

2014 KLINGSPOR METALWORKING GUIDE

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KLINGSPOR

The Most Sanding Power for Your Money Since 1893!®

www.klingspor.com

PRODUCT GROUPS AT A GLANCE



ABRASIVE FLAP DISCS

The performance of the KLINGSPOR abrasive flap disc far exceeds that of other abrasive products for grinding welds, smoothing out pits, removing slag and flash, and other metal grinding applications.



BONDED ABRASIVES

Continuous innovation and the development of specialized products for all application areas enables KLINGSPOR to offer a range of grinding discs and cut off wheels to satisfy virtually every need.



NON-WOVEN ABRASIVE

These products offer a tough, yet forgiving nature that has many benefits in the metal grinding and finishing trades. Non-woven abrasives require less finishing steps than coated abrasive materials.



QUICK CHANGE DISCS

These are staple items in many production shops. They offer instant disc changes and are very effective for general purpose grinding, blending, deburring, and removal of weld beads.



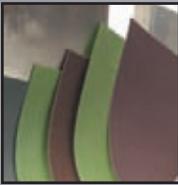
ABRASIVE BELTS

KLINGSPOR abrasive belts are available in various sizes and grades to meet all sanding and grinding requirements for a wide range of materials and applications.



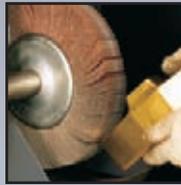
ABRASIVE ROLLS

KLINGSPOR rolls for hand sanding or use with hand-held machines are available in a number of special grades designed for a wide variety of materials.



ABRASIVE SHEETS

Sheets are one of the most convenient and quick ways to put a final-touch finish on wood, metal, plastics, solid surface materials and more.



ABRASIVE FLAPWHEELS

With different variations of KLINGSPOR Flapwheels, sanding and finishing of shaped parts, convex or concave, and moldings can be easily accomplished.



SPECIALTY ABRASIVES

KLINGSPOR offers a host of specialty grinding, sanding, and finishing products to assist in the overall completion of your workpieces. Some items include, spiral bands, cartridge rolls, mounted points, cross pads and wire wheels.



ABRASIVE DISCS

Ideal for either quick grinding use or production applications, KLINGSPOR fiber discs offer excellent grinding performance on most metals and steels. The heavy vulcanized fiber backing gives a firm platform for extended life and aggressive action when needed.



SAFETY PRODUCTS

KLINGSPOR offers a complete line of safety products to make the workplace a healthier, happier environment. Please inquire about these products for the protection of your employees.



POWER TOOLS

Dynabrade Power Tools offer capability in virtually every sanding, grinding, or finishing step.



oSa – What Does it Mean?

On our grinding and cutting products, you will see the oSa logo. What exactly is oSa and what does it mean?

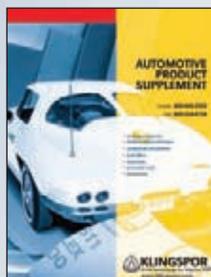
On products that grind and cut at high peripheral speeds, it is extremely important that they are deemed safe so as to stand up to extreme mechanical and thermal stress. Because there are no globally binding safety requirements for these abrasive products, responsible manufacturers of grinding and cutting abrasives from a number of European countries have set up the Organization for the Safety of Abrasives (oSa). This is a significant measure setting a clear signal against inferior and dangerous products.

oSa issues the worldwide protected oSa trademark only to manufacturers that see to it that the exact provisions are kept, standard operating procedures are adhered to, and that only safe, high quality products are produced and marketed. This is an assurance to the user that they are purchasing grinding and cutting products that have been consistently monitored for safety and quality during the manufacturing process.

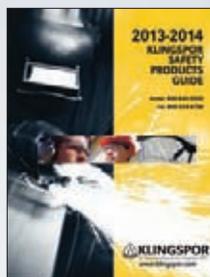
KLINGSPOR literature



Woodworking Price Guide



Automotive Supplement Guide



Safety Products



Dynabrade Power Tools



Floor Sanding Guide



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KLINGSPOR ABRASIVES

ABRASIVE FLAP DISCS4	SPECIALTY ABRASIVES35
QUICK CHANGE FLAP DISCS5-7	CONVOLUTE WHEELS35
ASSORTED FLAP DISCS7	TYPE 27 DEPRESSED CENTER UNITIZED DISCS ...35
FIBRE DISCS8	WIRE WHEELS AND BRUSHES36-37
QUICK LOCK FIBRE DISCS / BACKING PADS9	WET OR DRY DIAMOND PADS37
	FLEXIBLE SANDING PADS38
	ANGLE FLEXIBLE SANDING PADS38
BONDED ABRASIVES10	POWER WHEEL38
ULTRA-THIN CUT-OFF WHEELS10-11	STANDARD GRADE MASKING TAPE39
“EXTRA CUT” SMALL CUTTING WHEELS11	PG 27 TAPE39
ASSORTED CUTOFF WHEELS	HEAVY DUTY GRAPHITE ROLLS39
FOR HANDHELD MACHINES12-13	GRAPHITE STICKS39
CUTOFF WHEELS FOR PORTABLE MACHINES ...14	GREASE STICKS39
ASSORTED GRINDING DISCS15-17	CLEANING STICKS39
	SQUARE AND CROSS PADS40
	SANDING STARS40
	CLOTH SPIRAL BANDS41
	RUBBER DRUMS41
	MOUNTED POINTS42-43
	CARTRIDGE ROLLS44
NON-WOVEN ABRASIVES18	ABRASIVE DISCS45
NON-WOVEN BELTS18	HEAVYWEIGHT PLAIN PAPER DISCS - NON PSA...45
NON-WOVEN ROLLS18	PLAIN CLOTH DISCS - NON PSA45
NON-WOVEN DISCS19	PSA DISCS - PAPER46
NON-WOVEN HAND PADS19	PSA DISCS - CLOTH47
	PSA DISC ROLLS47
	WATERPROOF PAPER PSA DISC ROLLS47
	KLING-ON® HOOK AND LOOP DISCS48
	BLACK HOOK MATERIAL48
	BACKING PADS49
	FUSION FOAM49
QUICK CHANGE DISCS20	SAFETY PRODUCTS50
QDC (QUICK DISC CONNECT) DISCS20	RESPIRATORY PROTECTION50
QRC (QUICK ROLL CONNECT) DISCS21	HEARING PROTECTION51
QMC (QUICK METAL CONNECT) DISCS21	EARMUFFS51
CERAMIC DISCS21	EYEWEAR52-53
NON-WOVEN DISCS21	HEAD AND FACE PROTECTION54
HOLDER PADS21	PROTECTIVE SUITS AND SPRAY SOCKS54
	HARD HATS55
	WORK GLOVES55-56
	LATEX & NITRILE PROTECTIVE GLOVES56
ABRASIVE BELTS23	POWER TOOLS57
FILE BELTS23	RANDOM ORBITAL SANDERS57-58
PORTABLE BELTS24	DIE GRINDERS58
STANDARD AND CUSTOM SIZE CLOTH BELTS ..25	DYNAFIL, DYNINGER, DYNASTRAIGHT59-60
SPECIALTY POLYESTER BELTS26	ACCESSORIES61
STANDARD AND CUSTOM SIZE PAPER BELTS ..27	
ABRASIVE ROLLS28	REFERENCE62
PREMIUM AND ECONOMY CLOTH ROLLS28	PRODUCT RECOMMENDATIONS62
WATERPROOF PAPER ROLLS29	BELT SANDING RECOMMENDATIONS63
	ORBITAL SANDERS AIR SUPPLY RECOMMENDATIONS ...63
	ABRASIVE BELT JOINTS64
	GRIT GRADING SYSTEMS64
	ABRASIVE GRAINS AND BACKINGS65
	METAL AND BONDED GUIDE66
	METAL AND ALUMINUM FINISHES67
	MATERIAL DESCRIPTIONS68-69
	BONDED WHEELS REFERENCE70
	TERMS AND CONDITIONS71
	GRIT CHART72-75
ABRASIVE SHEETS30	
STANDARD SIZE SHEETS30	
BOARD FILE SHEETS31	
ABRASIVE FLAPWHEELS32	
SM 611 FLAPWHEELS32	
WSM 617 ABRASIVE FLAPWHEELS32	
SMD 612 MOUNTING PLATES33	
MAC MOP / SPINDLE MOUNTED MAC MOP33	
KM 613 SPINDLE MOUNTED FLAPWHEELS33	
FINISHING FLAPWHEELS34	
NCS 600 SMALL FINISHING FLAPWHEELS34	
NCW 600 SMALL FINISHING FLAPWHEELS34	





ABRASIVE FLAP DISCS



Flap Discs have become commonplace in many production facilities and job shops.

KLINGSPOR, an early innovator of the flap disc design, continues to be at the forefront in developing new types of these versatile discs. Effective for multitudes of grinding and finishing operations, KLINGSPOR Flap Discs will be one of your most-used abrasive tools for grinding welds, smoothing out pits, removing slag and flash, and a host of other metal grinding situations. The line includes specialty discs, as well as high performance discs and discs that offer economical efficiency.

Several different designs offer the user ways to enhance both the performance of the disc and the final results left on the workpiece. Choose from shapes in flat, 6° convex shape, or 12° convex shape. Flat discs are best suited for use on flat surfaces and on edges. The 6° convex shape allows for use on flat or slightly contoured surfaces, while the 12° convex shape is perfect for contoured surfaces.

Quick Change Flap Discs

Simply affix the die-cast backing plate to your angle grinder using a standard locking nut and leave it there. Then the CMT "loadings" are locked into place with a quick turn of the wrist. No tools are necessary to accomplish the task, which only takes seconds. When a new grinding surface is needed or when grits need to be changed, twist the CMT off and put a new one on. No more fumbling with the grinder's locking nut each time - twist on, twist off. Sold in boxes of 10.

CMT 726 - ALUMINA ZIRCONIA

PRICE PER EACH



Size	Max RPM	120 Grit	80 Grit	60 Grit	40 Grit
4 1/2" Box Qty 10 per each	12,000	\$5.63	\$5.63	\$5.63	\$5.63



CMT 728 - ALUMINA ZIRCONIA

PRICE PER EACH



Size	Max RPM	120 Grit	80 Grit	60 Grit	40 Grit
4 1/2" Box Qty 10 per each	12,000	\$5.63	\$5.63	\$5.63	\$5.63



CMT 730 - MULTIBOND ALUMINA ZIRCONIA

PRICE PER EACH



Size	Max RPM	120 Grit	80 Grit	60 Grit	40 Grit
4 1/2" Box Qty 10 per each	12,000	\$6.53	\$6.53	\$6.53	\$6.53



CMT 800 - NON WOVEN

PRICE PER EACH



Size	Max RPM	Coarse	Medium	Very Fine
4 1/2" Box Qty 10 per each	12,000	\$10.60	\$10.60	\$10.60



ADJUSTABLE SPANNER WRENCH

#BPS900001\$15.68



4 1/2" BACKING PLATE:\$5.73



Easy to change in just a few simple steps.



Special "channels" ensure that the CMT is securely locked in place.



The steel CMT backing plate.



Place the backing plate on your angle grinder.



CMT backing plate on angle grinder.



Use your standard locking nut to fasten the backing plate in place.



Match the CMT "loading" to the backing plate.



FLAP DISCS



SMT 618

This flap disc utilizes a tough plastic fibre-reinforced backing plate for more aggressive grinding possibilities. The flat shape makes this model most suitable for grinding flat surfaces. The SMT 618 is made with our exceptionally durable ALUMINA ZIRCONIA - perfect for most metal surfaces. Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2"	80, 60, 40	\$6.20



SMT 619

With the same tough plastic backing plate and the same durable ALUMINA ZIRCONIA material as the SMT 618, the SMT 619 offers a 12° convex form for grinding contoured metal surfaces. Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2"	80, 60, 40	\$6.20



SMT 624

The SMT 624 alumina zirconia disc utilizes a 12° angled backing plate. This will enable the disc to be used on more severely curved surfaces like pipes and storage tanks. Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2"	120, 80, 60, 50, 40, 36	\$7.13
6"	80, 60, 40	\$11.22
7"	120, 80, 60, 50, 40, 36	\$13.24



SMT 626

This tough alumina zirconia disc has a slight 6° convex form for use on flat or slightly contoured parts and on edges. Sold in boxes of 10.



Size	Available Grits	Price Each
4"	120, 80, 60, 50, 40	\$6.72
4 1/2"	120, 80, 60, 50, 40, 36	\$7.13
7"	120, 80, 60, 50, 40, 36	\$13.24

5/8"-11 hubs \$2.08 each



SMT 627

The SMT 627 makes use of aluminum oxide grains on the flaps. This makes a flap disc that has more uses in applications involving paint and non-ferrous metals. The 12° angle of the disc allows use on contoured parts and flat parts alike. Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2"	120, 80, 60, 40, 36	\$7.13
7"	120, 80, 60, 50, 36	\$13.24

MAXIMUM RPM'S: 4": 15,300 4 1/2": 13,300 5": 12,000 7": 8,500



SMT 628

The SMT 628 is a flat-shaped version which makes it versatile for grinding on flat surfaces. Also made with our durable alumina zirconia grains. Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2"	120, 80, 60, 40, 36, 24	\$7.13
7"	120, 80, 60, 50, 40, 36, 24	\$13.24

5/8"-11 hubs \$2.08 each



SMT 630

Our popular SMT 630 alumina zirconia flap disc with a multi-bond lubricant now has a new backing plate structure. It is a consumable fibre-reinforced backing just like our other SMT flap discs and with a 6° convex angle. The 630 is best-suited for cooler edge grinding of stainless steel. Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2"	120, 80, 60, 40, 36	\$8.15
5"	120, 80, 60, 40, 36	\$10.30
7"	80, 60, 40, 36	\$14.28



SMT 640 - with built-in 5/8"-11 hole and thread

The SMT 640 is a flat disc with our premium alumina zirconia material and is suitable for use on the same materials and in the same applications as our other flat SMT flap discs. The center hole of the disc is threaded with the proper 5/8"-11 hole and threading dimensions. Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2" 5/8"-11	80, 60, 50, 40, 36, 24	\$7.13



SMT 650 JUMBO FLAPDISC

Here's our longest lasting flap disc ever - the SMT 650 alumina zirconia disc. This is a double-thick disc that offers twice the grinding power and substantially less downtime from disc changing. We like to call the SMT 650 the "JUMBO". Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2"	80, 60, 40, 36	\$8.15



SMT 656

From the inventors of the flap disc comes the highest performing flap disc ever produced.

This convex shaped disc utilizes an enhanced abrasive material made specifically for the applications where the SMT 656 will be most effective. When used on stainless steel or steels of all types, you'll realize a 50% longer service life, 50% higher stock removal, and 50% overall improved efficiency. Compare that with any other flap disc made by any other manufacturer. These are available in the most commonly used grits for steel. Sold in boxes of 10.

5/8"-11 hubs \$2.08 each



Size	Available Grits	Price Each
4 1/2"	80, 60, 40	\$8.15





SMT 696 SPECIAL

Made from a premium ceramic aluminum oxide grain with a special multi-bond lubricant. At an aggressive 6° angle this SMT is best suited for grind weld seams and edge grinding on harder metals such as stainless steel and other alloys. Sold in boxes of 10.



Size	Available Grits	Price Each
4 1/2"	40, 60, 80	\$9.17
7"	40, 80	15.29



SMT 800 NON WOVEN FLAP DISC

The flexibility of non-wovens in a flap disc.

High quality non-woven web abrasive mop disc for finishing work. Depending on the degree of hardness, these are also suited for cleaning and light de-burring work and the processing of TIG-welded seams on stainless steel. The SMT 800 will also leave a pleasant finish on most metals and steels. Sold in boxes of 5.



Size	Available Grits	Price Each
4 1/2"	Coarse, Medium, Very Fine	\$13.87

PLEASE SPECIFY



SMT 850 FLAP DISC

The SMT 850 is the perfect combination of non-woven web and coated abrasives for improved stock removal, finish, and convenience. With a lubricated aluminum oxide coated abrasive and a 3 different grades of non-woven materials, you'll get exceptional removal rates, yet you'll also see a high quality surface finish. This reduces machining times and further processing steps. Try this Multi-Purpose abrasive flap disc today. Sold in boxes of 5.



Size	Available Grits	Price Each
4 1/2"	60 Grit/Coarse, 80 Grit/Medium, 120 Grit/Very Fine	\$15.99

PLEASE SPECIFY



NCD 200 POWER WHEEL FLAP DISC

Powerful cleaning with the design of a flap disc.

Here's a disc that will clean rust, scale, paint, varnishes, or other surface imperfections. The NCD 200 is made of a coarse cleaning material imbedded with silicon carbide grains – the most effective for aggressive cleaning and removal applications. The high edge strength allows you to apply the necessary pressure without damaging the disc. 4-1/2". Sold in boxes of 5.



Size	Price Each
4 1/2"	\$15.84

MAXIMUM RPM: 11,000

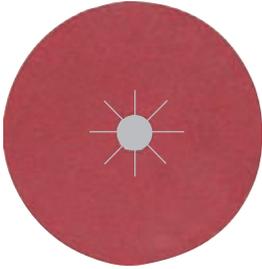
5/8"-11 hubs \$2.08 each

Fibre Discs

CS 561 ALUMINUM OXIDE FIBRE DISCS

These aluminum oxide discs are perfect for most metal grinding applications where major stock removal is NOT necessary. Removal of surface contaminants and smoothing of mild weld seams are the CS 561's forte.

PRICE PER BOX



Diameter	Box Qty	Max RPM	80 and Finer	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit	16 Grit
4" x 5/8"	25	14,400	\$21.29	\$23.16	\$24.25	\$25.32	\$26.07	\$26.80	\$33.43
4 1/2" x 7/8"	25	13,300	23.48	25.32	26.07	27.21	27.90	29.01	36.35
5" x 7/8"	25	12,200	26.07	27.21	29.01	30.11	30.84	31.94	41.13
7" x 7/8"	25	8,600	41.13	43.70	44.76	47.36	48.47	50.30	63.53
9" x 7/8"	25	6,600	53.99	57.65	60.60	62.44	64.25	66.11	84.83

CS 565 ALUMINA ZIRCONIA FIBRE DISCS

For heavier stock removal and faster cutting, the CS 565 cannot be beat. The tough alumina zirconia grains cut with a vengeance to take your workpiece to a more finished state.

PRICE PER BOX

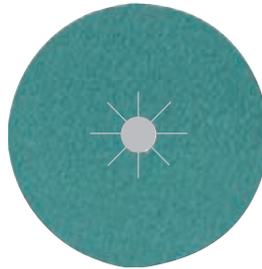


Diameter	Box Qty	Max RPM	100/80 Grit	60 Grit	50 Grit	36 Grit	24 Grit
4 1/2" x 7/8"	25	13,300	\$30.11	\$32.07	\$33.27	\$36.35	\$38.18
5" x 7/8"	25	12,200	38.18	40.03	41.87	45.54	47.75
7" x 7/8"	25	8,600	53.24	56.17	57.65	62.81	65.00
9" x 7/8"	25	6,600	95.47	100.98	102.83	113.82	116.03

CS 570 LUBRICATED ALUMINA ZIRCONIA FIBRE DISCS

Also an alumina zirconia disc, the CS 570 has an added advantage - a dry lubricant. This feature aids in reducing heat build-up for a cleaner, cooler cut. The CS 570 is especially useful in those applications where grinding heat can discolor the workpiece.

PRICE PER BOX

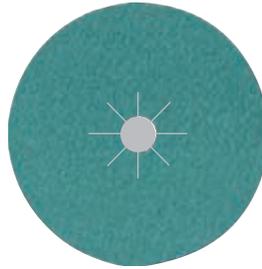


Diameter	Box Qty	Max RPM	120/100/80 Grit	60 Grit	50 Grit	36 Grit	24 Grit
4 1/2" x 7/8"	25	13,300	\$30.11	\$32.07	\$33.27	\$36.35	\$38.18
5" x 7/8"	25	12,200	38.18	40.03	41.87	45.54	47.75
7" x 7/8"	25	8,600	53.24	56.17	57.65	62.81	65.00

FS 966 LUBRICATED CERAMIC FIBRE DISCS

For the optimum in life and grinding consistency, these ceramic aluminum oxide lubed fibre disc cannot be beat. The tough ceramic grain cuts fast and lasts longer than any other grain type on hard steels and metals. **ACT** Increased grain adhesion of edgewear.

PRICE PER BOX



Diameter	Box Qty	Max RPM	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
4 1/2" x 7/8"	25	13,300	41.83	43.92	\$47.44	49.43	\$54.37	\$62.74
5" x 7/8"	25	12,200	56.54	59.37	64.13	65.78	72.37	83.34
7" x 7/8"	25	8,600	90.55	95.08	102.69	108.47	119.31	137.05



CS 575 TYPE 27 SILICON CARBIDE FIBRE DISCS

Silicon Carbide grain on a rigid backing designed for fast removal times and heavy stock removal rates in the fiberglass and plastic industries. **NOTE: Must be used with backup pad.**

Diameter	Box Qty	60 Grit	36 Grit	24 Grit	16 Grit
4-1/2"	5	\$22.04	\$22.87	\$23.42	\$24.80
5"	5	24.97	25.24	25.90	27.18
7"	5	32.24	32.52	32.79	33.34

PRICE PER BOX



CS 575



Quick Lock Fibre Discs

Production shops will appreciate the quick on, quick off use of KLINGSPOR's Quick Lock Fibre Discs. Changing of discs or switching between grits takes only a few seconds. Use only with KLINGSPOR's Quick Lock Backing Pads.

CS 561 ALUMINUM OXIDE QUICK LOCK FIBRE DISCS

PRICE PER BOX

Diameter	Box Qty	Max RPM	80 Grit +	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit	16 Grit
4 1/2"	25	13,300	\$40.03	\$41.87	\$42.56	\$43.70	\$44.44	\$45.54	\$52.87
5"	25	12,200	42.56	43.70	45.54	46.64	47.36	48.47	57.65
7"	25	8,600	57.65	60.22	61.33	63.91	65.00	66.84	80.07
9"	25	6,600	70.51	74.17	77.11	78.97	80.81	82.62	101.37

CS 565 ALUMINA ZIRCONIA QUICK LOCK FIBRE DISCS CS 570 LUBRICATED ALUMINA ZIRCONIA

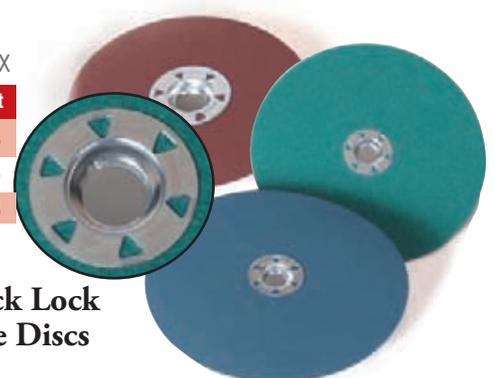
PRICE PER BOX

Diameter	Box Qty	Max RPM	80 Grit	60 Grit	50 Grit	36 Grit	24 Grit
4 1/2"	25	13,300	\$46.64	\$48.47	\$49.94	\$52.87	\$54.72
5"	25	12,200	54.72	56.56	58.38	62.05	64.25
7"	25	8,600	69.76	72.73	74.17	79.33	81.53
9"	25	6,600	111.98	117.51	■	130.35	132.56

FS 966 LUBRICATED CERAMIC FIBRE DISCS

PRICE PER BOX

Diameter	Box Qty	Max RPM	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
4 1/2" x 7/8"	25	13,300	\$58.56	\$60.64	\$64.11	\$66.15	\$71.07	\$79.46
5" x 7/8"	25	12,200	76.09	76.09	80.85	82.51	88.97	100.05
7" x 7/8"	25	8,600	107.27	111.80	119.45	125.19	136.02	153.78



Quick Lock Fibre Discs



Phenolic Backing Pad

PRICE PER PAD

Diameter	Item #	Description	Price
4 1/2"	FBP-4.5	4 1/2" Phenolic Backing Pad	\$5.49
5"	FBP-5	5" Phenolic Backing Pad	5.49
7"	FBP-7	7" Phenolic Backing Pad	7.33

Quick Lock Backing Pads

Diameter	Item #	PRICE PER PAD
4 1/2"	BPQ001	\$47.92
4 1/2" Low Profile	BPQ002	\$47.92
5"	BPQ003	\$47.92
5" Low Profile	BPQ004	\$47.92
7" Soft	BPQ005	\$62.79
7" Medium	BPQ006	\$53.94
7" Firm	BPQ007	\$62.79
9" Medium	BPQ008	\$75.07

Fibre Disc Backing Pads

Diameter	Item #	PRICE PER PAD
4 1/2" Standard	BP001	\$20.29
4 1/2" Spiral Cool	BPS012	\$35.27
5" Standard	BP002	\$23.96
5" Spiral Cool	BPS011	\$42.57
7" Standard	BP003	\$35.76
7" Spiral Cool	BPS010	\$51.54
9" Standard	BP004	\$46.33

BP Series Rubber Plates





BONDED ABRASIVES

CUT OFF WHEELS

As one of the world's leaders in the production of cut off wheels KLINGSPOR has the ideal wheel for virtually any cutting application. Whether they are used on die grinders, portable gas powered tools, or stationary machines, you'll be able to fine tune to your specific need. Discs are available for the cutting of ferrous and non-ferrous metals as well as masonry, glass, and other specialty materials. Sizes from 3" in diameter to 20" in diameter.

GRINDING DISCS

KLINGSPOR Grinding Discs are perfect for grinding welds, smoothing out pits, removing slag and flash, and a host of other metal grinding situations. The line includes specialty discs, as well as high performance discs and discs that offer economical efficiency.



Ultra-Thin Cut-off Wheels

A 46 TZ Special Stainless Steel, Stainless Steel Sheets, Container Construction



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4" X 1/16" X 5/8"	A46TZ	25	13,300	A46TZ1001.616F	\$3.46
4 1/2" X 1/16" X 7/8" TYPE 27	A46TZ	25	13,300	A46TZ1151.622D	3.57
4 1/2" X 1/16" X 7/8"	A46TZ	25	13,300	A46TZ1151.622F	3.57
5" X 1/16" X 7/8"	A46TZ	25	12,200	A46TZ1251.622F	4.12
6" X 1/16" X 7/8"	A46TZ	25	12,200	A46TZ1501.622F	4.37
6" X 1/16" X 7/8" TYPE 27	A46TZ	25	12,200	A46TZ1501.622D	4.37
7" X 1/16" X 7/8"	A46TZ	25	8,500	A46TZ1781.622F	5.45
7" X 1/16" X 7/8" TYPE 27	A46TZ	25	8,500	A46TZ1781.622D	5.45
9" X 5/64" X 7/8"	A46TZ	25	6,600	A46TZ2301.922F	7.03
9" X 5/64" X 7/8" TYPE 27	A46TZ	25	6,600	A46TZ2301.922D	7.03

Ultra-Thin!



A 60 TZ Special Stainless Steel, Stainless Steel Sheets and Container Construction



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4" X .045" X 5/8"	A60TZ	25	15,300	A60TZ1001.016F	\$3.45
4 1/2" X .045" X 7/8" TYPE 27	A60TZ	25	13,300	A60TZ1151.022D	3.57
5" X .045" X 7/8" TYPE 27	A60TZ	25	12,200	A60TZ1251.022D	4.01
4 1/2" X .045" X 7/8"	A60TZ	25	13,300	A60TZ1151.022F	3.57
5" X .045" X 7/8"	A60TZ	25	12,200	A60TZ1251.022F	4.01



Ultra-Thin Cut-off Wheels



**A 60 N Supra Non-Ferrous Metals, Aluminum, Copper and Brass.
Soft Structure Prevents Loading**

Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x .045" x 7/8"	A60N	25	13,300	A60N1151.022F	\$3.95
5" x .045" x 7/8"	A60N	25	12,200	A60N1251.022F	4.36



A 60 S Stainless Steel, Stainless Steel Sheets and Container Construction

Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
6 x .045 x 7/8" TYPE 27	A60S	25	10,000	CFX0175	5.30
6 x .045 x 7/8" Flat	A60S	25	10,000	CFX0170	5.30



**A 80 TZ Special Stainless Steel, Stainless Steel Sheets,
Container Construction**

Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 1/32" x 7/8" TYPE 27	A80TZ	25	13,300	A80TZ1150.822D	\$3.95
5" x 1/32" x 7/8" TYPE 27	A80TZ	25	12,200	A80TZ1250.822D	4.36

“Extra Cut” Small Cutting Wheels

THICKNESS TOLERANCES WILL NOT EXCEED +/- .015"



Size	Grit	Box Quantity	Max RPM	Item #	Price Per Disc
2" x 1/8" x 3/8"	A60T	10	30,000	EC1191	\$2.54
3" x .040" x 1/4"	A60S	10	25,000	EC0105	2.10
3" x .040" x 3/8"	A60S	10	25,000	EC0110	2.10
3" x 1/16" x 1/4"	A36S	10	25,000	EC0120	2.10
3" x 1/16" x 1/4"	A60S	10	25,000	EC0130	2.10
3" x 1/16" x 3/8"	A36S	10	25,000	EC0140	2.10
3" x 1/16" x 3/8"	A60S	10	25,000	EC0150	2.10
3" x 3/32" x 1/4"	A36S	10	25,000	EC0160	2.10
3" x 3/32" x 3/8"	A36S	10	22,000	EC0170	2.10
4" x .040" x 1/4"	A60S	10	22,000	EC0180	2.47
4" x .040" x 3/8"	A60S	10	22,000	EC0190	2.47
4" x 1/16" x 1/4"	A36S	10	19,000	EC0230	2.47
4" x 1/16" x 1/4"	A60S	10	19,000	EC0240	2.54
4" x 1/16" x 3/8"	A36S	10	19,000	EC0250	2.54
4" x 1/16" x 3/8"	A60S	10	19,000	EC0260	2.54
4" x 3/32" x 3/8"	A36S	10	19,000	EC0370	2.54

“EXTRA CUT” MANDREL

1/4" & 3/8"	ECARBORM-50P	\$10.52
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PRICE PER MANDREL

FLAP DISCS
 BONDED
 NON-WOVEN
 QUICK CHANGE
 BELTS
 ROLLS
 SHEETS
 FLAPWHEELS
 SPECIALTY
 DISCS
 SAFETY
 POWER TOOLS
 REFERENCE

Assorted Cut Off Wheels For Hand-held Machines

CUT OFF WHEELS - TYPE 1 FLAT

A 24 E	Size	Grit	Box Quantity	Max RPM	Item #	Price Per Disc
General purpose cutting of most metals	7" x 1/8" x 7/8"	A24Extra	25	8500	A24E1783.022F	\$3.33
	7" x 1/8" x 7/8"	C24Extra	25	8500	C24E1783.022F	3.47
	9" x 1/8" x 7/8"	A24Extra	25	6600	A24E2303.022F	4.91
	9" x 1/8" x 7/8"	C24Extra	25	6600	C24E2303.022F	5.03



CUT OFF WHEELS - TYPE 27 DEPRESSED CENTER

C 24 E	Size	Grit	Box Quantity	Max RPM	Item #	Price Per Disc
General purpose cutting of most stone/masonry	4" x 3/32" x 5/8"	A24Extra	25	15300	A24E1002.516D	\$2.33
	4" x 3/32" x 5/8"	C24Extra	25	15300	C24E1002.516D	2.47
	4 1/2" x 3/32" x 7/8"	A24Extra	25	13300	A24E1152.522D	2.41
	4 1/2" x 3/32" x 5/8"-11 hub	A24Extra	10	13300	A24E1152.522A	4.11
	4 1/2" x 3/32" x 7/8"	C24Extra	25	13300	C24E1152.522D	2.54
	4 1/2" x 3/32" x 5/8"-11 hub	C24Extra	10	13300	C24E1152.522A	4.28
	5" x 3/32" x 7/8"	A24Extra	25	12200	A24E1252.522D	2.62
	5" x 3/32" x 5/8"-11 hub	A24Extra	10	12200	A24E1252.522A	4.33
	7" x 1/8" x 7/8"	A24Extra	25	8500	A24E1783.022D	3.32
	7" x 1/8" x 5/8"-11 hub	A24Extra	10	8500	A24E1783.022A	5.03
	7" x 1/8" x 7/8"	C24Extra	25	8500	C24E1783.022D	3.47
	7" x 1/8" x 5/8"-11 hub	C24Extra	10	8500	C24E1783.022A	5.18
	9" x 1/8" x 7/8"	A24Extra	25	6600	A24E2303.022D	4.90
	9" x 1/8" x 5/8"-11 hub	A24Extra	10	6600	A24E2303.022A	6.60
	9" x 1/8" x 7/8"	C24Extra	25	6600	C24E2303.022D	5.03
	9" x 1/8" x 5/8"-11 hub	C24Extra	10	6600	C24E2303.022A	6.72



A 24 R	Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
Supra Steel, Structural Steel, Tool Steel, Sheet Steel	4" x 3/32" x 5/8"	A24R	25	15300	A24R1002.516D	\$2.47
	4 1/2" x 3/32" x 7/8"	A24R	25	13300	A24R1152.522D	2.62
	4 1/2" x 3/32" x 5/8"-11 hub	A24R	10	13300	A24R1152.522A	4.33
	5" x 3/32" x 7/8"	A24R	25	12200	A24R1252.522D	2.97
	5" x 3/32" x 5/8"-11 hub	A24R	10	12200	A24R1252.522A	4.67
	7" x 1/8" x 7/8"	A24R	25	8500	A24R1783.022D	3.68
	7" x 1/8" x 5/8"-11 hub	A24R	10	8500	A24R1783.022A	5.38
	9" x 1/8" x 7/8"	A24R	25	6600	A24R2303.022D	6.24
	9" x 1/8" x 5/8"-11 hub	A24R	10	6600	A24R2303.022A	7.92



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4" x 3/32" x 5/8"	A24R	25	15300	A24R1002.516F	\$2.47
4 1/2" x 3/32" x 7/8"	A24R	25	13300	A24R1152.522F	2.62
5" x 3/32" x 7/8"	A24R	25	12200	A24R1252.522F	2.97
6" x 3/32" x 7/8"	A24R	25	10200	A24R1502.522F	3.53
7" x 1/8" x 7/8"	A24R	25	8500	A24R1783.022F	3.68
9" x 1/8" x 7/8"	A24R	25	6600	A24R2303.022F	6.24



Assorted Cut Off Wheels For Hand-held Machines

FLAP DISCS

BONDED

NON-WOVEN

QUICK CHANGE

BELTS

ROLLS

SHEETS

FLAPWHEELS

SPECIALTY

DISCS

SAFETY

POWERTOOLS

REFERENCE



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 3/32" x 7/8"	A24N	25	13300	A24N1152.522D	\$2.77
4 1/2" x 3/32" x 5/8"-11 hub	A24N	10	13300	A24N1152.522A	4.45
5" x 3/32" x 7/8"	A24N	25	12200	A24N1252.522D	3.13
5" x 3/32" x 5/8"-11 hub	A24N	10	12200	A24N1252.522A	4.81
7" x 1/8" x 7/8"	A24N	25	8500	A24N1783.022D	4.03
7" x 1/8" x 5/8"-11 hub	A24N	10	8500	A24N1783.022A	5.73
9" x 1/8" x 7/8"	A24N	25	6600	A24N2303.022D	6.72
9" x 1/8" x 5/8"-11 hub	A24N	10	6600	A24N2303.022A	8.44

A 24 N Supra
Stainless Steel,
Non-Alloy Stainless Steel,
High Alloy Stainless Steel



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
7" x 1/8" x 7/8"	A24N	25	8500	A24N1783.022F	\$4.03
9" x 1/8" x 7/8"	A24N	25	6600	A24N2303.022F	6.72



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 3/32" x 7/8"	A46N	25	13300	A46N1152.522D	\$2.77
4 1/2" x 3/32" x 5/8"-11 hub	A46N	10	13300	A46N1152.522A	4.45
5" x 3/32" x 7/8"	A46N	25	12200	A46N1252.522D	3.13
5" x 3/32" x 5/8"-11 hub	A46N	10	12200	A46N1252.522A	4.81

A 46 N Supra
Aluminum



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
7" x 1/8" x 7/8"	A46N	25	8500	A46N1783.022F	\$4.03
9" x 1/8" x 7/8"	A46N	25	6600	A46N2303.022F	6.72



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4" x 3/32" x 5/8"	C24R	25	15300	C24R1002.516D	\$2.62
4 1/2" x 3/32" x 7/8"	C24R	25	13300	C24R1152.522D	2.77
4 1/2" x 3/32" x 5/8"-11 hub	C24R	10	13300	C24R1152.522A	4.45
5" x 3/32" x 7/8"	C24R	25	12200	C24R1252.522D	3.32
5" x 3/32" x 5/8"-11 hub	C24R	10	12200	C24R1252.522A	5.03

C 24 R Supra
Stone, Marble



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 5/64" x 7/8"	A36TZ	25	13300	A36TZ1152.022F	\$3.92
5" x 5/64" x 7/8"	A36TZ	25	12200	A36TZ1252.022F	4.05
7" x 5/64" x 7/8"	A36TZ	25	8500	A36TZ1782.022F	6.18
9" x 5/64" x 7/8"	A36TZ	25	6600	A36TZ2302.022F	8.04

A 36 TZ Special
Sheet Steel,
Stainless Steel,
High Alloy Steel



Cut Off Wheels For Portable Machines

A 24 R Special

Steel, Structural Steel,
Tool Steel, Sheet Steel

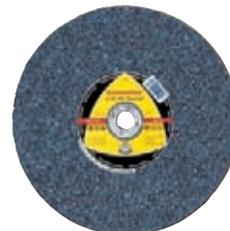
Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
12" x 3/64" x 7/8"	A24R	10	5100	A24R3003.522F	9.35
12" x 9/64" x 1"	A24R	10	5100	A24R3003.525F	9.35



A 24 SZ Special

Railroad Tracks

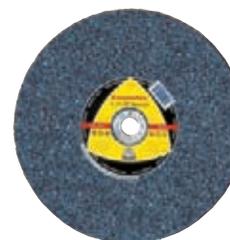
Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
14" x 5/32" x 1"	A24SZ	10	5500	A24SZ3504.025F	\$14.22



A 24 SX Special

Railroad Tracks

Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
14" x 5/32" x 1"	A24SX	10	5500	A24SX3504.025F	\$15.16
16" x 5/32" x 1"	A24SX	10	4800	A24SX4004.025F	24.52



C 24 RA Special

Asphalt

Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
12" x 9/64" x 20mm	C24RA	10	5100	C24RA3003.520F	\$9.77
12" x 9/64" x 7/8"	C24RA	10	5100	C24RA3003.522F	9.77
16" x 3/16" x 1"	C24RA	10	4800	C24RA4004.525F	17.83



A 24 N Supra

Stainless Steel, Non-Alloy and
High Alloy Stainless Steel

Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
14" x 9/64" x 1"	A24N	10	5500	A24N3503.525F	14.15



A 24 R Supra

Steel, Structural Steel,
Tool Steel, Sheet Steel

Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
10" x 3/32" x 1 1/4"	A24R	10	7600	A24R2502.532F	\$9.48
12" x 1/8" x 1"	A24R	10	6400	A24R3003.025F	9.48
12" x 1/8" x 1 1/8"	A24R	10	6400	A24R3003.030F	9.48
14" x 9/64" x 1"	A24R	10	5500	A24R3503.525F	13.32



Cut Off Wheels For Stationary Machines

KLINGSPOR's general purpose wheels for stationary saws provide reliable performance every time. The rigors of these applications are handled effectively and economically.



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
12" x 1/8" x 1"	C24R	10	6400	C24R3003.025F	\$10.20
12" x 1/8" x 1 1/8"	C24R	10	6400	C24R3003.030F	10.20
14" x 9/64" x 1"	C24R	10	5500	C24R3503.525F	14.03

C 24 R Supra
Stone



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
12" x 3/32" x 1"	A30N	10	5100	A30N3002.525F FC	\$9.27
14" x 1/8" x 1"	A30N	10	4400	A30N3503.025F FC	10.56
16" x 9/64" x 1"	A30N	10	3800	A30N4003.525F	13.93

A 30 N Special
All Metals



For use on high output, 3 phase machines.



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
10" x 3/32" x 5/8"	A30S	10	6112	CFX0300	\$12.69
16" x 5/32" x 1"	A30R	10	3820	CFX0340	29.46
20" x 3/16" x 1"	A30R	10	3066	CFX0350	60.53

A 30 S / R
Special

Hard Steels



For use on high output, 3 phase machines.

For use on high output, 3 phase machines.

For Circular Saws

KLINGSPOR's general purpose wheels for use on circular saws offer you economical, reliable performance in most cutting applications.

Size	Grit	Box Quantity	Max RPM	Item #	Price Per Disc
7" x 1/8" x 5/8"	C30U	10	8600	CFX0200	\$7.11
7" x 3/32" x 5/8"	A30T	10	8600	CFX0205	7.11
8" x 3/32" x 5/8"	A30T	10	7500	CFX0215	8.14



For Chopsaws

For fast-cutting action and overall performance on chopsaw machines, these general purpose wheels will accomplish your goals. **For use on low-power, 110/120v chopsaws.**

Size	Grit	Box Quantity	Max RPM	Item #	Price Per Disc
14" x 3/32" x 1"	A30R	10	4365	CFX0455	\$12.14
16" x 3/32" x 1"	A30R	10	3820	CFX0460	19.16

For Portable Gas & Electric Saws

These Heavy Duty wheels incorporate all the features needed to be top-performing cut off blades on portable machines.

Size	Grit	Box Quantity	Max RPM	Item #	Price Per Disc
12" x 1/8" x 20mm	A24/30S	10	6300	CFX0400	\$11.12
14 x 1/8" x 20mm	A24/30SB	10	5460	CFX0435	13.23



FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

Grinding/Notching/Cutting Dual Use Wheels

Two specialty wheels for pipe fabrication are the Duplex A 46 VZ and the Pipeline TS 30 AP. Both are approved for use on stainless and carbon steels and double fiberglass reinforcements allow for light grinding, notching and safe cutting.



TS 30 AP Special

Pipeline, Tank Fabrication,
Root Seams



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
5" x 1/8" x 7/8"	A 30 P	10	12,200	TS30AP1253.522D	\$3.09
5" x 1/8" x 5/8" - 11	A 30 P	10	10,200	TS30AP1253.522A	4.12
6" x 1/8" x 7/8"	A 30 P	10	10,200	TS30AP1503.522D	3.34
6" x 1/8" x 5/8" - 11	A 30 P	10	10,200	TS30AP1503.522A	4.37

Duplex A 46 VZ Special

Extra thin and efficient for
cutting AND safe grinding.



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 5/64" x 7/8" DUPLEX	A46VZ	25	13,300	A46VZ1152.022D	\$4.47
5" x 5/64" x 7/8" DUPLEX	A46VZ	25	12,200	A46VZ1252.022D	4.95

Grinding Discs

Whether you're grinding welds, smoothing out pits or cutting bar stock or concrete, the Klingspor Yellow Extra line should be your choice for maximum performance at a reasonable cost. Try these wheels from KLINGSPOR - the world leader in the development and production of high speed cut off wheels and grinding discs. Grit numbers beginning with "A" are suitable for use on most metals and steels. Grit numbers beginning with a "C" are suitable for most masonry applications.



A 24 Extra

Steel, Structural Steel,
Tool Steel, Sheet Steel



TYPE 27 DEPRESSED CENTER



Size	Grit	Box Quantity	Max RPM	Item #	Price Per Disc
4" x 1/4" x 5/8"	A24Extra	10	15300	A24E1006.016D	\$2.56
4 1/2" x 1/4" x 7/8"	A24Extra	10	13300	A24E1156.022D	2.73
4 1/2" x 1/4" x 5/8"-11 hub	A24Extra	10	13300	A24E1156.022A	4.48
5" x 1/4" x 7/8"	A24Extra	10	12200	A24E1256.022D	3.15
5" x 1/4" x 5/8"-11 hub	A24Extra	10	12200	A24E1256.022A	4.93
7" x 1/4" x 7/8"	A24Extra	10	8500	A24E1786.022D	4.85
7" x 1/4" x 5/8"-11 hub	A24Extra	10	8500	A24E1786.022A	6.60
7" x 1/4" x 7/8"	A24ExtraT	10	8500	A24ET1786.022D	4.85
7" x 1/4" x 5/8"-11 hub	A24ExtraT	10	8500	A24ET1786.022A	6.60
9" x 1/4" x 7/8"	A24Extra	10	6600	A24E2306.022D	7.06
9" x 1/4" x 5/8"-11 hub	A24Extra	10	6600	A24E2306.022A	8.81

Maximum operating speed - 16,000 surface feet per minute (SFPM). For use with portable tools.

A 24 R Supra

Steel, Structural Steel,
Tool Steel, Sheet Steel



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4" x 5/32" x 5/8"	A24R	10	15300	A24R1004.016D	\$2.73
4" x 1/4" x 5/8"	A24R	10	15300	A24R1006.016D	3.24
4 1/2" x 5/32" x 7/8"	A24R	10	13300	A24R1154.022D	2.86
4 1/2" x 5/32" x 5/8"-11 hub	A24R	10	13300	A24R1154.022A	4.48
4 1/2" x 1/4" x 7/8"	A24R	10	13300	A24R1156.022D	3.47
4 1/2" x 1/4" x 5/8"-11 hub	A24R	10	13300	A24R1156.022A	5.23
5" x 1/4" x 7/8"	A24R	10	12200	A24R1256.022D	3.58
5" x 1/4" x 5/8"-11 hub	A24R	10	12200	A24R1256.022A	5.36
6" x 1/4" x 7/8"	A24R	10	10200	A24R1506.022D	4.58
6" x 1/4" x 5/8"-11 hub	A24R	10	10200	A24R1506.022A	6.34
7" x 1/4" x 7/8"	A24R	10	8500	A24R1786.022D	6.03
7" x 1/4" x 5/8"-11 hub	A24R	10	8500	A24R1786.022A	7.79
7" x 5/16" x 7/8"	A24R	10	8500	A24R1788.022D	7.43
9" x 1/4" x 7/8"	A24R	10	6600	A24R2306.022D	10.23
9" x 1/4" x 5/8"-11 hub	A24R	10	6600	A24R2306.022A	11.97

Grinding discs should be used at a 35 degree angle for best wear and removal.

* This is also the safest way to run the wheel to avoid "chucking"



BONDED



A 24 N Supra
 Stainless Steel,
 Non-Alloy Stainless Steel,
 High Alloy Stainless Steel



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 1/4" x 7/8"	A24N	10	13300	A24N1156.022D	\$3.84
4 1/2" x 1/4" x 5/8"-11 hub	A24N	10	13300	A24N1156.022A	5.59
5" x 1/4" x 7/8"	A24N	10	12200	A24N1256.022D	4.18
5" x 1/4" x 5/8"-11 hub	A24N	10	12200	A24N1256.022A	5.95
7" x 1/4" x 7/8"	A24N	10	8500	A24N1786.022D	6.60
7" x 1/4" x 5/8"-11 hub	A24N	10	8500	A24N1786.022A	8.38
7" x 5/16" x 7/8"	A24N	10	8500	A24N1788.022D	7.79
9" x 1/4" x 7/8"	A24N	10	6600	A24N2306.022D	11.17
9" x 1/4" x 5/8"-11 hub	A24N	10	6600	A24N2306.022A	12.93



A 24 S Supra
 Cast Iron, Cast Steel



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
7" x 1/4" x 7/8"	A24S	10	8500	A24S1786.022D	\$7.79
7" x 1/4" x 5/8"-11 hub	A24S	10	8500	A24S1786.022A	9.53



C 24 R Supra
 Concrete, Granite Stone



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 1/4" x 7/8"	C24R	10	13300	C24R1156.022D	\$4.18
4 1/2" x 1/4" x 5/8"-11 hub	C24R	10	13300	C24R1156.022A	5.95
5" x 1/4" x 7/8"	C24R	10	12200	C24R1256.022D	5.29
5" x 1/4" x 5/8"-11 hub	C24R	10	12200	C24R1256.022A	7.06
7" x 1/4" x 7/8"	C24R	10	8500	C24R1786.022D	7.26
7" x 1/4" x 5/8"-11 hub	C24R	10	8500	C24R1786.022A	9.04



A 24 TX Special
 Cast Iron, Cast Steel



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 1/4" x 7/8"	A24TX	10	13300	A24TX1156.022D	\$5.40
4 1/2" x 1/4" x 5/8"-11 hub	A24TX	10	13300	A24TX1156.022A	7.10
5" x 1/4" x 7/8"	A24TX	10	12200	A24TX1256.022D	5.87
5" x 1/4" x 5/8"-11 hub	A24TX	10	12200	A24TX1256.022A	7.55
7" x 1/4" x 7/8"	A24TX	10	8500	A24TX1786.022D	9.60
7" x 1/4" x 5/8"-11 hub	A24TX	10	8500	A24TX1786.022A	11.30
9" x 1/4" x 7/8"	A24TX	10	6600	A24TX2306.022D	13.88
9" x 1/4" x 5/8"-11 hub	A24TX	10	6600	A24TX2306.022A	15.65

new



A30M Special
 2 in 1 Grinding Disc
 for Carbon Steel &
 Stainless Steel



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 1/4" x 7/8"	A30M	10	13300	A30M1156.022D	\$5.40
4 1/2" x 1/4" x 5/8"-11 hub	A30M	10	13300	A30M1156.022A	7.10
5" x 1/4" x 7/8"	A30M	10	12200	A30M1256.022D	5.87
5" x 1/4" x 5/8"-11 hub	A30M	10	12200	A30M1256.022A	7.55
6" x 1/4" x 7/8"	A30M	10	10200	A30M1506.022D	7.89
6" x 1/4" x 5/8"-11 hub	A30M	10	10200	A30M1506.022A	9.59
7" x 1/4" x 7/8"	A30M	10	8500	A30M1786.022D	9.60
7" x 1/4" x 5/8"-11 hub	A30M	10	8500	A30M1786.022A	11.30



A 46 N Supra
 Aluminum
 Top discs in the
 industry for aluminum



Size	Grit	Box Qty	Max RPM	Item #	Price Per Disc
4 1/2" x 1/4" x 7/8"	A46N	10	13300	A46N1156.022D	\$3.84
4 1/2" x 1/4" x 5/8"-11 hub	A46N	10	13300	A46N1156.022A	5.59
5" x 1/4" x 7/8"	A46N	10	12200	A46N1256.022D	4.18
5" x 1/4" x 5/8"-11 hub	A46N	10	12200	A46N1256.022A	5.95
7" x 1/4" x 7/8"	A46N	10	8500	A46N1786.022D	6.60
7" x 1/4" x 5/8"-11 hub	A46N	10	8500	A46N1786.022A	8.38



NON WOVEN ABRASIVES

Material	Extra Coarse	Coarse	Medium	Very Fine	Super Fine
Color	Brown/Blue	Brown	Maroon	Blue	Grey
Grain	AO	AO	AO	AO	SiC
Grit	46	80	180	320	600

Heavy Duty Scrim Back Non-Woven Belts

These belts are ideal for deburring, blending of tool marks, cleaning off coatings and making beautiful scratch patterns. All Non-Woven Belts are made with #4 butt joint only. Call for price and availability of other sizes. PLEASE **NOTE: All belt materials are low stretch material.**

BROWN = COARSE MAROON = MEDIUM BLUE-GRAY = VERY FINE GREY = EXTRA COARSE BROWN = SUPER FINE



File Belts

PRICE PER BELT

Size	Super Fine/Very Fine/Medium/Coarse/Extra Coarse
1/2" x 18"	\$5.49
1/2" x 20 1/2"	5.82
1/2" x 24"	6.16
3/4" x 18"	7.65
3/4" x 20 1/2"	8.22
1" x 18"	8.19
1" x 24"	9.51
1 1/8" x 21"	9.08
1 1/4" x 20 1/2"	9.08
1 1/2" x 18 15/16"	9.66

NOTE: Please add 25% for Extra Coarse pricing

Backstand Sander Sizes

PRICE PER BELT

Size	Super Fine/Very Fine/Medium/Coarse/Extra Coarse
2" x 118"	\$44.09
2" x 132"	48.51
3" x 118"	61.62
3" x 132"	67.63
4" x 118"	83.06
4" x 132"	91.10
4" x 168"	111.79

NOTE: Please add 25% for Extra Coarse pricing

Wide Belts

PRICE PER BELT

Size	Super Fine/Very Fine/Medium/Coarse/Extra Coarse
19" x 48"	\$163.98
36" x 60"	413.75
36" x 75"	498.75
37" x 60"	433.77
37" x 75"	522.98

NOTE: Please add 25% for Extra Coarse pricing

Platen Sander Sizes

PRICE PER BELT

Size	Super Fine/Very Fine/Medium/Coarse/Extra Coarse
1" x 30"	\$10.81
1" x 42"	13.42
1 1/2" x 60"	19.56
2" x 30"	16.29
2" x 42"	20.07
2" x 48"	21.96
2" x 60"	25.76
2" x 72"	29.55
2 1/2" x 60"	34.69
3" x 24"	21.30
3 1/2" x 15 1/2"	23.52
4" x 24"	29.01
4" x 36"	35.90
6" x 48"	60.03

NOTE: Please add 25% for Extra Coarse pricing

A non-woven step in stainless finishing produces a darker, glossy finish. Non-Woven medium to achieve #4 finish on graining stainless.

Non-Woven Rolls

Clean & Polish, Lightweight

PRICE PER ROLL

Size	Very Fine - S/C	Medium - A/O	Coarse- A/O
4" x 30 Feet	\$57.13	\$70.14	\$100.35
6" x 30 Feet	85.20	104.53	139.85

Both the Hyperflex (NWH) and standard NWA material are Heavy Duty Scrim Back. The advantages of the Hyperflex are a more "open coat" material and more conformable across the width of the belt. Both can be used in disc form as well. The open coat of NWH will help with heat and loading issues.



Non-Woven Discs

Use Non-Woven Discs to perform a variety of functions including deburring, blending, and cleaning on all metal types.

BROWN = COARSE • MAROON = MEDIUM • BLUE-GRAY = VERY FINE
 GREY = EXTRA COARSE BROWN = SUPER FINE

Heavy Duty Scrim Back - **Must be used with long hook back up pads**



PRICE PER PACK

Size	Quantity Per Pack	Super Fine	Very Fine	Medium	Coarse	Extra Course
4" x NH	10	\$23.06	\$23.06	\$23.06	\$23.06	\$23.06
4" x 5/8"	10	23.06	23.06	23.06	23.06	23.06
4 1/2" x NH	10	28.47	28.47	28.47	32.16	28.47
4 1/2" x 7/8"	10	28.47	28.47	28.47	32.16	28.47
5" x NH	10	33.63	33.63	33.63	38.55	33.63
5" x 7/8"	10	33.63	33.63	33.63	38.55	33.63
6" x NH	10	46.63	46.63	46.63	53.14	46.63
7" x NH	10	57.93	57.93	57.93	65.78	57.93
7" x 7/8"	10	57.93	57.93	57.93	65.78	57.93
8" x NH	10	79.78	79.78	79.78	90.95	79.78

Clean & Polish - Lightweight - **Must be used with short hook back up pads**

PRICE PER PACK

Size	Quantity Per Pack	Very Fine	Medium	Coarse
5" x NH	10	\$19.96	\$19.96	\$19.96
6" x NH	10	28.42	28.42	28.42
6" x 1/2"	10	28.42	28.42	28.42
8" x NH	10	49.39	49.39	49.39
8" x 1/2"	10	49.39	49.39	49.39

High Strength - for Edgework

PRICE PER PACK

Size	Quantity Per Pack	Medium
8" x 1/2"	10	\$89.55

Other sizes available. Call for Availability.

Backing Pads - Non-Woven

For Right Angle Grinders - Long Hook

Size	Item #	Price Per Pad
4" (5/8 - 11)	FJ40G	\$23.30
4 1/2" (5/8 - 11)	FJ45G	23.88
5" (5/8 - 11)	FJ50G	24.15
6" (5/8 - 11)	FJ60G	24.98
7" (5/8 - 11)	FJ70G	27.00
8" (5/8 - 11)	FJ80G	27.00

PLEASE NOTE BEFORE ORDERING: Long Hook Pads are for use with HD Scrim Back non-woven materials on a right angle grinder only!



Non-Woven Hand Pads

Use these hand pads as a replacement for steel wool to remove rust or to clean and polish metal surfaces.

6" x 9" Non-Woven Hand Pads

MATERIAL #		Color	Qty Per Pack	Price Per Pack
4396	General Purpose/Very Fine	Green	10	\$9.66
4660	Fine	Maroon	10	12.57
4630	Ultra fine	Gray	10	12.57
4223	No Abrasive	White	10	12.57
4790	Coarse (Extra Cut)	Brown	10	24.53



6" x 4 1/2" HAND PAD HOLDER
 uses 1/2 of standard size hand pad

List Price.....\$4.25



FLAP DISCS
 BONDED
 NON-WOVEN
 QUICK CHANGE
 BELTS
 ROLLS
 SHEETS
 FLAPWHEELS
 SPECIALTY
 DISCS
 SAFETY
 POWER TOOLS
 REFERENCE



QUICK CHANGE DISCS

Quick change discs are staple items in many production shops. They offer instant disc changes and are very effective for general purpose grinding, blending, deburring, and removal of weld beads and flash. Three popular styles are available - the Quick Disc Connect (QDC), the Quick Roll Connect (QRC), and the Quick Metal Connect (QMC). Each of our quick change discs types are available in aluminum oxide, alumina zirconia, alumina zirconia lubed and CERAMIC ALUMINUM OXIDE with a dry lubricant added. You'll find just the right material to fit your particular application. All styles are also produced with non-woven materials as well.

KLINGSPOR QDC (Quick Disc Connect) Discs

QDCs are staple items in many production shops. They offer instant disc changes, assurance that the disc is centered and smooth running. All QDCs work well on flat surfaces and most will perform well on contoured surfaces, too.



STEEL MANDRELS FOR QDC DISCS - 1/4" SHANK



For 3/4", 1", 1 1/2" QDC Discs
\$5.80 each
ITEM# SL100MANDREL

For 2", 3", 4" QDC Discs
\$7.28 each
ITEM# SL101MANDREL

ALUMINUM OXIDE Must be used with KLINGSPOR's Steel Mandrels.

PRICE PER BOX

Diameter	Box Qty	Max RPM	100 & Finer	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
3/4"	100	30,000	\$49.41	\$49.41	\$51.12	\$52.44	\$54.49	\$55.97	\$58.57
1"	100	30,000	49.41	49.41	51.12	52.44	54.49	55.97	58.57
1 1/2"	100	30,000	61.34	61.34	62.17	64.21	64.21	64.82	68.87
2"	100	20,000	88.03	89.83	90.98	94.62	97.22	102.14	109.46
3"	50	20,000	56.18	57.43	58.71	60.37	62.26	64.17	68.51
4"	25	20,000	47.03	48.10	49.14	50.55	52.17	53.74	57.38

ALUMINA ZIRCONIA Must be used with KLINGSPOR's Steel Mandrels.

PRICE PER BOX

Diameter	Box Qty	Max RPM	120 Grit	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
3/4"	100	30,000	\$59.28	\$59.28	\$61.35	\$62.94	\$65.39	\$67.34	\$70.70
1"	100	30,000	59.28	59.28	61.35	62.94	65.39	67.34	70.70
1 1/2"	100	30,000	73.58	73.58	74.60	77.06	77.06	78.69	82.73
2"	100	20,000	105.63	107.79	109.18	113.57	116.66	122.57	131.59
3"	50	20,000	67.41	68.89	70.44	72.37	74.74	76.98	81.99
4"	25	20,000	56.63	57.86	59.18	60.84	62.75	64.69	68.86

ALUMINA ZIRCONIA - LUBRICATED Must be used with KLINGSPOR's Steel Mandrels.

PRICE PER BOX

Diameter	Box Qty	Max RPM	120 Grit	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit
3/4"	100	30,000	\$71.13	\$71.13	\$73.61	\$75.52	\$78.49	\$80.79
1"	100	30,000	71.13	71.13	73.61	75.52	78.49	80.79
1 1/2"	100	30,000	88.33	88.33	89.56	92.46	92.46	94.44
2"	100	20,000	126.78	129.37	131.03	136.27	140.01	147.10
3"	50	20,000	80.86	82.66	84.54	86.88	89.68	92.39
4"	25	20,000	67.96	69.41	71.03	73.00	75.34	77.61



FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWER TOOLS
REFERENCE



QUICK CHANGE

QRC (Quick Roll Connect) Discs

QRC discs feature a common male (screw type) hub on the back of the disc. These discs mount easily into our standard Quick Roll Connect holder pad or into the popular Roloc® holder pad with a simple half turn. Stays secure through use of the disc.

RPM speeds on this product are the same as Holder Pads. **SEE PAGE 22 FOR THESE RATINGS.**



QMC (Quick Metal Connect) Discs

QMC Discs feature a metal locking device centered on the back of the disc that simply twists into the all-metal attachment on the holder pad to lock into place. These discs must be used with the Quick Metal Connect holder pad or the popular SocAtt® style holder pad.

ALUMINUM OXIDE Must be used with KLINGSPOR's Holder Pads.

PRICE PER BOX

Diameter	Box Qty	100 & Finer	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
1 1/2"	100	\$61.34	\$61.34	\$62.17	\$64.21	\$64.21	\$64.82	\$68.87
2"	100	88.03	89.83	90.98	94.62	97.22	102.14	109.46
3"	50	56.18	57.43	58.71	60.37	62.26	64.17	68.51

ALUMINA ZIRCONIA Must be used with KLINGSPOR's Holder Pads.

PRICE PER BOX

Diameter	Box Qty	120 Grit	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
1 1/2"	100	73.58	73.58	74.60	77.06	77.06	78.67	82.73
2"	100	105.63	107.79	109.18	113.57	116.66	122.57	131.61
3"	50	67.40	68.89	70.44	72.37	74.74	76.98	81.99

ALUMINA ZIRCONIA - LUBRICATED Must be used with KLINGSPOR's Holder Pads.

PRICE PER BOX

Diameter	Box Qty	120 Grit	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit
2"	100	\$126.78	\$129.37	\$131.03	\$136.27	\$140.01	\$147.10
3"	50	80.86	82.66	84.54	86.88	89.68	92.39

Ceramic Quick Change Discs

Ceramic

Available in QDC, QRC and QMC

QDC Must be used with KLINGSPOR's Steel Mandrels.

PRICE PER BOX

Diameter	Box Qty	100-180 Grit	80 Grit	60 Grit	50 Grit	36 Grit
2"	100	\$119.57	\$125.87	\$132.21	\$136.27	\$147.10
3"	50	76.27	80.27	84.26	86.88	92.39

Ceramic Lubricated

Available in QDC, QRC and QMC

QDC Must be used with KLINGSPOR's Steel Mandrels.

PRICE PER BOX

Diameter	Box Qty	100-180 Grit	80 Grit	60 Grit	50 Grit	36 Grit	24 Grit
2"	100	\$119.57	\$125.87	\$132.21	\$136.27	\$147.10	\$161.81
3"	50	76.27	80.27	84.26	86.88	92.39	101.63

NOTE: MAXIMUM RPM'S FOR QRC and QMC DISCS ARE THE SAME AS THE MAXIMUM RPM RATINGS OF THE HOLDER PAD USED TO DRIVE THE DISCS. **SEE PAGE 22 FOR THESE RATINGS.**



FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWER TOOLS
REFERENCE

FLAP DISCS
 BONDED
 NON-WOVEN
 QUICK CHANGE
 BELTS
 ROLLS
 SHEETS
 FLAPWHEELS
 SPECIALTY
 DISCS
 SAFETY
 POWER TOOLS
 REFERENCE

Non-Woven Scrim Backed Quick Change Discs

QDC - Scrim Backed

Must be used with KLINGSPOR's Steel Mandrels.

PRICE PER BOX

Diameter	Box Quantity	Very Fine	Medium	Coarse
2"	25	\$39.34	\$39.34	\$39.34
3"	25	74.55	74.55	74.55



QRC - Scrim Backed

PRICE PER BOX

Diameter	Box Quantity	Very Fine	Medium	Coarse
2"	25	\$39.34	\$39.34	\$39.34
3"	25	74.55	74.55	74.55



QMC - Scrim Backed

PRICE PER BOX

Diameter	Box Quantity	Very Fine	Medium	Coarse
2"	25	\$39.34	\$39.34	\$39.34
3"	25	74.55	74.55	74.55



NOTE: MAXIMUM RPM'S FOR QRC and QMC DISCS ARE THE SAME AS THE MAXIMUM RPM RATINGS OF THE HOLDER PAD USED TO DRIVE THE DISCS. SEE HOLDER PADS CHART BELOW FOR THESE RATINGS.

Non-Woven Buff & Blend

QRC - Buff and Blend

PRICE PER BOX

Diameter	Box Quantity	Very Fine	Medium	Coarse
2"	25	\$39.34	\$39.34	\$39.34
3"	25	74.55	74.55	74.55



QMC - Buff and Blend

PRICE PER BOX

Diameter	Box Quantity	Very Fine	Medium	Coarse
2"	25	\$39.34	\$39.34	\$39.34
3"	25	74.55	74.55	74.55

Holder Pads FOR QRC & QMC DISCS

PRICE PER HOLDER

Disc Diameter	Density	Max RPM	QRC #	Price
1 1/2"	Medium	25,000	(QM) (QR) HOLDER1.5MED	\$14.49
1 1/2"	Firm	30,000	(QM) (QR) HOLDER1.5FIRM	14.49
2"	Medium	25,000	(QM) (QR) HOLDER2.0MED	15.05
2"	Firm	30,000	(QM) (QR) HOLDER2.0FIRM	15.05
3"	Medium	20,000	(QM) (QR) HOLDER3.0MED	17.57
3"	Firm	20,000	(QM) (QR) HOLDER3.0FIRM	17.57





ABRASIVE BELTS

To meet the needs of the most demanding applications, KLINGSPOR offers one of the most diverse groups of materials for abrasive belts. Sanding and/or grinding with belts is one of the most effective and efficient methods for achieving all types of surface finishes. Common applications are found in all forms of manufacturing whether in metal, wood, glass, plastics, rubber or any number of different substrates. KLINGSPOR belts have long been revered in the industry for their longevity, cutting power, and price. Choose KLINGSPOR abrasive belts for *The Most Sanding Power for Your Money!*[®]



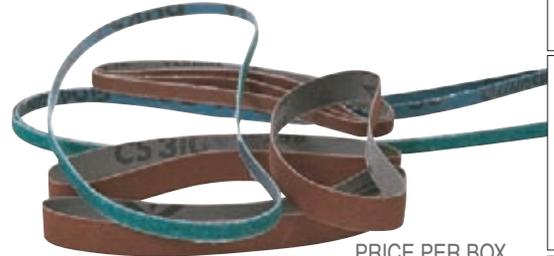
Approved Dynaflex Materials: CS310XF, CS710XF, CS308Y, CS411Y, CS409Y, CS416Y, CS910, CS912, Non-Woven

File Belts

Grind away small welds or deburr in hard-to-reach areas.

ALUMINUM OXIDE

These aluminum oxide belts will handle most small weld removal and deburring applications. The durable aluminum oxide grains combined with our special backing make the perfect belt for these small yet abrasive tools.



PRICE PER BOX

Belt Sizes	Box Quantity	100 Grit & Finer	80 Grit	60 Grit	50 Grit	40 Grit
* 1/8" x 12", 1/4" x 12", 1/2" x 12"	10	\$9.98	\$9.98	\$9.98	\$9.98	\$9.98
* 1/8" x 18", 1/4" x 18", 1/2" x 18"	10	11.06	11.06	11.06	11.06	11.06
1/4" x 20 1/2", 1/2" x 20 1/2"	10	12.16	12.16	12.16	12.16	12.16
* 1/8" x 24", 1/4" x 24", 1/2" x 24"	10	13.26	13.26	13.26	13.26	13.26
1/4" x 30", 1/2" x 30"	10	14.36	14.36	14.36	14.36	14.36
3/8" x 13"	10	10.75	10.75	10.75	10.75	10.75
5/8" x 18", 3/4" x 18"	10	13.42	13.42	13.42	13.42	13.42
5/8" x 20 1/2", 3/4" x 20 1/2"	10	14.36	14.36	14.36	14.36	14.36
5/8" x 24", 3/4" x 24"	10	15.44	15.44	15.44	15.44	15.44

* 1/8" wide belts are not guaranteed against breakage. All belts with #4 (butt splice) only.

Premium - CS 409 Y - ALUMINA ZIRCONIA DRY LUBRICANT

A lubricated alumina zirconia material, CS 409 is ideal for tougher metals and for heavier weld beads and burrs. The dry lubricant aids in the reduction of generated heat.

PRICE PER BOX

Belt Sizes	Box Quantity	120 Grit	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit
* 1/8" x 12", 1/4" x 12", 1/2" x 12"	10	\$13.26	\$13.26	\$13.26	\$13.26	\$13.26	\$13.26
* 1/8" x 18", 1/4" x 18", 1/2" x 18"	10	14.36	14.36	14.36	14.36	14.36	14.36
1/4" x 20 1/2", 1/2" x 20 1/2"	10	15.62	15.62	15.62	15.62	15.62	15.62
* 1/8" x 24", 1/4" x 24", 1/2" x 24"	10	16.53	16.53	16.53	16.53	16.53	16.53
1/4" x 30", 1/2" x 30"	10	17.61	17.61	17.61	17.61	17.61	17.61
3/8" x 13"	10	14.06	14.06	14.06	14.06	14.06	14.06
5/8" x 18", 3/4" x 18"	10	16.04	16.04	16.04	16.04	16.04	16.04
5/8" x 20 1/2", 3/4" x 20 1/2"	10	17.30	17.30	17.30	17.30	17.30	17.30
5/8" x 24", 3/4" x 24"	10	18.72	18.72	18.72	18.72	18.72	18.72

* 1/8" wide belts are not guaranteed against breakage. All belts with #4 (butt splice) only.

Ceramic File Belts

CERAMIC ALUMINUM OXIDE YY WEIGHT BACKING

PRICE PER BOX

Belt Size	Box Quantity	100 - 180 Grit	80 Grit	60 Grit	50 Grit	36 Grit
1/4" x 18", 1/2" x 18"	10	\$15.69	\$16.52	\$16.52	\$16.52	\$16.52
1/4" x 20 1/2", 1/2" x 20 1/2"	10	17.07	17.97	17.97	17.97	17.97
1/4" x 24", 1/2" x 24"	10	18.08	19.03	19.03	19.03	19.03
5/8" x 18", 3/4" x 18"	10	17.55	18.48	18.48	18.48	18.48
5/8" x 24", 3/4" x 24"	10	20.44	21.51	21.51	21.51	21.51



FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWER TOOLS
REFERENCE



Portable Belts

The ultimate in life and consistency. Premium components offer extended use in metal applications

CS 311 YX ALUMINUM OXIDE OPEN COAT YX WEIGHT CLOTH *ACT*

CS 310 X ALUMINUM OXIDE X WEIGHT CLOTH

PRICE PER BOX

Belt Size	Box Quantity	150-100 Grit	80 Grit	60 Grit	40 Grit
3" x 21"	10 *	\$28.77	\$29.55	\$30.89	\$33.02
3" x 24"	10 *	30.77	31.67	33.16	35.60
4" x 21"	10	47.88	48.95	50.61	53.63
4" x 24"	10 *	50.45	51.81	53.63	56.96
4" x 36"	10	60.90	62.74	65.42	70.59
6" x 48"	10	106.95	110.58	116.04	126.48

All belts with #4 (butt splice) only. * CALL FOR VOLUME DISCOUNTS ON CS 311 MATERIAL.



Premium Portable Belts

Perfect for heavy stock removal. Use for smoothing metal surfaces.

CS 411 Y ALUMINA ZIRCONIA POLYESTER CLOTH

PRICE PER BOX

Belt Size	Box Quantity	120 Grit	80 Grit	60 Grit	40 Grit	36 Grit	24 Grit
3" x 18"	10 *	\$35.89	\$38.62	\$40.15	\$42.87	\$44.40	\$47.73
3" x 21"	10 *	38.15	41.36	43.33	46.21	48.34	52.26
3" x 23 ^{3/4} "	10	41.10	44.40	46.49	49.86	52.26	56.66
3" x 24"	10 *	41.10	44.40	46.49	49.86	52.26	56.66
4" x 21"	10	64.47	68.45	70.91	75.15	77.56	83.02
4" x 24"	10 *	68.45	72.58	75.15	79.69	82.88	88.75

All belts with #4 (butt splice) only. * CALL FOR VOLUME DISCOUNTS.



Observe appropriate safety regulations. Use eye, face, hearing, respiratory, hand and body protection when using abrasive products.



FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

Custom Size Specialty Polyester Belts

Width	100 Grit & Finer	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit	Joining Charge
1/2"	\$0.0233	\$0.0257	\$0.0284	\$0.0305	\$0.0323	\$0.0362	\$0.0387	\$1.55
5/8"	0.0286	0.0311	0.0344	0.0359	0.0387	0.0440	0.0499	1.55
3/4"	0.0341	0.0363	0.0410	0.0431	0.0458	0.0522	0.0590	1.55
1"	0.0440	0.0465	0.0533	0.0562	0.0599	0.0682	0.0773	2.09
2"	0.0848	0.0907	0.1020	0.1087	0.1158	0.1314	0.1504	2.09
3"	0.1243	0.1328	0.1512	0.1610	0.1726	0.1956	0.2237	3.08
4"	0.1649	0.1775	0.1999	0.2144	0.2285	0.2600	0.2974	4.10
5"	0.2056	0.2199	0.2495	0.2668	0.2858	0.3240	0.3704	5.10
6"	0.2460	0.2640	0.2979	0.3189	0.3419	0.3875	0.4427	6.14
7"	0.2870	0.3065	0.3473	0.3714	0.3983	0.4522	0.5160	7.13
8"	0.3275	0.3501	0.3964	0.4238	0.4545	0.5160	0.5894	8.17
9"	0.3674	0.3932	0.4457	0.4764	0.5106	0.5793	0.6627	9.19
14"	0.5694	0.6098	0.6917	0.7389	0.7924	0.8999	1.0294	14.26
36"	1.1475	1.2298	1.3926	1.4912	1.5992	1.8168	2.0793	30.71
50"	1.5863	1.7007	1.9273	2.0640	2.2132	2.5160	2.8803	42.67
51"	1.6495	1.7679	2.0036	2.1456	2.3011	2.6149	2.9946	44.32
52"	1.7123	1.8352	2.0799	2.2279	2.3889	2.7154	3.1089	46.06
53"	1.7123	1.8352	2.0799	2.2279	2.3889	2.7154	3.1089	46.06

AVAILABLE MATERIALS

CS 326¹ A/O Agglomerate
YX wt Cloth
CS 409² AZ Dry-Lube
YY/YX wt Cloth
CS 411 AZ X wt Cloth
CS 411³ AZ YX/YY wt Cloth
CS 416³ AZ YY/YX wt Cloth
CS 811YY³ AZ YY/YX Cloth *ACT*

¹ = Final price x 2
² = Add 20% to final price
³ = Add 10% to final price



Custom Size Ceramic Cloth Belts

Width	100 - 180 Grit	80 Grit	60 Grit	50 Grit	36 Grit	24 Grit	Joining Charge
1/2"	\$0.0430	\$0.0453	\$0.0496	\$0.0531	\$0.0631	\$0.0694	\$2.68
5/8"	0.0522	0.0549	0.0599	0.0629	0.0770	0.0847	2.68
3/4"	0.0606	0.0638	0.0717	0.0751	0.0907	0.0997	2.68
1"	0.0769	0.0809	0.0932	0.0983	0.1196	0.1315	3.64
1 1/4"	0.0960	0.1010	0.1130	0.1211	0.1470	0.1618	3.64
1 1/2"	0.1137	0.1197	0.1348	0.1446	0.1751	0.1926	3.64
1 3/4"	0.1310	0.1379	0.1556	0.1671	0.2031	0.2234	3.64
2"	0.1500	0.1580	0.1777	0.1895	0.2296	0.2525	3.64
2 1/4"	0.1673	0.1762	0.1995	0.2125	0.2574	0.2831	4.53
2 1/2"	0.1855	0.1953	0.2210	0.2361	0.2854	0.3139	4.53
3"	0.2200	0.2316	0.2644	0.2809	0.3416	0.3758	5.39
3 1/2"	0.2575	0.2710	0.3055	0.3277	0.3980	0.4378	6.25
4"	0.2945	0.3100	0.3484	0.3739	0.4538	0.4992	7.17
4 1/2"	0.3306	0.3480	0.3925	0.4192	0.5101	0.5611	8.07
5"	0.3648	0.3840	0.4359	0.4656	0.5657	0.6223	8.91
6"	0.4376	0.4607	0.5199	0.5567	0.6758	0.7435	10.69
7"	0.5084	0.5352	0.6067	0.6484	0.7892	0.8682	12.43
8"	0.5807	0.6112	0.6917	0.7402	0.9010	0.9911	14.24
9"	0.6523	0.6867	0.7777	0.8312	1.0115	1.1127	16.11
10"	0.7253	0.7635	0.8629	0.9238	1.1235	1.2358	17.83
11"	0.7960	0.8379	0.9494	1.0158	1.2362	1.3598	19.53
12"	0.8683	0.9140	1.0339	1.1071	1.3478	1.4826	21.38

AVAILABLE MATERIALS

CS 631 XF A/O Ceramic, Multibond, XF-wt Cloth (60, 80, 100, 120 Grit)
CS 631 JF A/O Ceramic, Multibond, JF-wt Cloth (80, 100, 120, 180, 240, 320 Grit)
CS 910* A/O Ceramic, Multibond, YY wt Cloth (24, 36, 60 Grit)
CS 912 A/O Ceramic YY wt Cloth (36 and 50-180 Grit)
* = Add 20% to final price



Custom Size Paper Belts

Design your own paper belt for your application.

Width	100 Grit & Finer	80 Grit	Joining Charge
4"	\$0.0619	\$0.0678	\$4.48
6"	0.0910	0.0995	6.66
8"	0.1204	0.1318	8.85

AVAILABLE MATERIALS

PS 20 A/O F wt Paper
 PS 21* A/Z F wt Paper
 * Add 20% to final price
 PS 22 A/O E wt Paper *ACT*

PRICE CALCULATION FOR CUSTOM SIZE BELTS

1. Locate price according to width and grit size.
2. Multiply price by length in inches (if fraction, use next full inch).
3. Add joining charge in the last column.
4. Multiply by applicable up charge, if necessary.
5. Rounding off to second decimal place equals retail price.

EXAMPLE:

PS 20 80F 6" x 270" #4
 (1,2) \$.0995 x 270 = \$26.109
 (3) + \$6.66

 \$33.525
 (5) \$33.53

Call if you need assistance with a custom belt.



Standard Size Paper Belts

Choose from popular sizes for stroke sanding, wide belt sanding, etc.

AVAILABLE MATERIALS

PS 20 A/O F wt Paper
 PS 21* A/Z F wt Paper * Add 20% to price
 PS 22 A/O E wt Paper *ACT*

PRICE PER BELT

Belt Size	100 Grit & Finer	80 Grit
6" x 274"	\$31.33	\$33.63
6" x 288"	32.61	34.99
6" x 298"	33.50	35.95
6" x 328"	36.23	38.97
6" x 330"	36.44	39.16
6" x 335"	36.86	39.66
6" x 376"	40.59	43.73
6" x 396"	42.42	45.71



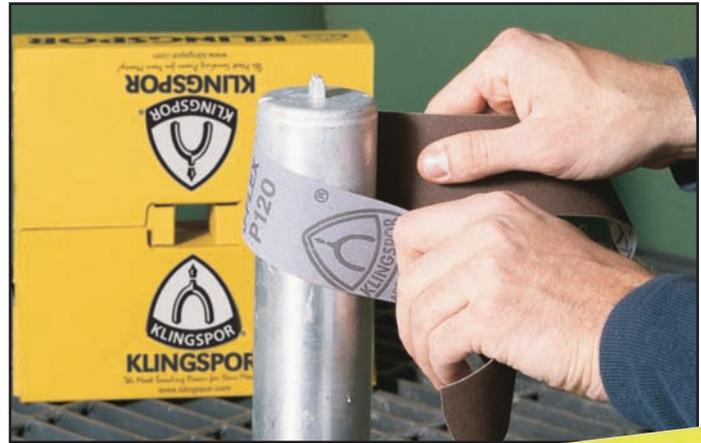
Observe appropriate safety regulations. Use eye, face, hearing, respiratory, hand and body protection when using abrasive products.

- FLAP DISCS
- BONDED
- NON-WOVEN
- QUICK CHANGE
- BELTS**
- ROLLS
- SHEETS
- FLAPWHEELS
- SPECIALTY
- DISCS
- SAFETY
- POWERTOOLS
- REFERENCE



ABRASIVE ROLLS

Many KLINGSPOR materials are available in roll form. Your applications may benefit from being able to fabricate your own sanding pieces from rolls. In addition, KLINGSPOR economy roll materials are quite possibly the very best in the business. For quick touch-up and the sanding of shaped surfaces, KLINGSPOR rolls cannot be beat.



Premium Shop Rolls - 50 Yards

This could very well be the best shop roll material in the world. Numerous applications from maintenance to general quick use make these rolls very versatile. **NOT FOR USE ON DRUM SANDERS!**

KL 361 ALUMINUM OXIDE FLEXIBLE COTTON CLOTH PRICE PER ROLL

Width	100 Grit & Finer	80 Grit	60 Grit	40 Grit
1"	\$42.25	\$44.27	\$51.73	\$59.48
1 1/2"	59.68	61.43	73.61	82.83
2"	75.57	79.35	94.98	110.41
2 1/2"	92.75	97.63	105.45	122.05
3"	111.31	117.16	126.54	146.42
3 1/2"	129.85	136.66	147.59	181.86
4"	148.38	156.20	168.73	195.23
4 1/2"	167.17	176.01	189.98	219.88
6"	222.90	234.60	253.39	293.28

Intermediate widths use next higher list price.

WIDTHS UP TO 12" AVAILABLE UPON REQUEST. CALL FOR PRICES



Economy Rolls - 50 Yards

When the budget is your concern, these Economy Rolls will keep you smiling, and this material will hold its own against most higher-priced shop rolls. **NOT FOR USE ON DRUM SANDERS.**

KL 385 ALUMINUM OXIDE JF WEIGHT CLOTH PRICE PER ROLL

Width	100 Grit & Finer	80 Grit	50 Grit	40 Grit
1"	\$34.89	\$37.65	\$47.34	\$50.54
1 1/2"	49.35	52.20	66.36	70.39
2"	62.43	67.44	90.25	93.86
3"	91.94	99.59	115.52	124.46
4"	126.13	132.79	153.99	165.98
6"	189.46	199.40	231.32	249.30

WIDTHS UP TO 12" AVAILABLE UPON REQUEST. CALL FOR PRICES



Cloth Rolls-100 Meters (109 YARDS)

A multitude of applications can be covered with these cloth rolls from general clean-up to maintenance. KLINGSPOR materials include a realm of aluminum oxide, alumina zirconia, and silicon carbide products.

PRICE PER 100 METER ROLL

Width	100 & Finer	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
1"	\$124.55	\$129.75	\$142.33	\$150.18	\$160.12	\$172.65	\$195.71
2"	239.15	251.67	272.08	289.88	310.30	333.32	381.45
3"	351.09	371.52	404.49	417.98	460.45	496.05	567.23
4"	465.18	493.42	533.72	572.44	610.15	658.79	752.95
5"	579.80	612.73	666.09	684.53	712.15	762.89	938.18
6"	694.37	735.17	795.88	851.86	913.09	981.62	1,121.35

25 meter (27 yards) rolls available at 75% off prices shown

50 meter (54 1/2 yards) rolls available at 50% off prices shown



AVAILABLE MATERIALS			
CS 308	A/O YX wt Cloth	CS 341*	A/O Waterproof X wt Cloth
LS 309	A/O J/JF wt Cloth	CS 412*	A/O YX wt Cloth
CS 310	A/O X wt Cloth	CS 411	A/Z X/YX/YY wt Cloth
CS 311	A/O Open Coat YX wt Cloth <i>ACT</i>	CS 411 X	24-36 Grit - Add 40.32% to price shown
LS 312*	A/O Dry-Lube JF wt Cloth		40-60 Grit - Add 33.10% to price shown
LS 313**	A/O Dry-Lube for SS JF wt Cloth		80 Grit - Add 27.56% to price shown
LS 318	JF 80 - 180 JF cotton cloth backing	CS 411 Y	120 Grit - Add 27.56% to price shown
	A/S, ACT bonding with an open coat.		24-36 Grit - Add 57.15% to price shown
CS 320*	S/C Waterproof YY wt		40-60 Grit - Add 49.71% to price shown
CS 321*	S/C Waterproof YX/X wt Cloth		80 Grit - Add 46.05% to price shown
CS 333	S/C X/J/JF wt Cloth	CS 710*	120 Grit - Add 31.14% to price shown
			Heat-Treated XF Wt. Cloth <i>ACT</i>

* Add 5% to price shown ** Add 10% to price shown



Waterproof Paper Rolls

PS 14 SILICON CARBIDE A/C WEIGHT LATEX PAPER

PRICE PER 100 METER ROLL

Width	220 Grit & Finer	180 Grit	150 Grit	120 Grit	100 Grit	80 Grit
4" x 100 meters	\$158.04	\$165.77	\$177.12	\$188.86	\$218.58	\$250.08
6" x 100 meters	237.09	248.65	265.68	283.33	327.84	375.17

25 meter (27 yard) rolls available at 75% off prices shown

50 meter (54 1/2 yards) rolls available at 50% off prices shown

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

Standard Size Sheets

Sheets for every purpose are available for almost any hand sanding or power sheet sanding application. Hand-sanded surfaces cannot be beat when it comes down to final finishing.

PS 36 ALUMINA ZIRCONIA STEARATE C/D WEIGHT PAPER

PRICE PER PACK

Size	Pack Quantity	100C Grit & Finer	80C Grit	60C Grit	40D Grit	36D Grit
9" x 11"	50	\$57.37	\$63.10	\$71.70	\$89.85	\$106.85
4 1/2" x 11"	100	65.01	72.66	82.22	103.27	122.79
3 2/3" x 9"	100	44.00	49.70	55.43	68.83	81.85
4 1/2" x 5 1/2"	100	32.50	34.42	42.06	51.61	61.36



PS 14 SILICON CARBIDE WATERPROOF A/C WEIGHT LATEX PAPER

PRICE PER PACK

Size	Pack Quantity	2000A-220A Grit	180C Grit	150C Grit	120C Grit	100C Grit	80C Grit	60C Grit
9" x 11"	50	\$47.53	\$51.50	\$54.64	\$57.82	\$66.51	\$76.02	\$89.51
4 1/2" x 11"	100	53.85	58.63	61.78	66.51	76.02	87.14	102.97
3 2/3" x 9"	100	36.46	39.62	42.78	44.33	50.68	58.63	68.11
4 1/2" x 5 1/2"	100	25.33	28.53	30.09	33.27	39.62	44.33	52.26

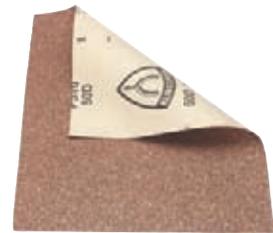


PS 10 GARNET A/C/D WEIGHT PAPER

PRICE PER PACK

Size	Pack Quantity	220A Grit	180A Grit	150A Grit	120A Grit	100A Grit	80A Grit
9" x 11"	50	\$25.33	\$25.33	\$25.33	\$25.33	\$25.33	\$30.09

C and D weight paper is available. Call for price and availability.



PS 33 ALUMINUM OXIDE STEARATE B/C WEIGHT PAPER

PRICE PER PACK

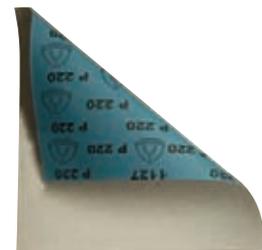
Size	Pack Quantity	600B-150B Grit	120C-100C Grit	80C Grit	60C Grit	40C Grit
9" x 11"	50	\$47.53	\$47.53	\$52.26	\$59.39	\$74.43
4 1/2" x 11"	100	53.85	53.85	60.19	68.11	85.53
3 2/3" x 9"	100	36.46	36.46	41.17	45.92	57.01
4 1/2" x 5 1/2"	100	26.95	26.95	28.53	34.85	42.78



VP 73W STEARATE ALUMINUM OXIDE LATEX PAPER

PRICE PER PACK

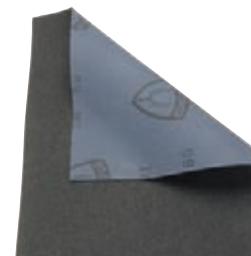
Size	Pack Quantity	100 Grit & Finer	80 Grit
9" x 11"	50	\$54.64	\$60.11
4 1/2" x 11"	100	61.94	69.22
3 2/3" x 9"	100	41.91	47.34
4 1/2" x 5 1/2"	100	30.96	32.80



KL 371 EMERY CLOTH HEAVY COTTON CLOTH

PRICE PER PACK

Size	Pack Quantity	400 - 80 Grit	60 - 50 Grit	40 Grit
9" x 11"	50	\$76.02	\$86.32	\$99.81



KL 361 "PREMIUM" ALUMINUM OXIDE CLOTH FLEXIBLE COTTON CLOTH

PRICE PER PACK

Size	Pack Quantity	100 Grit & Finer	80 Grit	60 Grit	40 Grit
9" x 11"	50	\$95.82	\$102.17	\$123.54	\$143.34
4 1/2" x 11"	100	110.89	118.80	142.59	164.73
3 3/8" x 9"	100	72.84	77.62	95.04	109.30
4 1/2" x 5 1/2"	100	55.43	58.63	71.28	80.81



KL 385 ALUMINUM OXIDE CLOTH HEAVY COTTON CLOTH

PRICE PER PACK

Size	Pack Quantity	100 Grit & Finer	80 Grit	50 Grit	40 Grit
9" x 11"	50	\$82.55	\$87.93	\$113.34	\$121.57
4 1/2" x 11"	100	95.51	102.34	130.96	141.90
3 3/8" x 9"	100	62.79	66.81	87.71	92.70
4 1/2" x 5 1/2"	100	47.75	50.43	64.77	68.52



Board File Sheets

Make short work of body filler or metal with these popular-sized file board sheets.

PLAIN SHEETS - 2 3/4" X 17 1/2"

PRICE PER BOX

Material	150 Grit & Finer	Box Qty	120 Grit	Box Qty	100 Grit	Box Qty	80 Grit	Box Qty	60 Grit	Box Qty	40 Grit	Box Qty	36 Grit	Box Qty
PS 73W	\$47.70	100	■		■		■		■		■		■	
PS 33	\$41.59	100	\$41.59	100	\$41.59	100	\$22.98	50	\$28.47	50	\$31.53	50	■	
PS 29	■		■		■		\$37.28	50	\$42.35	50	\$50.78	50	■	
PS 20	■		■		■		■		■		■		\$28.10	25
PS 21	\$41.59	50	\$41.59	50	\$41.59	50	\$44.37	50	■		\$60.03	50	\$31.94	25
PS 36	\$28.91	50	\$28.91	50	\$28.91	50	\$31.98	50	\$39.63	50	\$43.92	50	\$23.36	25

PSA SHEETS - 2 3/4" X 16 1/2"

Material	150 Grit & Finer	Box Qty	120 Grit	Box Qty	100 Grit	Box Qty	80 Grit	Box Qty	60 Grit	Box Qty	40 Grit	Box Qty	36 Grit	Box Qty
PS 73W	\$36.96	50	■		■		■		■		■		■	
PS 33	\$32.31	50	\$32.31	50	\$32.31	50	\$35.40	50	\$40.03	50	\$43.89	50	■	
PS 29	■		■		■		\$48.49	50	\$53.11	50	\$56.96	50	■	
PS 20	■		■		■		■		■		■		\$30.02	25
PS 21	■		\$55.41	50	\$55.41	50	\$57.74	50	\$63.89	50	\$69.26	50	\$34.64	25
PS 36	\$44.97	50	\$44.97	50	\$44.97	50	\$49.27	50	\$55.71	50	\$61.06	50	\$30.53	25

KLING-ON® SHEETS - 2 3/4" X 16 1/2"

Material	150 Grit & Finer	Box Qty	120 Grit	Box Qty	100 Grit	Box Qty	80 Grit	Box Qty	60 Grit	Box Qty	40 Grit	Box Qty	36 Grit	Box Qty
PS 73W	\$52.31	50	■		■		■		■		■		■	
PS 33	\$45.41	50	\$45.41	50	\$45.41	50	\$50.01	50	\$49.27	50	\$51.57	50	■	
PS 29	■		■		■		\$33.10	25	\$36.96	25	\$37.32	25	■	
PS 20	■		■		■		■		■		■		\$41.08	25

FLAP DISCS
BONDED
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QUICK CHANGE
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SAFETY
POWERTOOLS
REFERENCE



ABRASIVE FLAPWHEELS

Often under utilized and misunderstood, flapwheels can play a key role in the finishing of parts made of metal, wood, plastic, and more. The ability of these tools to conform to irregular or flat surfaces is unparalleled, making them ideal choices for many applications. You'll find that our flapwheels offer answers to a myriad of different manufacturing "problems" in edge sanding, flat sanding, and sanding of shaped parts. KLINGSPOR Flapwheels are the most revered in the world because of the durable construction and the longevity they yield.



SM 611 Abrasive Flapwheels

Sand and finish wood or metal contoured parts with these large diameter flapwheels.

Diameter x Width x Arbor	Max RPM	320 Grit	240 Grit	220 Grit	180 Grit	120 Grit	100 Grit	80 Grit	60 Grit	50 Grit	40 Grit
4" x 2"	9,500	\$39.37	\$39.37	\$34.63	\$34.63	\$33.09	\$33.09	■	\$29.05	\$29.05	\$29.05
5 1/2" x 1"	6,800	34.63	34.63	29.05	29.05	26.10	26.10	26.10	23.47	23.47	■
5 1/2" x 2"	6,800	48.75	48.75	43.98	43.98	40.58	40.58	40.58	34.63	34.63	34.63
* 6 1/2" x 1" x 1"	5,800	42.41	42.41	38.53	38.53	32.80	32.80	32.80	29.88	29.88	29.88
* 6 1/2" x 2" x 1"	5,800	69.26	69.26	61.65	61.65	54.05	54.05	54.05	45.27	45.27	45.27
6 1/2" x 3"	5,800	99.14	99.14	■	■	73.31	73.31	73.31	65.55	■	■
* 8" x 1" x 1"	4,800	71.24	71.24	■	63.66	56.29	56.29	56.29	48.75	48.75	48.75
* 8" x 1 3/16" x 1"	4,800	■	■	■	71.24	61.64	61.64	61.64	56.29	■	■
* 8" x 2" x 1"	4,800	123.57	■	108.65	108.65	87.96	87.96	87.96	73.19	73.19	■
10" x 1"	3,800	102.71	102.71	89.56	89.56	77.54	77.54	77.54	61.16	61.16	61.16
10" x 2"	3,800	165.02	165.02	145.81	145.81	126.00	126.00	126.00	108.11	■	108.11
10" x 3"	3,800	213.42	213.42	183.18	183.18	162.50	162.50	162.50	139.37	■	139.37
12" x 1 3/16"	3,200	151.62	151.62	139.37	139.37	■	129.04	129.04	112.12	112.12	■
12" x 2"	3,200	222.99	222.99	193.99	193.99	162.50	162.50	162.50	139.37	139.37	139.37
12" x 3"	3,200	■	308.92	265.64	265.64	217.77	■	217.77	188.43	188.43	■
14" x 2"	2,500	■	■	261.20	■	207.05	207.05	207.05	181.58	181.58	181.58
14" x 3"	2,500	456.21	456.21	428.30	428.30	■	297.02	297.02	■	■	■
16" x 2"	2,300	398.79	■	■	356.13	298.66	298.66	298.66	246.19	246.19	246.19
16" x 3"	2,300	552.99	552.99	491.54	491.54	405.83	■	405.83	334.71	334.71	334.71

* Do not require SMD 612 mounting plates. Bores from 1/2" to 1 1/4" available. Please specify bore size. All other SM 611 flapwheels must be used with SMD 612 Mounting Plates.

WSM 617

This useful and versatile flapwheel makes metal finishing easier. The WSM 617 has a solid center with a built-in 5/8"-11 threaded hole for use on most angle-grinders. With this type of flapwheel, the larger surface area of the face is used, making it a quicker way to apply finishing touches or a unique decorative finish to your metal workpiece. **For extended life, use at a slower RPM between 7,500 and 8,600.**

Diameter x Width x Spindle	Maximum RPM	Recommended RPM	120 Grit	80 Grit	60 Grit	40 Grit
4 1/2" x 3/4" x 5/8" - 11"	13,300	8,600	\$22.90	\$22.90	\$21.61	\$21.61

WSM617 great for stainless steel kitchen manufacturers, and blending weld seams for a linear scratch pattern.



SMD 612 Mounting Plates

REQUIRED! Top quality alignment for your SM 611 flapwheels. For repeated use with SM 611 and the Mac Mop. Specify arbor hole size. **Flanges for 4" Flapwheels thru 12" Flapwheels are Galvanized Steel. Flanges for 14" Flapwheels thru 16" Flapwheels are Aluminum Castings.**

Flapwheel Diameter	Diameter of Plates (Inches)	Standard Bore (Inches)	Maximum Bore (Inches)	Price Per Pair
4"	2 ³ / ₁₆ "	3/ ₈ "	3/ ₄ "	\$8.12
5 ¹ / ₂ "	2 ³ / ₁₆ "	3/ ₈ "	3/ ₄ "	8.12
† * 6 ¹ / ₂ "	3 ¹ / ₈ "	1/ ₂ "	1 ¹¹ / ₁₆ "	8.12
†† 10"	4 ³ / ₄ "	9/ ₁₆ "	2"	19.19
12"	6"	3/ ₄ "	2"	29.31
14"	8"	1"	3 ¹ / ₈ "	97.71
16"	9"	1"	3 ¹ / ₈ "	109.28

* Mac Mop mounting plate size. † Mounting Plate for 6 1/2" NCW 600 †† Mounting Plate for 8" NCW 600



KM 613 Spindle Mounted Flapwheels

Superb for finish-sanding of small metal contoured parts, in and around radii or into holes.

Available Grits: 60, 80, 120, 180, 240 • Minimum Package: 1 Box of 10 per size and grit

*Other sizes are available. Please call for pricing.

Diameter x Width x Spindle	Max RPM	Price
1" x 1/2" x 1/4"	30,000	\$5.80
1" x 1" x 1/4"	30,000	6.20
1 1/2" x 1/2" x 1/4"	25,000	6.59
1 1/2" x 1" x 1/4"	25,000	7.38
2" x 1/2" x 1/4"	25,000	7.69
2" x 3/4" x 1/4"	25,000	8.08
2" x 1" x 1/4"	25,000	8.69
2 1/2" x 1/2" x 1/4"	20,000	8.23
2 1/2" x 1" x 1/4"	20,000	9.35
2 1/2" x 2" x 1/4"	20,000	13.52
3" x 1/2" x 1/4"	12,000	8.80
3" x 3/4" x 1/4"	12,000	10.15
3" x 1" x 1/4"	12,000	10.89
3" x 2" x 1/4"	12,000	15.29

PRICE PER FLAPWHEEL



**VERY IMPORTANT
NOT TO EXCEED
RECOMMENDED RPM!**

Mac Mop

The very best tool for final finishing, polishing, and making decorative finishes on severe profiles.

Must be used with KLINGSPOR SMD 612 - 6 1/2" mounting plates.

Diameter x Width	Max RPM	Recommended RPM	PRICE PER MOP	
			180, 150 Grit	120, 100, 80 Grit
10" x 2"	3400	1700 - 2500	\$159.86	\$138.19
10" x 4"	3400	1700 - 2500	284.52	235.39



**DON'T FORGET
MOUNTING PLATES**



Spindle Mounted Mac Mops

The very best tool for final finishing, polishing, and making decorative finishes on severe profiles.

Diameter x Width	Max RPM	240, 180, 120, 80 Grit
7" x 1" x 1/4"	4200	\$40.00
7" x 2" x 1/4"	4200	45.72

PRICE PER MOP

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE BELTS
ROLLS SHEETS
FLAPWHEELS
SPECIALTY DISCS
SAFETY
POWER TOOLS
REFERENCE

NSF 600 Small Finishing Flapwheels

Non-woven abrasive wheels specifically for matte, satin and final finishing on metals.

Diameter x Width x Spindle	Maximum RPM	VERY FINE	MEDIUM
2 3/8" x 2" x 1/4"	3,700	\$13.76	\$13.76
3 1/8" x 2" x 1/4"	3,700	17.13	16.41



NCS 600 Small Finishing Flapwheels

Superb for final finish-sanding of small metal flat or contoured parts, in and around radii or into holes. These flapwheels produce a beautiful "brush finish" on most metals.

SPINDLE MOUNTED

PRICE PER FLAPWHEEL

Diameter x Width x Spindle	Maximum RPM	240 S/C	150 A/O	100 A/O	60 A/O
2" x 1" x 1/4"	12,000	\$14.31	\$14.31	\$14.31	\$14.31
3 1/8" x 2" x 1/4"	8,000	31.58	31.58	31.58	31.58
4" x 1 3/4" x 1/4"	6,000	36.91	N/A	36.91	36.91

S/C = Silicon Carbide; A/O = Aluminum Oxide



NCW 600 Finishing Flapwheels

A very fine sanding form of flapwheel that conforms to contoured parts and puts a beautiful satin finish on most metals. Constructed of non-woven abrasive and flexible sandpaper

PLEASE NOTE: NCW 600 Finishing Flapwheels must be used with SMD 612 Mounting Plates on page 33.

PRICE PER FLAPWHEEL

Diameter x Width	Maximum RPM	180, 150, 100, 80 A/O
6 1/2" x 2"	3,700	\$60.07
8" x 2"	3,050	\$95.01



Observe appropriate safety regulations. Use eye, face, hearing, respiratory, hand and body protection when using abrasive products.



Convolute Wheels



KLINGSPOR Convolute Wheels feature dense, non-woven construction. They are smooth running, non-metallic, soft and smear-resistant. They create less operator fatigue, no contamination of the workpiece, reduce gouging and provide a faster stock removal rate.

Applications: Used for blending mill marks, machine mismatches, prior sanding scratch patterns, reducing uneven edges between surfaces and surface roughness prior to welding, for removing medium burrs, light flashing, parting lines, light adhesive overflow, smoothing radii on stamped metal parts, polishing welds, blending and polishing handling marks.

Market Usage: Chemical plants, metal fabricators, appliance manufacturers, machine builders, engine builders, welding shops, aerospace, manufacturing, maintenance, mold & die shops, welding shops, oil field machinery.

Required Tool/Equipment: Automated equipment, straight shaft stationary tools, straight shaft portable tools and feed thru machines.

Item#	Max. RPM	Size	Grit	Density/Designation	List Price
CFV60001	6,000	6" x 1/2" x 1"	Fine SILICON CARBIDE	Hard Deburring 9SF	\$58.69
CFV60004	6,000	6" x 1/2" x 1"	Fine SILICON CARBIDE	Medium Deburring 8SF	58.69
CFV60002	6,000	6" x 1" x 1"	Fine SILICON CARBIDE	Medium Deburring 9SF	82.16
CFV60003	6,000	6" x 1" x 1"	Fine SILICON CARBIDE	Hard Deburring 9SF	82.16
CFV60005	6,000	6" x 1" x 1"	Medium SILICON CARBIDE	Medium Deburring 8SM	82.16
CFV80003	4,500	8" x 1/2" x 3"	Fine SILICON CARBIDE	Medium Deburring 8SF	69.84
CFV80001	4,500	8" x 1" x 3"	Fine SILICON CARBIDE	Medium Deburring 8SF	102.75
CFV80002	4,500	8" x 1" x 3"	Fine SILICON CARBIDE	Hard Deburring 9SF	102.75
CFV80006	4,500	8" x 1" x 3"	Medium SILICON CARBIDE	Medium Deburring 8SM	102.75
CFV80007	4,500	8" x 2" x 3"	Medium SILICON CARBIDE	Medium Deburring 8SM	179.17
CFV80008	4,500	8" x 2" x 3"	Medium SILICON CARBIDE	Medium Deburring 9SF	194.04
CFV12001	3,000	12" x 1" x 5"	Fine SILICON CARBIDE	Hard Deburring 9SF	147.76
CFV12003	3,000	12" x 1" x 5"	Fine SILICON CARBIDE	Medium Deburring 8SF	147.76
CFV12002	3,000	12" x 2" x 5"	Fine SILICON CARBIDE	Hard Deburring 9SF	262.65

Convolute Competitive Comparisons

KLINGSPOR	3M	Norton
Deburring Hard S/C Fine	EXL Deburring 9SF	Series 1000 - 1 - 9SF
Deburring Medium S/C Fine	EXL Deburring 8SF	Series 1000 - 1 - 8SF
Deburring Medium S/C Medium	EXL Deburring 8SM	Series 1000 - 1 - 8SM

IMPORTANT: Convolute wheels must be run in the direction of the arrow.

Mounting Bushings

Description	Item#	Price	Description	Item#	Price
6" Wheel Bushing 1" to 3/8"	CFVB001	\$1.50	8" Wheel Bushing 3" to 1"	CFVB004	\$73.47
6" Wheel Bushing 1" to 1/2"	CFVB002	1.50	8" Wheel Bushing 3" to 1 1/4"	CFVB005	73.47
6" Wheel Bushing 1" to 3/4"	CFVB003	1.50	12" Wheel Bushing 5" to 1"	CFVB006	104.28
6" Wheel Bushing 1" to 5/8"	CFVB008	1.50	12" Wheel Bushing 5" to 1 1/4"	CFVB007	104.28

Type 27 Depressed Center Unitized Discs

These unique depressed center discs offer a new grinding and finishing solution for the metal working markets. They are manufactured using the popular and highly durable unitized material attached to a fibre-reinforced backing plate. This device offers stock removal while leaving a pleasing final finish. Some applications for fibre discs and/or flap discs may be replaced with the Type 27 Unitized Discs. Applications include: deburring, edge breaking, blending, cleaning, polishing, and final finishing.

Unitized discs great for polishing brass. Excellent for food grade stainless steel

Unitized discs excellent for aluminum sign mfrs, blending weld marks.

Size	Series 632	Series 811	Series 821
4 1/2" x 7/8"	\$22.44	\$28.41	\$27.01

TYPE	DENSITY	GRADE	GRAIN	APPLICATION
Series 632	Medium	Fine	S/C	Use light pressure for fine finishing and polishing; is highly conformable; provides clean bright stainless finishes; blends tool marks and removes slight surface imperfections.
Series 811	Hard	Coarse	A/O	Highest stock removal and edge-breaking capability; most aggressive for deburring.
Series 821	Hard	Medium	A/O	Provides high stock removal while maintaining disc life and productivity; very durable on an edge.



FLAP DISCS
 BONDED
 NON-WOVEN
 QUICK CHANGE
 BELTS
 ROLLS
 SHEETS
 FLAPWHEELS
 SPECIALTY
 DISCS
 SAFETY
 POWER TOOLS
 REFERENCE

Wire Brushes and Wheels

The KLINGSPOR line embodies the main types of wire products with a focus on basic application needs. Included in the line are both carbon steel and stainless steel versions of knot wheels, crimped wheels, cup wheels, stringer bead wheels, and end brush wheels to name a few. With this assortment, the KLINGSPOR line satisfies most wire wheel requirements.



CRIMPED CUP WHEEL (CC)



AVAILABLE IN: CARBON STEEL		
KM6009	3 x 5/8-11, .014, trim 1/8" MAX RPM 14,000	\$11.95
KM6010	4 x 5/8-11, .020, trim 1/8" MAX RPM 9,000	\$18.26
KM6011	6 x 5/8-11, .014, trim 1/8" MAX RPM 6,000	\$25.84

CRIMPED END BRUSH WHEEL (CEB)

AVAILABLE IN: CARBON STEEL		
KM6015	3/4 x 1/4, .020, Trim 1/8" MAX RPM 18,000	\$7.56
KM6016	1 x 1/4, .020, Trim 1/8" MAX RPM 18,000	\$9.20
KM6018	3/4 x 1/4, .014, Trim 1/8" MAX RPM 20,000	\$8.09



TWISTED KNOT CUP WHEEL (TKC)



AVAILABLE IN: CARBON STEEL (CS) AND STAINLESS STEEL (SS)		
KM6012	2 3/4 x 5/8-11, CS, .020 Trim 1/4", 18 Knots MAX RPM 12,500	\$19.73
KM6013	2 3/4 x 5/8-11, SS, .020 Trim 1/4", 18 Knots MAX RPM 12,500	\$29.47
KM6014	4 x 5/8-11, CS, .020 Trim 1/8", 18 Knots MAX RPM 9,000	\$28.27

TWISTED KNOT END BRUSH (TKEB)

AVAILABLE IN: CARBON STEEL (CS) AND STAINLESS STEEL (SS)

KM6017	3/4 x 1/4, CS, .020, Trim 1/8", 9 Knots MAX RPM 20,000	\$14.64
KM6043	3/4 x 1/4, CS, .014, Trim 7/8", 9 Knots MAX RPM 20,000	\$14.61
KM6044	3/4 x 1/4, SS, .020, Trim 7/8", 9 Knots MAX RPM 20,000	\$17.96
KM6045	1 1/8 x 1/4, CS, .014, Trim 7/8", 9 Knots, MAX RPM 18,000	\$15.80
KM6046	1 1/8 x 1/4, SS, .020, Trim 7/8", 9 Knots, MAX RPM 18,000	\$30.59



NARROW FACE BRUSH WHEEL (NFBW)

AVAILABLE IN: CARBON STEEL (CS)

KM6030	6 x 5/8 - 1/2, .014, Trim 1/8" MAX RPM 6,000	\$10.53
KM6031	8 x 5/8, .014, Trim 1/4", MAX RPM 4,500	\$26.12



CABLE TWIST KNOT WHEEL (CTKW)

AVAILABLE IN: CARBON STEEL (CS) AND STAINLESS STEEL (SS)

KM6041	4 x 5/8-11, .020, CS, Trim 1", F 3/8, 20 Knots, MAX RPM 20,000	\$21.74
KM6042	4 x 5/8-11, .020, SS, Trim 1", F 3/8, 20 Knots, MAX RPM 20,000	\$38.16



STANDARD TWISTED KNOT WHEEL (STKW)

AVAILABLE IN: CARBON STEEL (CS) AND STAINLESS STEEL (SS)

KM6001	4 x 5/8-11, CS, .014 trim 1" MAX RPM 20,000	\$21.12
KM6002	4 x 5/8-11, SS, .014 trim 1" MAX RPM 20,000	\$39.34
KM6003	6 x 5/8-11, CS, .020 Trim 1 1/4" MAX RPM 9,000	\$29.38



STRINGER BEAD TWIST WHEEL (SBTW)

AVAILABLE IN: CARBON STEEL (CS) AND STAINLESS STEEL (SS)

KM6004	4 x 5/8-11, CS, .020 trim 7/8"	MAX RPM 20,000	\$17.67
KM6005	4 x 5/8-11, SS, .020 trim 7/8"	MAX RPM 20,000	\$29.72
KM6006	6 x 5/8-11, CS, .020 trim 1"	MAX RPM 12,500	\$24.79
KM6007	6 x 5/8-11, SS, .020 trim 7/8"	MAX RPM 12,500	\$37.01
KM6008	7 x 5/8-11, SS, .020 trim 7/8"	MAX RPM 12,500	\$46.01

STEM MOUNTED KNOT WHEEL (SMKW)

AVAILABLE IN: CARBON STEEL (CS) AND STAINLESS STEEL (SS)

KM6034	3 x 1/4, CS, .014, 1/4 stem	\$23.89
KM6035	3 x 1/4, SS, .014, 1/4 stem	\$39.97



MEDIUM FACE BRUSH WHEEL (MFBW)

AVAILABLE IN: CARBON STEEL (CS)

KM6032	6 x 5/8 - 1/2, .014, Trim 1/8" MAX RPM 6,000	\$34.78
KM6033	8 x 5/8, .014, Trim 1/4" MAX RPM 4,500	\$49.86





SMALL DIAMETER WHEEL (SDW)

AVAILABLE IN: CARBON STEEL (CS) AND STAINLESS STEEL (SS)

KM6036	3 x 1/2 - 3/8, 1/2 face, .006 SS, Trim 1" MAX RPM 22,000	\$22.77	KM6038	3 x 1/2 - 3/8, 5/8 face, .0118 SS, Trim 1" MAX RPM 22,000	\$15.88
KM6037	3 x 1/2 - 3/8, 5/8 face, .0118 CS, Trim 1" MAX RPM 22,000	\$8.60	KM6039	3 x 1/2 - 3/8, 5/8 face, .014 CS, Trim 1" MAX RPM 22,000	\$8.06
			KM6040	3 x 1/2 - 3/8, 5/8 face, .014 SS, Trim 1" MAX RPM 22,000	\$15.21

SCRATCH BRUSHES



Curved Handle

	Overall Size	Brush Length	Row Config	Trim	Price
KM30157 (CS)	14" x 7/8"	5-1/2"	3 x 19	1-3/16"	\$3.91
KM30167 (SS)	14" x 7/8"	5-1/2"	3 x 19	1-3/16"	7.84



Plastic Handle

KM30214 (SS)	7-1/2" x 1/2"	-	3 x 7	1/2"	3.82
KM30270 (BRASS)	7-1/2" x 1/2"	-	3 x 7	1/2"	3.82

Wood Handle (not shown)

KM30271	7-1/2" x 1/2"	-	3 x 7	1/2"	3.75
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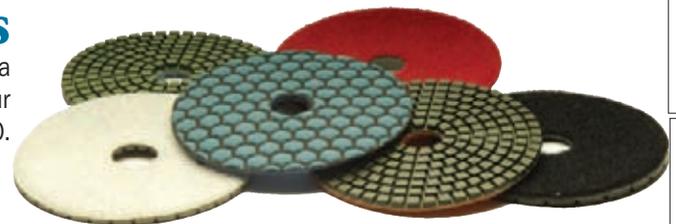


Shoe Handle

KM30161 (CS)	10" x 1/18"	5"	4 x 6	1-3/16"	4.26
KM30168 (SS)	10" x 1/18"	5"	4 x 6	1-3/16"	8.70

Wet Or Dry Diamond Pads

These pads will be sold in singles and are available in a 4" wet pad, a 4" dry pad, a 4" white buff, and a 4" black buff. Both our wet and our dry pads are available in grits 50, 100, 200, 400, 800, 1500, and 3000. Paid trials are available at this time.



	Grit	Price	Item#
4" Wet Pad	50	\$22.90	POLISHPADWET0050400
	100	22.90	POLISHPADWET0100400
	200	22.90	POLISHPADWET0200400
	400	22.90	POLISHPADWET0400400
	800	22.90	POLISHPADWET0800400
	1500	22.90	POLISHPADWET1500400
3000	22.90	POLISHPADWET3000400	
4" Wet Set	ALL	137.42	POLISHPADSET400
4" Dry Pad	50	29.30	KAIPOLISHPADDRY0050400
	100	29.30	KAIPOLISHPADDRY0100400
	200	29.30	KAIPOLISHPADDRY0200400
	400	29.30	KAIPOLISHPADDRY0400400
	800	29.30	KAIPOLISHPADDRY0800400
	1500	29.30	KAIPOLISHPADDRY1500400
3000	29.30	KAIPOLISHPADDRY3000400	
4" White Buff		22.90	KAIBUFFPADWHITE400
4" Black Buff		22.90	KAIBUFFPADBLACK400
Rigid Backing Pad		24.34	KAIPOLISHBKRPADRIG4
Rubber Backing Pad		22.13	KAIPOLISHBKRPADRUB4

For those of you unfamiliar with this type of pad, here is a brief overview. Polishing pads are a kind of diamond pad where the face is a working layer, which has straight or curved radiate slots and the back is hook & loop material with a soft nap. Its thickness is 2mm, 3mm or 4mm and it can be bent or distorted freely. It can process marble, ceramic, and other hard and fragile materials, as well as non-ferrous metals. They are most commonly used to polish stone, porcelain profiles, ceramic tile floors, all kinds of table-boards and stone sculptures.

**Wet is for production •
 Dry is mostly for install
 Wet pads can be used
 wet or dry**

FLAP DISCS
 BONDED
 NON-WOVEN
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 FLAPWHEELS
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 DISCS
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 REFERENCE

Flexible Sanding Pads

These foam and sponge sanding pads are perfect for quick hand sanding of contoured or profiled parts.



ULTRAFLEX SANDING PADS The UltraFlex Sanding Pads are the premium foam pads on the market. These incorporate a dense foam structure and a full, even coating of either aluminum oxide or silicon carbide grains. This makes for an extremely long-lasting pad that is very flexible for finish-sanding of contoured parts and profiles. The pad measures 4 1/2" wide and 5 1/2" long.

Unit	320 Grit	220 Grit	180 Grit	120 Grit
10 Pack	\$14.86	\$14.86	\$14.86	\$14.86
Case 250	334.58	334.58	334.58	334.58

* Pads are available in ALUMINUM OXIDE in 120, 180, 220, and 320 grit. Pads are available in SILICON CARBIDE in 120, 180, 220, and 320 grit. Please specify when ordering.

SANDING SPONGES Our Sanding Sponge is meant for the sanding of slight contours and flat parts. It measures approximately 4" in length, 3" in width and 1/4" thick.

Unit	220 Grit	180 Grit	120 Grit	100 Grit	80 Grit	60 Grit
10 Pack	\$14.86	\$14.86	\$14.86	\$14.86	\$14.86	\$14.86
Case 250	334.58	334.58	334.58	334.58	334.58	334.58

* Sponges are available in Aluminum Oxide only.



FOAM SANDING PADS KLINGSPOR Foam Sanding Sponges are now produced with the latest technological advances. These general purpose foam pads are solvent free and outperform other similar pads on the market. The Foam Sanding Pad can be used on severely profiled parts, because it is more flexible and much thinner. The foam pad measures 5" long, 4" wide and 1/2" thick.

Unit	220 Grit	180 Grit	120 Grit	100 Grit	80 Grit	60 Grit
10 Pack	\$14.86	\$14.86	\$14.86	\$14.86	\$14.86	\$14.86
Case 250	334.58	334.58	334.58	334.58	334.58	334.58



Angle Flexible Sanding Pads

Unit	220 Grit	180 Grit	120 Grit
10 Pack	\$18.82	\$18.82	\$19.07
Case 100	160.85	160.85	165.68

* Sponges are available in Aluminum Oxide only.



Observe appropriate safety regulations. Use eye, face, hearing, respiratory, hand and body protection when using abrasive products.

Power Wheel

These wheels will replace your wire wheels for removing surface contaminants while leaving fine finish. Constructed of large nylon filament with coarse silicon carbide grain, this open structure provides aggressive removal and blending characteristics without loading. Applications include: removal of paints and other surface coatings, cleaning of weld discoloration, blending, and removing corrosion, rust and scale.



All Power Wheels have a 1/2" center hole. Mandrels both have a 1/2" insertion end and either a 1/4" or 5/16" shank.

Size & Description	Recommended RPM	Maximum RPM	Price Per Wheel
4" dia. with 1/2" arbor	3,700 - 4,200	7,600	\$11.02
6" dia. with 1/2" arbor	2,500 - 3,000	5,000	18.93

The KLINGSPOR reusable arbor system is unique in that it comes with a series of "washers" which allows for optimum support as the wheel wears away.

Reusable arbor - 5/16"	\$11.03
Reusable arbor - 1/4"	\$11.03



SPECIALTY

Premium Grade Masking Tape

This Premium Masking Tape adheres to and removes cleanly from a variety of surfaces due to its high grade rubber adhesive. This enables trouble-free removal, saving time and clean up costs. A specially treated paper makes this standard tape very conformable and provides straight paint lines with clean, sharp edges. It will also strip easily from most surfaces without leaving a residue.

Item #	Size	Price - Roll	Price - Sleeve	Price - Case
MTAPE4309-075	3/4" X 55 yds	\$4.06	\$61.31 (\$3.83 per roll @ 16 rolls)	\$335.19 (\$3.49 per roll @ 96 rolls)
MTAPE4309-100	1" X 55 yds	\$5.34	\$40.56 (\$5.07 per roll @ 8 rolls)	\$223.22 (\$4.65 per roll @ 48 rolls)
MTAPE4309-150	1 1/2" X 55 yds	\$7.83	\$60.93 (\$7.62 per roll @ 8 rolls)	\$327.97 (\$6.83 per roll @ 48 rolls)
MTAPE4309-200	2" X 55 yds	\$10.50	\$59.23 (\$9.87 per roll @ 6 rolls)	\$319.86 (\$8.89 per roll @ 36 rolls)



PG 27 Tape

MASKING TAPES SHOULD BE STORED IN A CLIMATE CONTROLLED AREA.

This premium masking tape is considered as one of the best on the market. PG27 is temperature resistant up to 300°F for 30 minutes and provides superior holding characteristics. Its increased elongation insures conformability when cornering and bending. Intertape uses only top quality adhesive that consistently allows for clean removal with no leftover glue residue.

Item #	Size	Price - Roll	Price - Sleeve	Price - Case
MTAPE-PG27-075	3/4" x 60 yds	\$4.59	\$49.47 / 12 rolls (\$4.12 per roll)	\$175.80 / 48 rolls (\$3.66 per roll)
MTAPE-PG27-150	1 1/2" x 60 yds	\$8.36	\$45.16 / 6 rolls (\$7.53 per roll)	\$160.57 / 24 rolls (\$6.69 per roll)
MTAPE-PG27-200	2" x 60 yds	\$11.71	\$63.25 / 6 rolls (\$10.54 per roll)	\$225.76 / 24 rolls (\$9.41 per roll)



Heavy Duty Graphite Rolls

Heavy duty graphite-coated canvas will extend the life of your belts by reducing heat and friction.

Price Per Roll

Size	Price
3" x 10 yards	\$58.45
4" x 10 yards	90.90
6" x 10 yards	116.91
9" x 10 yards	175.35
12" x 10 yards	233.81



Graphite Sticks

Graphite sticks are used to lubricate belt backings used in mold sanding.

Graphite Sticks \$13.00 each



Cleaning Sticks

Cleaning Sticks 8" x 2" x 2" \$20.07 each

Grease Sticks

Grease Sticks \$13.42 each



Wide Belt Cleaning Pad

15" x 20" x 1 1/8" \$118.71 each

*Must adjust machine to accommodate 1 1/8" thickness

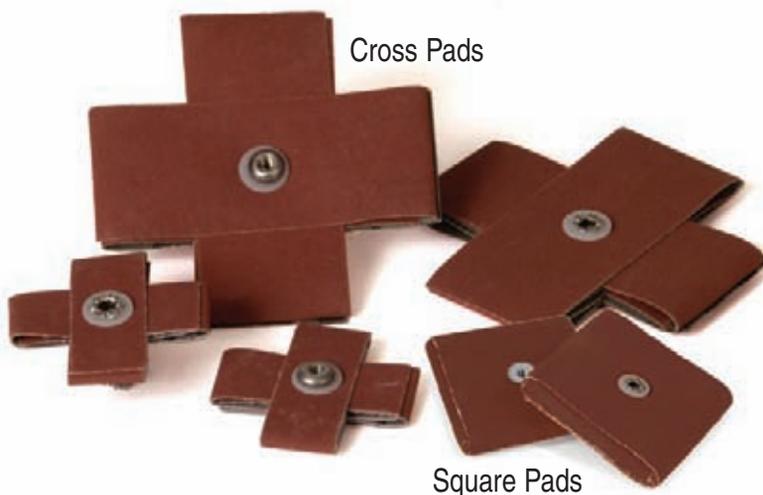
FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

Square Pads

Size	Available Grits	Price Per Each
1" x 1" x 8 ply 8-32 eyelet	60,80,120	\$1.89
1-1/2" x 1-1/2" x 1/2" 1/4-20 eyelet	60,80	3.49
2" x 2" x 1/2" 1/4-20 eyelet	60,80	4.70
2" x 2" x 3/4" 1/4-20 eyelet	50,80	4.70
3" x 3" x 1/4" 1/4-20 eyelet	80	5.15
3" x 3" x 1/2" 1/4-20 eyelet	50,60,80	5.15

Cross Pads

Size	Available Grits	Price Per Each
1-1/2" x 1-1/2" x 1/2" 8 ply 8-32 eyelet	60,80,100,120	\$1.81
2" x 2" x 1/2" 8 ply 8-32 eyelet	60,80,120	1.86
2" x 2" x 3/4" 8 ply 8-32 eyelet	60,80,120	1.86
2" x 2" x 1" 8 ply 8-32 eyelet	120	1.86
2-1/4" x 2-1/4" x 1/2" 8 ply 8-32 eyelet	80	2.09
2-1/2" x 2-1/2" x 3/4" 8 ply 8-32 eyelet	80,120	2.20
3" x 3" x 1" 8 ply 1/4-20 eyelet	60,80,120	2.57
4" x 4" x 1" 8 ply 1/4-20 eyelet	60,80,120	3.30
4" x 4" x 1-1/2" 8 ply 1/4-20 eyelet	80,120	3.30



Sanding Stars

KLINGSPOR Sanding Stars are the ideal tools for the sanding of highly contoured or profiled wood or metal parts. These ingenious tools are made from our very flexible cloth-backed material which makes them perfect for finish sanding. The KLINGSPOR Sanding Stars are unique also in that the material they are made with contains a dry lubricant along with the premium aluminum oxide grains. This helps reduce loading of wood particles and improves the overall finish on metals.

Available with either a built-in 1/4" mandrel or a 1/2" hole with grommet for mounting. Our Sanding Star with the 1/4" mandrel is almost an 1" thick and is filled with 40 flaps of high quality material with just the right amount of spacers inserted to make this the perfect finishing device for use in virtually any tool with a 1/4" chuck. Our grommeted Sanding Star is not as thick containing 10 flaps. This design makes it perfect for stacking multiple Sanding Stars to achieve the desired width and finish.

MAXIMUM RPM 4" = 3200



SANDING STARS ARE GREAT FOR INTRICATE DEBURRING IN MACHINE SHOPS.

4" DIAMETER

Grit	Size & Description	Price
80 Grit	1/4" shank	\$14.21
100 Grit	1/4" shank	14.21
120 Grit	1/4" shank	14.21
150 Grit	1/4" shank	14.21
180 Grit	1/4" shank	14.21
220 Grit	1/4" shank	14.21

4" DIAMETER

Grit	Size & Description	Price
80 Grit	1/2" hole/no shank	\$5.33
100 Grit	1/2" hole/no shank	5.33
120 Grit	1/2" hole/no shank	5.33
150 Grit	1/2" hole/no shank	5.33
180 Grit	1/2" hole/no shank	5.33
220 Grit	1/2" hole/no shank	5.33



Cloth Spiral Bands



Spiral Bands for Oscillating Spindle Sanders PRICE PER PACK

Diameter x Width	Box Qty	150 Grit	100 Grit	60 Grit
1/2" x 4 1/2"	10	\$17.42	\$17.42	\$17.60
3/4" x 4 1/2"	10	18.38	18.38	18.73
1" x 4 1/2"	10	19.19	19.19	20.30
1 1/2" x 4 1/2"	10	20.60	20.60	21.10
2" x 4 1/2"	10	28.07	28.07	29.32
3" x 4 1/2"	10	31.87	31.87	33.45
1/2" x 9"	10	36.96	36.96	37.28
3/4" x 9"	10	39.32	39.32	40.13
1" x 9"	10	41.23	41.23	42.97
1 1/2" x 9"	10	44.08	44.08	45.64
2" x 9"	10	48.52	48.52	51.04
3" x 9"	10	55.82	55.82	58.99

PRICE PER BOX

Diameter	Width	Box Quantity	150 Grit	100 Grit	60 Grit
1/2"	1/2"	25	\$14.06	\$14.06	\$14.06
	1"	25	14.45	14.45	14.45
	1 1/2"	25	■	15.65	15.65
	2"	25	20.47	20.47	20.47
3/4"	1"	25	14.45	14.45	15.25
	1 1/2"	25	■	■	16.87
	3"	25	■	33.86	■
1"	1"	25	15.25	15.25	15.65
	1 1/2"	25	17.27	17.27	17.66
	2"	25	23.68	23.68	24.88
	3"	25	34.92	34.92	36.13
1 1/2"	1"	25	15.65	15.65	16.46
	1 1/2"	25	17.27	17.27	18.47
	2"	25	25.28	25.28	25.80
	2 1/2"	25	■	■	31.71
2"	3"	25	37.33	37.33	38.53
	1"	25	17.27	17.27	17.66
	1 1/2"	25	20.47	20.47	22.07
	2"	25	27.67	27.67	28.90
3"	3"	25	41.35	41.35	43.35

Rubber Drums

For use with cloth spiral bands.



Size	MAX RPM	PRICE PER DRUM	Size	MAX RPM	PRICE PER DRUM
1/2" x 1/2" x 1/4"	30,000	\$6.63	1" x 3" x 1/4"	6,000	\$12.49
1/2" x 1" x 1/4"	15,000	6.63	1 1/2" x 1" x 1/4"	14,000	8.71
3/4" x 1" x 1/4"	13,000	6.63	1 1/2" x 1 1/2" x 1/4"	10,000	9.62
3/4" x 1 1/2" x 1/4"	10,000	8.47	1 1/2" x 2" x 1/4"	7,000	14.34
3/4" x 2" x 1/4"	9,000	9.62	2" x 1" x 1/4"	11,000	9.62
1" x 1" x 1/4"	18,000	6.85	2" x 1 1/2" x 1/4"	8,000	14.36
1" x 1 1/2" x 1/4"	10,000	8.47	2" x 2" x 1/4"	6,000	19.13
1" x 2" x 1/4"	8,000	9.62	2" x 3" x 1/4"	4,000	21.33

Common sizes listed - call for others.

MAX RPM'S FOR SLEEVES CORRESPOND TO MAX RPM'S OF RUBBER DRUMS.

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

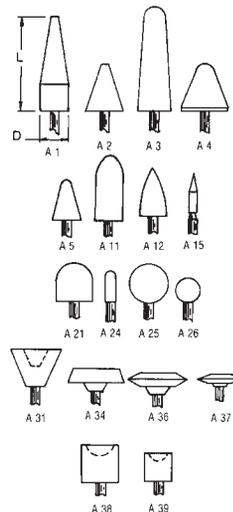
Mounted Points

Klingspor's Mounted Points have been developed for safe, high performance use. Quality is consistently excellent, as you would expect from products with the Klingspor name. Over 100 different shapes and a variety of sizes, bonds, grits, etc. are available to suit virtually any metal grinding need.



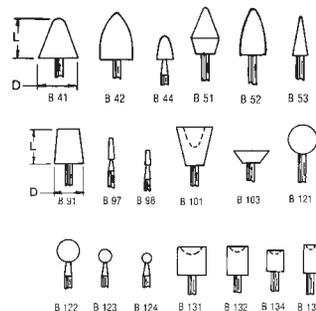
Group "A" Special Shapes - 1/4" Shanks

Shape	Diameter x Length	Max RPM	Red	Blue	Price Per Pack of 10
A1	3/4" x 2 1/2"	19,800	60	60	\$58.44
A2	1" x 1 1/4"	38,200	60	60	35.74
A3	1" x 2 3/4"	16,100	60	60	63.38
A3	1" x 2 3/4"	16,100	36	36	63.38
A4	1 1/4" x 1 1/4"	30,560	60	60	33.78
A5	3/4" x 1 1/8"	45,000	60	60	33.78
A11	7/8" x 2"	19,860	60	60	43.04
A11	7/8" x 2"	19,860	36	36	43.04
A12	1 1/16" x 1 1/4"	48,000	60	60	40.05
A14	1 1/16" x 7/8"	55,560	60	60	24.28
A15	1/4" x 1 1/16"	72,750	60	60	32.60
A21	1" x 1"	34,500	60	60	27.64
A24	1/4" x 3/4"	76,500	60	60	23.32
A25	1" x 1"	35,620	60	60	27.64
A26	5/8" x 5/8"	61,120	60	60	24.69
A31	1 3/8" x 1"	27,780	60	60	33.78
A32	1" x 5/8"	38,000	60	60	24.28
A34	1 1/2" x 3/8"	25,470	60	60	29.59
A36	1 5/8" x 3/8"	23,520	60	60	33.78
A37	1 1/4" x 1/4"	30,560	60	60	25.25
A38	1" x 1"	34,500	60	60	23.32
A39	3/4" x 3/4"	47,250	60	60	19.13

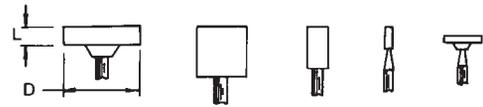


Group "B" Special Shapes- 1/8" Shanks

Shape	Diameter x Length	Max RPM	Red	Blue	Price Per Pack of 10
B41	5/8" x 5/8"	33,750	60	60	\$24.69
B42	1/2" x 3/4"	33,750	60	60	23.32
B44	7/32" x 3/8"	68,400	60	60	21.54
B44	7/32" x 3/8"	68,400	90	90	21.54
B45	3/16" x 5/16"	104,250	90	90	19.72
B51	7/16" x 3/4"	45,370	60	60	23.32
B52	3/8" x 3/4"	45,370	60	60	23.32
B53	1/4" x 5/8"	60,000	60	60	23.32
B91	1/2" x 5/8"	34,500	60	60	19.13
B96	1/8" x 1/4"	105,000	90	90	18.40
B97	1/8" x 3/8"	105,000	90	90	21.54
B97	1/8" x 3/8"	105,000	120	120	21.54
B98	3/32" x 1/4"	105,000	90	90	24.69
B101	5/8" x 1 1/16"	33,750	60	60	23.32
B103	5/8" x 3/16"	61,120	60	60	21.54
B121	1/2" x 1/2"	45,370	60	60	21.54
B122	3/8" x 3/8"	61,650	60	60	19.13
B123	3/16" x 3/16"	104,250	90	90	19.13
B124	1/8" x 1/8"	105,000	90	90	17.19
B131	1/2" x 1/2"	34,500	60	60	17.19
B132	3/8" x 1/2"	45,370	60	60	17.19
B134	5/16" x 3/8"	61,650	60	60	17.19
B135	1/4" x 1/2"	60,000	60	60	17.19



Group "W" Plain Shapes



Shape	Diameter x Length	Shank Size	Max RPM	Red	Blue	Price Per Pack of 10
W142	3/32" x 1/4"	1/8"	105,000	90	90	\$15.39
W142	3/32" x 1/4"	1/8"	105,000	120	120	15.39
W144	1/8" x 1/4"	1/8"	105,000	60	60	15.39
W145	1/8" x 3/8"	1/8"	105,000	60	60	17.19
W146	1/8" x 1/2"	1/8"	105,000	60	60	17.19
W152	3/16" x 1/4"	1/8"	105,000	60	60	15.39
W153	3/16" x 3/8"	1/8"	80,850	60	60	17.19
W154	3/16" x 1/2"	1/8"	70,500	60	60	17.19
W160	1/4" x 1/4"	1/8"	81,370	60	60	15.39
W162	1/4" x 3/8"	1/8"	68,400	60	60	17.19
W163	1/4" x 1/2"	1/8"	60,000	60	60	17.19
W164	1/4" x 3/4"	1/8"	45,900	60	60	17.79
W175	3/8" x 3/8"	1/8"	54,000	60	60	17.19
W176	3/8" x 1/2"	1/8"	45,370	60	60	17.19
W178	3/8" x 1"	1/8"	26,250	60	60	19.13
W179	3/8" x 1 1/4"	1/4"	45,750+	60	60	24.69
W185	1/2" x 1/2"	1/8"	34,500	60	60	17.19
W186	1/2" x 3/4"	1/8"	26,250	60	60	17.79
W187	1/2" x 1"	1/8"	20,620	60	60	19.13
W188	1/2" x 1 1/2"	1/4"	30,370+	60	60	29.59
W189	1/2" x 2"	1/4"	24,000+	60	60	36.90
W200	3/4" x 1/8"	1/8"	50,930	60	60	17.19
W204	3/4" x 3/4"	1/4"	18,900+	60	60	19.13
W205	3/4" x 1"	1/4"	34,900+	60	60	21.54
W206	3/4" x 1 1/4"	1/4"	28,720	60	60	24.28
W208	3/4" x 2"	1/4"	18,750+	60	60	38.70
W210	7/8" x 1/16"	1/8"	43,650	120	120	16.60
W215	1" x 1/8"	1/8"	38,200	60	60	17.79
W218	1" x 1/2"	1/4"	38,200+	60	60	19.13
W219	1" x 3/4"	1/4"	35,100+	60	60	21.54
W220	1" x 1"	1/4"	25,500+	60	60	23.32
W221	1" x 1 1/2"	1/4"	19,120+	60	60	32.60
W222	1" x 2"	1/4"	15,900+	60	60	40.05
W225	1 1/4" x 1/4"	1/4"	30,560+	60	60	21.54
W235	1 1/2" x 1/4"	1/4"	25,470+	60	60	23.32
W236	1 1/2" x 1/2"	1/4"	25,470+	60	60	24.69
W242	2" x 1"	1/4"	19,100+	60	60	36.90

Red General Purpose Mounted Points - These vitrified wheels are made with a clay bond along with premium white ALUMINUM OXIDE. They are best suited for grinding hardened tool steels which require a softer cutting wheel and will also effectively grind other materials such as hardened steels, glass, rubber, some stainless steels, wood, aluminum(hard), carbon steels and plastics.

Blue General Purpose Mounted Points - Also vitrified wheels, the blue mounted points are made with a porcelain bond along with regular ALUMINUM OXIDE grain. They are best suited for grinding low carbon steels or pre-hardened tool steels which require a tougher bond strength. These wheels will also effectively grind in heavier duty applications such as foundry work on castings, weld grinding on ferrous metals, hard brass and hard bronze.

Safety and Use of Mounted Wheels - Mounted wheels should be used with all the safety precautions recommended for grinding wheels. Each wheel should be inspected before use to make sure that the wheel is not damaged or the mandrel is not bent. Safe operating speeds are determined by shape and size, diameter of the mandrel and overhang (distance from end of support to base of wheel).

DO NOT EXCEED THE SPEED INDICATED. • DO NOT USE EXCESSIVE WORK PRESSURE. • DO NOT OPERATE A MOUNTED WHEEL WHICH IS NOT CAREFULLY MOUNTED AND RUNNING TRUE. • USE FACE PROTECTION AT ALL TIMES.

It is good practice, when starting hand grinders, to hold the grinder pointed downward and away from the operator until full operating speed is attained. If excessive vibration is felt, stop the grinder at once.



FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWER TOOLS
REFERENCE

Cartridge Rolls

PRICE PER 100



Cartridge Rolls of 1" Length3/4" Pilot Length
 Cartridge Rolls of 1-1/2" Length1" Pilot Length
 Cartridge Rolls of 2" Length1 1/2" Pilot Length

Item #	Size	Max RPM	Grit	Mandrel #	Description	Price
CR703732	3/8" x 1 1/2" x 1/8"	25,000	60	2	Straight A/O	\$55.19
CR705036	3/8" x 1 1/2" x 1/8"	25,000	80	2	Straight A/O	56.89
CR707336	3/8" x 1 1/2" x 1/8"	25,000	120	2	Straight A/O	56.89
CR711147	3/8" x 1 1/2" x 1/8"	25,000	180	2	Straight A/O	60.39
CR706313	1/2" x 1" x 1/8"	25,000	60	1	Straight A/O	50.01
CR707617	1/2" x 1" x 1/8"	25,000	80	1	Straight A/O	51.77
CR711471	1/2" x 1" x 1/8"	25,000	120	1	Straight A/O	53.46
CR710652	1/2" x 1" x 1/8"	25,000	240	1	Straight A/O	55.19
CR707947	1/2" x 1 1/2" x 1/8"	25,000	40	2	Straight A/O	70.73
CR709187	1/2" x 1 1/2" x 1/8"	25,000	60	2	Straight A/O	68.98
CR710479	1/2" x 1 1/2" x 1/8"	25,000	80	2	Straight A/O	70.73
CR709813	1/2" x 1 1/2" x 1/8"	25,000	120	2	Straight A/O	70.73
CR700624	1/2" x 1 1/2" x 1/8"	25,000	180	2	Straight A/O	75.90
CR704494	1/2" x 1 1/2" x 1/8"	25,000	240	2	Straight A/O	77.62
CR707308	1/2" x 2" x 1/8"	25,000	60	3	Straight A/O	84.51
CR708564	1/2" x 2" x 1/8"	25,000	80	3	Straight A/O	86.24
CR707712	1/2" x 2" x 1/8"	25,000	120	3	Straight A/O	87.98
CR714235	3/4" x 1 1/2" x 1/8"	25,000	60	2	Straight A/O	117.30
CR713444	3/4" x 1 1/2" x 1/8"	25,000	80	2	Straight A/O	117.30
CR713317	3/4" x 1 1/2" x 1/4"	25,000	60	4	Straight A/O	117.30
CR713081	3/4" x 1 1/2" x 1/4"	25,000	80	4	Straight A/O	119.01
CR713077	3/4" x 1 1/2" x 1/4"	25,000	120	4	Straight A/O	122.47
CR713679	3/4" x 2" x 1/8"	25,000	100	3	Straight A/O	162.16
CR715682	3/4" x 2" x 1/8"	25,000	120	3	Straight A/O	162.16
CR707096	3/8" x 1" x 1/8"	25,000	60	1	Full Taper A/O	86.24
CR708357	3/8" x 1" x 1/8"	25,000	80	1	Full Taper A/O	89.67
CR702229	3/8" x 1" x 1/8"	25,000	120	1	Full Taper A/O	91.43
CR706036	3/8" x 1" x 1/8"	25,000	180	1	Full Taper A/O	91.43
CR710094	3/8" x 1 1/2" x 1/8"	25,000	50	2	Full Taper A/O	94.88
CR705509	3/8" x 1 1/2" x 1/8"	25,000	80	2	Full Taper A/O	94.88
CR706968	3/8" x 1 1/2" x 1/8"	25,000	120	2	Full Taper A/O	94.88
CR712772	1/2" x 1" x 1/8"	25,000	60	1	Full Taper A/O	91.43
CR700973	1/2" x 1" x 1/8"	25,000	80	1	Full Taper A/O	94.88
CR710725	1/2" x 1 1/2" x 1/8"	25,000	36	2	Full Taper A/O	105.23
CR709653	1/2" x 1 1/2" x 1/8"	25,000	60	2	Full Taper A/O	100.05
CR710928	1/2" x 1 1/2" x 1/8"	25,000	80	2	Full Taper A/O	101.77
CR700939	1/2" x 1 1/2" x 1/8"	25,000	120	2	Full Taper A/O	101.77
CR704817	1/2" x 1 1/2" x 1/8"	25,000	180	2	Full Taper A/O	105.23
CR700667	1/2" x 2" x 1/8"	25,000	60	3	Full Taper A/O	106.96
CR701974	1/2" x 2" x 1/8"	25,000	80	3	Full Taper A/O	110.42
CR702233	1/2" x 2" x 1/8"	25,000	120	3	Full Taper A/O	112.13



Mandrels

PRICE PER MANDREL

MANDREL#	ITEM#	PILOT	PILOT LENGTH	SHANK	SHANK LENGTH	OVERALL LENGTH	LIST PRICE
1	CRMANDREL700717	1/8"	3/4"	1/4"	1 1/4"	2 1/2"	\$3.49
2	CRMANDREL710190	1/8"	1"	1/4"	1 1/4"	2 3/4"	3.49
3	CRMANDREL708875	1/8"	1 1/2"	1/4"	1 1/4"	3 1/4"	3.49
4	CRMANDREL712584	1/4"	1"	1/4"	1 1/4"	3"	3.49





ABRASIVE DISCS

Disc sanding is at its height of popularity, and rightly so. KLINGSPOR abrasive discs have a range of usage that covers the full spectrum of manufacturing and/or job shop applications. With one of the country's most revered disc sanding programs, you'll find that KLINGSPOR has the perfect product for your need. Operations working with wood, metal, glass, solid surface materials, plastics, rubber, fiberglass and autobody repair will all benefit from our continually growing list of materials.

Heavyweight Plain Paper Discs - Non PSA

HEAVYWEIGHT PLAIN PAPER DISC AVAILABLE MATERIALS

PS 20 A/O F wt Paper *ACT* PS 22 A/O E wt Paper
PS 24 A/O Open Coat F wt Paper* PS 29 A/O Open Coat F Wt Paper *ACT*
* Add 10% to price shown

Diameter	Box Qty	100 Grit & Finer	80 Grit	60 Grit	50 Grit	40 Grit
4"	50	\$20.95	\$22.55	\$24.09	\$26.42	\$29.52
5"	50	28.73	31.84	34.97	38.86	42.74
6"	50	39.62	42.74	47.39	53.61	59.03
7"	50	59.03	63.72	70.72	78.46	86.23
8"	50	72.28	77.70	87.01	97.12	107.21
9"	50	93.99	101.01	113.46	125.07	138.29
10"	50	116.53	125.07	139.86	155.38	170.92
12"	50	170.92	184.90	205.86	227.63	251.70

For intermediate sizes use next higher list price. Call for availability of other sizes. PRICE PER BOX



PS 21 Plain Paper Discs - Non PSA

Diameter	Box Qty	100 Grit & Finer	80 Grit	60 Grit	40 Grit
4"	50	\$25.17	\$27.04	\$28.91	\$35.43
5"	50	34.51	38.22	41.97	51.26
6"	50	47.57	51.26	56.87	70.86
7"	50	70.86	76.43	84.85	103.49
8"	50	86.70	93.23	104.43	128.65
9"	50	112.81	121.21	136.12	165.95
10"	50	139.84	150.11	167.81	205.10
12"	50	205.10	221.88	247.01	302.06

For intermediate sizes use next higher list price. Call for availability of other sizes. PRICE PER BOX



PLAIN CLOTH DISC AVAILABLE MATERIALS

LS 309 A/O J/JF wt Cloth
CS 310 A/O X wt Cloth
CS 311 A/O Open Coat YX wt Cloth
CS 321* S/C Waterproof X wt Cloth *ACT*
* Add 5% to price shown
CS 411** A/Z X/YX/YX wt Cloth
** 24-36 Grit - Add 47% to price shown
** 40-60 Grit - Add 39% to price shown
** 80 Grit - Add 33% to price shown
** 120 Grit - Add 33% to price shown

Plain Cloth Discs - Non PSA

Diameter	Box Quantity	100 Grit & Finer	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
4"	50	\$26.42	\$27.96	\$29.52	\$31.84	\$33.40	\$35.77	\$40.40
5"	50	38.86	41.17	44.30	46.62	50.51	53.61	60.61
6"	50	54.37	57.51	61.39	66.04	70.72	75.37	85.44
7"	50	77.70	82.34	87.80	93.99	99.44	106.45	120.42
8"	50	98.66	103.27	111.08	118.84	126.64	135.19	153.05
9"	50	126.64	132.85	142.96	151.50	161.58	173.25	195.77
10"	25	78.07	81.96	88.59	94.00	100.22	107.21	121.20
12"	25	113.85	119.64	128.97	136.72	145.67	155.75	175.97

For intermediate sizes use next higher list price. Call for availability of other sizes.



PRICE PER BOX

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
DISCS
SAFETY
POWER TOOLS
REFERENCE

PSA Discs - Paper WITH HOLES OR WITHOUT

Call for availability of other sizes.
For intermediate sizes use next higher list price.

PS 33 ALUMINUM OXIDE STEARATE B/C WEIGHT PAPER

PRICE PER BOX

Diameter	Box Quantity	100 Grit & Finer	80 Grit	60 Grit	40 Grit
3 1/2"	100	\$35.08	\$36.78	\$40.12	\$45.14
4"	100	35.08	36.78	40.12	45.14
4 1/2"	100	35.08	36.78	40.12	45.14
5"	100	35.08	36.78	40.12	45.14
6"	100	45.98	48.13	51.80	67.49
8"	50	40.66	42.73	46.03	59.61

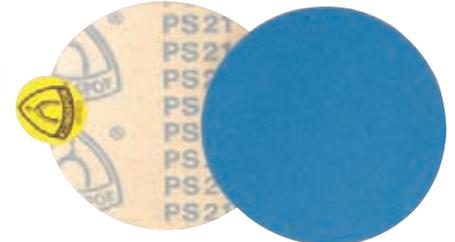


PS 21 ALUMINA ZIRCONIA F WEIGHT PAPER

PRICE PER BOX

Our longest lasting paper PSA disc. Offers smooth finishes and long life in wood or metal applications.

Diameter	Box Quantity	100 Grit & Finer	80 Grit	60 Grit	40 Grit
5"	100	\$87.23	\$91.19	\$95.15	\$107.08
6"	100	126.87	132.81	140.75	158.58
7"	100	182.39	194.29	204.19	229.98
8"	50	116.00	122.93	128.88	141.77
9"	50	147.71	156.60	165.54	186.37
10"	50	181.38	193.28	204.19	229.98
12"	25	133.31	140.75	149.68	168.03



FP 73W EXTRA-LUBE ALUMINUM OXIDE STEARATE FILM

PRICE PER BOX

Diameter	Box Quantity	320 Grit & Finer
5"	100	\$52.45
6"	100	67.84



VP 73W EXTRA-LUBE ALUMINUM OXIDE STEARATE LATEX PAPER

PRICE PER BOX

Diameter	Box Quantity	100 Grit & Finer	80 Grit
5"	100	\$40.35	\$42.31
6"	100	51.30	60.75
8"	50	46.77	49.15



PS 29 ACT ALUMINUM OXIDE OPEN COAT F WEIGHT PAPER

PRICE PER BOX

Diameter	Box Qty	100 Grit & Finer	80 Grit	60 Grit	40 Grit
5"	100	\$72.72	\$75.98	\$79.29	\$89.23
6"	100	105.74	110.68	117.30	132.18
7"	100	152.00	161.90	170.16	191.64
8"	50	96.68	102.43	107.40	118.12
9"	50	123.08	130.50	137.94	155.31
10"	50	151.17	161.10	170.16	191.64
12"	25	111.10	117.30	124.76	140.03



PS 36 ALUMINA ZIRCONIA STEARATE C/D WEIGHT PAPER

PRICE PER BOX

Diameter	Box Qty	100 Grit & Finer	80 Grit	60 Grit	40 Grit	36 Grit
5"	100	\$43.15	\$45.21	\$49.30	\$55.47	■
6"	100	56.51	59.15	63.68	74.78	■
5"	50	■	■	■	■	\$32.97
6"	50	■	■	■	■	43.80



PS 14 SILICON CARBIDE WATERPROOF A/C WEIGHT LATEX PAPER

Wet sanding of wood finishes, glass, stone or clay are easily accomplished with these waterproof discs.

Diameter	Box Qty	220A & Finer	180C Grit	150C Grit	120C Grit	100C Grit	80C Grit	60C Grit
3 1/2"	100	\$56.18	\$57.83	\$61.15	\$64.43	\$71.04	\$74.33	\$77.64
4"	100	56.18	57.83	61.15	64.43	71.04	74.33	77.64
5"	100	62.79	67.76	69.38	72.72	79.29	85.91	89.23
6"	100	90.86	95.81	100.78	105.74	115.64	122.28	130.50
7"	100	135.47	145.39	152.00	156.95	175.10	185.06	196.63
8"	50	87.56	91.69	96.68	102.43	116.50	117.30	123.08
9"	50	110.68	116.48	122.28	129.72	141.27	149.50	158.58
10"	50	136.30	143.73	151.17	159.42	174.30	185.06	195.76
12"	25	99.95	105.32	111.10	116.50	127.63	135.47	143.33



PRICE PER BOX

PSA Discs - Cloth - WITH HOLES OR WITHOUT

KL 385 ALUMINUM OXIDE JF WEIGHT CLOTH PRICE PER BOX

Diameter	Box Quantity	100 - 150 Grit	80 Grit
5"	100	\$74.37	\$78.85
6"	100	108.58	114.53

LS 312 ALUMINUM OXIDE DRY-LUBE JF WEIGHT CLOTH PRICE PER BOX

Diameter	Box Quantity	120 - 220 Grit
5"	50	\$61.47
6"	50	89.29



PSA Discs - Cloth When the ultimate in durability is required, these cloth PSA discs will fit the bill. With these discs, extra-long life and consistent finishes are achieved on metal, wood, glass, stone, plastics, etc.

PRICE PER BOX

Diameter	Box Qty	100 Grit & Finer	80 Grit	60 Grit	50 Grit	40 Grit	36 Grit	24 Grit
3"	50/Box	\$42.09	\$43.63	\$46.00	\$47.53	\$49.82	\$49.86	\$56.09
4"	50/Box	48.32	50.69	53.77	56.09	59.24	61.59	70.14
5"	50/Box	56.88	60.01	63.12	66.25	69.38	73.25	82.61
6"	50/Box	82.61	87.28	92.74	98.20	103.65	109.80	123.93
8"	50/Box	152.76	160.54	168.34	176.95	185.52	194.83	219.78
9"	50/Box	193.28	204.90	217.44	229.95	243.94	258.53	290.45
10"	25/Box	118.87	126.26	133.66	141.84	150.42	157.28	178.70
12"	10/Box	69.70	73.88	78.41	83.08	88.08	93.31	104.65
20"	10/Box	197.82	209.65	222.45	235.70	249.88	264.61	297.30
24"	10/Box	27.69	29.20	31.27	33.23	35.29	37.80	42.72
30"	5/Box	41.68	43.91	47.31	50.35	53.67	57.50	65.18

CLOTH PSA DISC AVAILABLE MATERIALS

- LS 309 A/O J wt Cloth
 - CS 310 A/O X wt Cloth
 - CS 311 A/O Open Coat YX wt Cloth
 - CS 411* A/Z X wt Cloth
- * 24-36 Grit - Add 47% to price shown
 40-60 Grit - Add 39% to price shown
 80 Grit & Finer - Add 33% to price shown



For intermediate sizes use next higher list price. Call for availability of other sizes.

PSA Disc Rolls

Non-loading discs, a favorite in metal and finish sanding, on a roll in our popular dispenser box.

PS 33 ALUMINUM OXIDE STEARATE B/C WEIGHT PAPER PRICE PER ROLL

Diameter	Roll Quantity	100 Grit & Finer	80 Grit
3 1/2"	100	\$35.08	\$36.78
5"	100	35.08	36.78
6"	100	45.98	48.13



Waterproof Paper PSA Disc Rolls

PS 14 SILICON CARBIDE WATERPROOF A/C WEIGHT LATEX PAPER

Easily dispense these discs for your wet applications.

PRICE PER ROLL

Diameter	Roll Quantity	220 Grit & Finer	180 Grit	150 Grit	120 Grit	100 Grit	80 Grit	60 Grit
5"	100	\$62.92	\$66.25	\$69.94	\$73.46	\$80.26	\$84.49	\$88.68
6"	100	90.44	95.53	100.62	105.72	115.69	122.67	130.25

"NO LINER" DISC ROLLS AVAILABLE - CALL FOR PRICE AND AVAILABILITY

FLAP DISCS
 BONDED
 NON-WOVEN
 QUICK CHANGE
 BELTS
 ROLLS
 SHEETS
 FLAPWHEELS
 SPECIALTY
DISCS
 SAFETY
 POWER TOOLS
 REFERENCE

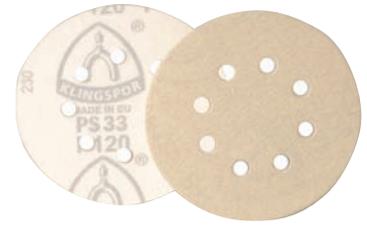
FLAP DISCS
 BONDED
 NON-WOVEN
 QUICK CHANGE
 BELTS
 ROLLS
 SHEETS
 FLAPWHEELS
 DISCS
 SAFETY
 POWER TOOLS
 REFERENCE

Kling-On® Discs (Hook & Loop) WITH HOLES OR WITHOUT

PS 33 ALUMINUM OXIDE STEARATE PAPER

PRICE PER BOX

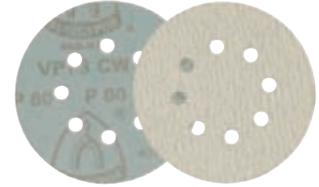
Dia.	Box Quantity	100 & Finer	80 Grit	60 Grit	40 Grit
3 1/2"	100	\$35.08	\$36.78	\$40.12	\$45.14
4"	100	35.08	36.78	40.12	45.14
4 1/2"	100	35.08	36.78	40.12	45.14
5"	100	35.08	36.78	40.12	45.14
6"	100	45.98	48.13	51.80	67.49
8"	50	40.66	42.73	46.03	59.61



VP 73W EXTRA-LUBE ALUMINUM OXIDE STEARATE LATEX PAPER

PRICE PER BOX

Diameter	Box Quantity	100 Grit & Finer	80 Grit
5"	100	\$40.35	\$42.31
6"	100	51.30	60.75
8"	50	46.77	49.15



FP 73W EXTRA-LUBE ALUMINUM OXIDE STEARATE FILM

PRICE PER BOX

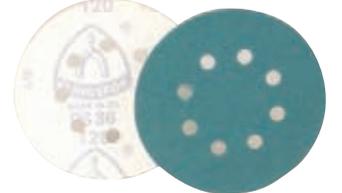
Diameter	Box Quantity	320 Grit & Finer
5"	100	\$52.45
6"	100	68.70



PS 36 ALUMINA ZIRCONIA STEARATE HEAVY PAPER

PRICE PER BOX

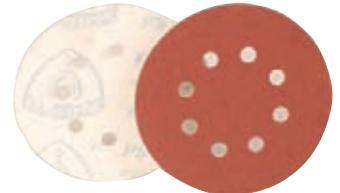
Dia.	Box Qty	100 Grit & Finer	80 Grit	60 Grit	40 Grit	36 Grit
5"	100	\$43.15	\$45.21	\$49.30	\$55.47	\$65.94
6"	100	56.51	59.15	63.68	74.78	87.60



PS 29 ALUMINUM OXIDE OPEN COAT HEAVY PAPER *ACT*

PRICE PER BOX

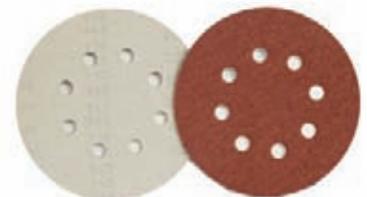
Dia.	Box Qty	100 Grit & Finer	80 Grit	60 Grit	40 Grit
4 1/2"	50	\$49.59	\$52.06	\$53.72	\$59.45
5"	51	49.59	52.06	53.72	57.77
6"	50	70.23	75.19	79.31	89.25



CS 310 XF ALUMINUM OXIDE CLOTH

PRICE PER BOX

Dia.	Box Qty	60 Grit	40 Grit	36 Grit	24 Grit
5"	50	\$93.05	\$106.10	\$112.55	\$127.30
6"	50	128.95	148.60	158.30	179.50

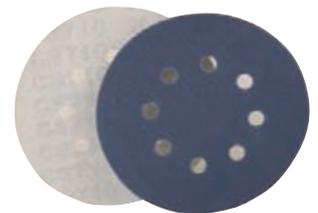


CS 710 XF HEAT TREATED ALUMINUM OXIDE CLOTH

PRICE PER BOX

Dia.	Box Quantity	100 - 240 Grit	80 Grit
5"	50	\$45.96	\$48.21
6"	50	57.91	60.13

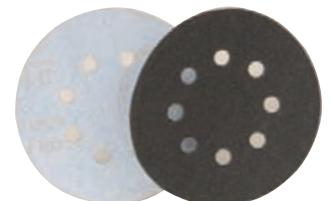
Please Note: This material is not available in 220 Grit.



PS 14 SILICON CARBIDE WATERPROOF A/C WEIGHT LATEX PAPER

PRICE PER BOX

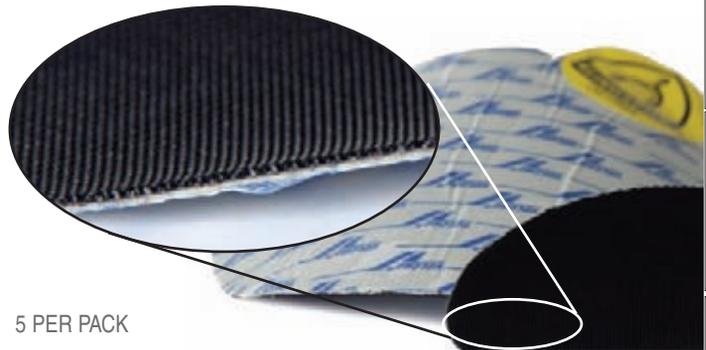
Dia.	Box Qty	220 Grit & Finer	180 Grit	150 Grit	120 Grit	100 Grit	80 Grit	60 Grit
5"	100	\$62.79	\$67.76	\$69.39	\$72.72	\$79.29	\$85.92	\$89.23
6"	100	90.44	95.53	100.62	105.72	115.69	122.67	130.25
11"	25	139.94	147.45	163.08	163.08	163.08	189.63	208.59



Black Hook Material **"CONVERT FROM PSA TO HOOK & LOOP"**

Quickly and easily convert your old PSA disc sanders to hook & loop sanders with this "hook" material. Simply determine what size and hole configuration you'll need and affix these pre-cut "hook" discs to your PSA backing pad. Now you can realize the benefits of using KLINGSPOR Kling-On® discs without having to reinvest in new backing pads or new sanders. It's that quick and that easy!

Disc Size	List Price
5" x No Hole	\$14.32
6" x No Hole	16.37
5" x 5 Hole	14.32
5" x 8 Hole	14.32
5" x 16 Hole	14.32
6" x 6 Hole	16.37
6" x 8 Hole	16.37
5" x 9 Hole	14.32
6" x 9 Hole	16.37



5 PER PACK

Backing Pads

5" x No Hole Hook & Loop **FJ41515**\$15.90

- fits Porter Cable 332 Random Orbit Sander (*also fits PC 333, 334, 335)

5" x 5 Hole Hook & Loop **FJ41515-H5**\$15.90

- fits Porter Cable 333, 334, 335 Random Orbit Sanders

5" x No Hole Hook & Loop **FJ70515**\$15.90

- fits Dynabrade models 59005, 59020, 59035, 56815, 56850

5" x No Hole PSA **FJ70515V**\$24.13

- fits Chicago Pneumatic Models CP-3575-SP, CP-3565-SH
- fits all Dynabrade models 59005, 59020, 59035, 56815, 56850

5" x 5 Hole Hook & Loop **FJ70515-H5**\$15.90

- fits Dynabrade models 59008, 59023, 59038, 59009, 59024, 59039, 56818, 56879, 175,241,5564
- fits Sioux Model 790VV • fits Chicago Pneumatic Model CP-3575-VP

5" x 8 Hole Hook & Loop **FJ43515-H8**\$18.17

- fits Porter Cable and Dewalt

5" x 9 Hole Hook & Loop **FJ48495-H9**\$21.51

- fits Festool

6" x No Hole Hook & Loop **FJ70516**\$18.17

- fits Dynabrade Models 59010, 59025, 59040, 56826, 56859



For Porter Cable Orbital Sanders: pads attach with 3 drop down screws thru the face

For Dynabrade Orbital Sanders: pads attach with a 5/16-24 male threaded stud

6" x No Hole PSA **FJ70516V**\$28.18

- fits Chicago Pneumatic Models CP-3576-SP, CP-3566-SH, CP-9164, 763, 763P, 787,707P
- fits Ingersoll-Rand Models IR310, IR311 • fits Sioux Model 5558A
- fits all Dynabrade models 59010, 59025, 59040, 56826, 56859

6" x 6 Hole Hook & Loop **FJ70516-H6**\$18.17

- fits Dynabrade models 59013, 59028, 59043, 59014, 59029, 59044, 56829, 56888, 56830, 56863 • fits Chicago Pneumatic Models CP-3576-VP, 760, 760P, 761, 784P

6" x 9 Hole Hook & Loop **FJ78596-H9**\$23.55

- fits Festool

Fusion Foam

KLINGSPOR's Fusion Foam Pads are the latest in high technology abrasives for surface preparation. The unique coating process makes them the highest performing and longest-lasting preparation discs on the market - designed and engineered to obtain an even looking, uniform surface on contoured or flat surfaces. Applications: Fusion Foam is the perfect choice for final finishing of marble and granite surfaces and solid surface materials, sanding filler, primer, orange peel, fiberglass, clear coats, and fine finish restoration. Also excellent for scuff sanding lacquer sealers, conversion varnish sealers, vinyl sealers, or any surface that requires preparation of a top coat. Fusion Foam may be used either wet or dry.

*The grit "range" - 800-1200, 1200-1500, etc. - refers to the use of Fusion Foam on variable speed sanders. At slow speeds the product performs at the coarser end of the range; at higher speeds, the product performs at the finer end of the range.



Diameter	Box Quantity	3500-2800 Grit	2500-1800 Grit	1500-1200 Grit	1200-800 Grit
3"	5	\$3.08	\$3.08	\$3.08	\$3.08
5"	5	4.81	4.81	4.81	4.81
6"	5	6.12	6.12	6.12	6.12

* Discs are available in ALUMINUM OXIDE in 800-1200 and 1200-1500 grit.

Discs are available in SILICON CARBIDE in 800-1200, 1800-2500 and 2800-3500 grit. Please specify when ordering.

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

Respiratory Protection

FULL FACE RESPIRATOR

This full face respirator is from the trusted people at Gerson – true leaders in respirators and breathing protection. It offers a one size fits all design with a wraparound lens for optimal field of vision and is made using a comfortable elastomeric material – ideal for long term use. The full size nose cup reduces the chances of fogging common with other full face respirators. All cartridges are interchangeable with Gerson half mask respirators. Mask includes a free lanyard!

Full Face Respirator - one size	SP8990	\$193.00
Tear Away Protective Lens	SP8711	\$65.00



SP8990



SP9200
SP9300

REUSABLE HALF MASK RESPIRATOR

This dual cartridge half mask respirator is made of comfortable, non-irritating TPE and elastic strap and cradle suspension for comfortable wear. The construction with exhalation valves and two filtering cartridges offers very low breathing resistance while the low profile design allows for a wide field of vision and room for eyewear. Their economical price allows for single use applications yet they can be used over and over again. Used in conjunction with the multi-contaminant filters, our half mask respirators will combat either organic gases and vapors or acidic gases and vapors, based on which cartridge is chosen, plus all solids and particulates. Cartridges sold separately.

Reusable Half Mask Respirator		P100 Particulate Cartridges
Medium	SP9200	\$18.00
Large	SP9300	\$18.00
P95 Organic Vapor/Acid Gas Cartridges		SPG70
SPG03	\$14.30	\$14.51
		PANCAKE P100 OV
		SPXP100
		\$8.00



SPXP100

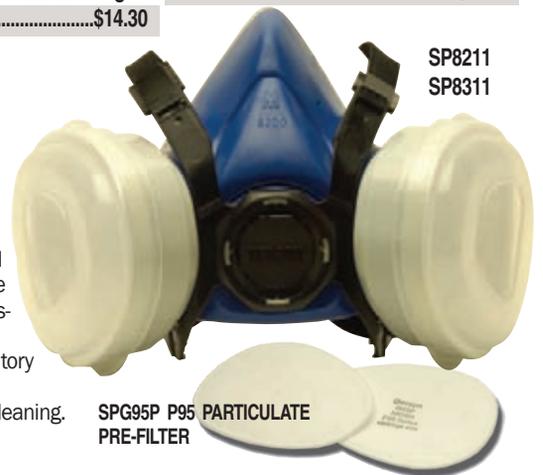
SPG03

SP172 N95 FILTER RETAINER WITH PARTICULATE PRE-FILTER

DISPOSABLE DUAL CARTRIDGE HALF MASK RESPIRATOR

Our maintenance-free respirator comes completely assembled with organic vapor cartridges and P95 particulate replaceable pre-filters. This NIOSH approved respirator offers state-of-the-art design, performance and comfort. It features a soft, lightweight elastomeric facepiece, and cradle suspension with easy-adjust headstraps that facilitate a comfortable and proper fit. The low, profile, swept-back design provides a greater field of vision and allows workers to use glasses or goggles. The P Series filters can be used with oil or solid particulates.

- Ready to use. No cartridges to replace and no spare parts to stock. Simplifies your inventory requirements.
- Reduces the record keeping necessary for OSHA compliance regarding maintenance and cleaning.
- Available in two sizes: Medium and Large.



SP8211
SP8311

SPG95P P95 PARTICULATE PRE-FILTER

Disposable Half Mask Respirator Medium	SP8211	\$30.13
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Disposable Half Mask Respirator Large	SP8311	\$30.13
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SP1730

SP1501 (Not NIOSH Approved)

SP1740/SP1940

NIOSH APPROVED N95 PARTICULATE RESPIRATORS

All of these particulate respirators are NIOSH approved and conform to NIOSH 42 CFR standard as N95 class. What does that mean to you? The filter medium has an efficiency of at least 95% against airborne particulates 0.3 microns in size that are free of oils - dusts, metal fumes, microorganisms and non-oil containing mists. These masks are excellent for many welding exposure situations involving fumes. The soft inner facepiece layer of these is non-irritating and comfortable to wear for long periods of time. The shell doesn't absorb as much moisture from exhaled breath as other masks. The respirators maintain low breathing resistance all day long. The New SP1940 particulate respirator offers the same level of protection, but may be used in the presence of oils and/or oil mists.

N95 Particulate Pre-Filter - sold 10 per pack	SPG95P	\$19.22
Filter Retainer for use with N95 Particulate Pre-Filter	SP172	\$4.30
N95 Particulate Respirator	SP1730	\$21.20

N95 Particulate Respirator w/Valve	SP1740	\$23.00
R95 Particulate Respirator w/Valve	SP1940	\$31.50
Nuisance Dust Mask	SP1501	\$12.00

Hearing Protection

BULLET EARPLUGS

Tapered shape offers the most comfortable fit for ear canal. It has an extremely soft foam seals without pressure. A smooth surface help to repel dirt. Meets ANSI S3.19 (METHOD FOR DETERMINING NRR) requirements Corded. NRR 32

Resistor Bullet Earplug Uncorded NRR 32 200/Box	SPFP70	\$40.00
Resistor Bullet Earplug with Cord NRR 32 100/Box	SPFP71	\$43.25

BARREL EARPLUGS

Cylindrical shape provides a comfortable fit for virtually any ear canal. A lightweight foam provides a comfortable seal without pressure. They also can be combined with ear muffs or other personal protection equipment to help you meet requirements and comfort that you need. Meets ANSI S3.19 requirements!!! Corded NRR 29

Resistor Barrel Earplug Uncorded NRR 29 200/Box	SPFP60	\$29.75
Resistor Barrel Earplug with Cord NRR 29 100/Box	SPFP61	\$42.00

FOUR FLANGE EARPLUGS

Four flanges for a safe, accurate and comfortable seal. Reusable synthetic rubber provides superior comfort and protection. A soft material is hypoallergenic without PVC (Polyvinyl chloride; a thermoplastic polymer) materials. Nylon dielectric cord conveniently hangs around neck (corded only) NRR 27 Corded NRR

Resistor 4-Flange Earplug Uncorded NRR 27 200/Box	SPFP40	\$134.60
Resistor 4-Flange Earplug with Cord NRR 27 100/Box	SPFP41	\$90.48

SNUG DESIGN EARPLUGS

Super soft Snug Plugs are washable and reusable!!!!!! FDA approved materials are non-toxic; soft and comfortable fit for long hour use. This product is made in the USA! NRR 28 Corded

Snug Plug Earplug Uncorded NRR 28 100/Box	SPJP3050	\$69.60
Snug Plug Earplug with Cord NRR 28 100/Box	SPJ3165	\$98.56



TERMINATOR EARMUFF WITH COOLMAX DESIGN NRR29

Soft, lightweight, extra long padding on headband offers added comfort. Folds for compact storage Very lightweight design offers maximum comfort for long time wear. The adjustable headband allows for optimum fit. Foam filled cushion gives comfortable fit when wearing safety glasses!!!! NRR 29

TERMINATOR EARMUFF	SPTR0160	\$29.00
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RDEF GUARD LIGHTWEIGHT

These earmuffs offer adjustable headband slides for maximum comfort and fit; the foamed filled earcups fit securely. They are light weight and offer a contemporary design with red earcups!!! NRR23

RDEF-GUARD EARMUFF	SPDF0310	\$9.75
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ELIMINATOR EARMUFF WITH ADJUSTABLE CUPS NRR26

Adjustable earcups flip outward for an easy, comfortable fit when hanging around neck. The headband is designed to equalize pressure which provides an even seal for better protection. The low profile earcup design provides lightweight all day comfort, flexible inner headband allows earmuffs to automatically adjust to shape of head. Fully dielectric design provides greater safety NRR 26

ELIMINATOR EARMUFF	SPEL26	\$21.75
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Eyewear

MIRAGE Lightweight • Full Wraparound Frame

These top-notch wrap-around glasses offer contemporary styling with outstanding performance. The close-to-the-face fit and extreme light weight make these ideal for extended all day wear. Features include ANSI Z87.1 approved impact resistance, economical pricing, and wrap-around coverage. With 5 available colors and a smaller frame version, you'll get the perfect fit and the best shade for your application.



Provides 99.9% UVA and UVB protection.



Meets ANSI



Available with Anti-Fog coating.



Mirage Clear Lens	SPMR0110	\$2.15	Mirage Amber Lens	SPMR0140	\$2.95
Mirage Clear Anti-Fog Lens	SPMR0111	\$3.25	Mirage Light Blue Lens	SPMR01B0	\$2.95
Mirage Smoke Lens	SPMR0120	\$2.85	Mirage Clear Lens 10% Smaller Frame	SPMRS110	\$2.15
Mirage Indoor/Outdoor Lens	SPMR0190	\$3.10	Mirage Indoor/Outdoor Lens 10% Smaller Frame	SPMRS190	\$3.00

RAD-SEQUEL

- Lightweight
- Full Wraparound Frame
- Rubber Tipped Temples
- Rubber Nose Piece for Added Comfort and Extended Wear
- Polycarbonate lens provides impact resistance
- Meets or exceeds ANSI Z87.1 + standards
- Five available color options offer more choices to suit your application. The "cheater" lenses in 3 different magnifications bring small parts and small print into focus.



Meets ANSI



Available with Anti-Fog coating.



Provides 99.9% UVA and UVB protection.



Rad-Sequel Clear Lens	SPRS110	\$3.20	Rad-Sequel Indoor/Outdoor Lens	SPRS190	\$4.00
Rad-Sequel Anti-Fog Lens	SPRS111	\$4.00	Rad-Sequel Bi-Focal 1.5x Magnification, Clear Lens	SPRSB115	\$8.25
Rad-Sequel Smoke Lens	SPRS120	\$3.50	Rad-Sequel Bi-Focal 2.0x Magnification, Clear Lens	SPRSB120	\$8.25
Rad-Sequel Light Blue Lens	SPRS1B	\$3.50	Rad-Sequel Bi-Focal 2.5x Magnification, Clear Lens	SPRSB125	\$8.25

RAD-ATAC GLASSES

- Lightweight Frame • Rubber Tipped Temples

RAD-ATAC CLEAR LENS	SPAT110	\$3.10
RAD-ATAC CLEAR ANTI-FOG LENS	SPAT111	\$3.75
RAD-ATAC SMOKE LENS	SPAT120	\$3.75
RAD-ATAC LIGHT BLUE LENS	SPAT1B	\$3.75
RAD-ATAC INDOOR/OUTDOOR LENS	SPAT190	\$3.75
RAD-ATAC AMBER LENS	SPAT140	\$3.75
RAD-ATAC 10% SMALLER FRAME, INDOOR/OUTDOOR	SPATS90	\$3.75



Meets ANSI



Provides 99.9% UVA and UVB protection.



Available with Anti-Fog coating.



JOURNEY

- Excellent Coverage • Adjustable Temple • Rubber Nosepiece
- Wrap around lens provides excellent optics and coverage. Gel nosepiece allows for all day comfort. 4-Position telescoping temples for superior fit. Lenses are hard coated for scratch resistance. ANSI Z87.1-2003 certified. Choose from 4 popular colors.

Journey Clear Lens	SPJR0110	\$4.40
Journey Light Blue Lens	SPJR01B	\$5.32
Journey Indoor/Outdoor Lens	SPJR0190	\$5.32
Journey Amber Lens	SPJR0140	\$5.32



Provides 99.9% UVA and UVB protection.



Meets ANSI



Available with telescoping temples.



Meets ANSI



Provides 99.9% UVA and UVB protection.



TITAN GLASSES

- Lightweight Frame

Titan Clear Lens	SPTT0110	\$3.90
Titan Smoke Lens	SPTT0120	\$4.68





Z87.1+
MEETS ANSI

99.9%
UVA/UVB PROTECTION

Meets ANSI Provides 99.9% UVA and UVB protection.

TYPHOON GLASSES

• Lightweight • Extended Brow



Typhoon Clear Lens	SPTY0110	\$5.00
Typhoon Indoor/Outdoor Lens	SPY0190	\$6.00



SHEATH GLASSES

Sheath Over the Glasses One Piece Frame • Ratcheting Temples

Sheath Clear Lens	SPSH610	\$5.30
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Z87.1+
MEETS ANSI

99.9%
UVA/UVB PROTECTION

Meets ANSI Provides 99.9% UVA and UVB protection.

Available with telescoping temples.



99.9%
UVA/UVB PROTECTION

Provides 99.9% UVA and UVB protection.

Z87.1+
MEETS ANSI

Meets ANSI

RAD APOCALYPSE GLASSES

Rad Apocalypse
 • Soft Rubber Temples and Nose Piece
 • Free Neck Cord



Rad Apocalypse Clear Lens	SPAP110	\$6.00
Rad Apocalypse Indoor/Outdoor Lens	SPAP190	\$6.75
Rad Apocalypse Light Blue Lens	SPAP1B	\$6.75
Rad Apocalypse Amber Lens	SPAP140	\$6.75



GALAXY GLASSES

• Adjustable Temples
 • One Piece Lens with Brow

99.9%
UVA/UVB PROTECTION

Provides 99.9% UVA and UVB protection.

Z87.1+
MEETS ANSI

Meets ANSI

Available with telescoping temples.

GALAXY CLEAR LENS	SPGX0110	\$1.95
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99.9%
UVA/UVB PROTECTION

Provides 99.9% UVA and UVB protection.

Z87.1+
MEETS ANSI

Meets ANSI

AF
ANTI-FOG

Available with Anti-Fog coating.

BARRICADE GOGGLE

Barricade Goggle • Light, Compact • Soft Rubber Frame
 • Adjustable Elastic Head Strap



Barricade Goggle Clear Lens	SPBG110	\$5.95
Barricade Goggle Smoke Lens	SPBG120	\$6.15
Barricade Goggle Clear Anti-Fog Lens	SPBG111	\$6.60
Barricade Goggle Smoke Anti-Fog Lens	SPBG121	\$7.12



CHIEF GLASSES

Chief Over the Glasses One Piece Frame

Z87.1+
MEETS ANSI

Meets ANSI

99.9%
UVA/UVB PROTECTION

Provides 99.9% UVA and UVB protection.

Chief Clear Lens	SP360C	\$2.35
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Head and Face

DISPOSABLE NONWOVEN POLYPROPYLENE COVERALL

This coverall protects from harmful paint overspray, sanding dust, dirt, grease, grime, and pesticides. It's made from polypropylene non-woven material that's lightweight and comfortable. Elastic on wrists and ankles create an even barrier of protection; plus, it's washable so you can reuse.



COVERALL Large	PROTECTIVESUITL	\$10.21
COVERALL X-Large	PROTECTIVESUITXL	\$10.21
COVERALL XX-Large	PROTECTIVESUITXXL	\$11.24
REUSABLE NYLON HOODED SUIT Large	SUIT510056	\$72.52
REUSABLE NYLON HOODED SUIT X-Large	SUIT510058	\$72.52

SPRAY SOCKS

Our premium spray socks are longer, wider, and softer than the competition. This spray sock is the professional painter's choice and the most comfortable spray sock made.

Spray Socks	SPRAYSOCK	\$3.40
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HARD HATS

These hard hats meet the ANSI Z89.1 requirement for impact resistance. Available in either white or yellow, KLINGSPOR hard hats offer a comfortable 4-point web suspension and ratchet adjustment for the perfect fit. Each also has an optional chin strap included should the wearer require one.



Yellow Hard Hat	SPGHR4Y	\$14.00
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HEAD GEAR WITH RATCHET ADJUSTMENT



Headgear with faceshield	SPHG400	\$14.50
Replacement faceshield clear Meets ANSI Z87.1	SPV40815	\$7.00
Polycarbonate face shield	SPV40815C	\$9.25

Work Gloves

LEATHER WORK GLOVES

Split Leather work gloves come in handy in virtually any manufacturing facility whether you're a material handler, emptying the garbage, or working around rough metal, wood, or plastic. These gloves from KLINGSPOR are a "one-size-fits-all" style that is perfect for protection from rough objects, sparks and heat, and for cushioning in heavy-duty work environments. Features a rubberized cuff and reinforced palm. Size: 10¹/₂"

Leather Work Gloves	SP663	\$4.45
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LEATHER WELDING GLOVES

The new KLINGSPOR split leather welding gloves are an excellent choice for your welding applications. These heavy gloves are lined for further protection from the heat involved and the 14" length protects your forearms from spatter. They are completely finished around the cuff for extra comfort.

Leather Welding Gloves	SPGL09	\$7.99
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Work Gloves

BLACK SABRE WELDING GLOVES

The Black Sabre Welding Glove is a top-notch glove that features premium grade split cowhide leather and sewn with Kevlar® thread for excellent heat resistance. The gauntlet area is lined with flame retardant material while the palm and back have a soft fleece cotton sock lining. All seams are fully welted for total protection. For the ultimate welding glove, choose the Black Sabre!

Black Sabre Welding Glove	SPBlksabre	\$18.00
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PIGSKIN TIG WELDING GLOVE

The thin, but very strong and durable design makes these gloves the perfect choice for Precision Welding Applications where fingertip sensitivity is necessary. This glove features: Grain Pigskin Palm and Back, Sewn with Kevlar® thread, 4" leather cuff, Reinforced leather thumb strap, For TIG (Tungsten Inert Gas) Welding

Tig Welding Glove - Medium	SP0129M	\$21.75
Tig Welding Glove - Large	SP0129L	\$21.75
Tig Welding Glove - XLarge	SP0129XL	\$21.75



DISPOSABLE PROTECTIVE GLOVES

KLINGSPOR is pleased to offer disposable protective gloves. Almost every manufacturing facility has applications where latex and/or nitrile gloves are used. They may be used directly in the manufacturing process or simply in maintenance operations. Three versions of our KLINGSPOR gloves are available - regular powder-free latex, 5 mil powder-free blue nitrile and 6 mil powder-free black nitrile.

POWDER FREE LATEX GLOVE	ITEM #	QTY PER CANISTER
LARGE	LATEX17002	100\$14.25
EXTRA LARGE	LATEX17003	100\$14.25

BLUE NITRILE GLOVE - 5 MIL POWDER FREE	ITEM #	QTY PER CANISTER
LARGE	NITRILE18002	100\$17.46
EXTRA LARGE	NITRILE18003	100\$17.46

BLACK NITRILE GLOVE 6 MIL POWDER FREE	ITEM #	QTY PER BOX
SMALL	NITRILE66516	100\$23.25
MEDIUM	NITRILE66517	100\$23.25
LARGE	NITRILE66518	100\$23.25
XLARGE	NITRILE66519	100\$23.25
XXLARGE	NITRILE66520	100\$23.25

THICKSTER (SAS) 14 MIL LATEX POWDER FREE EXAMINATION GLOVE	ITEM #	QTY PER BOX
MEDIUM	LATEX6602	50\$25.75
LARGE	LATEX6603	50\$25.75
EXTRA LARGE	LATEX6604	50\$25.75



FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

Work Gloves

NITRILE COATED

Nitrile gray color coated palm/fingers, dark blue color nylon knit shell, elastic knit wrist

Nitrile Coated - Small	SP1890S.....	\$3.90
Nitrile Coated - Medium	SP1890M	\$3.90
Nitrile Coated - Large	SP1890L.....	\$3.90
Nitrile Coated - Extra Large	SP1890XL.....	\$3.90



KINCOPRO DRIVER GLOVE

Black color synthetic leather palm and black color form fitting spandex back. Synthetic leather palm with reinforced fingertips. Neoprene wrist support material with hook and loop closure pull strap. Terry cloth sweat wipe on thumb. Machine washable

KincoPro Driver Glove - Medium	SP2011M	\$18.35
KincoPro Driver Glove - Large	SP2011L.....	\$18.35
KincoPro Driver Glove - Extra Large	SP2011XL	\$18.35



LATEX COATED GRIPPING

Blue latex coated palm and fingers, gray color polyester/cotton knit shell, unlined, washable, 10 gauge knit

Latex Coated Gripping - Small	SP1791S.....	\$4.15
Latex Coated Gripping - Medium	SP1791M	\$4.15
Latex Coated Gripping - Large	SP1791L.....	\$4.15
Latex Coated Gripping - Extra Large	SP1791XL.....	\$4.15



KINCO GENERAL GLOVE

Gray color synthetic leather palm with XtremeGRIP!® palm reinforcement with a Kevlar® reinforced thumb crotch. Anti-vibration palm padding. Ventilated neoprene knuckle protection. Black color form fitting stretchable fabric on upper back of hand. Neoprene wrist support material with hook and loop closure pull strap. Terry cloth sweat wipe on thumb. Machine washable

GENERAL GLOVE		
Medium	SP2041M	\$25.75
Large	SP2041L.....	\$25.75
Extra Large	SP2041XL	\$25.75

GENERAL KEVLAR		
Medium	SP2041KM.....	\$48.00
Large	SP2041KL	\$48.00
Extra Large	SP2041KXL	\$48.00



Dynorbital Spirit®

FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> • Comfort handle • Lower profile for improved control • 14 SCFM @ 90psi • High-wear, plastic valve stem • Non-Vacuum to Vacuum Conversion Kits available • Only 1.4 lbs.! 	<ul style="list-style-type: none"> • Kling-On® (Hook & Loop) Paper Discs • PSA Paper Discs • PSA Cloth Discs • 710 XF Kling-On® Cloth Discs



NON-VACUUM * Non - Vacuum to Vacuum Conversion Kits available.

Pad Diameter	3/8 Orbit Models	3/16 Orbit Models	3/32 Orbit Models
5"	59005	59020(H)	59035(H)
6"	59010(H)	59025(H)	59040(H)

SELF-GENERATED VACUUM

* Ready for connection to optional portable self-contained dust collection system.

Pad Diameter	3/8 Orbit Models	3/16 Orbit Models	3/32 Orbit Models
5"	59008	59023(H)	59038
6"	59013	59028	59043

CENTRAL VACUUM

* Has 1" (25 mm) diameter port for easy connection to central vacuum system.

Pad Diameter	3/8 Orbit Models	3/16 Orbit Models	3/32 Orbit Models
5"	59009	59024	59039
6"	59014	59029	59044

(H) - Available in both Hook & Loop and PSA

Dynorbital Supreme

Can be easily converted to self-generated vacuum for connection to a self-contained dust collection system. Can also be converted to connect to a standard central vacuum system.



FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> • Comfort handle • 18 SCFM @ 90psi • Non-Vacuum to Vacuum Conversion Kits available 	<ul style="list-style-type: none"> • Kling-On® (Hook & Loop) Paper Discs • PSA Paper Discs • PSA Cloth Discs • 710 XF Kling-On® Cloth Discs

NON-VACUUM * Non - Vacuum to Vacuum Conversion Kits available.

Pad Diameter	3/8 Orbit Models	3/16 Orbit Models	3/32 Orbit Models
5"	56880	56815	56850
6"	56890	56826	56859

SELF-GENERATED VACUUM

* Ready for connection to optional portable self-contained dust collection system.

Pad Diameter	3/8 Orbit Models	3/16 Orbit Models	3/32 Orbit Models
5"	56883	56818	56853
6"	56893	56829	56862

CENTRAL VACUUM

* Has 1" (25 mm) diameter port for easy connection to central vacuum system.

Pad Diameter	3/8 Orbit Models	3/16 Orbit Models	3/32 Orbit Models
5"	56884	56819	56854
6"	56894	56830	56863

DYNABRADE BACKING PADS

NON-VACUUM PADS

5" Hook-Face Velcro Discs

Part#	Thickness	Nap	Density
DYNA54325	3/8"	Short	Medium
DYNA56157	3/8"	Short	Soft
DYNA56180	5/8"	Short	Medium
DYNA56195	5/8"	Short	Soft

5" Vinyl-Face PSA Discs

Part#	Thickness	Density
DYNA56102	3/8"	Soft
DYNA56106	3/8"	Medium
DYNA56175	5/8"	Medium
DYNA56185	5/8"	Soft

VACUUM PADS

5" Hook-Face Velcro Discs - 5 Hole

Part#	Thickness	Nap	Density
DYNA54326	3/8"	Short	Medium
DYNA56155	3/8"	Short	Soft
DYNA56181	5/8"	Short	Medium
DYNA56196	5/8"	Short	Soft

5" Vinyl-Face PSA Discs - 5 Hole

Part#	Thickness	Density
DYNA56100	3/8"	Soft
DYNA56104	3/8"	Medium
DYNA56176	5/8"	Medium
DYNA56186	5/8"	Soft

RANDOM ORBITAL REFERENCE		
Most Aggressive 3/8"	General Sanding 3/16"	Ultra Fine Sanding 3/32"

Call For Pricing

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE BELTS
ROLLS SHEETS
FLAPWHEELS
SPECIALTY DISCS
SAFETY
POWER TOOLS
REFERENCE

FLAP DISCS
BONDED
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
NON-WOVEN
SPECIALTY
DISCS
SAFETY
POWER TOOLS
REFERENCE

Dynorbital Silver Supreme

FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> Steel cylinder and end plates increase motor efficiency. Stay-tight threaded muffler. Single-piece lock ring. Low Sound Levels. Muffler system reduces exhaust sound levels. Patented bearing protection. Smaller ergonomic housing for maximum comfort. Muffler elements are easily changed for convenient maintenance. 	<ul style="list-style-type: none"> Kling-On® (Hook & Loop) Paper Discs PSA Paper Discs PSA Cloth Discs 710 XF Kling-On® Cloth Discs



NON-VACUUM * Non - Vacuum to Vacuum Conversion Kits available.

Pad Diameter	3/8 Orbit	3/16 Orbit	3/32 Orbit
5"	69005	69020	69035
6"	69010	69025	69040

SELF-GENERATED VACUUM

* Ready for connection to optional portable self-contained dust collection system.

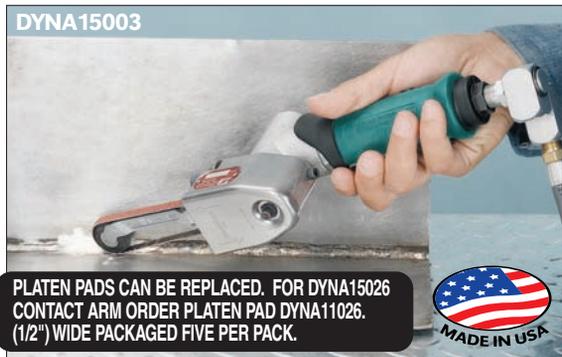
Pad Diameter	3/8 Orbit	3/16 Orbit	3/32 Orbit
5"	69008	69023	69038
6"	69013	69028	69043

CENTRAL VACUUM

* Has 1" (25 mm) diameter port for easy connection to central vacuum system.

Pad Diameter	3/8 Orbit	3/16 Orbit	3/32 Orbit
5"	69009	69024	69039
6"	69014	69029	69044

Mini-Dynaflex® II Air Powered Abrasive Belt Tool. Ideal for strap polishing and working in narrow openings.



PLATEN PADS CAN BE REPLACED. FOR DYNA15026 CONTACT ARM ORDER PLATEN PAD DYNA11026. (1/2") WIDE PACKAGED FIVE PER PACK.

FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> For broad range of applications Lightweight ergonomic design handle features 7° offset. Multi-position grinding head pivots 180° Pop-off belt guard for easy abrasive change; easy belt tracking adjustment knob Tool includes 15026 Contact Arm for 1/2" wide x 12" long abrasive belts and 15118 Drive Wheel. For added versatility, tool can be easily converted to die grinder with optional 01644 (1/4") Threaded Collet Insert 	<ul style="list-style-type: none"> 1/8", 1/4" and 1/2" wide x 12" coated long belts 1/8", 1/4" and 1/2" wide x 12" non-woven long belts

Model Number	Motor HP (W)	Motor RPM	Sound Level	Abrasive Belt Size Inch (mm)	Maximum Air Flow CFM/SCFM (LPM)	Max. SFPM (SMPM)	Weight Pound (kg)	Length Inch (mm)	Height Inch (mm)
15003	.4 (298)	25,000	80 dB(A)	1/8-1/2 (3-13) W x 12 (305) L	3/20 (566)	4,890 (1,486)	1.8 (.8)	11-3/4 (298)	3-1/2 (89)

Additional Specifications: Air Inlet Thread 1/4" NPT • Hose I.D. Size 1/4" (6 mm) • Air Pressure 90 PSIG (6.2 Bar)
Recommended Air Line Accessory: For Best Performance use 95676 Coupler/Plug Assembly

Die Grinders



FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> .4 hp, Straight-Line, 25,000 RPM, Rear Exhaust Collet Insert Size: 1/4 in. Gearless Motor reduces downtime and lessens repair expense 	<ul style="list-style-type: none"> KM 613 1/4" shank Cartridge rolls 1/4" shank No lap bands 1/4" shank Carbide burrs 1/4" shank

FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> 4 hp, Right Angle, 20,000 RPM, Rear Exhaust Collet Insert Size: 1/4 in. Centerline height is 2-1/16 in. Ideal for hard to reach areas 	<ul style="list-style-type: none"> 1" and 1 1/2" QDC 2"; 3" and 4" QDC 1"; 1-1/2"; 2" and 3" QRC & QMC

Dynaflex® II

Air Powered Abrasive Belt Tool
Reach normally inaccessible areas



DYNA40320

PLATEN PADS CAN BE REPLACED. FOR DYNA11206 CONTACT ARM ORDER PLATEN PAD DYNA11109. (3/4") WIDE PACKAGED FIVE PER PACK.



DYNA40320

FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> • Grind, deburr, blend and polish. Work on metal, plastic, fiberglass, composites, rubber, glass and stone • Lightweight, ergonomic 7° offset design • Grinding head pivots 360° • Grind off contact wheel or platen pad • Finish & polish using slack of belt • Secure belt housing at desired position using 95134 Hex Key 	<ul style="list-style-type: none"> • Includes 11206 Contact Arm for 3/4" wide x 18" long abrasive belts

FOR 18" LONG BELTS

DYNA40320

- Includes 11206 Contact Arm for 3/4" wide x 18" long abrasive belts.

FOR 20-1/2" LONG BELTS

DYNA40326

- Includes 11287 Contact Arm for 5/8" or 3/4" wide abrasive belts. 11287 is only arm compatible with 20-1/2" long belts.



DYNA40321



Versatility Kit

- Includes Model 40320 Dynaflex® II with 11203 and 11206 Contact Arms; eight abrasive belts and durable carrying case.

DYNA40321

- Also includes: 11204 Contact Arm and 50010 (1/4") Collet for die grinder use.

DYNA40324

Metric

- Also includes: 11320 Contact Arm and 50015 (6 mm) Collet for die grinder use.

ABRASIVE CAPACITY

- 1/8", 1/4" to 3/4" wide x 18", 20-1/2" and 24" lengths.

ACCESSORIES

- For broad range of applications see optional contact arms.

TUNE-UP KIT

- Model 40381: Tune-Up Kit 96174; all other models this page: Tune-Up Kit 96044.

TECH TIP

- Air motor easily converts to 1/4" die grinder (50010 Collet), 6 mm die grinder (50015 Collet) or 1/4" drill (53032 Chuck). Order collet and chuck separately.



Observe appropriate safety regulations. Use eye, face, hearing, respiratory, hand and body protection when using abrasive products.

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWER TOOLS
REFERENCE

Works best when routinely lubricated (Item# 95542)



Lightweight Dyninger DYNA52050

FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> • For use with Spindle Mounted Sanding Stars • 3,200 rpm variable speed • Air-Flow Control Dynaswivel® • Rear exhaust • Replaces tedious hand sanding 	<ul style="list-style-type: none"> • 4" Sanding Stars • Flutter Sheets (with Flutter Sheet Arbor) • 4" and 6" Power Wheels



ALSO AVAILABLE:
 Dyna52052 Dyninger with 1/2" Arbor
 Dyna52051 Dyninger with 6mm Collet

4-1/2" Right Angle Air Grinder MODEL 52632



1.3 hp, 12,000 RPM, Side Exhaust, 5/8"-11 Spindle Thread

FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> • Depressed Center Wheel Grinder is ideal for fast weld and stock removal, heavy deburring, rust and scale removal • Includes 25212 Wheel Guard, 25262 Backup Flange and 53696 Locking Flange • Vibration Dampening Side Handle included • Rotational Exhaust system allows operator to rotate a full 360 degrees to ensure that exhaust is directed away from operator • BPS900001 Adjustable spanner wrench 	<p>Any 4-1/2" sizes of the following:</p> <ul style="list-style-type: none"> • CMT Flapdisc • SMT Flapdisc • NCD Power wheel • Cut off wheel • Grinding Discs • WSM 617 Flap Wheel • Unitized Discs

Dynastraight® DYNA13204



FEATURES	KLINGSPOR PRODUCTS
<ul style="list-style-type: none"> • 3,400 rpm • Ideal set-up for Dyncacushion® • 5/8"-11 threaded arbor for use with pneumatic wheels • Available combo arbor for wheels up to 3" wide and 5/8" or 1" diameter center hole • Great for stainless steel work 	<ul style="list-style-type: none"> • 3 1/2" wide Non-Woven Belts • SM611 Abrasive Flapwheels (up to 3,800 rpm) or 10" diameter • VKM 630 Small Finishing Flapwheels • 8" Sanding Stars • Flutter Sheets • 4" and 6" diameter Power Wheels

ALSO AVAILABLE:

Model 13205

13071 Combo Arbor for up to 3" wide wheels which have either 5/8" or 1" diameter center hole. Any Dyncacushion® pneumatic wheel with 5/8" bore may also be mounted.

Versatility Kit

* Includes 13204 Dynastraight; 94472 Dyncacushion Pneumatic Wheel; 94465 Wheel Inflation Tool (1/4" NPT); 94300 Dynaswivel (1/4" NPT); 13016 Arbor; and an assortment of abrasives.

DYNA13220



Observe appropriate safety regulations. Use eye, face, hearing, respiratory, hand and body protection when using abrasive products.



DYNABRADE AUTHORIZED ACCESSORIES

PRODUCT	FEATURES
 <p>COMPOSITE DYNASWIVEL® DYNA94300</p>	<ul style="list-style-type: none"> • Swivels 360° at two pivot points • Improves tool maneuverability • Extends hose life • 1/4" NPT thread size • Non-marring composite construction
 <p>FLOW CONTROL DYNASWIVEL® DYNA95734 ALUMINUM HOUSING.</p> <p>COMPOSITE DYNASWIVEL® DYNA94407</p>	<ul style="list-style-type: none"> • Finger tip air-flow control dial • 1/4" NPT • Heavy-duty construction • Swivels 360° at two pivot points
 <p>1/2" NPT FILTER/REGULATOR/LUBRICATOR DYNA10681</p>	<ul style="list-style-type: none"> • Cost-Effective Solutions for Air Systems • Unit has modular connections with mounting brackets for easy installation
 <p>SAFETY TYPE MODEL DYNAJET IN-LINE BLOW GUN DYNA94467</p>	<ul style="list-style-type: none"> • Reduces line pressure down to 30 psi • Keep work pieces and workstations clean • Durable, aluminum construction • Mounts permanently between coupler & air hose • 1/4" NPT female threads at both ends • Weighs only 2 oz. • Purge lines of water and contaminants
 <p>WHEEL INFLATION TOOL DYNA94465</p>	<ul style="list-style-type: none"> • Controlled inflation/deflation of pneumatic wheels • Fits 1/4" air hose • A must with the Dynacushion®
 <p>DYNACUSHION DYNA94472 DYNA94508</p>	<ul style="list-style-type: none"> • Pneumatic wheel • 5" Diameter x 3 1/2" in width (3 1/2" x 15 1/2") on DYNA94472 • 3 1/4" Diameter 3" width (3" x 10 11/16") belt size on DYNA94508 • Composite hub, 5/8" - 11 thread
 <p>DYNABRADE GREASE AND GREASE GUN</p> <p>10 OZ GREASE TUBE: DYNA95542 GREASE GUN: DYNA95541</p>	<ul style="list-style-type: none"> • Multi-purpose grease for all types of bearing, cams, gears • High film strength; excellent resistance to water, steam, etc. • Workable range 0° to 300°
 <p>GEAR OIL DYNA95848</p>	<ul style="list-style-type: none"> • 2-1/2 ounce
 <p>DYNABRADE AIR LUBE AVAILABLE IN SIZES 4 ounces DYNA95821 1 pint DYNA95842 and 1 gallon DYNA95843</p>	<ul style="list-style-type: none"> • Highly recommended in use of all Dynabrade tools • Absorbs up to 10% of its weight in water • Prevents rust and formation of gum and sludge • Keeps pneumatic tools operating longer with greater power and less downtime
 <p>DYNABRADE MUFFLER INSERT DYNA56027 30 PACK DYNA56054</p>	<ul style="list-style-type: none"> • Highly recommended to keep contaminants out of tool motor • For use in many Dynabrade pneumatic tools
 <p>DYNABRADE MUFFLER CAP DYNA56028 DYNABRADE THREADED MUFFLER CAP DYNA69359</p>	<ul style="list-style-type: none"> • Standard rear muffler cap for all Dynabrade orbital sanders and many other Dynabrade pneumatic tools
 <p>DYNABRADE 26mm WRENCH DYNA50679</p>	<ul style="list-style-type: none"> • Standard 26mm flat wrench to change pads on all palm style orbital sanders
 <p>QUICK CHANGE COUPLER NPT FEMALE END DYNA95674</p>	<ul style="list-style-type: none"> • Durable nickel-plated steel and brass construction • Single action quick connect by just inserting plug into coupler. Pull back on sleeve of coupler for quick disconnect
 <p>1/4" "PORTED" MALE TO MALE PLUG NPT MALE END DYNA95675</p>	<ul style="list-style-type: none"> • Ported design to prevent starving of the air tool • Provides up to twice the airflow compared to standard plug design • Durable zinc-plated steel construction

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWER TOOLS
REFERENCE

PRODUCT RECOMMENDATIONS FOR SPECIFIC MATERIALS

ALUMINUM - Alumina Zirconia for rough grinding. Aluminum Oxide for general purpose grinding and finishing. Open coat is useful for softer types of aluminum. Silicon Carbide is sometimes used in abrasive machining, coil grinding, roll grinding, and wide belt deburring.

BRASS/BRONZE/COPPER/NON-FERROUS METALS - Aluminum Oxide is most common. Alumina Zirconia is used equally well. Silicon Carbide is sometimes used for finishing or polishing.

CAST IRON - For most types of cast iron, use Alumina Zirconia for rough grinding and Aluminum Oxide for grinding and finishing. For Chilled Cast Iron or Grey Iron, Silicon Carbide is sometimes used.

CHROME - Alumina Zirconia or Aluminum Oxide can be used. Mostly Aluminum Oxide.

CORIAN®/PLASTIC - Silicon Carbide or Stearate Aluminum Oxide products are recommended almost exclusively. Alumina Zirconia is sometimes used in rougher applications. Usually run wet, especially thermoplastics.

FIBERGLASS - Wet or dry silicon Carbide almost exclusively. Alumina Zirconia is useful also in rough applications. **(PS 33/PS 73 Dry)**
(PS 14/FP73 Wet)

GLASS - Usually Silicon Carbide for any application. Occasionally Alumina Zirconia is used for flat stock or mirror stock. Glass is usually ground wet to reduce burning and breakage. Cork Silicon Carbide (CS321X) is used for wet polishing.

GRANITE/MARBLE/STONE - Silicon Carbide almost exclusively. Usually ground wet to reduce dust and eliminate burning. **(Diamond Pads)**

LEATHER - Aluminum Oxide most widely used. Alumina Zirconia is popular with shoe manufacturers. Sometimes Silicon Carbide is found to be used. Open coats are also very common.

PAINT - Usually Silicon Carbide but sometimes Alumina Zirconia. Zinc Stearate materials common (PS 33).

RUBBER - Almost always ground with Silicon Carbide. Soft rubber or polyurethane is usually ground wet. Most other types are usually ground dry. Sometimes 24 grit Aluminum Oxide is used for heavy stock removal.

STAINLESS STEEL - Alumina Zirconia, Aluminum Oxide or Ceramic Aluminum Oxide. Silicon Carbide is sometimes used for final finishing because a more consistent scratch pattern is achieved.

STEEL - Alumina Zirconia, Aluminum Oxide or Ceramic Aluminum Oxide. Occasionally, Silicon Carbide will be used for final polishing on some applications.

TITANIUM - Silicon Carbide, for polishing, Ceramic Aluminum Oxide, Alumina Zirconia for rough grinding.

WOOD - Aluminum Oxide for general purpose sanding. Alumina Zirconia can be used for planing operations and Silicon Carbide is often used when working with particle board and finish operations.

COATED ABRASIVE SAFETY GUIDELINES

1. Eye protection should always be worn when using any machinery-operated abrasive product (A.N.S.I. Standard Z87.1). Body protection should also be worn whenever appropriate; arm guards, leather gloves, and aprons. Loose clothing, jewelry and hair should always be secured before using any powered machinery.
2. Machinery should always be maintained in good working order. Proper electrical controls should be easily reached and in good working order. Safety guards on machines should never be removed. Machinery should be disconnected from the power source before making any abrasive or machine adjustments.
3. Proper dust control is essential. Always observe OSHA regulations regarding dust collection. Dust masks are recommended to minimize dust inhalation. Dust collection systems should be properly maintained and cleaned frequently.
4. Never use a coated abrasive product which is cut, creased, or otherwise damaged. Observe proper storage conditions.
5. Proper machinery use:
 - A. Always run lap joint belts in proper direction.
 - B. Jog the machine to start abrasive belt tracking, rather than full-power starts.
 - C. If unusual ticking or bumping noises are heard on a running abrasive belt, check belt and machine for possible damage.
 - D. On offhand applications, present the workpiece to the abrasive belt below the center of a contact wheel.
 - E. Proper belt tension should always be maintained.
 - F. Belt tracking should be properly adjusted.



Look for these safety warnings in your workplace and on abrasive products.

Call for more detailed safety information.



BELT SANDING MATERIAL/APPLICATION RECOMMENDATION CHART GENERAL GUIDELINES

(call for specific information)

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
SAFETY
POWERTOOLS
REFERENCE

Operation		Metal	Grit
Abrasive Planing:		Soft Metals: CS 311, CS 416, CS 910, CS 811YY Hard Metals: CS 308, CS 310, CS 412, CS 411, CS 912, CS 811YY	24-40
Wide Belts:	Primary	Soft Metals: CS 311, CS 416, CS 910 Hard Metals: CS 308, CS 310, CS 412, CS 411, CS 912	40-60
	Intermediate	Soft Metals: CS 311, CS 416, CS 910 Hard Metals: CS 308, CS 310, CS 412, CS 411, CS 912	80-120
	Finish	Soft Metals: CS 311, CS 416 Hard Metals: CS 308, CS 310, CS 412, PS 20, PS 21	120 & Finer
Edge Sanding:		Soft Metals: CS 311, CS 416 Hard Metals: CS 308, CS 310, CS 412, CS 411	80-180
Stroke Sanding:		Soft Metals: CS 311, CS 631 Hard Metals: CS 308, CS 310, CS 631	80-180
Backstand:	Grinding	CS 308, CS 310, CS 412, CS 311, CS 411, CS 910, CS 912, CS 811YY	24-60
	Finishing	LS 309JF, LS 312, CS 631	80-400
Portable Belts:		CS 308, CS 310, CS 311, CS 412, CS 411	24-120

AIR SUPPLY RECOMMENDATIONS FOR RANDOM ORBITAL SANDERS

Sufficient air supply to portable sanding tools is crucial for proper finishing characteristics. If the air pressure is too low, random orbital disc sanders will be much more likely to create "swirl marks" or "fish hooks" on the workpiece.

KLINGSPOR RECOMMENDS THE FOLLOWING:

- Maintain steady operating air pressure of 90 PSI under load. Remember this is not the same as the air pressure to the tool when it is not in use. Use your gauge on the sander to determine actual p.s.i. under load.
- Most palm style random orbital sanders require an air volume of 15 to 18 standard cubic feet per minute (SCFM). Compressors should be at least 5HP., two stage design.
- If using rubber or plastic air hoses with an inside diameter of 3/8", a maximum length of 20 feet from the iron air supply pipe is suggested.
- Use larger I.D. hoses and couplings whenever possible. Standard hose inside diameters are typically 5/16", 3/8" and 1/2". Also, make sure the couplings' I.D. sizes are no more than one size smaller than the hose I.D. Be sure male and female couplings are of the same I.D.
- Always keep air tools properly maintained. Keep tools properly lubricated and clean. Replace worn bearings and backing pads. Keep mufflers and exhaust areas clean and unrestricted.

ABRASIVE GRAIN SIZE

All KLINGSPOR coated abrasive products, with the exception of Alumina Zirconia, are graded by grit size using the FEPA or P-grade scale. Some competitive products are graded according to the CAMI (Coated Abrasives Manufacturers Institute) scale. P-graded products are easily identified by a "P" preceding the grit number on the back of the material. The chart on this page compares both scales, along with relative size in inches and microns.

ABRASIVE BELT JOINTS



NO.1 Belt ends are overlapped with no grain removed off top of splice. Offers maximum protection against wear in the lap joints. For soft contact wheels, slack of belt operations and paper belts 150 and finer used in wide belt or lever stroke sanding. Standard joint for pump sleeves.



NO.2 Belt ends are overlapped with partial grain removed off top of splice (partial top-skived). Smooth running over platens or hard contact wheels for cloth belts 80 grit or finer. Seen mainly on edge sanders where bull nose or dead head sanding is being done.



NO.3 Similar to Type 4 joint except the two belt ends are cut in an interlocking configuration, or zig-zag. Can be run in either direction. Available in grit size 80 or finer only. Designed specifically for glass grinding operations. Not for use on any paper belts.



NO.4 "Butt splice", in which belt ends are butted together and joined by high strength tape on underside of joint. Allows belt to run in either direction for greater belt life and convenience. Smooth running. Most popular splice, suitable for a wide variety of applications and belt sizes. Strongest of the non-specialty joints.



NO.6 Belt ends are overlapped with a complete grain removal off top of splice (fully top-skived) and cut at a 45 degree angle minimizing the amount of time the joint is in contact with the workpiece. Used where a high degree of conformability in the joint area is required, such as in mold sanding. For cloth belts only!



"T" Joints A top skived #4 butt joint used on cloth belts 150 and finer for platen sanding operations on wide belt sanders or in grits 80 and finer on other belt operations where chatter is a problem when using a #4. Not for use on paper belts. Cloth only.



GRIT GRADING SYSTEMS

FEPA (P-Grade)	CAMI	Finishing Scale	Average Particle Size In Inches	Micron Scale μ	Comparable Grit Symbol (Old Scale)
P2000	1000	•	.00042	9.5	*
P1500	800	•	.00051	12.3	*
P1200	•	A16	.00060	15.3	*
•	600	•	.00062	16.0	*
P1000	•	•	.00071	18.3	*
•	500	•	.00077	19.7	*
•	•	•	.00079	20.0	*
P800	•	A25	.00085	21.8	*
•	400	A30	.00092	23.6	10/0
•	•	•	.00098	25.0	*
P600	•	A35	.00100	25.75	*
•	360	•	.00112	28.8	*
•	•	•	.00118	30.0	*
P500	•	•	.00018	30.2	*
P400	•	A45	.00137	35.0	*
•	320	•	.00140	36.0	9/0
•	•	•	.00158	40.0	*
P360	•	•	.00158	40.5	*
•	280	•	.00172	44.0	8/0
•	•	•	.00177	45.0	*
P320	•	A60	.00180	46.2	*
•	•	•	.00197	50.0	*
P280	•	•	.00204	52.5	*
•	240	A65	.00209	53.5	7/0
•	•	•	.00217	55.0	*
P240	•	A75	.00228	58.5	*
•	•	•	.00230	60.0	*
P220	•	A90	.00254	65.0	*
•	220	A85	.00257	66.0	6/0
P180	180	A110	.00304	78.0	5/0
•	150	A130	.00363	93.0	4/0
P150	•	•	.00378	97.0	*
•	120	•	.00452	116.0	3/0
P120	•	A160	.00495	127.0	*
•	100	•	.00550	141.0	2/0
P100	•	A200	.00608	156.0	*
•	80	•	.00749	192.0	0
P80	•	•	.00768	197.0	*
P60	•	•	.01014	260.0	*
•	60	•	.01045	268.0	1/2
P50	•	•	.01271	326.0	*
•	50	•	.01369	351.0	1
P40	•	•	.01601	412.0	*
•	40	•	.01669	428.0	1-1/2
P36	•	•	.02044	524.0	*
•	36	•	.02087	535.0	2
P30	•	•	.02426	622.0	*
•	30	•	.02488	638.0	2-1/2
•	24	•	.02789	715.0	3
P24	•	•	.02886	740.0	*



ABRASIVE GRAINS

ALUMINUM OXIDE - A blocky, hard grain best suited for sanding and grinding of ferrous and non-ferrous metals, wood and solid surface materials.

SILICON CARBIDE - A sharp, very hard and brittle grain best suited for sanding of glass, plastics, rubber, ceramics, solid surface materials and some non-ferrous metals.

ALUMINA ZIRCONIA - A very hard and sharp grain that works well for grinding of stainless steel, spring steel, titanium and other hard steels and for dimensioning of wood.

EMERY - An abrasive that is a natural composite of Corundum and Iron Oxide. The grains are blocky, cut slowly, and tend to polish the material being abraded.

GARNET - A very sharp grain that cuts very quickly when new. Fractures quickly, keeping it sharp. Perfect for sanding wood end grains or for final-finish sanding of wood. Very economical.

CERAMIC - exceptionally hard, strong, sharp abrasive made with bauxite and other ingredients that are chemically bonded.

STEARATE - An additive that prevents loading when sanding soft resinous woods, after sealer coats and when working with soft ferrous or non-ferrous metals. Not an abrasive grain.

ABRASIVE BACKINGS

CLOTH

JF - A light weight very flexible Egyptian cotton cloth

J - A light weight flexible Egyptian cotton cloth

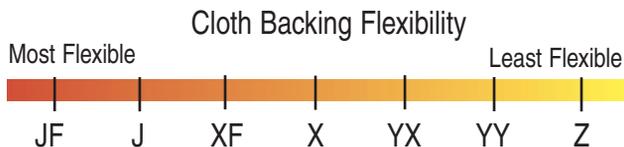
XF - A heavy, yet flexible Egyptian cotton cloth

X - A heavy, stiff Egyptian cotton cloth

YX - A lighter weight polyester backing

YY - A very heavy, stiff polyester backing

Z - A very heavy, stiff, polyester backing that is cross-weaved for segmented belts



FIBRE - A very hard, strong, coated abrasive backing material consisting of multiple layers of chemically-impregnated paper. Used primarily for disc products.

FILM - 3 mil polyester film, lightweight, strong yet flexible for disc and power sheet sanding. Enhanced finishing characteristics.

PAPER

A - A very light weight paper - typically for sheet use only or light PSA or hook & loop disc usage

B - A light weight paper - typically for sheet use only or light PSA or hook & loop disc usage

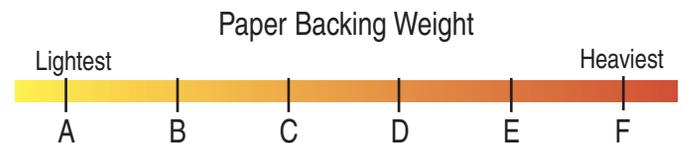
C - A medium weight paper - typically for sheet use only or light PSA or hook & loop disc usage

LATEX - C wt latex infused paper provides strength and smoother finishing characteristics

D - A medium to heavy weight paper - typically for sheet use only or PSA or hook & loop disc usage

E - A heavy weight paper - typically for stroke or wide belt sanding

F - A very heavy weight paper - typically for stroke or wide belt sanding



AVAILABLE MATERIALS • Cross Reference (see Grit Chart for detailed information)

ALUMINUM OXIDE		ALUMINA ZIRCONIA	
CLOTH	PAPER	CLOTH	PAPER
CS 308	PS 10 - Garnet	CS 409	PS 21
LS 309	PS 20	CS 411	PS 36 - Stearate
CS 310	PS 22	CS 416	
CS 311	PS 26	CS 565	
LS 312	PS 29	CS 570	
LS 313	PS 31	CS 811	
CS 326	PS 33 - Stearate		
CS 341	PS 73W - Stearate		
KL 361	PL 36 - Stearate		
KL 371			
CS 412	VP 73W - Latex		
CS 561	FP 73W - Film		
CS 710			
CERAMIC ALUMINUM OXIDE		SILICON CARBIDE	
CLOTH	PAPER	CLOTH	PAPER
CS 631	CS 912	CS 320	PS 14
CS 910	FS 966	CS 321	PS 24
		CS 539	PS 27
		CS 333	PL 35 - Stearate

BACKINGS * AVAILABLE IN MORE THAN ONE BACKING.

A-WEIGHT	B-WEIGHT	C-WEIGHT	D-WEIGHT
PS 10	PS 33 *	PS 14 *	PS 27
PS 14 *	PS 73W *	PS 31 *	PS 31 *
PS 31 *	PL 35	PS 33 *	PS 36 *
	PL 36	PS 36 *	
		PS 73W *	
		VP 73W	
F-WEIGHT	J-WEIGHT	Y-WEIGHT	Z-WEIGHT
PS 20	LS 309 *	CS 308	CS 538
PS 21		CS 311	CS 539
PS 22	X-WEIGHT	CS 320	
PS 24	CS 310 *	CS 326	FIBRE
PS 26	CS 321	CS 336	CS 561
PS 29	CS 341	CS 409	CS 565
	CS 411 *	CS 411 *	CS 570
	CS 333	CS 412	FS 966
		CS 416	
		CS 910	FILM
	X-FLEX	CS 912	FP 73W
	CS 310 *	CS 811	
	CS 710		
	CS 631		
J-FLEX			
LS 309 *			
LS 312			
LS 313			
LS 318			
KL 361			
KL 385			
CS 631			

METAL QUICK GUIDE

FERROUS METALS

- 1.) Cast Iron – contains over 2% carbon, very hard & brittle
- 2.) Carbon Steel – is less than 2% carbon. Includes low carbon, mild/medium carbon, high carbon, tool steel. Will rust or corrode unless painted, plated or galvanized.
- 3.) Stainless Steel – alloyed with the metal chromium and sometimes nickel and other metals. Non-rusting or corroding. Four basic types: austenitic, martensitic, Ferritic and precipitation-hardening (PH).

NON-FERROUS METALS

- 1.) Aluminum – very common, lightweight, strong, various hardnesses available. Used for a wide variety of applications.
- 2.) Copper Alloys – (pure copper, brass, bronze, copper-nickel alloys). Many types and varieties. Non-corroding.
- 3.) Zinc – Lightweight, white-colored metal. Mostly for die cast parts or for galvanizing steel to prevent rusting.
- 4.) Magnesium – Very lightweight, similar to aluminum. Usually cast.
- 5.) Titanium – Space age material for medical, nuclear and aerospace markets. Very lightweight, very strong.
- 6.) Nickel and nickel alloys – Monel is the most common nickel alloy. Similar to stainless steel. Pure nickel is usually alloyed with other metals



BONDED WHEEL SELECTION GUIDE

GRAIN

- A – Aluminum Oxide: for general purpose use on all metals
- C – Silicon Carbide: for use on stone and masonry applications.

GRIT

- 24 – Coarse: for fast cutting and maximum wheel life
- 30 – Medium/Coarse: for fast cutting and long wheel life
- 36 – Medium/Coarse: excellent for general purpose cutting
- 46 – Fine/Medium: for a smoother finish and reduced burr
- 60 – Fine: for a burr-free cut
- 80 – Fine: for a burr-free cut

GRADE

- TZ – Hard: for maximum wheel life
- R/S – Medium/Hard: for improved stock removal and life
- M/N – Soft: for maximum cut rate

SOFT VS. HARD WHEELS

SOFT

- Shorter wheel life
- High stock removal
- Faster cut
- Large contact areas
- Less bond holding the grain together
- For use on harder metals

HARD

- Longer wheel life
- Lower stock removal
- Slower cut
- Finer finishes
- Small contact areas
- More bond holding the grain together

WHEEL THICKNESS

CUT OFF WHEELS

- 1/32" = .031"
- 3/64" = .045"
- 1/16" = .063"
- 5/64" = .078"
- 3/32" = .094"
- 1/8" = .125"
- 9/64" = .141"

GRINDING DISCS

- 1/8" = .125"
- 5/32" = .156"
- 1/4" = .250"
- 5/16" = .312"



METAL FINISHES

Stainless Steel Mill Finishes

- #2B A mill cold-rolled finish. No abrasive used.
- #3 A 2B finish processed with #100 AO belt.
- #4 Dairy or Food Service finish. A 2B finish processed with #100 AO belts, followed by #120 AO finish.
- #6 A # 4 finish which has been buffed. A fine satin finish.
- #7 A #4 finish followed by #180 then #240 AO belts, the cut-buffed and finally color-buffed to a reflective finish. A bright finish with some grit lines still visible.
- #8 A #4 finish followed by #180, 240, 320 and 400 AO belts, followed by cut-buffing, followed by color-buffing to a mirror finish. No grit lines available. A convolute or similar wheel may be used instead of the cut/color buffing steps if acceptable.

STANDARD ALUMINUM FINISHES

M21 Smooth Specular: Belt polished to 320 grit then buffed with Tripoli buffing compound

M22 Specular Buffing without prior belt polishing

Directional Textured:

- M31 Fine Satin Belt polished to 320 then 400 grit
- M32 Medium Satin Belts polished to 180 to 320 grit
- M33 Coarse Satin Belt polished to 80 or 100 grit
- M34 Hand Rubbed Rubbed with medium grades of steel wool or non-woven hand pad material

Standard Finishes on Brass and Bronze

- M21 Smooth Specular Polishing to 320 grit then cut buffing with AO
- M33 Specular M21 plush light buffing
- M31 Fine Satin Polishing with AO or SC to 180 then 240
- M32 Medium Satin Polishing with AO or SC from 120 then 180
- M33 Coarse Satin Polishing with AO or SC from 80 to 120
- M34 Hand Rubbed Rubbed with medium or coarse non-woven pad
- M35 Brushed Wire brush or polish with coarse grit abrasive
- M36 Uniform Polish with 60 or 80 AO or SC

DRESSING/TRUING CONVOLUTE WHEELS

Truing: To make level, balanced or concentric; bring or restore to a desired mechanical accuracy or form. To prevent vibration at high speeds, a diamond or other dressing tool is used to ensure that a non-woven grinding wheel is round and concentric.

Dressing: Removal of undesirable materials from "loaded" non-woven grinding wheels to expose unused abrasive points.

Both the above activities are limited to convolute wheels 6" in diameter and larger.

Truing or Dressing for non-woven/convolute wheels can be accomplished by either Powered Diamond Saw Blades, Coated Abrasive Materials or the use of Custom Metal Tools. The best two options of these for end users will be either the Coated Abrasive Material or the Custom Metal Tool.

The Coated Abrasive Materials option requires inexpensive material with a little technique. A piece of very coarse (24 or 36 grit) coated abrasive material and a heavy solid piece of metal is used. The coated abrasive material is used because of the many cutting points it provides for truing. The heavy piece of metal maintains contact between the non-woven wheel and the coated abrasive material. If a heavy piece of metal is not used, the coated abrasive material will bounce on and off the non-woven wheel and the wheel will not be properly trued. This method works best for the harder density non-woven wheels such as the convolute 9SF for deburring.

The Custom Metal Tool option is the most unique method of all because some operators use many different variations of "truing tools" ranging from a bottle cap to a very elaborate two-handed rake-type tooth tool. The tools are usually very thin to maintain a sharp edge, short, and have a right angle to reduce the change of snagging the tool with the wheel. This method is best suited for the softer non-woven wheels. The advantage of this method is the tool's ability to quickly cut into the wheel by actually cutting the non-woven fibers.

Profiling, which is often inaccurately referred to as "dressing", is basically putting a mirror image of the one to be sanded into the face of the sanding wheel. This procedure is not recommended for convolute wheels. There are specialty non-woven wheels made by companies like Bardo-Flex which are specifically designed in the weave to allow profiling.



PS 10: Premium Garnet material used in hand, fine finish type sanding, or sanding undercoats of finishing materials. Offers a “softer” cut that leaves a smoother surface. Sheets only.

PS 14: Waterproof Silicon Carbide, A and C-weight latex papers, resin-resin bonded and available in grits P60 - P2000. Use for sanding of furniture finishes such as varnish, lacquer, shellac, oil, polishing of glass, and in automotive body shops for final color sanding of paint.

PS 20: Primarily for grinding and polishing on metals, but also useful in finish sanding on hardwoods and leather. Closed coat, Aluminum Oxide, resin-resin bonded to heavy F-weight paper. Best for wide belts and stroke sanders.

PS 21: F-weight paper, fully resin-bonded, alumina zirconia grains. Ideal on steel and stainless steel plates. Also for use on stamped parts, final grinding of cast-iron housings, and some woodworking applications

ACT PS 22: For grinding and polishing metals and for finish sanding on hardwoods and leather. F-weight paper backing, Aluminum Oxide closed coat resin-resin bond available in intermediate and wide belts.

ACT PS 24: Fully resin-bonded Silicon Carbide material, F-weight paper backing. Works well for non-ferrous metal applications, sanding between coats of paint, lacquer, varnish, etc. in woodworking applications, or for finish sanding of particle board or MDF. Available in wide belts, production belts, or stroke sanding belts.

PS 26: Premium Anti-Static Aluminum Oxide open coat, resin-resin bond, F-weight paper material. Reduces wood loading. Works well in any application where loading is a problem. Belts only.

PS 27W: Silicon Carbide, open coat sterated on a D-weight backing for wide belts stroked sanding. Best suited for UV finishes or high gloss finishes in the woodworking industry.

ACT PS 29: Premium Anti-Static Aluminum Oxide open coat, resin-resin bond, F-weight paper material, with ACT Advanced Coating Technology. Reduces wood loading. Works well in any application where loading is a problem.

PS 31: Aluminum Oxide A, C & D open coat weight paper material. Produces a soft consistent finish at a budget price.

PS 33: Aluminum Oxide B or C-weight paper, resin-resin bond for bare wood sanding, autobody use, sanding of bare metal, primer, primer surfacer, between coats of paint, and sanding of solid surface materials.

PL 35: B-weight Silicon Carbide paper, resin over glue bond, semi-open coat top-coated with Zinc Stearate dry lubricant. Suitable for sanding contoured surfaces or flat surfaces by hand, with sanding blocks, or on vibrating sanders. Ideal for sanding primer, paint, bare metal, and rust, or in woodworking, for sanding sealer, wash coats, bare softwoods and hardwoods, and between coats of furniture finishes.

PL 36: A-weight Aluminum Oxide, semi-open coat, resin over glue bond with Zinc Stearate top coat. Recommended for bare wood, primer, primer surfaces and between coats of paint.

PS 36: These C and D weight papers from KLINGSPOR combine the effectiveness of Alumina Zirconia grains and a stearate coating with the leveling properties of paper. A more consistent finish can be achieved when sanding wood, metal, and various other substances including body fillers. PS 36 is a premium fully resin bonded product.

PS 73 W: Specifically for automotive body work and for applications in the boating industry. Aluminum Oxide resin-bond, B weight paper backing coated with a select mixture of stearates for even less loading than ever before! Also useful on sanding of solid surface materials.

VP 73 W: Enhanced PS73W material with a latex impregnated backing for longer edgewear and life. May be used anywhere PS33 is found including bare wood, composite, marine and autobody. This material is not waterproof.

FP 73 W: Aluminum Oxide on a 3 mil poly film backing, FP73W is the latest generation in the PS73W material product line. It's semi-open coat grain covering and double layer of stearate make it the ideal product for longer life in woodworking, solid surface, auto & marine body and composite markets. The 3 mil poly film backing makes it tear resistant and enhances the finishing characteristics of this product. Available in P320 - 1500 (no 360 or 500) grits and available in sheets, rolls, Kling-on and PSA discs only, no belts. Performs best used wet.

CS 308: Our YX weight Aluminum Oxide material is a fully resin-bonded product that offers the benefits of a polyester backing in an X-weight. This makes it suitable for use on ferrous or non-ferrous metals and on hardwoods. CS 308 has an extended grit range that allows for coarse to ultra-fine belt sanding and polishing.

LS 309: Aluminum Oxide, fully resin bonded, J or J-flex cotton cloth for use on ferrous or non-ferrous metals and hardwoods where belt conformability to the work piece is required. Narrow belts and some intermediate belts.

CS 310: Aluminum Oxide, X or X-Flex cloth resin-resin bond, closed coat. Suitable for all ferrous metals, hardwoods, leather, aluminum, stainless steel, and most alloys.

ACT CS 311 YX: Aluminum Oxide, Anti-Static, and Y-weight, resin bonded, open coat material for wood sanding operations where clogging or loading is a problem and sanding of soft metals such as brass or bronze.

LS 312: Aluminum Oxide, semi-open coat resin bonded with a special top coating to aid in cooling and to resist loading. Very flexible, J-Flex cloth backing for severely contoured workpieces. Best suited for stainless steel and high alloy steels, other ferrous metals and non-ferrous metals.

LS 313: Aluminum Oxide, semi-open coat, highly flexible J-flex backing, fully resin-bonded with a dry lubricant to reduce heat and clogging on stainless steel, aluminum, and titanium grinding and finishing.

ACT LS 318: Aluminum Oxide, open coat, J-flex backing, fully resin-bonded for furniture and other woodworking particularly pump sleeves or intermediate belts used on soft woods.

CS 320: Silicon Carbide on Y or X-weight polyester backings. Excellent for wet applications on glass, plastic, etc. where strength of polyester would be a benefit.

CS 321: Waterproof Silicon Carbide X-weight cloth resin bonded for grinding and polishing of glass, non-ferrous metals, plastics, stone, marble, grey cast iron, and titanium. Specially treated for use with water or water-based coolants.

CS 326: Aluminum Oxide grain, X-weight polyester backing (YX) with a resin-bonded “agglomerate” surface consisting of clusters of abrasive grains of a given grit size for a very consistent rate of cut and finish when metal grinding and polishing using automatic machinery, particularly on centerless or roll grinding operations.

CS 333: Silicon Carbide, fully resin bonded, X, J, or J-Flex cloth backings for grinding and polishing of non-ferrous metals, grinding and polishing of plastic, glass, rubber, fiberglass, stone, marble, and grey cast iron. Sometimes used for softwood or particleboard sanding.



CS 341: Waterproof Aluminum Oxide fully resin bonded X-weight cloth for metal grinding and polishing where water or soluble oil coolants are used to reduce heat.

KL 361: Aluminum Oxide J-flex cloth backing, resin-resin bonded for general purpose use on all metals or wood.

KL 371: Grits P40 - P400 contain emery grain, a natural form of Aluminum Oxide, glue-glue bond, medium weight cloth similar to X-weight for general purpose grinding and polishing of metals. The lightweight cloth backing is similar to J-weight.

KL 385: Aluminum Oxide, resin-bonded to a very flexible J-flex cotton backing for general clean up and maintenance operations on steel, non-ferrous metals and wood.

CS 409: Alumina Zirconia grain with a multibond additive on polyester backing for grinding high alloys such as titanium and metals like stainless steel where heat build-up is a problem.

CS 411 X; CS 411 YX, Y: Alumina Zirconia resin-bonded, with backings available in both X-weight cloth (YX) or polyester cloth in Y-weight (Y) for high pressure, heavy stock removal on all types of metal, especially stainless steel. Polyester backings can be used wet or dry.

CS 412: Aluminum Oxide, resin bonded, Y-weight (Y), polyester-backings for use wet or dry on ferrous or non-ferrous metals. Also suitable for sanding hardwoods.

ACT CS 416: 100% Alumina Zirconia semi-open coat on a heavy or extra heavy polyester backing for high pressure production situations grinding steel, stainless steel, non-ferrous metals, plastic, leather and wood planing.

CS 538 / 539: Silicon Carbide, Anti-Static polyester backing and open coat grain coverage make this a preferred product for the particle board and plywood industries. For wide belts only. Also for stainless steel coil processing.

CS 561 fibre disc: Aluminum Oxide, vulcanized fibre backing is tear-resistant and will not fray at the edges like cloth discs.

CS 565 fibre disc: Alumina Zirconia, vulcanized fibre backing is designed for harder, tougher metals, or high production operations.

CS 570 fibre disc: Alumina Zirconia vulcanized fibre backing with a multibond lubricant added to assist in keeping the toughest grinding jobs cool.

CS 575 fibre disc: Silicon Carbide grain on a rigid backing designed for fast removal times and heavy stock removal rates in the fiberglass and plastic industries.

CS 631 JF/XF: Ceramic Aluminum Oxide on either X-flex backing or very flexible J-flex backing. Perfect for use on steels of all types but specifically for hard steels and under high grinding pressure. Added multibond lubricant enhances grinding properties and reduces heat build-up.

CS 910: Ceramic Aluminum Oxide with multibond lubricant added to enhance the grinding properties and cool the grinding surface. Features a polyester backing that enhances its durability while removing large amounts of stock.

CS 912: Ceramic Aluminum Oxide on our heaviest YY polyester backing for use on steels of all types and under high grinding pressure applications.

ACT FS 966 fibre disc: Advanced ceramic aluminum oxide fibre disc with ACT coating. Faster cutting and longer lasting on hard steels and metals. Lubricated for heat control.

CS 710: Heat-treated aluminum oxide, X-Flex Cloth resin-resin bond, closed coat. Suitable for all ferrous metals, hard woods, leather, aluminum, stainless steel and most alloys.

ACT CS 811YY: Alumina Zirconia resin-bonded to an extra heavy polyester backing for severe applications such as rough grinding of ferrous or non-ferrous castings, tubes and rolls, forging and flame-cut parts, tools, turbine blades, and machine components. Performs wet or dry. Excellent edge wear with ACT Advanced Coating Technology.

Fusion Foam Pads: Abrasive slurry poured onto a foam pad with no substrate between provides exceptional conformability and consistency of finish. Can be used wet or dry for finishing applications in automotive and marine body, aerospace, wind energy and many other applications where the finest finishes is required and performance and longevity is desired. Does particularly well on the fine sanding of the darker solid surface materials like Formica. Wet running enhances its fine finishing characteristics.

FLAPWHEELS

NSF 600: Non-woven abrasive mops that are suitable for matte, satin, and final finishing work on all metals. These are 1/4" spindle-mounted wheels.

SM 611 abrasive flapwheel: Constructed of hundreds of resin-bonded cloth Aluminum Oxide abrasive sheets firmly attached to a balanced core. Adapts quickly to contours of the workpiece continuously exposing fresh, sharp grit. Can be used on all metals, plastics and wood. Must be used with SMD 612 plates except on 61/2" and 8" wheels.

KM 613 small abrasive flapwheel: A smaller, yet equally powerful version of our standard flapwheel, these flapwheels can be used on portable or off-hand 1/4" power tools to grind, polish, deburr, or finish small and/or hard-to-handle parts.

WSM 617: An abrasive mop wheel, that can for the 1st time be used on an angle grinder, the WSM 617 is for use on both metal and wood. A built-in 5/8-11 hub makes mounting easy and it can be used everywhere from joiners workshops and on cross grained wood to auto body and for office furniture prep and stripping, etc. Grits 40, 60, 80 and 120. 4 1/2 x 2 3/4 x 5/8 - 11.

NCS 600 small finishing flapwheel: Constructed in the same fashion as the larger NCW 600 finishing flapwheel, this smaller 1/4" spindle-mounted version was designed for use on portable machinery.

NCW 600 finishing flapwheel: For smoother, more blended finishes than regular abrasive flapwheels, use KLINGSPOR Finishing Flapwheels. Flaps of non-woven abrasive and resin-bonded abrasive cloth are placed alternately throughout the circumference of the wheel and attach to a solid core for use on wood, metal or plastic without stock removal. The NCW 600 must be used with KLINGSPOR SMD 612 mounting plates.

NSF 600: Non-woven abrasive wheels specifically for matte, satin and final finishing.

BONDED WHEELS REFERENCE

GRINDING DISCS

DESCRIPTION		Metals	Steel	General Structural steel	High-tensile Structural steel	Tool steel	Sheet steel	Stainless steel	Non-alloy Stainless steel	High-alloy Stainless steel	Stainless steel Sheets	Container Construction	Nuclear Industry	Pipeline Construction	Grey cast iron	Spheroidal cast iron	Cast Steel	Malleable cast iron	Aluminum	Bronze	Copper	Brass	Other NF metals	Concrete	Reinforced Concrete	Granite	Marble	Sandstone	Stone
	● = Best Application ○ = Also Suitable																												
A 24 Extra	medium	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 24 Extra T	hard	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 24 R Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 24 N Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 24 S Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 46 N Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
C 24 R Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 24 TX Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A46VZ Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A30M Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
TS 30 AP Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

CUT-OFF WHEELS

DESCRIPTION		Metals	Steel	General Structural Steel	High-tensile Structural Steel	Tool steel	Sheet steel	Stainless steel	Non-alloy Stainless steel	High-alloy Stainless steel	Stainless steel Sheets	Container Construction	Railway tracks	Nuclear industry	Grey cast iron	Spheroidal Cast Iron	Cast Steel	Malleable Cast Iron	Aluminum	Bronze	Copper	Brass	Other NF Metals	Asphalt	Concrete	Reinforced Concrete	Pumice stone	Pantiles	Gas concrete	Granite	Tiles	Sand-Lime Bricks	Ceramics	Clinker	Fireclay Brick	Stone	Clay Pipes	Exposed-Aggregate Concrete				
	● = Best Application ○ = Also Suitable																																									
A 24 Extra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
C 24 Extra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 24 R Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 24 N Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 24 S Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 36 R Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 46 N Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
C 24 R Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 60 N Supra		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 24 TZ Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 36 TZ Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
A 46 TZ Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 60 TZ Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 80 TZ Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 24 R Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 24 SZ Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
C 24 RA Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
C 24 RT Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A 30 N Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A46VZ Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
A24SX Special		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

● = Best Application ○ = Also Suitable

	MATERIAL	SHAPE	Steel	Tool Steel	Sheet Metal	Stainless Steel	High Alloy Stainless Steel	Stainless Sheet Metal	Titanium	Aluminum	Bronze	Plastic	Paint/Lacquer	Wood	Surface Grinding	Weld Seams	Edge Grinding	Contours	
EXTRA	SMT 618	Alumina Zirconia	Flat	●	●	●	●	●							○	●	●	○	
	SMT 619	Alumina Zirconia	Convex	●	●	●	●	●							○	●	●	○	
SUPRA	SMT 624	Alumina Zirconia	Convex	●	●	●	●	●							○	○	●	●	
	SMT 626	Alumina Zirconia	Convex	●	●	●	●	●	○						○	●	●	○	
SPECIAL	SMT 627	Aluminum Oxide	Convex	●	●	●				●	●	○	○	●		○	●	●	
	SMT 628	Alumina Zirconia	Flat	●	●	●	●	●	○						●	●	○	○	
	SMT 630	Alumina Zirconia Multibond	Convex	○	●	○	●	●	●	●						○	●	●	
	SMT 640	Alumina Zirconia	Flat	○	●	○	●	●	●						●	●	○	○	
	SMT 650	Alumina Zirconia	Flat/Jumbo	●	●	●	●	●	●						●	●	○	○	
	SMT 656	Alumina Zirconia	Convex	●			●	●	●						○	●	●	○	
	SMT 696	Ceramic Aluminum Oxide	Convex	○	○	○	●	●	○										
	SMT 800	Non Woven	Convex	●	○	○	●	●	○			○							
	SMT 850	Aluminum Oxide Multibond / NW	Convex	●	○	○	●	●	○			○				●	●	○	●
	SMT 726	Alumina Zirconia	Convex	●	●	●	●	●	○							○	●	○	○
SMT 728	Alumina Zirconia	Flat	●	●	●	●	●	○						●	●	○	○		
SMT 730	Multibond Alumina Zirconia	Convex	○	●	○	●	●	○						●	○	●	●		
SMT 800	Non-woven	Convex	●	○	○	●	●	○			○								
SMT 200	Cleaning Wheel	Flat			○	○							●		○	●	○	○	



TERMS AND CONDITIONS

TERMS: Minimum \$50.00 order. Net 30 days from date of invoice. Invoices not paid within terms will be considered delinquent, and any orders will be placed on hold until delinquent invoices are paid.

DELIVERY: Single order shipments to one destination totaling \$300.00 or more will be shipped F.O.B. destination via carrier of our choice, continental U.S. only. Orders under \$300.00 will be shipped F.O.B. KLINGSPOR Distribution Point, continental U.S. only.

ALASKA & HAWAII SHIPMENTS: Shipments to Alaska or Hawaii will be pre-paid only to the point of embarkation within the continental U.S., provided above conditions are met. NOTE: KLINGSPOR ABRASIVES cannot be held accountable for delays once an order is released to a carrier.

QUANTITY VARIANCE: Because of the nature of the manufacturing process, a $\pm 10\%$ variance will be allowed by the buyer to the manufacturer.

PRICING: All prices in this catalog are subject to correction and change without notice. All computer invoice extensions have been calculated utilizing two decimal places; therefore, there is the possibility that variations, however minor, may occur due to rounding, and shall be allowed by the buyer.

RETURN POLICY: Returns of merchandise will be accepted only with prior return authorization. Custom size items cannot be returned. All products authorized for return must be properly packaged and returned freight prepaid and in original packaging in re-sellable condition. We are not responsible for items ordered in error or overstocked; if any exceptions are made, a 15% restocking fee will apply. Material non-refundable after one year.

PRODUCT WARRANTY: KLINGSPOR ABRASIVES, Inc. warrants all products to be free from defects for up to one year. If any KLINGSPOR products are found to be defective, buyer's sole and exclusive remedy will be the replacement of any such products or, at KLINGSPOR's option, the refund of buyer's purchase price for said products. In any event, KLINGSPOR shall not be liable for any consequential damages.

GETTING THE MOST OUT OF A GRINDING DISC

In our continuing effort to create a reference for our customers on troubleshooting information, below please find our problems for this issue. If you clip this section or just keep this page in a file, it will build a troubleshooting reference for your use in the future. These check lists are good regardless of what type of material you are sanding, as they are problem oriented in regard to the abrasive/machinery as opposed to workpiece based.



We run quite a few tests in our business against competitors grinding discs. Did you know that simple alterations could change the results dramatically? Here are a few things that can greatly affect the efficiency of a grinding disc.

- 1. SPEED:** The maximum operational speed on the grinding disc must not be exceeded. This is an obvious point, but slower speeds can be equally as damaging. The grinding discs have been developed so that the maximum operational speed achieves the greatest efficiency. This means that this rated speed gives the most amount of stock removal compared with the amount of wheel wear. A lower selected speed has a considerable effect on the working manner of the discs because they will tend to "jump" or "bounce". This can cause the discs to become uneven in wear and abrasive grit is torn out of the bonding.
- 2. POWER:** In order to maintain a high speed during the operation it is necessary to have plenty of power. In less expensive grinders, motors are designed below proper strength. This usually causes the wheel to slow down when pressure is applied to the work piece. Placing the blame on the grinding disc is a common error. Sometimes a disc with a softer bond will solve the problem because the cut rate will be much faster; however, the grinding disc will have a shorter life.
- 3. ANGLE:** The angle that a grinding disc needs to be applied to the work piece is 35° . NOT $10-15^\circ$! Extended trials have shown that an applied angle of 35° provides the most efficient disc wear and amount of stock removal. By lowering the angle of application, a thin and tapered edge is created at the edge of the disc. If the grinding angle is then slightly altered the thin edge can no longer withstand the grinding pressure and breaks up.

For your own safety and for the optimum use of our Abrasive products please comply with the following safety recommendations. Each product is labeled with the appropriate safety pictograms.



Wear safety goggles or glasses to protect the eyes



Wear a dust mask



Wear safety gloves to protect hands



Use ear muffs



Observe safety instructions



Do not use for wet grinding

Description	ALUMINUM OXIDE				
	Material	Backing	Available Grits	Properties	PSA / Kling-On
PS 10 A	Paper	80 - 220	Garnet		
PS 10 C	Paper	100 - 150	Garnet		
PS 10 D	Paper	36 - 80	Garnet		
PS 20 F	Paper	60 - 240, 320, 400			
PS 22 F <i>ACT</i>	Paper	40 - 400	ANTISTATIC		
PS 26 F	Paper	80 - 220	SUPER - ANTISTATIC		
PS 29 F <i>ACT</i>	Paper	40 - 320, 400	ANTISTATIC	PSA & Kling-On	
PS 31 A	Paper	80 - 220		PSA & Kling-On	
PS 31 C	Paper	100 - 150		PSA & Kling-On	
PS 31 D	Paper	36 - 80		PSA & Kling-On	
PS 33 B	Paper	150 - 240, 320, 400 - 600	STEARATE	PSA & Kling-On	
PS 33 C	Paper	40, 60 - 120	STEARATE	PSA & Kling-On	
PL 36 B	Paper	80 - 320, 400	STEARATE	PSA & Kling-On	
PS 73 BW	Paper	150 - 320, 400 - 1500	STEARATE	PSA & Kling-On	
PS 73 CW	Paper	80 - 120	STEARATE	PSA & Kling-On	
VP 73 CW	Latex	80 - 320	STEARATE	PSA & Kling-On	
FP 73 W	Film	320, 400, 600 - 1500	STEARATE	PSA & Kling-On	
CS 308 YX	Cloth	40, 60 - 180, 240, 400			
LS 309 JF	Cloth	60 - 400			
LS 309 J	Cloth	60 - 500		PSA	
LS 309 XH	Cloth	40 - 150			
CS 310 XF	Cloth	40 - 240	Dynaflex Material		
CS 310 X	Cloth	24, 36 - 600		PSA & Kling-On	
CS 311 YX <i>ACT</i>	Cloth	50 - 220	ANTISTATIC	PSA	
CS 311 Y <i>ACT</i>	Cloth	36, 40	ANTISTATIC	PSA	
LS 312 JF	Cloth	80 - 320, 400	Multibond Lubricant		
LS 313 JF	Cloth	80 - 240, 320	Multibond Lubricant		
LS 318 JF <i>ACT</i>	Cloth	80 - 180			
CS 326 YX	Cloth	80, 120, 180, 240, 320, 600	Agglomerate, Waterproof		
CS 341 X	Cloth	80 - 320, 400, 500	Waterproof		
KL 361 JF	Cloth	40, 60 - 240, 320, 400 - 600	Shop Roll		
KL 371	Cloth	40 - 240, 320	Medium cotton		
KL 385 JF	Cloth	40 - 320, 400, 600	Shop Roll		
CS 412 YX	Cloth	40 - 180, 240			
CS 412 Y	Cloth	24, 36			
CS 561	Vulcanized fibre	16, 24, 36 - 150, 220, 240, 320			
CS 710 XF	Cloth	80 - 180, 240	Heat treated	Kling-On	



Description	Type	Coating	Bonding agent	Waterproof	Application	ALUMINUM OXIDE						
						Rolls	Short and long belts	Dynaflex Belts	Wide belts	Fibre discs	Strips/Sheets	Discs
PS 10 A	●	R			Wood	-	-	-	-	-	●	-
PS 10 C	●	R			Wood	-	-	-	-	-	●	-
PS 10 D	●	R			Wood	-	-	-	-	-	●	-
PS 20 F	●	R			Metal, Wood	-	●	-	●	-	-	-
PS 22 F	●	R			Metal, Wood	●	●	-	●	-	-	●
PS 26 F	○	R			Wood	-	●	-	●	-	-	-
PS 29 F	○	R			Wood	●	●	-	●	-	-	●
PS 31 A	○	R			Metal, Wood	-	-	-	-	-	●	●
PS 31 C	○	R			Metal, Wood	-	-	-	-	-	●	●
PS 31 D	○	R			Metal, Wood	-	-	-	-	-	●	●
PS 33 B	◐	R			Paint/Varnish/Primer, Wood	●	-	-	-	-	●	●
PS 33 C	◐	R			Paint/Varnish/Primer, Wood	●	-	-	-	-	●	●
PL 36 B	○	R			Paint/Varnish/Primer, Wood	●	-	-	-	-	●	●
PS 73 BW	◐	R			Metal, Fiberglass, Paint/Varnish/Primer, Wood, Plastic/Rubber	●	-	-	-	-	●	●
PS 73 CW	◐	R			Metal, Fiberglass, Paint/Varnish/Primer, Wood, Plastic/Rubber	●	-	-	-	-	●	●
VP 73 CW	◐	R			Metal, Fiberglass, Paint/Varnish/Primer, Wood, Plastic/Rubber	●	-	-	-	-	●	●
FP 73 W	◐	R		✓	Metal, Fiberglass, Paint/Varnish/Primer, Wood, Plastic/Rubber	-	-	-	-	-	●	●
CS 308 YX	●	R			Metal, Wood	●	●	●	●	-	-	-
LS 309 JF	●	R			Metal, Wood	●	●	-	-	-	-	-
LS 309 J	●	R			Metal, Wood	●	●	-	-	-	-	●
LS 309 XH	◐	R			Metal, Wood	-	●	-	-	-	-	-
CS 310 XF	●	R			Metal, Wood	-	●	●	-	-	-	-
CS 310 X	●	R			Metal, Wood	●	●	-	●	-	-	●
CS 311 YX	○	R			Metal, Wood	●	●	-	●	-	-	●
CS 311 Y	○	R			Metal, Wood	●	●	-	●	-	-	●
LS 312 JF	◐	R			Metal, Stainless Steel, Wood	●	●	-	-	-	-	●
LS 313 JF	◐	R			Metal, Stainless Steel, Wood	●	●	-	-	-	-	-
LS 318 JF	○	R			Metal, Wood	-	●	-	-	-	-	-
CS 326 YX	●	R		✓	Metal, Stainless Steel	-	●	-	●	-	-	-
CS 341 X	●	R		✓	Metal, Stainless Steel	-	●	-	●	-	-	-
KL 361 JF	●	R			Metal, Wood	●	-	-	-	-	●	-
KL 371	●	G			Metal	●	-	-	-	-	-	-
KL 385 JF	●	R			Metal, Wood	●	-	-	-	-	●	●
CS 412 YX	●	R		✓	Metal, Wood	●	●	●	●	-	-	-
CS 412 Y	●	R		✓	Metal, Wood	●	●	●	●	-	-	-
CS 561	●	R			Metal	-	-	-	-	●	-	-
CS 710 XF	●	R			Metal, Wood	●	●	●	-	-	-	●

FLAP DISCS
 BONDED
 NON-WOVEN
 QUICK CHANGE
 BELTS
 ROLLS
 SHEETS
 FLAPWHEELS
 SPECIALTY
 DISCS
 SAFETY
 POWERTOOLS
 REFERENCE

Description	Material	Backing	Available Grits	Properties	
				Properties	PSA / Kling-On
SILICON CARBIDE	PS 14 A	Paper	220, 240, 320, 400 - 2000	Wet/Dry	PSA & Kling-On
	PS 14 C	Paper	60 - 180	Wet/Dry	PSA & Kling-On
	PS 19 E <i>ACT</i>	Paper	12, 16, 20, 30 - 120		
	PS 24 F	Paper	80, 120 - 320, 400, 500, 600	ANTISTATIC	
	PS 27 DW	Paper	180 - 600	STEARATE ANTISTATIC	
	PL 35 B	Paper	80 - 320, 400	STEARATE	PSA & Kling-On
	CS 320 Y	Polyester	40, 60 - 120, 180		
	CS 321 X	Cotton	80 - 320, 400, 500, 800	Waterproof	
	CS 333 X	Cotton	24, 36, 40, 60 - 150, 240		PSA
	CS 333 JF <i>ACT</i>	Cloth	180, 240, 320		
	CS 539 Z	Polyester	36 - 180	ANTISTATIC	

ALUMINA ZIRCONIA	PS 21 F <i>ACT</i>	Paper	40, 60 - 240, 320, 400		PSA
	PS 36 C	Paper	60 - 220	STEARATE	PSA & Kling-On
	PS 36 D	Paper	36, 40	STEARATE	PSA & Kling-On
	CS 409 YX	Cloth	60 - 120	Multibond lubricant	
	CS 409 Y	Cloth	36, 40, 50	Multibond lubricant	
	CS 411 X	Cloth	24, 36 - 80, 120		PSA
	CS 411 YX	Cloth	80, 120		
	CS 411 Y	Cloth	24, 36 - 60		
	CS 416 YX	Cloth	60 - 120		
	CS 416 Y	Cloth	24, 36 - 50		
	CS 565	Vulcanized fibre	24, 36, 50 - 100		
	CS 570	Vulcanized fibre	24, 36, 50 - 120	Multibond lubricant	
	CS 811 YY	Cloth	24, 36 - 60		

CERAMIC ALUMINUM OXIDE	CS 910 Y	Cloth	24, 36, 60	Multibond lubricant	
	CS 912 Y	Cloth	36, 50 - 180		
	FS 966	Vulcanized fibre	24, 36 - 80	Multibond lubricant	
	CS 631 JF	Cloth	80 - 120, 180, 240, 320	Multibond lubricant	
	CS 631 XF	Cloth	60 - 120	Multibond lubricant	



Description	Type	Coating	Bonding agent	Waterproof	Application	Rolls	Short and long belts	Dynafile Belts	Wide belts	Fibre discs	Strips/Sheets	Discs
SILICON CARBIDE	PS 14 A	●	R	✓	Glass & Stone, Paint/Varnish/Primer, Plastic/Rubber	●	-	-	-	-	●	●
	PS 14 C	●	R	✓	Glass & Stone, Paint/Varnish/Primer, Plastic/Rubber	●	-	-	-	-	●	●
	PS 19 E	○	R		Wood Floor Sanding	●	-	-	-	-	-	●
	PS 24 F	●	R		Metal, Paint/Varnish/Primer, Plastic/Rubber	●	●	-	●	-	-	-
	PS 27 DW	○	R		Wood Finishes, UV Finishes	-	-	-	●	-	-	-
	PL 35 B	○	R		Paint/Varnish/Primer	●	-	-	-	-	●	●
	CS 320 Y	●	R	✓	Glass & Stone, Metal, Paint/Varnish/Primer, Plastic/Rubber	●	●	●	●	-	-	-
	CS 321 X	●	R	✓	Glass & Stone, Metal, Paint/Varnish/Primer, Plastic/Rubber	-	-	-	-	-	●	●
	CS 333 X	●	R		Glass & Stone, Metal, Paint/Varnish/Primer, Plastic/Rubber	-	●	-	●	-	●	●
	CS 333 JF	●	R		Glass & Stone, Metal, Paint/Varnish/Primer, Plastic/Rubber	●	●	-	-	-	●	-
CS 539 Z	○	R	✓	Wood, Particle Board, Coil Polishing	-	●	-	-	-	-	-	

ALUMINA ZIRCONIA	PS 21 F	●	R		Metal, Stainless Steel, Wood	●	●	-	-	-	-	●
	PS 36 C	○	R		Metal, Stainless Steel, Wood	●	-	-	-	-	●	●
	PS 36 D	○	R		Metal, Stainless Steel, Wood	●	-	-	-	-	●	●
	CS 409 YX	●	R	✓	Metal, Stainless Steel	-	●	●	●	-	-	-
	CS 409 Y	●	R	✓	Metal, Stainless Steel	-	●	●	●	-	-	-
	CS 411 X	●	R		Metal, Stainless Steel	●	●	-	-	-	-	●
	CS 411 YX	●	R	✓	Metal, Stainless Steel	●	●	●	●	-	-	-
	CS 411 Y	●	R	✓	Metal, Stainless Steel	●	●	●	●	-	-	-
	CS 416 YX	○	R	✓	Metal, Stainless Steel	-	●	●	●	-	-	-
	CS 416 Y	○	R	✓	Metal, Stainless Steel	-	●	●	●	-	-	-
	CS 565	●	R		Metal, Stainless Steel	-	-	-	-	●	-	-
	CS 570	●	R		Metal, Stainless Steel	-	-	-	-	●	-	-
	CS 811 YY	●	R	✓	Metal	●	●	●	-	-	-	-

CERAMIC ALUMINUM OXIDE	CS 910 Y	●	R	✓	Metal, Stainless Steel	-	●	●	●	-	-	-
	CS 912 Y	●	R	✓	Metal, Stainless Steel	-	●	●	●	-	-	-
	FS 966	●	R		Metal, Stainless Steel	-	-	-	-	●	-	-
	CS 631 JF	●	R		Metal, Stainless Steel	-	●	-	-	-	-	-
	CS 631 XF	●	R		Metal, Stainless Steel	-	●	●	-	-	-	-

ACT Advanced Coating Technology, ○ Open Coat, ○ Semi Open Coat, ● Closed Coat, R = Resin, G = Glue

FLAP DISCS
BONDED
NON-WOVEN
QUICK CHANGE
BELTS
ROLLS
SHEETS
FLAPWHEELS
SPECIALTY
DISCS
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