- ◆ Flaps made of aluminium oxide
- ◆ Consistent and uniform grained satin finish
- ◆ Work with straight shank and die grinders



Size (D x W) mm	Shank mm	Max. rpm	Order Number				
			40#	60#	80#	120#	240#
10x10	3	30000	19JA00001	19JA00051	19JA00101	19JA00151	19JA00201
15x15	3	30000	19JA00002	19JA00052	19JA00102	19JA00152	19JA00202
20x10	3	30000	19JA00003	19JA00053	19JA00103	19JA00153	19JA00203
20x15	3	30000	19JA00004	19JA00054	19JA00104	19JA00154	19JA00204
20x15	6	30000	19JA00005	19JA00055	19JA00105	19JA00155	19JA00205
20x20	6	30000	19JA00006	19JA00056	19JA00106	19JA00156	19JA00206
20x25	6	30000	19JA00007	19JA00057	19JA00107	19JA00157	19JA00207
20x30	6	30000	19JA00008	19JA00058	19JA00108	19JA00158	19JA00208
25x10	3	25000	19JA00009	19JA00059	19JA00109	19JA00159	19JA00209
25x15	3	25000	19JA00010	19JA00060	19JA00110	19JA00160	19JA00210
25x15	6	25000	19JA00011	19JA00061	19JA00111	19JA00161	19JA00211
25x25	6	25000	19JA00012	19JA00062	19JA00112	19JA00162	19JA00212
30x5	3	25000	19JA00013	19JA00063	19JA00113	19JA00163	19JA00213
30x5	6	25000	19JA00014	19JA00064	19JA00114	19JA00164	19JA00214
30x10	3	25000	19JA00015	19JA00065	19JA00115	19JA00165	19JA00215
30x10	6	25000	19JA00016	19JA00066	19JA00116	19JA00166	19JA00216
30x15	3	25000	19JA00017	19JA00067	19JA00117	19JA00167	19JA00217
30x15	6	25000	19JA00018	19JA00068	19JA00118	19JA00168	19JA00218
30x20	6	25000	19JA00019	19JA00069	19JA00119	19JA00169	19JA00219
30x25	6	25000	19JA00020	19JA00070	19JA00120	19JA00170	19JA00220
30x30	6	25000	19JA00021	19JA00071	19JA00121	19JA00171	19JA00221
40x10	6	25000	19JA00022	19JA00072	19JA00122	19JA00172	19JA00222
40x15	6	25000	19JA00023	19JA00073	19JA00123	19JA00173	19JA00223

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Mini Flap Wheels with Mounted Steel Shank - Metric

- ◆ Excellent for small finishing and blending
- ◆ Flaps made of aluminium oxide
- ◆ Consistent and uniform grained satin finish
- ◆ Work with straight shank and die grinders



Size (D x W) mm	Shank mm	Max. rpm	Order Number				
			40#	60#	80#	120#	240#
40x20	6	25000	19JA00024	19JA00074	19JA00124	19JA00174	19JA00224
40x25	6	25000	19JA00025	19JA00075	19JA00125	19JA00175	19JA00225
40x30	6	25000	19JA00026	19JA00076	19JA00126	19JA00176	19JA00226
40x40	6	25000	19JA00027	19JA00077	19JA00127	19JA00177	19JA00227
40x50	6	25000	19JA00028	19JA00078	19JA00128	19JA00178	19JA00228
50x10	6	20000	19JA00029	19JA00079	19JA00129	19JA00179	19JA00229
50x15	6	20000	19JA00030	19JA00080	19JA00130	19JA00180	19JA00230
50x20	6	20000	19JA00031	19JA00081	19JA00131	19JA00181	19JA00231
50x25	6	20000	19JA00032	19JA00082	19JA00132	19JA00182	19JA00232
50x30	6	20000	19JA00033	19JA00083	19JA00133	19JA00183	19JA00233
50x40	6	18000	19JA00034	19JA00084	19JA00134	19JA00184	19JA00234
50x50	6	18000	19JA00035	19JA00085	19JA00135	19JA00185	19JA00235
60x10	6	18000	19JA00036	19JA00086	19JA00136	19JA00186	19JA00236
60x20	6	18000	19JA00037	19JA00087	19JA00137	19JA00187	19JA00237
60x25	6	18000	19JA00038	19JA00088	19JA00138	19JA00188	19JA00238
60x30	6	18000	19JA00039	19JA00089	19JA00139	19JA00189	19JA00239
60x40	6	15000	19JA00040	19JA00090	19JA00140	19JA00190	19JA00240
60x50	6	15000	19JA00041	19JA00091	19JA00141	19JA00191	19JA00241
80x20	6	15000	19JA00042	19JA00092	19JA00142	19JA00192	19JA00242
80x25	6	15000	19JA00043	19JA00093	19JA00143	19JA00193	19JA00243
80x30	6	15000	19JA00044	19JA00094	19JA00144	19JA00194	19JA00244
80x40	6	13000	19JA00045	19JA00095	19JA00145	19JA00195	19JA00245
80x50	6	13000	19JA00046	19JA00096	19JA00146	19JA00196	19JA00246

Remark: • Please indicate the grit when ordering • Other grit and other size are available



## Mini Flap Wheels with Mounted Steel Shank - Imperial

- ◆ Excellent for small finishing and blending
- ◆ Flaps made of aluminium oxide
- ◆ Consistent and uniform grained satin finish
- ◆ Work with straight Shank and die grinders



Size (D x W) Inch	Shank Inch	Max. rpm	Order Number				
			40#	60#	80#	120#	240#
3/8x3/8	1/8"	30,000	19JA05001	19JA05051	19JA05101	19JA05151	19JA05201
5/8x5/8	1/8	30,000	19JA05002	19JA05052	19JA05102	19JA05152	19JA05202
5/8x3/4	1/8	30,000	19JA05003	19JA05053	19JA05103	19JA05153	19JA05203
3/4x3/8	1/8	30,000	19JA05004	19JA05054	19JA05104	19JA05154	19JA05204
3/4x1/2	1/8	30,000	19JA05005	19JA05055	19JA05105	19JA05155	19JA05205
3/4x5/8	1/8	30,000	19JA05006	19JA05056	19JA05106	19JA05156	19JA05206
3/4x3/4	1/8	30,000	19JA05007	19JA05057	19JA05107	19JA05157	19JA05207
1 3/16x3/8	1/8	25,000	19JA05008	19JA05058	19JA05108	19JA05158	19JA05208
1x3/8	1/4	25,000	19JA05009	19JA05059	19JA05109	19JA05159	19JA05209
1x1/2	1/4	25,000	19JA05010	19JA05060	19JA05110	19JA05160	19JA05210
1x1	1/4	25,000	19JA05011	19JA05061	19JA05111	19JA05161	19JA05211
1 1/4x3/8	1/4	25,000	19JA05012	19JA05062	19JA05112	19JA05162	19JA05212
1 1/4x5/8	1/4	25,000	19JA05013	19JA05063	19JA05113	19JA05163	19JA05213
1 1/4x1	1/4	25,000	19JA05014	19JA05064	19JA05114	19JA05164	19JA05214
1 1/2x3/8	1/4	25,000	19JA05015	19JA05065	19JA05115	19JA05165	19JA05215
1 1/2x1/2	1/4	25,000	19JA05016	19JA05066	19JA05116	19JA05166	19JA05216
1 1/2x1	1/4	25,000	19JA05017	19JA05067	19JA05117	19JA05167	19JA05217
1 1/2x1 1/2	1/4	25,000	19JA05018	19JA05068	19JA05118	19JA05168	19JA05218
2x3/8	1/4	20,000	19JA05019	19JA05069	19JA05119	19JA05169	19JA05219
2x1/2	1/4	20,000	19JA05020	19JA05070	19JA05120	19JA05170	19JA05220
2x3/4	1/4	20,000	19JA05021	19JA05071	19JA05121	19JA05171	19JA05221
2x1	1/4	20,000	19JA05022	19JA05072	19JA05122	19JA05172	19JA05222
2x1 1/2	1/4	20,000	19JA05023	19JA05073	19JA05123	19JA05173	19JA05223

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### Mini Flap Wheels with Mounted Steel Shank - Imperial

- ◆ Excellent for small finishing and blending
- ◆ Flaps made of aluminium oxide
- ◆ Consistent and uniform grained satin finish
- ◆ Work with straight Shank and die grinders



Size (D x W) Inch	Shank Inch	Max. rpm	Order Number				
			40#	60#	80#	120#	240#
2 1/2 x 1/2	1/4	18,000	19JA05024	19JA05074	19JA05124	19JA05174	19JA05224
2 1/2 x 3/4	1/4	18,000	19JA05025	19JA05075	19JA05125	19JA05175	19JA05225
2 1/2 x 1	1/4	18,000	19JA05026	19JA05076	19JA05126	19JA05176	19JA05226
2 1/2 x 1 1/2	1/4	15,000	19JA05027	19JA05077	19JA05127	19JA05177	19JA05227
3 x 1	1/4	15,000	19JA05028	19JA05078	19JA05128	19JA05178	19JA05228
3 x 1 1/2	1/4	13,000	19JA05029	19JA05079	19JA05129	19JA05179	19JA05229
3 x 2	1/4	13,000	19JA05030	19JA05080	19JA05130	19JA05180	19JA05230

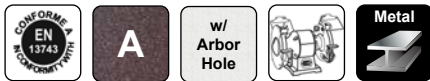
**Remark:** • Please indicate the grit when ordering  
 • Other grit and other size are available





## Flap Wheels with Arbor Hole - Metric

- ◆ Wide range of applications. For grinding, polishing and blending etc.
- ◆ No adjustments, dressing, or preparation required before or during operation
- ◆ Long life and fast cut
- ◆ Reduce the possibility of flattening, gouging and surface deformation
- ◆ Work with larger portable and fixed-base tools



Size (D x W) mm	Arbor Hole mm	Max. rpm	Order Number			
			40#	60#	80#	120#
90×25	16	12000	19JC00001	19JC00051	19JC00101	19JC00151
90×38	16	12000	19JC00002	19JC00052	19JC00102	19JC00152
90×50	16	12000	19JC00003	19JC00053	19JC00103	19JC00153
100×25	16	12000	19JC00004	19JC00054	19JC00104	19JC00154
100×38	16	12000	19JC00005	19JC00055	19JC00105	19JC00155
100×50	16	12000	19JC00006	19JC00056	19JC00106	19JC00156
125×25	16	12000	19JC00007	19JC00057	19JC00107	19JC00157
125×38	16	12000	19JC00008	19JC00058	19JC00108	19JC00158
150×13	25	6000	19JC00009	19JC00059	19JC00109	19JC00159
150×25	25	6000	19JC00010	19JC00060	19JC00110	19JC00160
150×38	25	6000	19JC00011	19JC00061	19JC00111	19JC00161
150×50	25	6000	19JC00012	19JC00062	19JC00112	19JC00162
150×75	25	6000	19JC00013	19JC00063	19JC00113	19JC00163
200×25	25	4500	19JC00014	19JC00064	19JC00114	19JC00164
200×50	25	4500	19JC00015	19JC00065	19JC00115	19JC00165
250×2	45	4000	19JC00016	19JC00066	19JC00116	19JC00166
200×38	45	4000	19JC00017	19JC00067	19JC00117	19JC00167
200×50	45	4000	19JC00018	19JC00068	19JC00118	19JC00168
200×75	45	4000	19JC00019	19JC00069	19JC00119	19JC00169
300×25	45	3000	19JC00020	19JC00070	19JC00120	19JC00170
300×50	45	3000	19JC00021	19JC00071	19JC00121	19JC00171
300×100	45	2400	19JC00022	19JC00072	19JC00122	19JC00172
350×25	45	2400	19JC00023	19JC00073	19JC00123	19JC00173

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**Flap Wheels with Arbor Hole - Metric**

- ◆ Wide range of applications. For grinding, polishing and blending etc.
- ◆ No adjustments, dressing, or preparation required before or during operation
- ◆ Long life and fast cut
- ◆ Reduce the possibility of flatting, gouging and surface deformation
- ◆ Work with larger portable and fixed-base tools



Size (D x W) mm	Arbor Hole mm	Max. rpm	Order Number			
			40#	60#	80#	120#
350x38	45	2400	19JC00024	19JC00074	19JC00124	19JC00174
350x50	45	2400	19JC00025	19JC00075	19JC00125	19JC00175
350x75	45	2400	19JC00026	19JC00076	19JC00126	19JC00176
350x100	45	2400	19JC00027	19JC00077	19JC00127	19JC00177
400x25	45	2400	19JC00028	19JC00078	19JC00128	19JC00178
400x50	45	2400	19JC00029	19JC00079	19JC00129	19JC00179
400x75	45	2400	19JC00030	19JC00080	19JC00130	19JC00180
400x100	45	2000	19JC00031	19JC00081	19JC00131	19JC00181
400x125	45	2000	19JC00032	19JC00082	19JC00132	19JC00182
400x150	45	2000	19JC00033	19JC00083	19JC00133	19JC00183
400x200	45	1800	19JC00034	19JC00084	19JC00134	19JC00184
400x250	45	1800	19JC00035	19JC00085	19JC00135	19JC00185

**Remark:** • Please indicate the grit when ordering  
 • Other grit and other size are available

## Flap Wheels with Arbor Hole - Imperial

- ◆ Wide range of applications. For grinding, polishing and blending etc.
- ◆ No adjustments, dressing, or preparation required before or during operation
- ◆ Long life and fast cut
- ◆ Reduce the possibility of flattening, gouging and surface deformation
- ◆ Work with larger portable and fixed-base tools



Size (D x W) inch	Arbor Hole inch	Max. rpm	Order Number			
			40#	60#	80#	120#
3-1/2x1	5/8	12000	19JC05001	19JC05051	19JC05101	19JC05151
3-1/2x1-1/2	5/8	12000	19JC05002	19JC05052	19JC05102	19JC05152
3-1/2x2	5/8	12000	19JC05003	19JC05053	19JC05103	19JC05153
4x1	5/8	12000	19JC05004	19JC05054	19JC05104	19JC05154
4x1-1/2	5/8	12000	19JC05005	19JC05055	19JC05105	19JC05155
4x2	5/8	12000	19JC05006	19JC05056	19JC05106	19JC05156
5x1	5/8	12000	19JC05007	19JC05057	19JC05107	19JC05157
5x1-1/2	5/8	12000	19JC05008	19JC05058	19JC05108	19JC05158
6x1/2	1	6000	19JC05009	19JC05059	19JC05109	19JC05159
6x1	1	6000	19JC05010	19JC05060	19JC05110	19JC05160
6x1-1/2	1	6000	19JC05011	19JC05061	19JC05111	19JC05161
6x2	1	6000	19JC05012	19JC05062	19JC05112	19JC05162
6x3	1	6000	19JC05013	19JC05063	19JC05113	19JC05163
8x1	1	4500	19JC05014	19JC05064	19JC05114	19JC05164
8x2	1	4500	19JC05015	19JC05065	19JC05115	19JC05165
10x1	1 3/4	4000	19JC05016	19JC05066	19JC05116	19JC05166
10x1-1/2	1 3/4	4000	19JC05017	19JC05067	19JC05117	19JC05167
10x2	1 3/4	4000	19JC05018	19JC05068	19JC05118	19JC05168
10x3	1 3/4	4000	19JC05019	19JC05069	19JC05119	19JC05169
12x1	1 3/4	3000	19JC05020	19JC05070	19JC05120	19JC05170
12x2	1 3/4	3000	19JC05021	19JC05071	19JC05121	19JC05171
12x4	1 3/4	2400	19JC05022	19JC05072	19JC05122	19JC05172
14x1	1 3/4	2400	19JC05023	19JC05073	19JC05123	19JC05173

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**Flap Wheels with Arbor Hole - Imperial**

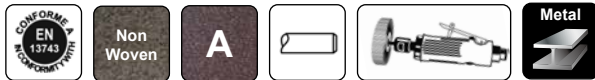
- ◆ Wide range of applications. For grinding, polishing and blending etc.
- ◆ No adjustments, dressing, or preparation required before or during operation
- ◆ Long life and fast cut
- ◆ Reduce the possibility of flatting, gouging and surface deformation
- ◆ Work with larger portable and fixed-base tools



Size (D x W) inch	Arbor Hole inch	Max. rpm	Order Number			
			40#	60#	80#	120#
14x1-1/2	1 3/4	2400	19JC05024	19JC05074	19JC05124	19JC05174
14x2	1 3/4	2400	19JC05025	19JC05075	19JC05125	19JC05175
14x3	1 3/4	2400	19JC05026	19JC05076	19JC05126	19JC05176
14x4	1 3/4	2400	19JC05027	19JC05077	19JC05127	19JC05177
16x1	1 3/4	2400	19JC05028	19JC05078	19JC05128	19JC05178
16x2	1 3/4	2400	19JC05029	19JC05079	19JC05129	19JC05179
16x3	1 3/4	2400	19JC05030	19JC05080	19JC05130	19JC05180
16x4	1 3/4	2000	19JC05031	19JC05081	19JC05131	19JC05181
16x5	1 3/4	2000	19JC05032	19JC05082	19JC05132	19JC05182
16x6	1 3/4	2000	19JC05033	19JC05083	19JC05133	19JC05183
16x8	1 3/4	1800	19JC05034	19JC05084	19JC05134	19JC05184
16x10	1 3/4	1800	19JC05035	19JC05085	19JC05135	19JC05185

**Remark:** • Please indicate the grit when ordering  
 • Other grit and other size are available

## Non-Woven Abrasive Flap Wheel With Mounted Steel Shank



### Metric

Size (D × W) mm	Shank mm	Max. rpm	Order Number			
			Coarse	Medium	Fine	X-Fine
30×20	6	25000	19JE00001	19JE00051	19JE00101	19JE00151
40×25	6	25000	19JE00001	19JE00052	19JE00102	19JE00152
50×25	6	20000	19JE00001	19JE00053	19JE00103	19JE00153
50×50	6	18000	19JE00001	19JE00054	19JE00104	19JE00154
60×25	6	18000	19JE00001	19JE00055	19JE00105	19JE00155
76×25	6	15000	19JE00001	19JE00056	19JE00106	19JE00156
76×50	6	13000	19JE00001	19JE00057	19JE00107	19JE00157
80×30	6	15000	19JE00001	19JE00058	19JE00108	19JE00158
80×50	6	13000	19JE00001	19JE00059	19JE00109	19JE00159
100×50	6	7000	19JE00001	19JE00060	19JE00110	19JE00160

### Imperial

Size (D × W) inch	Shank inch	Max. rpm	Order Number			
			Coarse	Medium	Fine	X-Fine
2×1	1/4	20000	19JE05001	19JE05051	19JE05101	19JE05151
2-1/2×1	1/4	18000	19JE05002	19JE05052	19JE05102	19JE05152
3×1	1/4	18000	19JE05003	19JE05053	19JE05103	19JE05153
3×2	1/4	13000	19JE05004	19JE05054	19JE05104	19JE05154
4×2	1/4	7000	19JE05005	19JE05055	19JE05105	19JE05155

**Remark:** • Please indicate the grit when ordering

**Non-Woven Abrasive Flap Wheel with Arbor Hole**



**Metric**

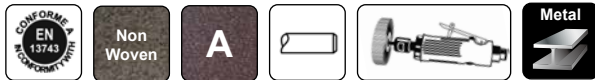
Size (D × W) mm	Arbor Hole mm	Max. rpm	Order Number			
			Coarse	Medium	Fine	X-Fine
150x25	25	6000	19JG00001	19JG00051	19JG00101	19JG00151
150x25	50	3000	19JG00002	19JG00052	19JG00102	19JG00152
150x50	25	6000	19JG00003	19JG00053	19JG00103	19JG00153
150x75	25	6000	19JG00004	19JG00054	19JG00104	19JG00154
200x25	75	2500	19JG00005	19JG00055	19JG00105	19JG00155
200x50	25	4500	19JG00006	19JG00056	19JG00106	19JG00156
200x50	75	2500	19JG00007	19JG00057	19JG00107	19JG00157
200x75	25	4500	19JG00008	19JG00058	19JG00108	19JG00158
300x25	125	1900	19JG00009	19JG00059	19JG00109	19JG00159
300x50	125	1900	19JG00010	19JG00060	19JG00110	19JG00160

**Imperial**

Size (D × W) inch	Arbor Hole inch	Max. rpm	Order Number			
			Coarse	Medium	Fine	X-Fine
6×1	1	6000	19JG05001	19JG05051	19JG05101	19JG05151
6×1	2	3000	19JG05002	19JG05052	19JG05102	19JG05152
6×2	1	6000	19JG05003	19JG05053	19JG05103	19JG05153
6×3	1	6000	19JG05004	19JG05054	19JG05104	19JG05154
8×1	3	2500	19JG05005	19JG05055	19JG05105	19JG05155
8×2	1	4500	19JG05006	19JG05056	19JG05106	19JG05156
8×2	3	2500	19JG05007	19JG05057	19JG05107	19JG05157
8×3	1	4500	19JG05008	19JG05058	19JG05108	19JG05158
12×1	5	1900	19JG05009	19JG05059	19JG05109	19JG05159
12×2	5	1900	19JG05010	19JG05060	19JG05110	19JG05160

**Remark:** • Please indicate the grit when ordering

## Interleaved Flap Wheel with Mounted Steel Shank



### Metric

Size (D × W) mm	Shank mm	Max. rpm	Order Number			
			Coarse	Medium	Fine	X-Fine
30×20	6	25000	19JF00001	19JF00051	19JF00101	19JF00151
40×25	6	25000	19JF00002	19JF00052	19JF00102	19JF00152
50×25	6	20000	19JF00003	19JF00053	19JF00103	19JF00153
50×50	6	18000	19JF00004	19JF00054	19JF00104	19JF00154
60×25	6	18000	19JF00005	19JF00055	19JF00105	19JF00155
76×25	6	15000	19JF00006	19JF00056	19JF00106	19JF00156
76×50	6	13000	19JF00007	19JF00057	19JF00107	19JF00157
80×30	6	15000	19JF00008	19JF00058	19JF00108	19JF00158
80×50	6	13000	19JF00009	19JF00059	19JF00109	19JF00159
100×50	6	7000	19JF00010	19JF00060	19JF00110	19JF00160

### Imperial

Size (D × W) inch	Shank inch	Max. rpm	Order Number			
			Coarse	Medium	Fine	X-Fine
2×1	1/4	20000	19JF05001	19JF05051	19JF05101	19JF05151
2-1/2×1	1/4	18000	19JF05002	19JF05052	19JF05102	19JF05152
3×1	1/4	18000	19JF05003	19JF05053	19JF05103	19JF05153
3×2	1/4	13000	19JF05004	19JF05054	19JF05104	19JF05154
4×2	1/4	7000	19JF05005	19JF05055	19JF05105	19JF05155

**Remark:** • Please indicate the grit when ordering

Interleaved Flap Wheel with Arbor Hole



Metric

Size (D × W) mm	Arbor Hole mm	Max. rpm	Order Number			
			Coarse	Medium	Fine	X-Fine
150x25	25	6000	19JH00001	19JH00051	19JH00101	19JH0151
150x25	50	3000	19JH00002	19JH00052	19JH00102	19JH0152
150x50	25	6000	19JH00003	19JH00053	19JH00103	19JH0153
150x75	25	6000	19JH00004	19JH00054	19JH00104	19JH0154
200x25	75	2500	19JH00005	19JH00055	19JH00105	19JH0155
200x50	25	4500	19JH00006	19JH00056	19JH00106	19JH0156
200x50	75	2500	19JH00007	19JH00057	19JH00107	19JH0157
200x75	25	4500	19JH00008	19JH00058	19JH00108	19JH0158
300x25	125	1900	19JH00009	19JH00059	19JH00109	19JH0159
300x50	125	1900	19JH00010	19JH00060	19JH00110	19JH0160

Imperial

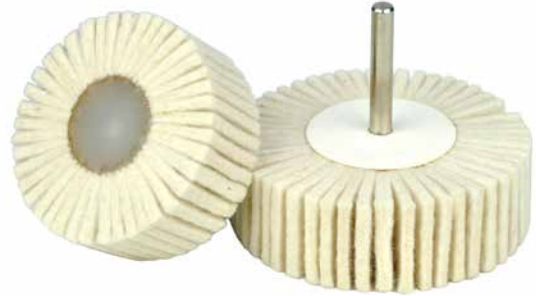
Size (D × W) inch	Arbor Hole inch	Max. rpm	Order Number			
			Coarse	Medium	Fine	X-Fine
6×1	1	6000	19JH05001	19JH05051	19JH05101	19JH05151
6×1	2	3000	19JH05002	19JH05052	19JH05102	19JH05152
6×2	1	6000	19JH05003	19JH05053	19JH05103	19JH05153
6×3	1	6000	19JH05004	19JH05054	19JH05104	19JH05154
8×1	3	2500	19JH05005	19JH05055	19JH05105	19JH05155
8×2	1	4500	19JH05006	19JH05056	19JH05106	19JH05156
8×2	3	2500	19JH05007	19JH05057	19JH05107	19JH05157
8×3	1	4500	19JH05008	19JH05058	19JH05108	19JH05158
12×1	5	1900	19JH05009	19JH05059	19JH05109	19JH05159
12×2	5	1900	19JH05010	19JH05060	19JH05110	19JH05160

Remark: • Please indicate the grit when ordering



## Felt Flap Wheels with Mounted Steel Shank

- ◆ Made of pure wool
- ◆ Ideal for mirror finishing/polishing on metal with finishing/polishing compound



### Metric

Size (D × W) mm	Shank mm	Grit	Max. rpm	Order Number
				X-Fine
30×25	6	N/A	25000	<b>19KE00001</b>
40×25	6	N/A	25000	<b>19KE00002</b>
50×25	6	N/A	20000	<b>19KE00003</b>
60×25	6	N/A	18000	<b>19KE00004</b>
76×25	6	N/A	15000	<b>19KE00005</b>

### Imperial

Size (D × W) mm	Shank mm	Grit	Max. rpm	Order Number
				X-Fine
1-1/4×1	1/4	N/A	25000	<b>19KE05001</b>
1-5/8×1	1/4	N/A	25000	<b>19KE05002</b>
2×1	1/4	N/A	20000	<b>19KE05003</b>
2-1/2×1	1/4	N/A	18000	<b>19KE05004</b>
3×1	1/4	N/A	15000	<b>19KE05005</b>

## Felt Bob

- ◆ Made from the high quality pure wool in a variety of sizes, shapes
- ◆ Suitable for finishing/polishing and buffing with finishing/polishing compounds
- ◆ Great for those difficult places to buff and polish.
- ◆ To produce a high surface finish
- ◆ Longer service life
- ◆ For use on die grinders, point grinders, flexible Shank machines, etc.



### Felt Bob - With 1/8" (3mm) Shank



Cylinder



Cylinder with ball top



Bullet



Taper with ball top



Ball



Inverted cone with ball top



Disc

Shape	Size (D × T) inch	Shank Dia. inch	Order Number	Size (D × T) mm	Shank DIA. mm	Order Number
			Imperial			Metric
Cylinder	3/16×3/8	1/8	<b>19KA00501</b>	5×10	3	<b>19KA00001</b>
Cylinder	1/4×3/8	1/8	<b>19KA00502</b>	6×10	3	<b>19KA00002</b>
Cylinder	5/16×3/8	1/8	<b>19KA00503</b>	8×10	3	<b>19KA00003</b>
Cylinder	3/8×9/16	1/8	<b>19KA00504</b>	10×14	3	<b>19KA00004</b>
Cylinder	1/2×3/4	1/8	<b>19KA00505</b>	12×20	3	<b>19KA00005</b>
Cylinder	5/8×3/4	1/8	<b>19KA00506</b>	15×20	3	<b>19KA00006</b>
Cylinder	3/4×3/4	1/8	<b>19KA00507</b>	20×20	3	<b>19KA00007</b>
Cylinder	5/32×5/16	1/8	<b>19KA00508</b>	4×8	3	<b>19KA00008</b>
Cylinder with ball top	3/16×3/8	1/8	<b>19KA00509</b>	5×9	3	<b>19KA00009</b>
Cylinder with ball top	1/4×3/8	1/8	<b>19KA00510</b>	6×10	3	<b>19KA00010</b>
Cylinder with ball top	5/16×3/8	1/8	<b>19KA00511</b>	8×10	3	<b>19KA00011</b>
Cylinder with ball top	3/8×1/2	1/8	<b>19KA00512</b>	10×13	3	<b>19KA00012</b>
Cylinder with ball top	1/2×9/16	1/8	<b>19KA00513</b>	12×14	3	<b>19KA00013</b>
Cylinder with ball top	1/2×3/4	1/8	<b>19KA00514</b>	12×20	3	<b>19KA00014</b>
Cylinder with ball top	5/8×3/4	1/8	<b>19KA00515</b>	15×20	3	<b>19KA00015</b>
Cylinder with ball top	5/32×3/8	1/8	<b>19KA00516</b>	4×10	3	<b>19KA00016</b>

Continue... ..

## Felt Bob - With 1/8" (3mm) Shank



Cylinder



Cylinder with ball top



Bullet



Taper with ball top



Ball



Inverted cone with ball top



Disc

Shape	Size (D x T) inch	Shank Dia. inch	Order Number	Size (D x T) mm	Shank DIA. mm	Order Number
			Imperial			Metric
Bullet	3/16x1/2	1/8	19KA00517	5x12	3	19KA00017
Bullet	1/4x5/8	1/8	19KA00518	6x16	3	19KA00018
Bullet	5/16x11/16	1/8	19KA00519	8x17	3	19KA00019
Bullet	3/8x9/16	1/8	19KA00520	10x14	3	19KA00020
Bullet	3/8x3/4	1/8	19KA00521	10x20	3	19KA00021
Bullet	1/2x3/4	1/8	19KA00522	12x20	3	19KA00022
Bullet	1/2x1	1/8	19KA00523	12x25	3	19KA00023
Bullet	5/16	1/8	19KA00524	8	3	19KA00024
Ball	3/8	1/8	19KA00525	10	3	19KA00025
Ball	1/2	1/8	19KA00526	12	3	19KA00026
Ball	3/4	1/8	19KA00527	18	3	19KA00027
Taper with ball top	3/8x9/16	1/8	19KA00528	10x14	3	19KA00028
Taper with ball top	1/2x1	1/8	19KA00529	12x25	3	19KA00029
Taper with plain top	1/2x11/16	1/8	19KA00530	12x18	3	19KA00030
Inverted cone with ball top	1/2x11/16	1/8	19KA00531	12x18	3	19KA00031
Disc	1x1/8	1/8	19KA00532	25x3	3	19KA00032
Disc	1x3/16	1/8	19KA00533	25x5	3	19KA00033

**Remark:** • Other sharps and sizes are available

**Felt Bob - With 1/4" (6mm) Shank**



Cylinder



Cylinder with ball top



Bullet



Conical



Oval



Inverted cone with ball top



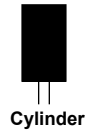
Ball

Shape	Size (D x T) inch	Shank Dia. inch	Order Number	Size (D x T) mm	Shank DIA. mm	Order Number
			Imperial			Metric
Cylinder	1/2x1	1/4	19KA00535	12x25	6	19KA00035
Cylinder	5/8x1	1/4	19KA00536	15x25	6	19KA00036
Cylinder	3/4x1	1/4	19KA00537	20x25	6	19KA00037
Cylinder	1x1-1/4	1/4	19KA00538	25x30	6	19KA00038
Cylinder	1-1/4x5/16	1/4	19KA00539	32x8	6	19KA00039
Cylinder	1-5/8x3/8	1/4	19KA00540	40x9.6	6	19KA00040
Cylinder with ball top	5/8x1	1/4	19KA00541	15x25	6	19KA00041
Cylinder with ball top	3/4x1	1/4	19KA00542	20x25	6	19KA00042
Cylinder with ball top	1x1-1/4	1/4	19KA00543	25x30	6	19KA00043
Bullet	5/8x1	1/4	19KA00544	15x25	6	19KA00044
Bullet	3/4x1	1/4	19KA00545	20x25	6	19KA00045
Bullet	1x1-1/4	1/4	19KA00546	25x30	6	19KA00046
Conical	1/2x1	1/4	19KA00547	13x25	6	19KA00047
Conical	3/4x1-1/2	1/4	19KA00548	19x38	6	19KA00048
Conical	1x1	1/4	19KA00549	25x50	6	19KA00049
Oval	1/2x1/2	1/4	19KA00550	13x13	6	19KA00050
Oval	3/4x3/4	1/4	19KA00551	19x19	6	19KA00051
Oval	1x1	1/4	19KA00552	25x25	6	19KA00052
Inverted cone with ball top	1/2x3/4	1/4	19KA00553	13x19	6	19KA00053
Ball	1/2	1/4	19KA00554	13	6	19KA00054
Ball	3/4	1/4	19KA00555	19	6	19KA00055
Ball	1	1/4	19KA00556	25	6	19KA00056

**Remark:** • Other sharps and sizes are available

## Non-Woven Polishing Wheel - With Handle

- ◆ Open construction enables aggressive cutting action
- ◆ Non-loading feature improved surface finish
- ◆ Smear-free finish
- ◆ Great for clean, deburr or finish a variety of surfaces, blend weld seams, or create decorative finishes.
- ◆ For use on die grinders, point grinders, flexible Shank machines, etc.



Shape	Size (D × T) inch	Shank Dia. inch	Order Number	Size (D × T) mm	Shank DIA. mm	Order Number	Grit	Color
			Imperial			Metric		
Cylinder	1/4×1/2	1/8	<b>19KF00501</b>	6×13	3	<b>19KF00001</b>	240#	Yellow
Cylinder	3/8×1/2	1/8	<b>19KF00503</b>	10×13	3	<b>19KF00003</b>	240#	Yellow
Cylinder	1/2×1/2	1/4	<b>19KF00505</b>	13×13	6	<b>19KF00005</b>	240#	Yellow
Cylinder	1×1/2	1/4	<b>19KF00506</b>	25×13	6	<b>19KF00006</b>	240#	Yellow
Cylinder	1/4×1/2	1/8	<b>19KF00508</b>	6×13	3	<b>19KF00008</b>	320#	Green
Cylinder	3/8×1/2	1/8	<b>19KF00510</b>	10×13	3	<b>19KF00010</b>	320#	Green
Cylinder	1/2×1/2	1/4	<b>19KF00512</b>	13×13	6	<b>19KF00012</b>	320#	Green
Cylinder	1×1/2	1/4	<b>19KF00513</b>	25×13	6	<b>19KF00013</b>	320#	Green
Cylinder	1/4×1/2	1/8	<b>19KF00515</b>	6×13	3	<b>19KF00015</b>	400#	Orange
Cylinder	3/8×1/2	1/8	<b>19KF00517</b>	10×13	3	<b>19KF00017</b>	400#	Orange
Cylinder	1/2×1/2	1/4	<b>19KF00519</b>	13×13	6	<b>19KF00019</b>	400#	Orange
Cylinder	1×1/2	1/4	<b>19KF00520</b>	25×13	6	<b>19KF00020</b>	400#	Orange
Cylinder	1/4×1/2	1/8	<b>19KF00522</b>	6×13	3	<b>19KF00022</b>	600#	Pink
Cylinder	3/8×1/2	1/8	<b>19KF00524</b>	10×13	3	<b>19KF00024</b>	600#	Pink
Cylinder	1/2×1/2	1/4	<b>19KF00526</b>	13×13	6	<b>19KF00026</b>	600#	Pink
Cylinder	1×1/2	1/4	<b>19KF00527</b>	25×13	6	<b>19KF00027</b>	600#	Pink
Cylinder	1/4×1/2	1/8	<b>19KF00529</b>	6×13	3	<b>19KF00029</b>	800#	Purple
Cylinder	3/8×1/2	1/8	<b>19KF00531</b>	10×13	3	<b>19KF00031</b>	800#	Purple
Cylinder	1/2×1/2	1/4	<b>19KF00533</b>	13×13	6	<b>19KF00033</b>	800#	Purple
Cylinder	1×1/2	1/4	<b>19KF00534</b>	25×13	6	<b>19KF00034</b>	800#	Purple
Cylinder	1/4×1/2	1/8	<b>19KF00536</b>	6×13	3	<b>19KF00036</b>	1000#	Brown
Cylinder	3/8×1/2	1/8	<b>19KF00538</b>	10×13	3	<b>19KF00038</b>	1000#	Brown
Cylinder	1/2×1/2	1/4	<b>19KF00540</b>	13×13	6	<b>19KF00040</b>	1000#	Brown
Cylinder	1×1/2	1/4	<b>19KF00541</b>	25×13	6	<b>19KF00041</b>	1000#	Brown
Cylinder	1/4×1/2	1/8	<b>19KF00543</b>	6×13	3	<b>19KF00043</b>	1500#	Blue
Cylinder	3/8×1/2	1/8	<b>19KF00545</b>	10×13	3	<b>19KF00045</b>	1500#	Blue
Cylinder	1/2×1/2	1/4	<b>19KF00547</b>	13×13	6	<b>19KF00047</b>	1500#	Blue
Cylinder	1×1/2	1/4	<b>19KF00548</b>	25×13	6	<b>19KF00048</b>	1500#	Blue

## Polish Buffing Compound

- ◆ The working part of the polishing & buffing process, to be used with buffs.



### Polish Buffing Compound - Liquid Type



Color	Abrasive	weight	Description	Grit	Gloss Level	Application	Feature	Work with	Order Number
Black	Silicon carbide	250g	Strong cut	≤120	1-2	For heavy removal application	For cutting brass, hardened steel and cast iron,	sisal buffs and cloth buffs.	<b>19KA00035</b>
Black	Silicon carbide	500g	Strong cut	≤120	1-2	For heavy removal application	For cutting brass, hardened steel and cast iron,	sisal buffs	<b>19KA00036</b>
Black	Silicon carbide	250g	Intensive	≥400	6-8	For light removal application	For polishing brass, hardened steel and cast iron,	sisal buffs and cloth buffs.	<b>19KA00037</b>
Black	Silicon carbide	500g	Intensive	≥400	6-8	For light removal application	For polishing brass, hardened steel and cast iron,	sisal buffs and cloth buffs	<b>19KA00038</b>

## Polish Buffing Compound - Solid Type



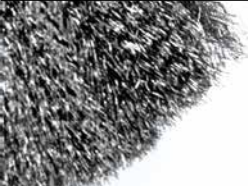

Color	Abrasive	weight	Description	Grit	Gloss Level	Application	Feature	Work with	Order Number
Brown	tripoli	1000g	Strong cut	≤220	1-2	Fast result due to high degree of cut. Having excellent cutting power with coloring result.	Suitable for brass, aluminium, zinc diecasting, non-ferrous metal etc	sisal buffs and cloth buffs.	<b>19KA00035</b>
White	alumina	800g	Pre Polish	220-380	3-6	Fast and effective cleaning, for cutting operation with levelling and coloring result.	Suitable for stainless steel, carbon steel, brass, aluminium, zinc diecasting, etc.	sisal buffs	<b>19KA00036</b>
Pink	alumina	800g	Pre Polish	220-380	3-7	Fast and effective cleaning, having excellent cutting power and coloring result.	One stage operation for cutting and coloring with sisal buffs.	sisal buffs and cloth buffs.	<b>19KA00037</b>
Pink	alumina	800g	Intensive	≥400	6-8	Removes polishing line after pre polishing, as well as small amount of wear, having excellent cutting power and coloring result.	One stage operation for cutting and coloring with sisal buffs	sisal buffs and cloth buffs	<b>19KA00038</b>
Green	alumina and silica	800g	Intensive	≥400	608	Removes polishing line after pre polishing, as well as small amount of wear, having excellent coloring result.	Suitable for all metal with coloring operation. Also can be worked on plastic parts, PE, PU coating surface for coloring operation.	cloth buffs	<b>19KA00039</b>
Black	alumina	800g	Final finish	≥600	6-8	Fine finishing of surface and a brilliant mirror finish	Suitable for one stage cutting and coloring operation on ferrous and non-ferrous metal. excellent mirror finishing result, and tailor made products	cloth buffs	<b>19KA00040</b>
Blue	alumina	800g	Super finish	≥800	9-10	Gloss optimisation and removal of micro scratches, perfect mirror finishing for the most demanding application	Suitable for all metal, wooden furnitures, plastic parts, PE, PU coatings	cloth buffs	<b>19KA00041</b>

## Wire Brush





- ◆ For Cleaning rust, scale and dirt; light deburring; edge blending; roughening for adhesion; finishing for appearance; finish preparation prior to plating or painting



## Wire Type

Crimped	Knotted
	
<ul style="list-style-type: none"> <li>◆ Crimped brushes provide additional strength compared to straight brushes and are commonly used where a knotted brush's impact would alter the working surface.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Knotted brushes are made up of multiple filaments/ wires bundled together to provide the most aggressive brushing action.</li> </ul>

## Wire Type

Power Tool Used	Type Of Brush	Wire Construction	Application
 Flat brushing	Cup brushes	Crimped	For surface cleaning and fine finishing on large surface
		Knotted	For heavy duty cleaning and brushing such as deburring, weld edge cleaning, etc
 Angle brushing	Saucer-cup	Knotted	For weld cleaning, weld spatter removal and deburring in hard to reach places such as inside corners, edges and contours.
 Vertical brushing	Wheel brushes	Stringer	For cleaning pipe welds between passes, brushing in narrow grooves, etc
		Knotted	For surface cleaning after welding, to remove scale, spatter, rust and corrosion
 Vertical brushing	Mounted brushes	Crimped	For general surface cleaning, rust, scale and paint removal
		Knotted	For heavy duty application such as deburring, removing heavy rust, etc



## Cup Brush - Crimped Wire

- ◆ For light-to medium-duty brushing applications on flat or irregular surfaces, and bevel buffing
- ◆ Highly flexible heavy wire fill
- ◆ Fast brushing action
- ◆ Equipped with threaded arbors for quick and easy mounting



Size (D)		Mount	Wire Dia.	Max. rpm	Order Number		
inch	mm				Carbon Steel	Stainless steel	Brass
2-1/2	65	M10×1.5	0.35	12500	19HJ00301	19HJ00901	19HJ00601
2-1/2	65	M10×1.25	0.35	12500	19HJ00302	19HJ00902	19HJ00602
2-1/2	65	5/8-11	0.35	12500	19HJ00303	19HJ00903	19HJ00603
3	75	M10×1.5	0.35	12500	19HJ00304	19HJ00904	19HJ00604
3	75	M10×1.25	0.35	12500	19HJ00305	19HJ00905	19HJ00605
3	75	M14×2.0	0.35	12500	19HJ00306	19HJ00906	19HJ00606
3	75	5/8-11	0.35	12500	19HJ00307	19HJ00907	19HJ00607
4	100	M10×1.5	0.35	9000	19HJ00308	19HJ00908	19HJ00608
4	100	M10×1.25	0.35	9000	19HJ00309	19HJ00909	19HJ00609
4	100	M14×2.0	0.35	9000	19HJ00310	19HJ00910	19HJ00610
4	100	5/8-11	0.35	9000	19HJ00311	19HJ00911	19HJ00611
5	125	M10×1.5	0.35	6000	19HJ00312	19HJ00912	19HJ00612
5	125	M10×1.25	0.35	6000	19HJ00313	19HJ00913	19HJ00613
5	125	M14×2.0	0.35	6000	19HJ00314	19HJ00914	19HJ00614
5	125	5/8-11	0.35	6000	19HJ00315	19HJ00915	19HJ00615

### Cup Brush - Twist Knot Wire

- ◆ High Impact Cutting And Cleaning On More Demanding Applications
- ◆ Rigid structure ensure high impact cutting and cleaning on more demanding applications
- ◆ Limits flaring of the brush on corners and angles
- ◆ Equipped with threaded arbors for quick and easy mounting



Size (D)		Mount	Wire Dia.	Max. rpm	Order Number	
inch	mm				Carbon Steel	Stainless steel
2-1/2	65	M10×1.5	0.5	12500	19HL00301	19HL00901
2-1/2	65	M10×1.25	0.5	12500	19HL00302	19HL00902
2-1/2	65	5/8-11	0.5	12500	19HL00303	19HL00903
3	75	M10×1.5	0.5	12500	19HL00304	19HL00904
3	75	M10×1.25	0.5	12500	19HL00305	19HL00905
3	75	M14×2.0	0.5	12500	19HL00306	19HL00906
3	75	5/8-11	0.5	12500	19HL00307	19HL00907
4	100	M10×1.5	0.5	9000	19HL00308	19HL00908
4	100	M10×1.25	0.5	9000	19HL00309	19HL00909
4	100	M14×2.0	0.5	9000	19HL00310	19HL00910
4	100	5/8-11	0.5	9000	19HL00311	19HL00911
5	125	M10×1.5	0.5	6000	19HL00312	19HL00912
5	125	M10×1.25	0.5	6000	19HL00313	19HL00913
5	125	M14×2.0	0.5	6000	19HL00314	19HL00914
5	125	5/8-11	0.5	6000	19HL00315	19HL00915

Remark: • Wire dia.0.35mm are available

## Saucer Brush - Twist Knot Wire

- ◆ For surface cleaning like removing paint, rust and corrosion
- ◆ Saucer cup shape allows working in hard to reach spots like inside corners, edges and contours
- ◆ Tightly knotted for maximum impact and long brush life
- ◆ Fast brushing action
- ◆ Equipped with threaded arbors for quick and easy mounting



Size (D)		Mount	Wire Dia.	Max. rpm	Order Number	
inch	mm				Carbon Steel	Stainless steel
4	100	M10×1.5	0.5	12500	19HK00301	19HK00901
4	100	M10 X1.25	0.5	12500	19HK00302	19HK00902
4	100	M14×2.0	0.5	12500	19HK00303	19HK00903
4	100	5/8-11	0.5	12500	19HK00304	19HK00904
4 -1/2	115	M14×2.0	0.5	12500	19HK00305	19HK00905
4 -1/2	115	5/8-11	0.5	12500	19HK00306	19HK00906

Remark: • Wire dia.0.35mm are available

## Wheel Brush - Crimped Wire

- ◆ Excellent performance for deburring, removing rust, corrosion and dirt
- ◆ Single-section, narrow-faced brushes are ideal for general-purpose brushing of uneven or difficult-to-reach surfaces
- ◆ Single section, medium-faced brushes clean larger surface areas and have longer life
- ◆ Equipped with threaded arbors for quick and easy mounting



Size (D)		Mount	Wire Dia.	Max. rpm	Order Number	
inch	mm				Carbon Steel	Stainless steel
4	100	M14×2.0	0.5	12500	19HM02001	19HM02901
4	100	5/8-11	0.5	12500	19HM02002	19HM02902
4 -1/2	115	M14×2.0	0.5	12500	19HM02003	19HM02903
4 -1/2	115	5/8-11	0.5	12500	19HM02004	19HM02904

### Wheel Brush - Twist Knot Wire

- ◆ Ideal for welding and metal fabrication applications (Removing weld scale spatter, extra-heavy rust and corrosion, or surface roughening)
- ◆ Twist knot wire design Provides added rigidity for extra cutting power
- ◆ Stiffer, longer-lasting knots for tougher applications / heavy build-up
- ◆ Equipped with threaded arbors for quick and easy mounting



Size (D)		Hole Size	Wire Dia. mm	Knot NO.	Max. rpm	Order Number	
inch	mm					Carbon Steel	Stainless steel
4	100	M10×1.5	0.5	18	12500	19HM00001	19HM00901
4	100	M10×1.25	0.5	18	12500	19HM00002	19HM00902
4	100	M14×2.0	0.5	18	12500	19HM00003	19HM00903
4-1/2	115	M14×2.0	0.5	20	12500	19HM00004	19HM00904
4-1/2	115	M16×2.0	0.5	20	12500	19HM00005	19HM00905
4-1/2	115	5/8-11	0.5	20	12500	19HM00006	19HM00906
5	125	M14×2.0	0.5	20	10000	19HM00007	19HM00907
5	125	M16×2.0	0.5	20	1000	19HM00008	19HM00908
5	125	5/8-11	0.5	20	1000	19HM00009	19HM00909
6	150	M14×2.0	0.5	24	9000	19HM00010	19HM00910
6	150	M16×2.0	0.5	24	9000	19HM00011	19HM00911
6	150	5/8-11	0.5	24	9000	19HM00012	19HM00912

## Wheel Brush - Stringer Bead Knot Wire

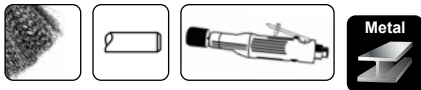
- ◆ Deliver high-impact cutting and cleaning for toughest applications
- ◆ Stringer bead wire for hard-to-reach areas
- ◆ Specially suited for groove and weld bead, corners, and t-connections
- ◆ Used for brushing joints, cleaning cracks in concrete and asphalt, and preparing expansion joints for filling and scaling
- ◆ Equipped with threaded arbors for quick and easy mounting



Size (D)		Hole Size	Wire Dia. mm	Knot NO.	Max. rpm	Order Number	
inch	mm					Carbon Steel	Stainless steel
4	100	M10×1.5	0.5	30	12500	19HN00001	19HN00901
4	100	M10×1.25	0.5	30	12500	19HN00002	19HN00902
4	100	M14×2.0	0.5	30	12500	19HN00003	19HN00903
4-1/2	115	M14×2.0	0.5	20	12500	19HN00004	19HN00904
4-1/2	115	M16×2.0	0.5	20	12500	19HN00005	19HN00905
4-1/2	115	5/8-11	0.5	20	12500	19HN00006	19HN00906
6	150	M14×2.0	0.5	48	9000	19HN00007	19HN00907
6	150	M16×2.0	0.5	48	9000	19HN00008	19HN00908
6	150	5/8-11	0.5	48	9000	19HN00009	19HN00909
7	180	M14×2.0	0.5	48	9000	19HN00010	19HN00910
7	180	M16×2.0	0.5	48	9000	19HN00011	19HN00911
7	180	5/8-11	0.5	48	9000	19HN00012	19HN00912

### Cup Brush With Mounted Steel Shank - Crimped Wire

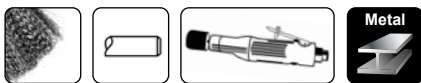
- ◆ For Light-to medium-duty brushing applications on flat or irregular surfaces, and bevel buffing
- ◆ Highly flexible heavy wire fill
- ◆ Fast cutting



Size (D)		Shank Size	Wire Dia.	Max. rpm	Order Number		
inch					Carbon Steel	Stainless steel	Brass
2	50	6	0.3	4500	19HA03001	19HA03901	19HA03601
2-1/2	65	6	0.3	4500	19HA03002	19HA03902	19HA03602
3	75	6	0.3	4500	19HA03003	19HA03903	19HA03603

### Wheel Brush With Mounted Steel Shank - Crimped Wire

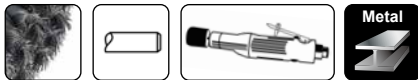
- ◆ Excellent performance for deburring, removing rust, corrosion and dirt
- ◆ Single-section, narrow-faced brushes are ideal for general-purpose brushing of uneven or difficult-to-reach surfaces
- ◆ Single section, medium-faced brushes clean larger surface areas and have longer life



Size (D)		Shank Size	Wire Dia.	Max. rpm	Order Number		
inch	mm				Carbon Steel	Stainless steel	Brass
1-1/4	30	6	0.3	18000	19HA00001	19HA00901	19HA00601
2	50	6	0.3	15000	19HA00002	19HA00902	19HA00602
2-1/2	65	6	0.3	15000	19HA00003	19HA00903	19HA00603
3	75	6	0.3	12000	19HA00004	19HA00904	19HA00604
3-1/4	80	6	0.3	12000	19HA00005	19HA00905	19HA00605

## Wheel Brush With Mounted Steel Shank - Twist Knot Wire

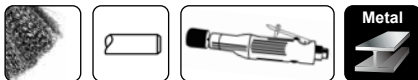
- ◆ Great for heavy duty brushing like deburring, removing heavy rust and corrosion, etc.
- ◆ Twist knot wire design Provides added rigidity for extra cutting power
- ◆ Stiffer, longer-lasting knots for tougher applications / heavy build-up



Size (D)		Shank Size	Wire Dia.	Max. rpm	Order Number	
inch	mm				Carbon Steel	Stainless steel
3	75	6	0.4	12500	19HA02001	19HA02901
4	100	6	0.4	12500	19HA02002	19HA02902

## End Brush - Crimped Wire

- ◆ For clean and deburr a recessed area or the inside diameter of a tube or pipe
- ◆ Twist knot wire end brushes For more aggressive cutting



Size (D)		Shank Size	Wire Dia.	Max. rpm	Order Number		
inch	mm				Carbon Steel	Stainless steel	Brass
1/4	6	6	0.3	20000	19HC00001	19HC00901	19HC00601
3/8	10	6	0.3	20000	19HC00002	19HC00902	19HC00602
1/2	12	6	0.3	20000	19HC00003	19HC00903	19HC00603
5/8	16	6	0.3	20000	19HC00004	19HC00904	19HC00604
3/4	20	6	0.3	20000	19HC00005	19HC00905	19HC00605
7/8	22	6	0.3	20000	19HC00006	19HC00906	19HC00606
1	25	6	0.3	20000	19HC00007	19HC00907	19HC00607
1-1/4	32	6	0.3	20000	19HC00008	19HC00908	19HC00608

### Ring Type

5/8	16	6	0.3	20000	19HD00001	19HD00901	19HD00601
3/4	20	6	0.3	20000	19HD00002	19HD00902	19HD00602
7/8	22	6	0.3	20000	19HD00003	19HD00903	19HD00603
1	25	6	0.3	20000	19HD00004	19HD00904	19HD00604

### End Brush - Twist Knot Wire

- ◆ For clean and deburr a recessed area or the inside diameter of a tube or pipe
- ◆ Crimped wire end brushes For lighter brushing action and contoured surfaces



Size (D)		Shank Size	Wire Dia.	Max. rpm	Order Number	
inch	mm				Carbon Steel	Stainless steel
1/2	13	6	0.3	20000	19HP0001	19HP00901
3/4	20	6	0.3	20000	19HP0001	19HP00902
1	25	6	0.3	20000	19HP0001	19HP00903

### Hand Brush

- ◆ Ergonomic Plastic handle scratch brush
- ◆ Crimped wire for longer life
- ◆ Strong construction prevent wire come out
- ◆ Curved face for hard-to-reach places
- ◆ Narrow brush allows access into tight areas and slots
- ◆ Steel scratch brushes are made with a high-carbon, brass-coated steel; stainless steel is made with a 304L stainless

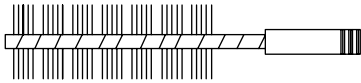


Type	Brush Size (D×T) mm	Overall L. mm	Order Number		
			Steel	Brass	Inox
1-row	5×130	280	19HE00301	19HE00601	19HE00901
2-row	10×130	280	19HE00302	19HE00602	19HE00902
3-row	15×130	280	19HE00303	19HE00603	19HE00903
4-row	20×130	280	19HE00304	19HE00604	19HE00904
4-row with scraper	20×130	280	19HE00305	19HE00605	19HE00905
5-row	25×130	280	19HE00306	19HE00606	19HE00906



## Tube Brushes With Thread

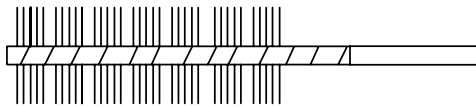
- ◆ For industrial maintenance, agricultural, workshop, machinery etc.
- ◆ For decarbonising and heavy duty cleaning use of tubes, struts, awkward places etc.



Size (Dia.)		Brush Length mm	Overall length mm	Thread	Order Number			
inch	mm				Steel	Stainless steel	Brass	Nylon
1/4	6	60	100	3/16F	19HE30301	19HE30601	19HE30901	19HE30801
5/16	8	60	100	3/16F	19HE30302	19HE30602	19HE30902	19HE30802
3/8	10	80	130	3/16M	19HE30303	19HE30603	19HE30903	19HE30803
1/2	13	90	140	1/4M	19HE30304	19HE30604	19HE30904	19HE30804
5/8	16	90	140	5/16M	19HE30305	19HE30605	19HE30905	19HE30805
3/4	19	90	140	5/16M	19HE30306	19HE30606	19HE30906	19HE30806
1	25	110	190	1/2M	19HE30307	19HE30607	19HE30907	19HE30807
1-1/4	32	110	190	1/2M	19HE30308	19HE30608	19HE30908	19HE30808
1-1/2	38	110	190	1/2M	19HE30309	19HE30609	19HE30909	19HE30809
1-3/4	45	110	190	1/2M	19HE30310	19HE30610	19HE30910	19HE30810
2	50	110	190	1/2M	19HE30311	19HE30611	19HE30911	19HE30811
2-1/4	57	110	190	1/2M	19HE30312	19HE30612	19HE30912	19HE30812
2-1/2	64	110	190	1/2M	19HE30313	19HE30613	19HE30913	19HE30813
2-3/4	70	110	190	1/2M	19HE30314	19HE30614	19HE30914	19HE30814
3	76	110	190	1/2M	19HE30315	19HE30615	19HE30915	19HE30815
3-1/2	89	110	190	1/2M	19HE30316	19HE30616	19HE30916	19HE30816
4	102	110	190	1/2M	19HE30317	19HE30617	19HE30917	19HE30817
4-1/2	115	110	190	1/2M	19HE30318	19HE30618	19HE30918	19HE30818
5	127	125	210	1/2M	19HE30319	19HE30619	19HE30919	19HE30819
5-1/2	140	125	210	1/2M	19HE30320	19HE30620	19HE30920	19HE30820
6	152	125	210	1/2M	19HE30321	19HE30621	19HE30921	19HE30821

### Tube Brushes With Shank

- ◆ For industrial maintenance, agricultural, workshop, machinery etc.
- ◆ For decarbonising and heavy duty cleaning use of tubes, struts, awkward places etc.



Size (Dia.)		Brush Length mm	Overall length mm	Shank mm	Order Number			
inch	mm				Steel	Stainless steel	Brass	Nylon

Tube brushes with Shank



3/8	10	60	100	6	19HE40301	19HE40601	19HE40901	19HE40801
5/8	16	60	100	6	19HE40302	19HE40602	19HE40902	19HE40802
3/4	19	60	100	6	19HE40303	19HE40603	19HE40903	19HE40803
1	25	60	100	6	19HE40304	19HE40604	19HE40904	19HE40804
1-1/4	32	60	100	6	19HE40305	19HE40605	19HE40905	19HE40805
1-1/2	38	60	100	6	19HE40306	19HE40606	19HE40906	19HE40806

Tube brushes with Shank-double spiral



5/8	16	60	100	6	19HE50302	19HE50602	19HE50902	19HE50802
3/4	19	60	100	6	19HE50303	19HE50603	19HE50903	19HE50803
1	25	60	100	6	19HE50304	19HE50604	19HE50904	19HE50804

Tube brushes with Shank-x-spiral



1-1/4	32	100	180	1/2M	19HE60301	19HE60601	19HE60901	19HE60801
1-1/2	38	100	180	1/2M	19HE60302	19HE60602	19HE60902	19HE60802
1-3/4	45	100	180	1/2M	19HE60303	19HE60603	19HE60903	19HE60803
2	50	100	180	1/2M	19HE60304	19HE60604	19HE60904	19HE60804
2-1/2	64	100	180	1/2M	19HE60305	19HE60605	19HE60905	19HE60805
2-3/4	70	100	180	1/2M	19HE60306	19HE60606	19HE60906	19HE60806
3	76	100	180	1/2M	19HE60307	19HE60607	19HE60907	19HE60807

## Flex Hone Brushes

- ◆ Used to improve the internal surface finish while also being able to deburr a bore or cylinder in brake cylinders, wheel cylinders, hydraulics, pneumatics and valve guides, etc.
- ◆ Comprised of abrasive globules laminated onto the ends of flexible nylon filaments
- ◆ Unique construction allows the tool to be self-aligning, self-centering and self-compensating for wear
- ◆ Removing loose, torn and folded metal and creating a substantially flat or plateau surface
- ◆ Burr removal from cross-drilled holes
- ◆ Always requires the use of a lubricant or honing oil.



Many fluids may be used general applications: water soluble oils, mineral oils, motor oils, and cutting/tapping fluids (solvents should be avoided, as they tend to degrade the adhesive bond in the tool)

Abrasive Material	Feature
Silicon carbide	Mild steel, stainless steel and cast iron
Aluminum oxide	Aluminum, brass, bronze, and soft metal.
Zirconia Alumina	Low carbon to medium carbon steels, stainless steel and cast iron
Boron Carbide	Medium to high carbon steels and heat treated steels to 50RC. Titanium, Inconel, and Monel

## Suggested RPM

- ◆ The flex-hone tools is a low RPM tool. Specific RPM is dependent on the diameter of the tool and the application.
- ◆ General speed ranges are given but, again, machine trials are required to verify the parameters.

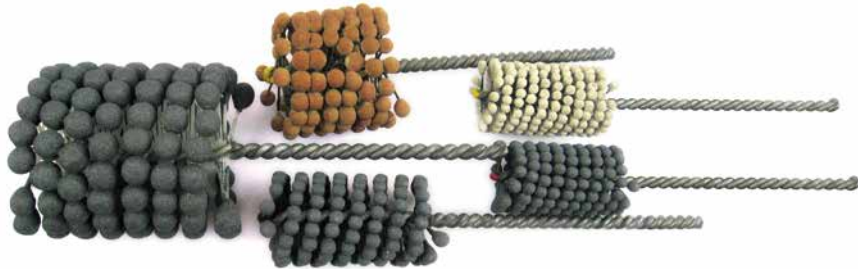
Hole dia.	RPM
4mm to 1/2	800-1200RPM
1/2 to 2	700-900RPM
2 to 4	600-800RPM
4 to 8	400-600RPM
8 to 12	300-500RPM
12 to 18	80 -350RPM
19 and 36	60-120RPM

## Grit Selection

- ◆ The chart is intended to offer a starting point in selecting a grit but the final selection must be verified by actual trial

Grit	Finishing range
800-LA	Ra 3-10(0.05-0.2 micrometer)
600	Ra 8-12(0.2-0.3 micrometer)
400	Ra 10-20(0.3-0.6micrometer)
320	Ra 18-30(0.5-0.7 micrometer)
240	Ra 24-32(0.6-0.8 micrometer)
180	Ra 30-40(0.7-1.0 micrometer)
120	Ra 35-50(0.9-1.4 micrometer)
80	Ra 45-64(1.2-1.6 micrometer)
60	Ra 60-80(1.5-2.0 micrometer)
40	Ra 70-125(1.7-3.2 micrometer)
20	Ra 125-250(3.2-6.3 micrometer)

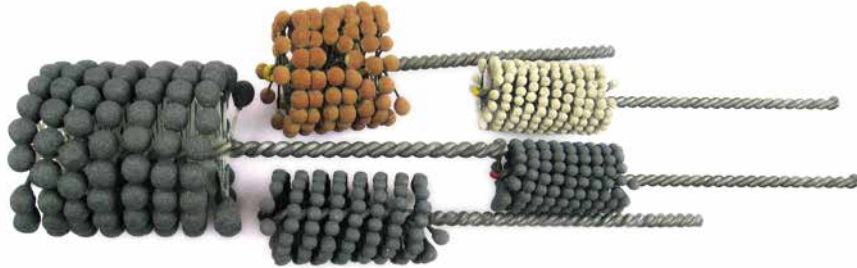
Flex Hone Brushes



Size(D)		Head Length		Overall Length		Shank Dia.		Order Number			
mm	inch	mm	inch	mm	inch	mm	inch	120#	180#	240#	400#
7	9/32	50	2	150	6	3.7	9/64	19HF00001	19HF00301	19HF00601	19HF00901
8	5/16	50	2	150	6	3.7	9/64	19HF00002	19HF00302	19HF00602	19HF00902
9	23/64	50	2	150	6	3.7	9/64	19HF00003	19HF00303	19HF00603	19HF00903
10	3/8	50	2	150	6	3.7	9/64	19HF00004	19HF00304	19HF00604	19HF00904
11	7/16	60	2-3/8	160	6-1/2	3.7	9/64	19HF00005	19HF00305	19HF00605	19HF00905
12	15/32	60	2-3/8	160	6-1/2	3.7	9/64	19HF00006	19HF00306	19HF00606	19HF00906
13	1/2	60	2-3/8	160	6-1/2	3.7	9/64	19HF00007	19HF00307	19HF00607	19HF00907
16	5/8	60	2-3/8	160	6-1/2	3.7	9/64	19HF00008	19HF00308	19HF00608	19HF00908
18	23/32	60	2-3/8	160	6-1/2	4.6	3/16	19HF00009	19HF00309	19HF00609	19HF00909
20	25/32	60	2-3/8	160	6-1/2	4.6	3/16	19HF00010	19HF00310	19HF00610	19HF00910
22	7/8	70	2-3/4	180	7	4.6	3/16	19HF00011	19HF00311	19HF00611	19HF00911
25	1	70	2-3/4	180	7	4.6	3/16	19HF00012	19HF00312	19HF00612	19HF00912
27	1-1/16	70	2-3/4	180	7	5.1	13/64	19HF00013	19HF00313	19HF00613	19HF00913
28	1-1/8	70	2-3/4	180	7	5.1	13/64	19HF00014	19HF00314	19HF00614	19HF00914
30	1-3/16	70	2-3/4	180	7	5.1	13/64	19HF00015	19HF00315	19HF00615	19HF00915
32	1-1/4	70	2-3/4	180	7	5.1	13/64	19HF00016	19HF00316	19HF00616	19HF00916
35	1-3/8	70	2-3/4	180	7	5.1	13/64	19HF00017	19HF00317	19HF00617	19HF00917
38	1-1/2	70	2-3/4	180	7	5.7	7/32	19HF00018	19HF00318	19HF00618	19HF00918
41	1-5/8	70	2-3/4	180	7	5.7	7/32	19HF00019	19HF00319	19HF00619	19HF00919
45	1-3/4	70	2-3/4	180	7	5.7	7/32	19HF00020	19HF00320	19HF00620	19HF00920
48	1-7/8	70	2-3/4	180	7	5.7	7/32	19HF00021	19HF00321	19HF00621	19HF00921
51	2	70	2-3/4	180	7	6.5	1/4	19HF00022	19HF00322	19HF00622	19HF00922
54	2-1/8	70	2-3/4	180	7	6.5	1/4	19HF00023	19HF00323	19HF00623	19HF00923
57	2-1/4	70	2-3/4	180	7	6.5	1/4	19HF00024	19HF00324	19HF00624	19HF00924

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## Flex Hone Brushes

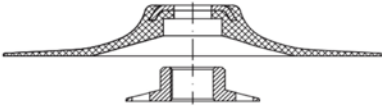
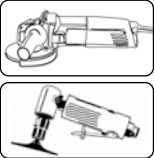


Size(D)		Head Length		Overall Length		Shank Dia.		Order Number			
mm	inch	mm	inch	mm	inch	mm	inch	120#	180#	240#	400#
60	2-3/8	70	2-3/4	200	8	7.3	9/32	19HF00025	19HF00325	19HF00625	19HF00925
64	2-1/2	70	2-3/4	200	8	7.3	9/32	19HF00026	19HF00326	19HF00626	19HF00926
67	2-5/8	70	2-3/4	200	8	7.3	9/32	19HF00027	19HF00327	19HF00627	19HF00927
70	2-3/4	70	2-3/4	200	8	By Order		19HF00028	19HF00328	19HF00628	19HF00928
73	2-7/8	70	2-3/4	200	8	By Order		19HF00029	19HF00329	19HF00629	19HF00929
76	3	70	2-3/4	200	8	By Order		19HF00030	19HF00330	19HF00630	19HF00930
79	3-1/8	70	2-3/4	200	8	By Order		19HF00031	19HF00331	19HF00631	19HF00931
83	3-1/4	76	3	200	8	By Order		19HF00032	19HF00332	19HF00632	19HF00932
89	3-1/2	76	3	200	8	By Order		19HF00033	19HF00333	19HF00633	19HF00933
95	3-3/4	89	3-9/16	200	8	By Order		19HF00034	19HF00334	19HF00634	19HF00934
105	4-1/8	102	4	200	8	By Order		19HF00035	19HF00335	19HF00635	19HF00935
118	4-5/8	114	4-1/2	200	8	By Order		19HF00036	19HF00336	19HF00636	19HF00936

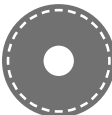

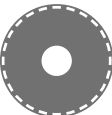
**Remark:** • Silicon carbide material • Other material available.

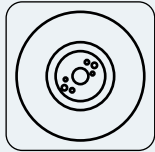

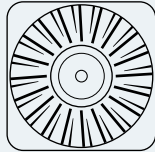
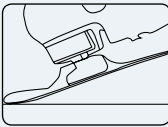

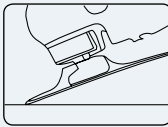

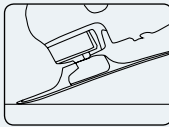



## Angle Grinder Pad

	<ul style="list-style-type: none"> <li>◆ Work with right angle grinders or polishing machines</li> <li>◆ Metal Zinc-alloy clamping nut included</li> </ul>	
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## The Right Back Up Pad

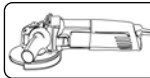
Overlapping		Non overlapping
 <p data-bbox="217 809 413 837">116mm Backing Pad</p>	 <p data-bbox="609 809 805 837">125mm Abrasive Disc</p>	 <p data-bbox="1007 809 1204 837">123mm Backing Pad</p>
<ul style="list-style-type: none"> <li>◆ Optimum Use of the abrasive disc</li> <li>◆ More accurate work in tight corners</li> <li>◆ Abrasive discs last longer</li> </ul>		<ul style="list-style-type: none"> <li>◆ Better for heavy duty work</li> <li>◆ Ideal on irregular surfaces (bolt heads etc.)</li> </ul>

Smooth Backing Pad (Soft)	Turbo Backing Pad (Hard)	Radial Backing Pad (Riged)
		
<ul style="list-style-type: none"> <li>◆ Pad feature smooth face</li> <li>◆ Better for use on curved surfaces and edges</li> </ul>	<ul style="list-style-type: none"> <li>◆ Pad feature spiral cooling ribs</li> <li>◆ Ensure a continuous stream of air between pad and disc for cool operation and long disc life while retaining some flexibility.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Pad feature radial cooling ribs</li> <li>◆ Improve the airflow on the pad ensure high heat resistance</li> <li>◆ For aggressive cutting action</li> </ul>
 <p data-bbox="217 1618 371 1646">Soft 80 + Finer</p> 	 <p data-bbox="588 1618 749 1646">Hard 36 + Finer</p> 	 <p data-bbox="979 1618 1141 1646">Riged 16 + Finer</p> 

**Remark:** • Customized flexibility and color available upon request

## Rigid Flexibility - Radial Backing Pad

- ◆ Bulid of High quality impact resistant plastic
- ◆ Fit with all kinds of electric and pneumatic angle grinders
- ◆ Radial ribbed backing improve airflow on the pad
- ◆ For aggressive cutting action



Abrasive Size (D)		Thread	Grits	Pad Size mm	Max. rpm	Order Number
inch	mm					
4-1/2	115	M10×1.5	16 + Finer	107	13300	19PD00032
4-1/2	115	M14×2	16 + Finer	107	13300	19PD00062
4-1/2	115	5/8-11UNC	16 + Finer	107	13300	19PD00092
5	125	M10×1.5	16 + Finer	117	12200	19PD00033
5	125	M14×2	16 + Finer	117	12200	19PD00063
5	125	5/8-11UNC	16 + Finer	117	12200	19PD00093
7	180	M14×2	16 + Finer	172	8500	19PD00035
7	180	M16×2	16 + Finer	172	8500	19PD00065
7	180	5/8-11UNC	16 + Finer	172	8500	19PD00095



### Hard Flexibility - Turbo Backing Pad

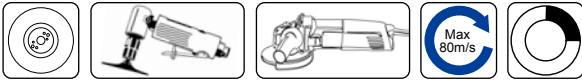
- ◆ Bulid of High quality impact resistant plastic, Flexible
- ◆ Fit with all kinds of electric and pneumatic angle grinders
- ◆ Turbe ribbed backing improve airflow helping cool the pad and abrasive while retaining flexibility
- ◆ For light weld removal and blending



Abrasive Size (D)		Thread	Grits	Pad Size mm	Max. rpm	Order Number
inch	mm					
4	100	M10×1.5	36 + Finer	98	15300	19PD02031
4	100	M14×2	36 + Finer	98	15300	19PD02061
4	100	5/8-11UNC	36 + Finer	98	15300	19PD02091
4-1/2	115	M10×1.5	36 + Finer	113	13300	19PD02032
4-1/2	115	M14×2	36 + Finer	113	13300	19PD02062
4-1/2	115	5/8-11UNC	36 + Finer	113	13300	19PD02092
5	125	M10×1.5	36 + Finer	124	12200	19PD02033
5	125	M14×2	36 + Finer	124	12200	19PD02063
5	125	5/8-11UNC	36 + Finer	124	12200	19PD02093
7	180	M14×2	36 + Finer	172	8500	19PD02035
7	180	M16×2	36 + Finer	172	8500	19PD02065
7	180	5/8-11UNC	36 + Finer	172	8500	19PD02095

## Soft Flexibility - Smooth Backing Pad

- ◆ Bulid of High quality impact resistant plastic, Flexible
- ◆ Fit with all kinds of electric and pneumatic angle grinders
- ◆ Better for use on curved surfaces and edges



Abrasive Size (D)		Thread	Grits	Pad Size mm	Max. rpm	Order Number
inch	mm					
4	100	M10×1.5	80 + Finer	98	15300	19PD03031
4	100	M14×2	80 + Finer	98	15300	19PD03061
4	100	5/8-11UNC	80 + Finer	98	15300	19PD03091
4-1/2	115	M10×1.5	80 + Finer	113	13300	19PD03032
4-1/2	115	M14×2	80 + Finer	113	13300	19PD03062
4-1/2	115	5/8-11UNC	80 + Finer	113	13300	19PD03092
5	125	M10×1.5	80 + Finer	124	12200	19PD03033
5	125	M14×2	80 + Finer	124	12200	19PD03063
5	125	5/8-11UNC	80 + Finer	124	12200	19PD03093
7	180	M14×2	80 + Finer	172	8500	19PD03035
7	180	M16×2	80 + Finer	172	8500	19PD03065
7	180	5/8-11UNC	80 + Finer	172	8500	19PD03095
9	230	M14×2	80 + Finer	220	6500	19PD03036
9	230	M16×2	80 + Finer	220	6500	19PD03066
9	230	5/8-11UNC	80 + Finer	220	6500	19PD03096

## Roloc Quick Change Disc Holder - With Steel Shank

◆ Tool-free, twist-on and -off fastening systems make fast work of disc changes

Type TR	Type TS
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◆ Fastener is made of plastic	◆ Fastener is made of metal
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Abrasive Size (D)		Thread	Grits	Pad Size mm	Max. rpm	Order Number	
inch	mm					Type TR	Type TS
1-1/2	38	1/4-20	34	1/4	25000	19PR00501	19PR00001
2	50	1/4-20	45	1/4	25000	19PR00502	19PR00002
3	75	1/4-20	69	1/4	18000	19PR00503	19PR00003
1-1/2	38	1/4-20	34	6	25000	19PR00551	19PR00051
2	50	1/4-20	45	6	25000	19PR00552	19PR00052
3	75	1/4-20	69	6	18000	19PR00553	19PR00053

**Remark:** • Customized flexibility and color available upon request

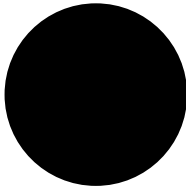
## Dual Action Orbital Sander Pad

- ◆ PUR molded, good flexibility and durability.
- ◆ One-piece bolt, strong and precise
- ◆ Well controlled balance and weight for vibration-free operation

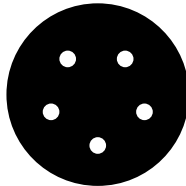


## Hole Type

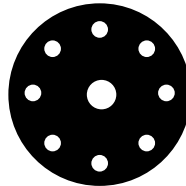
### 5" Pad Hole Configuration



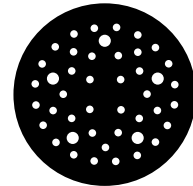
No-Hole



5 Holes

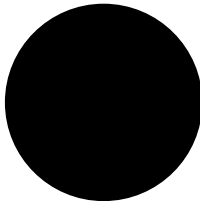


8+1 Holes

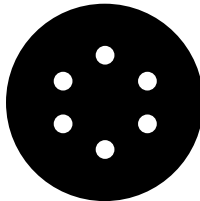


44 Holes

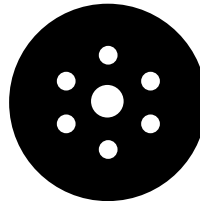
### 6" Pad Hole Configuration



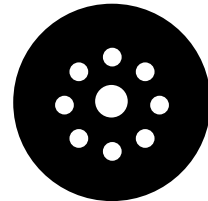
No-Hole



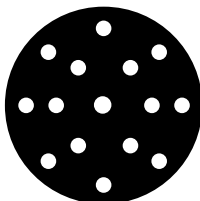
6 Holes



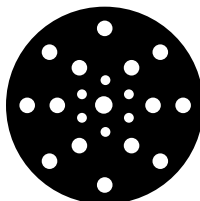
6+1 Holes



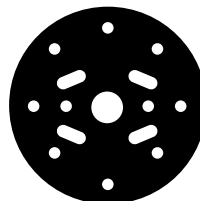
8+1 Holes



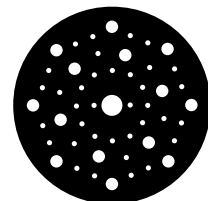
8+6+1 Holes



8+6+6+1 Holes



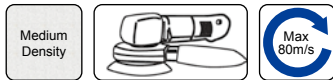
8+6 - 8+1 Holes



52 Holes

### Standard Type-With Fixed 5/16-24 Bolt

◆ Medium density pads are for all-purpose applications



Abrasive Size (D)		Thread	Density	Hole Type	Form Layer mm	Max. rpm	Order Number	
inch	mm						Velcro Face	PSA Face
5	125	5/16-24UNF	Medium	No hole	12	12000	19PA00001	19PA00501
5	125	5/16-24UNF	Medium	5holes	12	12000	19PA00002	19PA00502
5	125	5/16-24UNF	Medium	8 + 1 holes	12	12000	19PA00003	19PA00503
5	125	5/16-24UNF	Medium	44 holes	12	12000	19PA00004	19PA00504
6	150	5/16-24UNF	Medium	No hole	12	12000	19PA00005	19PA00505
6	150	5/16-24UNF	Medium	6 holes	12	12000	19PA00006	19PA00506
6	150	5/16-24UNF	Medium	6 + 1 holes	12	12000	19PA00007	19PA00507
6	150	5/16-24UNF	Medium	8 + 1 holes	12	12000	19PA00008	19PA00508
6	150	5/16-24UNF	Medium	8 + 6 + 1 holes	12	12000	19PA00009	19PA00509
6	150	5/16-24UNF	Medium	8 + 6 + 6 + 1 holes	12	12000	19PA00010	19PA00510
6	150	5/16-24UNF	Medium	52 holes	12	12000	19PA00011	19PA00511
6	150	5/16-24UNF	Medium	Multi holes	12	12000	19PA00012	19PA00512

