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WE CAN PUT YOUR CO

ABRASIVES CATALOG

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HIGH PERFORMANCE  
ZIRCONIA FLAP DISCS

E Grind Plus flap discs are manufactured using premium zirconia abrasive grain on a heavy cloth backing with the added benefit of a grinding aid. E Grind Plus is the smoothest running flap disc available. E Grind Plus flap discs run cooler than conventional discs without scaring the surface of your stainless or other tough steel application. E Grind Plus is available in a standard or high density disc on a Type 27 (flat face) or Type 29 (angled face) backing plate. Factory manufactures E Grind Plus flap discs with larger flaps and a higher flap count per disc than our competition. This care to detail provides our customers with significant performance value and longer running products.

**high performance zirconia flap disc**

standard density – type 29/angled face – fiberglass backing plate

size	grit				arbor	max RPM	pkg qty	type 29
	36	40	60	80				
4"	55776	55777	55778	55779	5/8"	15,300	10	
4-1/2"	54401	54402	54403	54404	7/8"	13,300	10	
5"	55780	55781	55782	55939	7/8"	12,000	10	
7"	54405	54406	54407	54408	7/8"	8,600	10	
4-1/2"	56004	56005	56006	56007	5/8"-11	13,300	10	
5"	56008	56009	56010	55942	5/8"-11	12,000	10	
7"	56011	56012	56013	56014	5/8"-11	8,600	10	

**high performance zirconia flap disc**

standard density – type 27/flat face – fiberglass backing plate

size	grit				arbor	max RPM	pkg qty	type 27
	36	40	60	80				
4"	55836	55838	55840	55842	5/8"	15,300	10	
4-1/2"	55769	55770	55144	55771	7/8"	13,300	10	
5"	55844	55846	55848	55850	7/8"	12,000	10	
7"	55772	55773	55145	55774	7/8"	8,600	10	
4-1/2"	55827	55987	55988	55989	5/8"-11	13,300	10	
5"	55845	55847	55849	55851	5/8"-11	12,000	10	
7"	55831	55991	55992	55993	5/8"-11	8,600	10	

**high performance zirconia flap disc**

high density – type 29/angled face – fiberglass backing plate

size	grit				arbor	max RPM	pkg qty	type 29
	36	40	60	80				
4"	55748	55749	55750	55751	5/8"	15,300	10	
4-1/2"	54409	54410	54411	54412	7/8"	13,300	10	
5"	55752	55753	55754	55755	7/8"	12,000	10	
7"	54413	54414	54415	54416	7/8"	8,600	10	
4-1/2"	55798	55799	55800	55801	5/8"-11	13,300	10	
5"	55802	55803	55804	55805	5/8"-11	12,000	10	
7"	55806	55807	55968	55809	5/8"-11	8,600	10	

**high performance zirconia flap disc**

high density – type 27/flat face – fiberglass backing plate

size	grit				arbor	max RPM	pkg qty	type 27
	36	40	60	80				
4"	55852	55854	55856	55855	5/8"	15,300	10	
4-1/2"	54417	55756	55757	55758	7/8"	13,300	10	
5"	55864	55866	55868	55870	7/8"	12,000	10	
7"	54418	55759	55760	55874	7/8"	8,600	10	
4-1/2"	55970	55811	55972	55813	5/8"-11	13,300	10	
5"	55865	55867	55869	55871	5/8"-11	12,000	10	
7"	55974	55815	55976	55875	5/8"-11	8,600	10	

**zirconia flap disc**

standard density – type 29/angled face – fiberglass backing plate

size	grit					arbor	max RPM	pkg qty	type 29	
	24	36	40	60	80					120
4"	–	54926	54927	54928	54929	54930	5/8"	15,300	10	
4-1/2"	50660	54931	54932	54933	55683	54181	7/8"	13,300	10	
5"	–	54939	54940	54941	54942	54943	7/8"	12,000	10	
7"	50662	54949	54950	54951	54952	54953	7/8"	8,600	10	
4-1/2"	50661	54934	54935	54936	54937	54938	5/8"-11	13,300	10	
5"	–	54944	54945	54946	54947	54948	5/8"-11	12,000	10	
7"	50663	54954	54955	54956	54957	54958	5/8"-11	8,600	10	

**zirconia flap disc**

standard density – type 27/flat face – fiberglass backing plate

size	grit				arbor	max RPM	pkg qty	type 27	
	36	40	60	80					120
4"	55609	55761	55611	54361	55762	5/8"	15,300	10	
4-1/2"	54874	54875	54876	54877	54878	7/8"	13,300	10	
5"	55763	55765	55766	55767	55768	7/8"	12,000	10	
7"	54883	54884	54885	54886	54887	7/8"	8,600	10	
4-1/2"	54879	54880	54881	54882	55633	5/8"-11	13,300	10	
5"	55982	55983	55984	55985	55986	5/8"-11	12,000	10	
7"	54888	54889	54890	54891	55641	5/8"-11	8,600	10	

**zirconia flap disc**

high density – type 29/angled face – fiberglass backing plate

size	grit					arbor	max RPM	pkg qty	type 29
	36	40	60	80	120				
4"	55739	55740	55741	55742	55783	5/8"	15,300	10	
4-1/2"	54353	55692	55736	55694	58038	7/8"	13,300	10	
5"	55743	55744	55745	55746	55747	7/8"	12,000	10	
7"	55728	55729	55730	55731	55737	7/8"	8,600	10	
4-1/2"	55724	55725	55726	55727	55951	5/8"-11	13,300	10	
5"	55945	56015	55948	55950	55952	5/8"-11	12,000	10	
7"	55732	55733	55734	55735	55953	5/8"-11	8,600	10	

**zirconia flap disc**

high density – type 27/flat face – fiberglass backing plate

size	grit					arbor	max RPM	pkg qty	type 27
	36	40	60	80	120				
4"	55919	55921	55923	55925	55927	5/8"	15,300	10	
4-1/2"	55142	55150	55654	54127	55655	7/8"	13,300	10	
5"	55929	55931	55933	55935	55937	7/8"	12,000	10	
7"	55146	55657	55148	55149	55658	7/8"	8,600	10	
4-1/2"	55666	55667	55668	55669	55670	5/8"-11	13,300	10	
5"	55930	55932	55934	55936	55938	5/8"-11	12,000	10	
7"	55671	55672	55673	55674	55675	5/8"-11	8,600	10	

 STANDARD ZIRCONIA  
FLAP DISC

E Grind flap discs are manufactured using the best zirconia abrasive. E Grind is a smooth running flap discs with the versatility to grind, finish and blend. E Grind is available in standard density and high density with a Type 27 (flat face) or Type 29 (angled face) backing plate. We manufacture E Grind with larger flap size and higher flap count per disc than our competition. This care to detail provides our customers with significant performance value and long running products.



ALUMINUM OXIDE  
FLAP DISC

E Grind A/O flap discs are manufactured using high quality aluminum oxide abrasive.

E Grind A/O is a smooth running flap discs with the versatility to prep material prior to welding and for finer finishing applications in aluminum and mild steel. E Grind A/O is available in standard density and high density with a Type 27 (flat face) or Type 29 (angled face) backing plate. Factory manufactures E Grind A/O flap discs with larger flaps and a higher flap count per disc than our competition. This care to detail provides our customers with significant performance value and long running products.

**aluminum oxide flap disc**

standard density – type 29/angled face – fiberglass backing plate

size	grit					arbor	max RPM	pkg qty	type 29
	36	40	60	80	120				
4"	55878	55880	55882	55884	55886	5/8"	15,300	10	
4-1/2"	54897	55775	54899	54457	54900	7/8"	13,300	10	
5"	55888	55890	55892	55894	55896	7/8"	12,000	10	
7"	54916	54917	54918	54919	54920	7/8"	8,600	10	
4-1/2"	54901	54902	54903	54904	54905	5/8"-11	13,300	10	
5"	55889	55891	55893	55895	55897	5/8"-11	12,000	10	
7"	54921	54922	54923	54924	54925	5/8"-11	8,600	10	

**aluminum oxide flap disc**

standard density – type 27/flat face – fiberglass backing plate

size	grit					arbor	max RPM	pkg qty	type 27
	36	40	60	80	120				
4"	55898	55900	55902	55904	55906	5/8"	15,300	10	
4-1/2"	54359	54863	54354	54357	54864	7/8"	13,300	10	
5"	55908	55910	55912	55914	55916	7/8"	12,000	10	
7"	54865	54866	54867	54868	54869	7/8"	8,600	10	
4-1/2"	54350	55622	54167	54351	55623	5/8"-11	13,300	10	
5"	55909	55911	55913	55915	55917	5/8"-11	12,000	10	
7"	54870	54871	54872	54873	55631	5/8"-11	8,600	10	

**aluminum oxide flap disc**

high density – type 29/angled face – fiberglass backing plate

size	grit					arbor	max RPM	pkg qty	type 29
	36	40	60	80	120				
4"	55784	55785	55786	55787	55788	5/8"	15,300	10	
4-1/2"	55738	54898	55693	54859	55789	7/8"	13,300	10	
5"	55790	55791	55792	55793	55794	7/8"	12,000	10	
7"	55695	55696	55697	55698	55795	7/8"	8,600	10	
4-1/2"	55943	55717	55718	55719	55961	5/8"-11	13,300	10	
5"	55962	55963	55964	55965	55966	5/8"-11	12,000	10	
7"	55720	55721	55722	55723	55967	5/8"-11	8,600	10	

**aluminum oxide flap disc**

high density – type 27/flat face – fiberglass backing plate

size	grit					arbor	max RPM	pkg qty	type 27
	36	40	60	80	120				
4"	55808	55810	55812	55814	55816	5/8"	15,300	10	
4-1/2"	55818	55642	55643	55644	55820	7/8"	13,300	10	
5"	55822	55824	55826	55828	55830	7/8"	12,000	10	
7"	55832	55645	55646	55647	55834	7/8"	8,600	10	
4-1/2"	55819	55659	55660	55661	55821	5/8"-11	13,300	10	
5"	55823	55825	56016	55829	55990	5/8"-11	12,000	10	
7"	55833	55662	55663	55664	55835	5/8"-11	8,600	10	



**egrind maxx  
ceramic flap disc**

standard density – type 29/angled face – fiberglass backing plate

size	grit				arbor	max RPM	pkg qty	type 29
	36	40	60	80				
4-1/2"	50664	50665	50666	50667	7/8"	13,300	10	
7"	50680	50681	50682	50683	7/8"	8,600	10	
4-1/2"	50668	50669	50670	50671	5/8"-11	13,300	10	
7"	50684	50685	50686	50687	5/8"-11	8,600	10	

**egrind maxx  
ceramic flap disc**

high density – type 29/angled face – fiberglass backing plate

size	grit				arbor	max RPM	pkg qty	type 29
	36	40	60	80				
4-1/2"	50672	50673	50674	50675	7/8"	13,300	10	
4-1/2"	50676	50677	50678	50679	5/8"-11	13,300	10	

**egrind maxx  
ceramic flap disc**

standard density – type 27/flat face – fiberglass backing plate

size	grit			arbor	max RPM	pkg qty	type 27
	36	60	80				
4-1/2"	50688	50689	50690	7/8"	13,300	10	
7"	50694	50695	50696	7/8"	8,600	10	
4-1/2"	50691	50692	50693	5/8"-11	13,300	10	
7"	50697	50698	50699	5/8"-11	8,600	10	

**egrind sharp  
silicon carbide flap disc**

standard density – type 27/flat face – fiberglass backing plate

size	grit						arbor	max RPM	pkg qty	type 27
	40	60	80	120	240	400				
4-1/2"	50700	50701	50702	50703	50704	50705	7/8"	13,300	10	
4-1/2"	50706	50707	50708	50835	50709	50710	5/8"-11	13,300	10	

**egrind fusion  
flap disc**

type 27/flat face – fiberglass backing plate

size	blend r	finish m	arbor	max RPM	pkg qty	type 27
4-1/2"	42337	42338	7/8"	6,000	10	
4-1/2"	50711	50712	5/8"-11	6,000	10	

**E GRIND MAXX**  
Manufactured using the highest quality ceramic grains on a heavy cloth backing with the added benefit of a grinding aid. Our discs are designed to grind the toughest work material with a very aggressive cutting action. Available on standard and high density type 29 (angled face) and standard density type 27 (flat face) backing plates.

**E GRIND SHARP**  
Manufactured with the sharp and aggressive, Silicon Carbide abrasive in standard density on a type 27 (flat face) backing plate. To 400 grit, this product is the right choice for Stone, Fiberglass and High Strength alloy material where contamination with Aluminum Oxide is a concern.

**E GRIND FUSION**  
Manufactured in Europe. These specialty products are designed specifically for the repair and blending of welded Stainless Steel. Using normal flap discs on these applications can often lead to grinding damage. These products are less aggressive and more forgiving and will create a flawless blended finish. For use in commercial kitchen equipment, medical implants, architectural Stainless Steel.



**MINI E QUICK CHANGE FLAP DISCS**

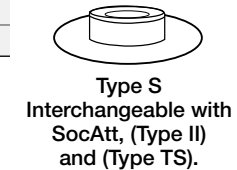
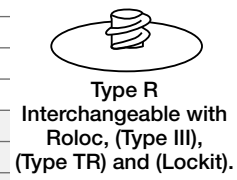
The Mini E flap discs are manufactured using the best zirconia abrasive on a heavy cloth backing. Mini E discs features a quick change system using industry standard Type R and Type S mounting methods and are available in 2" or 3" diameters.

The Mini E product for those tighter grinding areas where a larger flap disc will not fit.

E Blend Surface conditioning discs are available in standard and Heavy Duty (HD) forms. These discs have Type R or Type S fasteners bonded to the back of the product. Each disc is designed to consistently remove the same amount of material disc after disc. The HD disc is more rigid providing a more aggressive cut while the standard disc is more conforming.

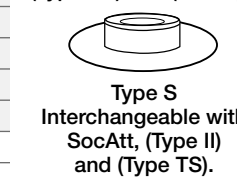
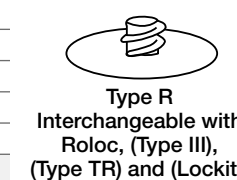
**zirconia mini e flap disc**

dia.	grit	type R	type S	max RPM	pkg qty
2"	40	56041	56045	25,000	10
	60	56042	56046	25,000	10
	80	56043	56047	25,000	10
	120	56044	56048	25,000	10
3"	40	56061	56065	20,000	10
	60	56062	56066	20,000	10
	80	56063	56067	20,000	10
	120	56064	56088	20,000	10



**eblend surface conditioning disc**

dia.	grit	type R	type S	max RPM	pkg qty
1-1/2"	A/Coarse	52659	53855	25,000	100
	HD A/Coarse	50713	50716	25,000	100
	A/Medium	52658	53856	25,000	100
	HD A/Medium	50719	50722	25,000	100
	A/Very Fine	53864	52652	25,000	100
2"	A/Coarse	52655	52654	25,000	50
	HD A/Coarse	50714	50717	25,000	50
	A/Medium	52656	52644	25,000	50
	HD A/Medium	50720	50723	25,000	50
	A/Very Fine	52705	52645	25,000	50
3"	A/Coarse	52680	52648	20,000	50
	HD A/Coarse	50715	50718	20,000	50
	A/Medium	52700	52646	20,000	50
	HD A/Medium	50721	50724	20,000	50
	A/Very Fine	53865	53859	20,000	50



**disc holders**

dia.	shank	type R	type S	max RPM	pkg qty
1-1/2"	1/4"	25074	25036	25,000	1
2"	1/4"	25075	25041	25,000	1
3"	1/4"	25077	25064	20,000	1

**aluminum oxide grain**

dia.	grit	cloth backed		fibre backed		max RPM	pkg qty
		type R	type S	type R	type S		
1-1/2"	24	53833	52024			25,000	100
	36	52611	52025			25,000	100
	40	52612	52026			25,000	100
	50	52613	52027			25,000	100
	60	52614	52028			25,000	100
	80	52615	52029			25,000	100
	100	52616	52030			25,000	100
	120	52617	52031			25,000	100
	150	52618	52032			25,000	100
	180	52619	52033			25,000	100
	240	52620	52034			25,000	100
	2"	24	52703	52036	50725	50735	25,000
36		52622	52037	50726	50736	25,000	100
40		52623	52038			25,000	100
50		52624	52039	50727	50737	25,000	100
60		52625	52040	50728	50738	25,000	100
80		52626	52041	50729	50739	25,000	100
100		52627	52072			25,000	100
120		52628	52043			25,000	100
150		52629	52044			25,000	100
180		52630	52045			25,000	100
240		52631	52046			25,000	100
3"		24	57074	52048	50730	50740	20,000
	36	52633	52042	50731	50741	20,000	50
	40	52634	52050			20,000	50
	50	52635	52051	50732	50742	20,000	50
	60	52636	52052	50733	50743	20,000	50
	80	52637	52049	50734	50744	20,000	50
	100	52638	52054			20,000	50
	120	52639	52055			20,000	50
	150	52640	52056			20,000	50
	180	52641	52057			20,000	50
240	52642	52058			20,000	50	

**silicon carbide grain**

dia.	grit	fibre backed		max RPM	pkg qty
		type R	type S		
2"	24	50785	50795	25,000	100
	36	50786	50796	25,000	100
	50	50787	50797	25,000	100
	60	50788	50798	25,000	100
	80	50789	50799	25,000	100
3"	24	50790	50800	20,000	50
	36	50791	50801	20,000	50
	50	50792	50802	20,000	50
	60	50793	50803	20,000	50
	80	50794	50804	20,000	50

(continued on page 8)

E Blend abrasive Quick Change discs are available in Aluminum Oxide, Silicon carbide, Zirconium and Ceramic grains with either Cloth or Fiber backing using industry standard Type R or Type S mounting methods. The Cloth disc is based on a tough resin bonded polyester backing for contoured surfaces. The stiff resin bonded vulcanized fiber provides for maximum cutting and durability.

**ALUMINUM OXIDE**

For light, general purpose grinding of various metals these discs are ideal for rust and scale removal

**SILICON CARBIDE**

A specialty silicon carbide grain is used for grinding or finishing of titanium and many non-ferrous materials such as porcelain coatings, glass, marble, and plastics.



ZIRCONIUM PLUS

Excellent performance for heavy weld and metal grinding on ferrous material including stainless steel. The combination of zirconium grain and a grinding aid creates a very high performance disc with a fast cut rate.

CERAMIC

This revolutionary grain, the latest generation of synthetic metal cutting minerals, was developed for the most demanding grinding and finishing applications in all types of carbon steel. Providing a very high rate of cut and extended life expectancy, this self-sharpening grain ensures consistent performance during the entire life of the disc.

(continued from page 7)  
zirconia/ga plus

dia.	grit	cloth backed		fibre backed		max RPM	pkg qty
		type R	type S	type R	type S		
1-1/2"	24	54500	54518			25,000	100
	36	54501	54519			25,000	100
	40	54502	54520			25,000	100
	50	54503	54521			25,000	100
	60	54504	54522			25,000	100
	80	54505	54523			25,000	100
2"	120	54506	54524			25,000	100
	24	54507	54525	50745	50755	25,000	100
	36	58028	52319	50746	50756	25,000	100
	40	58029	52323			25,000	100
	50	58030	52320	50747	50757	25,000	100
	60	58031	54528	50748	50758	25,000	100
3"	80	58032	58020	50749	50759	25,000	100
	120	58033	58021			25,000	100
	24	54514	54529	50750	50760	20,000	50
	36	52709	58022	50751	50761	20,000	50
	40	54515	58023			20,000	50
	50	54516	58024	50752	50762	20,000	50
3"	60	52701	58025	50753	50763	20,000	50
	80	52710	58026	50754	50764	20,000	50
	120	58039	58027			20,000	50

ceramic

dia.	grit	cloth backed		fibre backed		max RPM	pkg qty
		type R	type S	type R	type S		
1-1/2"	24	81302	81303			25,000	100
	36	81304	81305			25,000	100
	40	81306	81307			25,000	100
	50	81308	81309			25,000	100
	60	81310	81311			25,000	100
	80	81312	81313			25,000	100
2"	120	81314	81315			25,000	100
	24	81316	81317	50765	50775	25,000	100
	36	81318	81319	50766	50776	25,000	100
	40	81320	81321			25,000	100
	50	81322	81323	50767	50777	25,000	100
	60	81324	81325	50768	50778	25,000	100
3"	80	81326	81327	50769	50779	25,000	100
	120	81328	81329			25,000	100
	24	81330	81331	50770	50780	20,000	50
	36	81332	81333	50771	50781	20,000	50
	40	81334	81335			20,000	50
	50	81336	81337	50772	50782	20,000	50
3"	60	81338	81339	50773	50783	20,000	50
	80	81340	81341	50774	50784	20,000	50
	120	81342	81343			20,000	50

**premium aluminum oxide**

mounted micro mini flap wheels – 1/8" shank

size	grit						pkg qty
	60	80	120	180	240	320	
3/8" x 3/8"	40025	40033	40143	40036	40695	40035	10
5/8" x 5/8"	40702	40038	40080	42000	40759	40037	10
5/8" x 3/4"	40703	40039	40313	40655	40715	41323	10
3/4" x 3/16"	40815	40288	40289	40656	42600		10
3/4" x 3/8"	40725	42426	40660	40661	40662	40663	10
3/4" x 1/2"	40717	40086	40081	40323	40816	40817	10
3/4" x 5/8"	40718	40077	40621	42001	40818	40819	10
3/4" x 3/4"	40856	46845	40079	40322	40709	40071	10
1" x 1"			40665	40666	40667	40668	10
1-3/16" x 1/8"	46936	46937	46935	40810	40811	40812	10
1-3/16" x 3/16"	40137	40138	40140	40670	46907	46908	10
1-3/16" x 3/8"	40111	40108	40110	40144	46910	46911	10

*Other sizes and grits available upon request*

**premium aluminum oxide**

mounted flap wheels – 1/4"-20 threaded shank

size	grit					pkg qty
	60	80	120	180	240	
1" x 1/2"	40770	41097	40046	41098	41099	10
1" x 5/8"	42533	40602	40800	40074		10
1" x 1"	46850	42664	42665		40134	10
1-1/2" x 1/2"	41134	40768	40792		41103	10
1-1/2" x 1"	40788	40267	40269			10
2" x 1/2"	42532	41700	40246	43119	41104	10
2" x 3/4"	40628	41710	41932	41467	41931	10
2" x 1"	42531	46996	40855	40814	41876	10
2-1/2" x 1"	41890	41884	41761	41760	41762	10
3" x 1/2"	40682	41038	40769	42521	42527	10
3" x 1"	40654	46995	42601	40777	40778	10
3" x 2"	42910	42913	42013	42014		10

*Other sizes and grits available upon request*

**threaded adapters**

threaded size	shank diameter	length	part no.	pkg qty
1/4"-20	1/4"	3"	21011	1
1/4"-20	1/4"	4"	21014	1
1/4"-20	1/4"	6"	21012	1

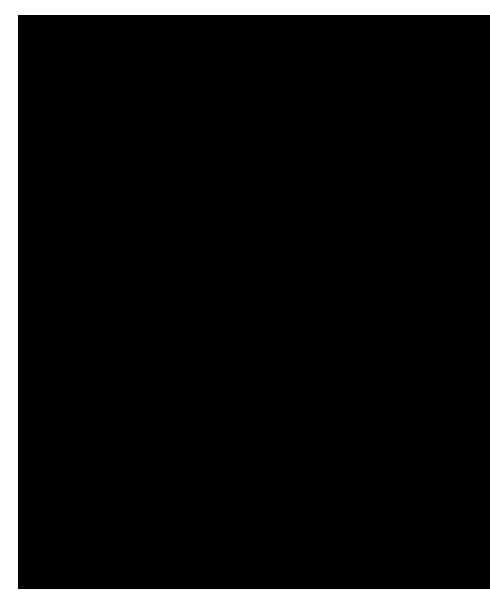
ALUMINUM OXIDE  
FLAP WHEELS

Our aluminum oxide flap wheel product line shown on pages 9 and 10 have three origins.

1/8 shank product is made for us in Europe. Items with 1/4" or 1/4-20 shanks that are not highlighted in Yellow are imported from our long standing supplier from Asia. This is a fine industrial product. The remaining items highlighted in yellow are made here in our plant in Ohio

from the finest raw material designed to withstand the most punishing application.

Our epoxy is formulated to take more heat than you can generate, eliminating flaps leaving the wheel while in use.



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**ZIRCONIUM FLAP WHEELS**

Zirconium flap wheel are designed for those tougher applications in all forms of steel. These wheels will generally last significantly longer than an AO product.

**CERAMIC FLAP WHEELS**

These Ceramic flap wheels provide amazing extended tool life in high tensile strength alloys. The ceramic grains fracture to expose sharp new cutting edges during use.

**SILICON CARBIDE  
FLAP WHEELS**

Using a flap wheel manufactured from Silicon Carbide is for those professionals who are looking for the exact match of grain with application. Silicon Carbide is well suited for working on hard metals like titanium and high nickel alloys and is a totally contaminant free grain.

**premium aluminum oxide  
mounted flap wheels – 1/4" shank**

size	grit							pkg qty
	40	60	80	120	180	240	320	
3/4" x 3/4"		40026	40736	40765	40761	40719		10
1" x 1/2"	42002	46938	42663	40674	40031	40032	40034	10
1" x 5/8"	40683	46863	40230	46864	43117	40772	40773	10
1" x 1"	40748	46846	46851	46852	40633	40632	40641	10
1-3/16" x 1/4"		40823	41324	40145	40824		40776	10
1-1/2" x 1/2"	40094	40716	40601	46867	40241	40168	40169	10
1-1/2" x 3/4"	40090	46866	40780	46897	46868		40782	10
1-1/2" x 1"	40091	46853	46854	46855	45221	40831	45222	10
2" x 1/2"	40297	42357	46849	40231	40232	41487	41490	10
2" x 3/4"	40832	41705	41708	41716	40401	41720	46924	10
2" x 1"	40600	46856	46857	46858	40234	40708	47003	10
2-1/2" x 1/2"	42358	42359	42522	42523	42524			10
2-1/2" x 1"	40304	41915	40237	42525	43109	40374	42895	10
2-1/2" x 1-1/2"	43110	40243	43111	40610	40611			10
3" x 1/2"	40242	40235	40307	40236	43112			10
3" x 1"	41892	46859	46860	46861	41461	40705	40771	10
3" x 1-1/2"	43113	40300	46870	40301	40311			10
3" x 2"	43114	40302	40147	40303	40245	40746		10

*Other sizes and grits available upon request*

**high performance – made in the USA  
mounted flap wheels – 1/4" shank**

dia.	grit	zirconia	ceramic	silicon carbide	pkg qty
1" x 1" x 1/4"	60	81626	81011	40171	10
	80	81627	81012	81610	10
	120	81628	81013	81611	10
1-1/2" x 1" x 1/4"	60	81632	81014	81612	10
	80	81633	81015	81613	10
	120	81634	81016	42178	10
2" x 1" x 1/4"	60	81638	81017	41717	10
	80	81639	81018	81617	10
	120	81640	81019	41489	10
2-1/2" x 1" x 1/4"	60	81644	81020	81619	10
	80	81645	81021	81620	10
	120	81646	81023	80818	10
3" x 1" x 1/4"	60	81650	81024	42502	10
	80	81651	81025	81623	10
	120	81652	81026	40405	10

**safe operating speeds for 1" wide  
flap wheels – shank mounted**

wheel diameter	maximum RPM
1-1/2" and smaller	30,000
2"	23,000
2-1/2"	23,000
3"	20,000

**safe operating speeds  
flap wheels – metal hub mounted**

wheel diameter	maximum RPM
4"	12,000
6"	6,200
8"	4,700
10"	3,400

**premium aluminum oxide**

flap wheels – unmounted metal hub

size	arbor	grit								pkg qty
		40	60	80	120	150	180	240	320	
4" x 1"	5/8"	40836	43301	43302	43304		43306	43308	43309	5
4" x 1-1/2"	5/8"	41079	43351	43352	43353		43354	43355	43356	5
4" x 2"	5/8"	40517	43401	43402	43404		43405	43406	43409	5
6" x 1"	1"	44348	44351	44352	44354	42007	44356	44358	44359	5
6" x 1-1/2"	1"	44460	44401	44402	44404	40489	44405	44406	44407	5
6" x 2"	1"		40045	44452	44454	40840	44456	44458	40711	5
8" x 1"	1"	40507	45102	45104	45105		40917	45108	45111	5
8" x 1-1/2"	1"	40508	42010	45153	45155	45156	41071	41072	45160	5
8" x 2"	1"	40843	40903	40899	40900	40473	45207	40584	45210	5
10" x 1"	1-1/4"		45501	45502				45508	45509	5
10" x 1-1/2"	1-1/4"			45553	40591					5
10" x 2"	1-1/4"	45600	45605	45603	40520	40586	40545	45608	45609	5

*Other sizes and grits available upon request*

**mounted**

interleaf flap wheels – shank mounted

dia. x width	shank	grit						non-woven	pkg qty
		60	80	120	180	240	320		
1-1/2" x 1"	1/4"				46319		47065	A\Fine	10
2" x 1"	1/4"	42100	42101	47091		42103	42104	A\Medium	10
2" x 1"	1/4"	40928	46511	46513	46311	47035	47116	A\Fine	10
2-1/2" x 1"	1/4"	42108	42109	46318	46317			A\Fine	10
3" x 1"	1/4"	42111	42112	42113	46519		42114	A\Medium	10
3" x 1"	1/4"	42115	46525	46522	47114		47112	A\Fine	10
3" x 2"	1/4"	40993	42116	47092	47097	40991	42118	A\Medium	10
3" x 2"	1/4"		46526	47109	47111	46589	47110	A\Fine	10

*Other sizes and grits available upon request*

**unmounted**

interleaf flap wheels – metal hub

dia. x width	shank	grit						non-woven	pkg qty
		60	80	120	180	240	320		
4" x 1"	5/8"		46542	46544			47057	A\Fine	5
4" x 2"	5/8"	46545		42123		45266		A\Medium	5
6" x 1"	1"	42136	42137	40968	42139	42140	42141	A\Medium	5
6" x 1"	1"	46560	42131	42132	42133	40404	42135	A\Fine	5
6" x 2"	1"	47067		42126	43127	42128	42129	A\Medium	5
6" x 2"	1"	46566		40407	46575	42146	47078	A\Fine	5
8" x 1"	1"	42148	42149	42150	42151	42152	42153	A\Medium	5
8" x 1"	1"	46580	42155	47045	46590	42158	42159	A\Fine	5
8" x 2"	1"	46586		42161	42162	42163	42164	A\Fine	5
10" x 1"	1-1/4"	42165	42166	42167			42170	A\Medium	5
10" x 2"	1-1/4"				47131		47142	A\Fine	5
16" x 1"	1-1/4"	42182	42183	42184	42185		42186	A\Medium	5
16" x 2"	1-1/4"	42187	42188		42190		42191	A\Medium	5

*Other sizes and grits available upon request*

**INTERLEAF FLAP WHEELS**

Cut interleaf flap wheels are manufactured from premium aluminum oxide resin bond cloth flaps combined with a flexible open structured nylon web flap which is impregnated with resins and aluminum oxide grains. Standard interleaf wheels are supplied in a 1:1 ratio with the flaps radially mounted around a metal shank or metal hub. Interleaf wheels are a balanced and smooth running product that performs best in contour work, blending, finishing, deburring and polishing applications of ferrous and nonferrous metals as well as wood and plastic. Interleaf wheels can also be used to produce a consistent scratch pattern for secondary finishing operations.

**safe operating speeds**

interleaf flap wheels – shank mounted

wheel diameter	maximum RPM
1-1/2"	15,000
2"	11,000
2-1/2"	11,000
3"	8,000

**flap wheels – metal hub mounted**

wheel diameter	maximum RPM
4"	4,000
6"	3,400
8"	3,200
10"-16"	2,500

**FLAP BRUSHES**

These flap brushes are made from a flexible open structure nylon web that is impregnated with resin and aluminum oxide grain. They are used for removing surface contaminants and to produce a high quality finish on a variety of metals. Flap brushes are manufactured with 1/4" shanks for the diameters 1-1/2" thru 3" and with arbor holes for the diameters 4" thru 12". Because of the open nature of our product, these brushes run cooler reducing the potential for smearing and discoloration of the part.

**non woven abrasive – mounted**

dia. x width	shank	A/Coarse	A/Medium	A/VFine	SC/ Ultra Fine	H.D. Tan	pkg qty
1-1/2" x 1"	1/4"	45996	45994	45990	40938		10
2" x 1"	1/4"	46215	46214	46210		46202	10
2" x 2"	1/4"	46219	46218	46216	40939		10
3" x 1/2"	1/4"	46335	46199				10
3" x 1"	1/4"	46226	46224	46220	40477	46229	10
3" x 1-1/2"	1/4"			46366			10
3" x 1-3/4"	1/4"		46347			46361	10
3" x 2"	1/4"	46234	46233	46228	46362	46337	10

**non woven abrasive unmounted – metal hub**

dia. x width	arbor hole	A/Coarse	A/Medium	A/VFine	pkg qty
4" x 1"	5/8"	46246	46244	46240	5
4" x 2"	5/8"	46254	46252	46248	5
4" x 2"	1"	46251	46253	42200	5
6" x 1"	1"	46266	46264	46260	5
6" x 2"	1"	46274	46272	46268	5
8" x 1"	1"	46286	46284	46280	5
8" x 2"	1"	46294	46292	46288	5

**non woven abrasive unmounted – phenolic core**

dia. x width	core I.D.	A/Medium	A/VFine	pkg qty
6" x 1"	3"	42201	42203	5
8" x 1"	3"	46340	42236	5
8" x 2"	3"	42207	46343	5
8" x 3"	3"	42210	42212	5
10" x 1"	3"	42213	42215	5
10" x 2"	3"	42216	42218	5
10" x 3"	3"	42219	42221	5
12" x 1"	5"	42222	42224	5
12" x 2"	5"	42232	42237	5

**safe operating speeds**

**flap brushes – shank mounted**

wheel diameter	maximum RPM
1-1/2"	11,000
2"	11,000
3"	8,000

**flap brushes – core mounted**

wheel diameter	maximum RPM
6"	3,400
8"	3,200
10"	2,700
12"	2,500

**flap brushes – metal hub mounted**

wheel diameter	maximum RPM
4"	4,000
6"	3,400
8"	3,200

**aluminum oxide**

size	grit	arbor hole 7/8"	pkg qty
4-1/2"	24	52999	25
	36	52991	25
	50	52994	25
	60	52995	25
	80	52996	25
	100	52989	25
	120	52992	25
5"	24	53000	25
	36	53001	25
	50	53003	25
	60	53004	25
	80	53005	25
	100	53006	25
	120	53007	25
7"	24	53710	25
	36	53711	25
	50	53713	25
	60	53714	25
	80	53715	25
	100	53716	25
	120	53717	25

**aluminum oxide open-cut**

size	grit	arbor hole 7/8"	pkg qty
4-1/2"	24	77002	25
	36	77001	25
	50	77000	25
5"	24	77008	25
	36	77007	25
	50	77006	25
7"	24	77016	25
	36	77015	25
	50	77014	25

**zirconia plus**

size	grit	arbor hole 7/8"	pkg qty
4-1/2"	24	53969	25
	36	53939	25
	50	55500	25
	60	53561	25
	80	53961	25
	100	77031	25
	120	77030	25
5"	24	53530	25
	36	53536	25
	50	53550	25
	60	53940	25
	80	53560	25
	100	51907	25
	120	77034	25
7"	24	53725	25
	36	53730	25
	50	53735	25
	60	53760	25
	80	55516	25
	100	77038	25
	120	77037	25

**sharp silicon carbide**

size	grit	arbor hole 7/8"	pkg qty
4-1/2"	24	50805	25
	36	50806	25
	50	50807	25
	60	50808	25
	80	50809	25
	100	50810	25
	120	50811	25
5"	24	50812	25
	36	50813	25
	50	50814	25
	60	50815	25
	80	50816	25
	100	50817	25
	120	50818	25
7"	24	50819	25
	36	50820	25
	50	50821	25
	60	50822	25
	80	50823	25
	100	50824	25
	120	50825	25

(continued on page 14)

**RESIN FIBER DISC**

Cut resin fiber discs are made with a reinforced vulcanized fiberback, coated with abrasive grains and bonded with a tough, heat resistant resin. This results in a durable, cool and fast cutting product that performs very well. A wide variety of grinding abrasive material is available so the proper disc can be selected for your specific application. We offer discs in the following grains; premium aluminum oxide, aluminum oxide open-cut, zirconia, silicon carbide blended ceramic and a blended ceramic with top size. The aluminum oxide is an excellent value designed as a general purpose product. The aluminum oxide open-cut is manufactured for use in soft non-ferrous materials like aluminum. The zirconia is a more aggressive material to be used in tougher general purpose applications. The silicon carbide abrasives are best suited for that application that requires the sharpest cutting grains. The ceramic blended abrasives are the best choice for mild, carbon based steel alloys. Finally, the ceramic blend with top size is manufactured for the toughest applications including stainless steel.

**BACK-UP PADS**

Factory supplies appropriately sized back-up pads for resin fiber discs. These pads are designed to maximize the life expectancy of the fiber discs and insure a quality finish.

**DISC CUTTER**

Manufacturer has a specially designed disc cutter with replaceable blades. This device can be used to double the life of a resin fiber disc by enabling the operator to remove worn edges from large diameter discs. This can provide a nearly new disc to be used on the next smaller tool.

**(continued from page 13)  
ceramic blend**

size	grit	arbor hole 7/8"	pkg qty
4-1/2"	24	77164	25
	36	55531	25
	50	55532	25
	60	77163	25
	80	77137	25
	100	77136	25
5"	120	77134	25
	24	77178	25
	36	77177	25
	50	77176	25
	60	77175	25
	80	77174	25
7"	100	77173	25
	120	77172	25
	24	55560	25
	36	55561	25
	50	55562	25
	60	55563	25
80	55564	25	
	100	55570	25
	120	77185	25

**ceramic blend w/top size**

size	grit	arbor hole 7/8"	pkg qty
4-1/2"	24	81369	25
	36	81368	25
	50	81367	25
	60	81366	25
	80	81365	25
	100	81364	25
5"	120	81363	25
	24	81376	25
	36	81375	25
	50	81374	25
	60	81373	25
	80	81372	25
7"	100	81371	25
	120	81370	25
	24	81383	25
	36	81382	25
	50	81381	25
	60	81380	25
80	81379	25	

**back-up pads for resin fiber discs**

dia.	flexible	part no.	pkg qty
4-1/2"	medium	66901	1
5"	medium	66903	1
7"	flexible	66906	1
	medium	66907	1
	rigid	66908	1
pad nuts	4-1/2" & 5"	66912	1
	7"	66913	1

**resin fiber disc cutter**

	part no.
fiber disc cutter	28100
fiber disc cutter – upper blade	28102
fiber disc cutter – lower blade	28104

**safe operating speeds  
resin fiber discs**

diameter	maximum RPM
4"	15,300
4-1/2"	13,300

diameter	maximum RPM
5"	13,300
7"	8,600

**product selection guide**

	aluminum oxide	aluminum oxide open-cut	zirconia	ceramic blend	ceramic blend w/top size	silicon carbide
General Purpose	Good		Better		Best	
Tougher Alloy Steel			Good	Better	Best	
Stainless Steel	Good		Better		Best	
Non-Ferrous	Good	Better				Best

**cone points**

aluminum oxide material

size ref	base dia.	length	grit				taper	pkg qty
			60	80	120	180		
A-1	5/16"	1"	39110	39111	39112	39026	15°	100
B-2	5/16"	1-1/2"	39115	39116	39117	39119	5°	100
C-3	3/8"	2"	39122	39123	39124	39125	5°	100
D-4	7/16"	2-1/2"	39132	39134	39133	39135	5°	100
E-5	1/2"	1-1/2"	39009	39136	39137	39010	15°	100
F-6	5/8"	1-1/2"	39014	39013	39012		18°	100
G-7	3/4"	1-1/2"	39152	39141	39143	39019	22°	100
H-8	1"	1-1/2"		39145		39146	30°	100
I-9	3/4"	2-1/2"	39129	39130	39024	39025	9°	100
K-11	3/16"	1"	39023	39147	39148	39154	2-1/2°	100

**cone points mandrels**

size ref	base dia.	length	shank size	taper	part no.	pkg qty
A-1	5/16"	1"	1/4"	15°	22301	1
B-2	5/16"	1-1/2"	1/4"	5°	22302	1
C-3	3/8"	2"	1/4"	5°	22303	1
D-4	7/16"	2-1/2"	1/4"	5°	22304	1
E-5	1/2"	1-1/2"	1/4"	15°	22305	1
F-6	5/8"	1-1/2"	1/4"	18°	22306	1
G-7	3/4"	1-1/2"	1/4"	22°	22307	1
H-8	1"	1-1/2"	1/4"	30°	22308	1
I-9	3/4"	2-1/2"	1/4"	9°	22309	1
K-11	3/16"	1"	1/8"	2-1/2°	22311	1

## CONE POINTS

Abrasive coin points are the solution for deburring or finishing areas that are hard to reach with conventional products. This tapered product is designed for accessing surfaces requiring polishing, grinding or deburring where the adjoining surfaces make this operation difficult. As the outer wrap wears away, new abrasive is exposed, resulting in longer machining time. Cone points are fitted to the appropriate shank mounted mandrel specifically tapered for the safe and secure use on hand held power tools.



CARTRIDGE ROLLS

Cut cartridge rolls are produced by tightly wrapping abrasive materials around a close tolerance mandrel. The roll is removed from the mandrel and cured to secure the form. They are designed to be long lasting as fresh abrasive is exposed when the outer layer wears through. Available in straight, full taper and half taper versions, each of these styles is application or operator specific, and the choice of design is usually a function of the configuration of the part being machined. Used on hand held power tools, cartridge rolls are mounted on mandrels designed to securely hold the roll during operation.

**premium aluminum oxide material**  
straight cartridge rolls

dia. x length	mandrel size	grit												pkg qty
		36	40	50	60	80	100	120	150	180	220	240	320	
3/16" x 3/4"	3/32"			33715	37251	30240	33716	30387	33717	30623	30942	30435	30436	100
3/16" x 1"	3/32"			33718	30167	30241	30383	30388	30526	30530	37291	30531	30534	100
1/4" x 3/4"	1/8"				30155	30247	30316	30385	30455	30464		30605	30815	100
1/4" x 1"	1/8"	30045	37160	30104	32073	30248	30319	30390	37221	30532	30603	30674	30816	100
1/4" x 1-1/2"	1/8"	33719	37479	30122	30169	33877	30320	33878	37168	30533	30604	30675	30817	100
1/4" x 2"	1/8"		30035	33721	30170	30246	30321	37239	30463	37011	37367	37238	32450	100
5/16" x 1"	1/8"	30182		37203	30180	30251	30322	30393	33723	30535	33724	30677	37018	100
5/16" x 1-1/2"	1/8"	30174		30175	30179	32386	30323	30394	30525	30536	30665		30694	100
3/8" x 1"	1/8"	30036	37150	30915	30183	30254	30325	30396	30467	30607	30609	30950	30822	100
3/8" x 1-1/2"	1/8"	34013	30043	30100	30184	30255	30326	33854	30468	30606	30679	30982	37005	100
3/8" x 2"	1/8"	30038	30044	30110	30185	30256	30327	30951	30469	30608	33725	33726	33727	100
3/8" x 2"	3/16"				30196	30265								100
1/2" x 1"	1/8"	30006	37173	30107	30186	30257	30328	30399	30470	30541	30612	30683	30825	100
1/2" x 1-1/2"	1/8"	30029	30046	30923	30187	30258	30937	37387	30471	30542	30616	30688	30911	100
1/2" x 2"	1/8"	30001	30049	30109	30188	30260	30330	30401	30472	30569	30617	30684	37405	100
1/2" x 2"	3/16"	30002	30914	30112	30191	30266	30333	30425	33728	30546		37468	33729	100
1/2" x 2"	1/4"		30047	30114	30126	37156	33730	30404	30473	30545		33731		100
5/8" x 1"	1/8"				32309	30263	32377					31060		100
5/8" x 1"	3/16"	30051		30113	30119	30301	33732	37129	33733			30680	30830	100
5/8" x 1-1/2"	1/8"		30052	30943	30193	30264	30335	31012	37166	30555	30560	30685	30832	100
5/8" x 1-1/2"	3/16"	30050	30053	37155	30192	30959	30020	30409	33734	33735	30686		33736	100
5/8" x 1-1/2"	1/4"						30338	30475						100
5/8" x 2"	1/8"			37165	30197	30268		37167	30482				37336	100
5/8" x 2"	3/16"	33738	37218	37467	30210	37523	33739	30414	33740	30552	33741	33742	33743	100
5/8" x 2"	1/4"			33111	30195	32394		32396						100
3/4" x 1"	1/8"	30007	30056		30198	30929	30340	30411	30479	30551	30564	30961	33745	100
3/4" x 1"	3/16"	37015	33746	37016	30172	30273	30344	30415	30480	37531	34784	33747	34783	100
3/4" x 1-1/2"	1/8"	30034	30058	30120	30199	30270	30341	30412	30483	30556	30566	32355		100
3/4" x 1-1/2"	3/16"	30008	37280	30125	30203	30274	30350	30416	30484	30558	33748	30703		100
3/4" x 1-1/2"	1/4"	33749	30059	30129	30207	37032	30349	30422	37423	30557	33750	37331	30478	100
3/4" x 2"	1/8"		37560	30121	30200	30271	30342	30413	30486	30562		30704		100
3/4" x 2"	3/16"	37164	30063	30128	30204	30275	30346	30417	37368	30559	30289	33751	33752	100
3/4" x 2"	1/4"	30013	30065	30130	30208	30279	33800	33849	30485	30563		32453	30918	100
1" x 1"	1/4"	30016	30077	33753	30218	30288	30352	30424	30501	30570				100
1" x 1-1/2"	3/16"		30081		30213	30286								100
1" x 1-1/2"	1/4"	32121		30141	30219	30916	30356	30432	30503	30571	30619		30906	100
1" x 2"	3/16"	32352			32354	32428	32429	32430	32431					100
1" x 2"	1/4"	33755	30076	30142	32279	30291	30359	30430	30502	30600				100
1-1/2" x 1-1/2"	1/4"	30022		30163	30239	30310	30381	37297		37388		37352	37353	100
1-1/2" x 2"	1/4"			30153	32375			32432						100

**premium aluminum oxide material**  
**full taper cartridge rolls**

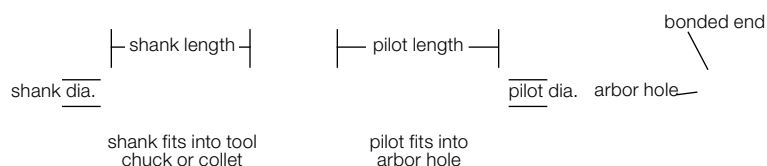
dia. x length	mandrel size	grit												pkg qty
		36	40	50	60	80	100	120	150	180	220	240	320	
3/8" x 1"	1/8"			34200	34300	34400	34500	30946	34700	34750	34800	34830	34900	100
3/8" x 1-1/2"	1/8"			34205	34302	34402	34505	34602	34705	34754	34805	34835	34901	100
3/8" x 2"	1/8"			34210	34304	34404		34604	34710	32522				100
1/2" x 1"	1/8"			34220	34306	34405	34515	34608	34720	34758	34810	34838	34910	100
1/2" x 1-1/2"	1/8"	37333		34031	34307	30956	34528	34612	31307	34762	34815	34840	34915	100
1/2" x 1-1/2"	3/16"	34015				37393		34614						100
1/2" x 2"	1/8"	33757		34235	34312	34416	34535	34618		34766	34816			100
5/8" x 1"	1/8"				34053	34418		34620		34768		34845		100
5/8" x 1-1/2"	1/8"			34240	34326	34422	34545	34624	34730	34770	33012	34850	34920	100
5/8" x 2"	1/8"			34250	34319	34426		34628					37335	100
3/4" x 1"	1/8"			34255	34330	34430	37201	34632	33777				34930	100
3/4" x 1"	3/16"			34630	34328	34431		34633		32318				100
3/4" x 1-1/2"	1/8"	34045	34140	30983	34334	34434	34550	34636	34735	34774	34820	37309	37310	100
3/4" x 1-1/2"	3/16"	34040		34265	34332	34435		34634		34778		34869	37117	100
3/4" x 2"	3/16"				34338	34440	32422	34640		34790	34825	37122		100
3/4" x 2"	1/4"			34275										100
1" x 1-1/2"	3/16"	34060		34285	34344	34444		34644		30974				100
1" x 1-1/2"	1/4"				34348	30947	34560	30958				34646	34448	100
1" x 2"	3/16"					34450		34648						100
1" x 2"	1/4"	34155		34299	34352	34452	37209	37184	34740	34798			34940	100

**mandrels**

pilot dia.	pilot length	shank dia.	eventcut part no.	pkg qty	pilot dia.	pilot length	shank dia.	eventcut part no.	pkg qty
3/32"	1/2"	1/4"	22017	1	3/16"	3/4"	1/4"	22156	1
3/32"	3/4"	1/4"	22015	1	3/16"	1"	1/4"	22166	1
3/32"	1"	1/4"	22016	1	3/16"	1-1/2"	1/4"	22176	1
1/8"	1/2"	1/4"	22076	1	3/16"	2"	1/4"	22186	1
1/8"	3/4"	1/4"	22086	1	1/4"	1/2"	1/4"	22196	1
1/8"	1"	1/4"	22096	1	1/4"	3/4"	1/4"	22206	1
1/8"	1-1/2"	1/4"	22106	1	1/4"	1"	1/4"	22216	1
1/8"	2"	1/4"	22116	1	1/4"	1-1/2"	1/4"	22226	1
3/16"	1/2"	1/4"	22146	1	1/4"	2"	1/4"	22236	1

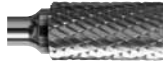
**safe operating speeds**  
**cartridge rolls**

diameter	maximum RPM
1/8" x 1" thru 1/2" x 2"	26,000 rpm
5/8" x 1" thru 3/4" x 1-1/2"	18,000 rpm
1" x 1" thru 1" x 2"	15,000 rpm



**CARBIDE BURS**

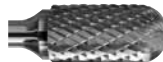
Cut burs are manufactured on CNC machines creating the most consistent product available. Premium grade carbide is used to create the toughest bur that won't chip while providing exceptional tool life.



**cylinder carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SA-42	3/32"	7/16"	1/8"	1-1/2"	76000	76021		
SA-43	1/8"	9/16"	1/8"	1-1/2"	76001	76022		
SA-1	1/4"	5/8"	1/4"	2"	76004	76025	76055	
SA-3	3/8"	3/4"	1/4"	2-1/2"	76006	76027	76057	

We offer a diverse line of burs for your specific application. Single and double cut products are designed for ferrous materials. The non-ferrous design quickly removes unwanted material in aluminum, plastic and brass. See our application and speed chart on page 19 to assist in the proper tool selection.



**ball nose cylinder carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SC-41	3/32"	7/16"	1/8"	1-1/2"	76096	76115		
SC-42	1/8"	9/16"	1/8"	1-1/2"	76097	76116		
SC-1	1/4"	1/2"	1/4"	2"	76099	76118	76139	
SC-3	3/8"	3/4"	1/4"	2-1/2"	76101	76120	76141	
SC-5	1/2"	1"	1/4"	2-3/4"	76104	76123	76142	



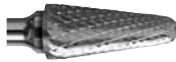
**ball carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SD-42	1/8"	1/8"	1/8"	1-1/2"	76146	76158		
SD-1	1/4"	7/32"	1/4"	2"	76149	76161	76172	
SD-3	3/8"	5/16"	1/4"	2"	76151	76163		
SD-5	1/2"	7/16"	1/4"	2-1/4"	76153	76165	76175	



**oval carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SE-41	1/8"	7/32"	1/8"	1-1/2"	76179	76187		
SE-1	1/4"	3/8"	1/4"	2"	76181	76189		
SE-3	3/8"	5/8"	1/4"	2"	76183	76191	76196	
SE-5	1/2"	7/8"	1/4"	2-3/4"	76184	76192	76197	



**ball nose tree carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SF-42	1/8"	1/2"	1/8"	1-1/2"	76200	76216		
SF-1	1/4"	3/4"	1/4"	2"	76202	76218	76236	
SF-3	3/8"	3/4"	1/4"	2-1/2"	76204	76220	76238	
SF-5	1/2"	1"	1/4"	2-3/4"	76207	76223	76239	



**tree carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SG-44	1/8"	1/2"	1/8"	1-1/2"	76243	76261		
SG-1	1/4"	5/8"	1/4"	2"	76245	76263		
SG-3	3/8"	3/4"	1/4"	2-1/2"	76247	76265		

**flame carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SH-41	1/8"	1/4"	1/8"	1-1/2"	76279	76284		
SH-2	5/16"	3/4"	1/4"	2-1/2"	76280	76285		
SH-5	1/2"	1-1/4"	1/4"	3"	76281	76286		



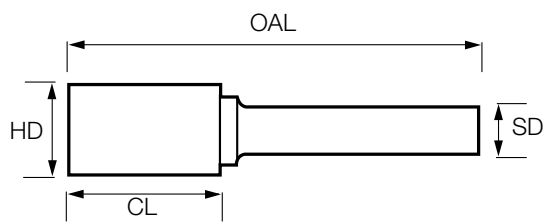
**ball nose cone carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SL-42	1/8"	1/2"	1/8"	1-1/2"	76314	76325		
SL-1	1/4"	5/8"	1/4"	2"	76316	76327	76338	
SL-3	3/8"	1-1/16"	1/4"	3"	76318	76329	76339	
SL-5	5/8"	1-3/16"	1/4"	3"	76320	76331	76341	



**cone carbide bur**

descrip.	head dia.	cut length	shank dia.	overall length	single cut	part no. double cut	non ferrous	profile
SM-42	1/8"	7/16"	1/8"	1-1/2"	76343	76351		
SM-43	1/8"	5/8"	1/8"	1-1/2"	76344	76352		
SM-1	1/4"	3/4"	1/4"	2"	76346	76354		
SM-4	3/8"	3/4"	1/4"	2-1/2"	76347	76355		



HD = carbide head diameter  
 CL = carbide head length  
 SD = steel shank diameter  
 OAL = overall bur length

**bur cuts**

**single cut**

- general purpose
- recommended for deburring, weld preparation, metal removal
- ideal on steels, copper, cast iron, nickel alloys

**double cut**

- very fine chip size
- smooth operation-less vibration
- high cutting action

**non-ferrous cut**

- wide teeth spacing
- reduced clogging of teeth
- ideal for non-ferrous/soft materials

**recommended running speeds**

size of bur	aluminum alloys, zinc base alloys, plastics, fiberglass	brass, cast iron, copper, bronze	unhardened steel	hardened steels, nimonic, stainless steel, ceramics, titanium
1/8"	30,000 to 90,000	45,000 to 90,000	60,000 to 90,000	60,000 to 90,000
1/4"	15,000 to 70,000	22,500 to 60,000	45,000 to 60,000	30,000 to 45,000
3/8"	10,000 to 50,000	15,000 to 40,000	30,000 to 40,000	19,000 to 30,000
1/2"	7,000 to 38,000	11,000 to 30,000	22,500 to 30,000	15,000 to 22,500
5/8"	6,000 to 30,000	9,000 to 24,000	18,000 to 24,000	12,000 to 18,000

## E GRIND BELTS

Our Cloth Belt products are available in AO, Zirc and Ceramic for most sizes. Our AO product is Y weight material Aluminum Oxide, while our Zirc and Ceramic are X weight. Use our AO belt on Ferrous and Non-ferrous metals, Carbon Steel, Aluminum, plastic and wood. Our Heavy Duty Zirc Product is at home when used on Higher Alloyed Steel and Stainless Steels. Our Ceramic grain product includes a grinding aid and is used on High Temp alloys, Stainless Steel and Titanium.

The strength of the converter industry is our ability to choose the correct material for your application. Please use our belt offering as a guideline of available product, but we can also supply other sizes as well as materials to meet your exact application. Ask about our great Silicon Carbide material that is used to grind high strength material or stone product where a very sharp grain is required. Your representative can help you find the correct product for your application.

## belts

width x length	grit	AOR	Zirc	Ceramic	pkg qty
1/8" x 18"	50	50001	50110	50239	100
	60	50002	50111	50240	100
	80	50003	50112	50241	100
	120	50004	50113	50242	100
1/8" x 24"	50	50005	50114	50243	100
	60	50006	50115	50244	100
	80	50007	50116	50245	100
	120	50008	50117	50246	100
1/4" x 18"	50	50009	50118	50247	100
	60	50010	50119	50248	100
	80	50011	50120	50249	100
	120	50012	50121	50250	100
1/4" x 24"	50	50013	50122	50251	100
	60	50014	64185	50252	100
	80	50015	50123	50253	100
	120	60162	50124	50254	100
3/8" x 13"	50	50016	50125	50255	100
	60	50017	50126	50256	100
	80	66391	66673	50257	100
	120	50018	50127	50258	100
1/2" x 18"	50	50019	50128	50259	100
	60	50020	50129	50260	100
	80	50021	50130	50261	100
	120	50022	50131	50262	100
1/2" x 24"	50	50023	50132	50263	100
	60	60150	50133	50264	100
	80	50024	63127	50265	100
	120	50025	50134	50266	100
3/4" x 18"	50	50026	50135	50267	100
	60	50027	63080	50268	100
	80	50028	50136	50269	100
	120	50029	50137	50270	100
3/4" x 20-1/2"	50	50030	50138	50271	100
	60	50031	50139	50272	100
	80	50032	50140	50273	100
	120	50033	50141	50274	100
1" x 30"	50	62138	50142	50275	50
	60	62120	50143	50276	50
	80	62104	50144	50277	50
	120	62105	50145	50278	50
1" x 42"	50	62096			50
	60	62099			50
	80	62101			50
	120	62116			50
1" x 72"	50	50034	50146		50
	60	50035	50147		50
	80	50036	50148		50
	120	50037	50149		50
1" x 132"	50	50038	50150		50
	60	50039	50151		50
	80	50040	50152		50
	120	50041	50153		50

width x length	grit	AOR	Zirc	Ceramic	pkg qty
1-1/8" x 21"	50	50042	50154	50279	50
	60	50043	18849	50280	50
	80	50044	50155	50281	50
	120	50045	50156	50282	50
1-1/2" x 60"	50	50046	50157		50
	60	50047	50158		50
	80	50048	50159		50
	120	50049	50160		50
1-1/2" x 72"	50	50050	50161		50
	60	50051	50162		50
	80	50052	50163		50
	120	50053	50164		50
2" x 34"	50	50054	50165		50
	60	50055	50166		50
	80	50056	50167		50
	120	50057	50168		50
2" x 48"	50	50058	50169	50283	50
	60	62113	50170	50284	50
	80	50059	50171	50285	50
	120	50060	50172	50286	50
2" x 72"	50	50061	50173		50
	60	50062	50174		50
	80	62179	50175		50
	120	62126	50176		50
2" x 132"	50	50063	50177		50
	60	50064	50178		50
	80	50065	50179		50
	120	50066	50180		50
3" x 10-11/16"	50	50067	50181	50287	50
	60	50068	50182	50288	50
	80	50069	50183	50289	50
	120	50070	50184	50290	50
3" x 21"	50	64142	50185		50
	60	64188	50186		50
	80	64189	50187		50
	120	50071	50188		50
3" x 24"	50	50072	50189		50
	60	64191	50190		50
	80	64192	50191		50
	120	50073	50192		50
3" x 72"	50	50074	50193		50
	60	50075	50194		50
	80	50076	50195		50
	120	50077	50196		50
3" x 90"	50	50078	50197		50
	60	50079	50198		50
	80	50080	50199		50
	120	50081	50200		50
3" x 132"	50	50082	50201		50
	60	50083	50202		50
	80	62114	62111		50
	120	50084	50203		50

width x length	grit	AOR	Zirc	Ceramic	pkg qty
3" x 168"	50	50085	50204		50
	60	50086	50205		50
	80	50087	50206		50
	120	50088	50207		50
3-1/2" x 15-1/2"	50	50089	50208	50291	50
	60	62075	50209	50292	50
	80	50090	50210	50293	50
	120	50091	50211	50294	50
4" x 24"	50	62051	50212		50
	60	66325	50213		50
	80	66326	50214		50
	120	66327	50215		50
4" x 36"	50	50092	50216		50
	60	62042	50217		50
	80	63066	50218		50
	120	50093	50219		50
4" x 72"	50	50094	50220		50
	60	50095	50221		50
	80	50096	50222		50
	120	50097	50223		50
4" x 90"	50	50098	50224		50
	60	50099	50225		50
	80	50100	50226		50
	120	50101	50227		50
4" x 132"	50	50102	50228		50
	60	50103	50229		50
	80	64143	50230		50
	120	50104	50231		50
6" x 48"	50	62054	50232	50295	50
	60	62052	62109	50296	50
	80	62077	50233	50297	50
	120	50105	50234	50298	50
6" x 89"	50	50106	50235		50
	60	50107	50236		50
	80	50108	50237		50
	120	50109	50238		50

## SPIRAL BANDS

Cut spiral bands are manufactured from the highest quality domestically produced premium aluminum oxide abrasive grain bonded with resins to a cotton cloth backing material. Mounted on rubber expanding wheels, flex core wheels or slotted expanding wheels, spiral bands are typically used on hand held power tools as well as drill presses, bench grinders and spindle sanders. The construction of a spirally wound band results in a "joint-less" sanding surface, which ensures consistent finishes on flat or contoured surfaces. Deburring, polishing, blending and general surface finishing are the usual applications where spiral bands excel.

## premium aluminum oxide material

dia. x length	grit													pkg qty
	24	36	40	50	60	80	100	120	150	180	220	240	320	
1/4" x 1/2"		10009	10018	10027	10040	10050	10060	10068	10083	10085	10090	10092	10095	100
1/4" x 3/4"		10013		10026	10037	15293		10069		11763		10093	10096	100
1/4" x 1"		10011		10028	10038	10051	10065	10070	10081	10087	10091	10103	10097	100
1/4" 1-1/2"		10015		11407	10039	15294	10059	10072	13143	11865	13272	11408		100
1/4" x 2"		10010	10019	10029	10035	10056		10075	10883	10077	12021	11727	11760	100
3/8" x 1/2"		10109	10118	10130	10140	10150	10160	10170	10180	10186	10189	10195	10196	100
3/8" x 1"	10105	10111	10122	10131	10141	10152	10163	10171	10181	10187	10816	10194	10198	100
3/8" x 1-1/2"		10113	10124	10134	10147	10153	10162	10172		10185		11819	11911	100
3/8" x 2"		10112	10123	10132	10139	10151	10161	10173		11809			11810	100
1/2" x 1/2"	10200	10210	10220	10230	10240	10250	10260	10270	10280	10285	10291	10294	10297	100
1/2" x 3/4"	13137	10211	10221	10231	10241	10251	10261	10271	11845	11037	10301	10312	10299	100
1/2" x 1"	10202	10212	10222	10232	10242	10252	10262	10272	10281	10286	10302	10290	10298	100
1/2" x 1-1/2"	10204	10213	10223	10233	10243	10253	10263	10273	10282	10287	10292	10307	10633	100
1/2" x 2"	10207	10214	10224	10234	10244	10254	10264	10274	10283	10288	10311	10293	10300	100
1/2" x 3"	10205	10215	10226	10237	10245	10255	10265	10277	11788		10309	10308	10310	100
5/8" x 1/2"	15220	15221	15211	11676	15235	15240	15255	15262	15273	15276	11821	15280	10144	100
5/8" x 1"		15222	15215	19520	15232	15242	15258	15265	12068	15275	15263	15278	11759	100
5/8" x 2"		15209	15218	15230	15236	15246	15259	15267						100
3/4" x 1/2"	13284	10408	10420	10430	10440	10450	10460	10470	10480	10485	10491	10492	10496	100
3/4" x 3/4"	10395	10409	10421	10431	10441	10451	10461	10471	10481	10486	10490	10493	10316	100
3/4" x 1"	10396	10412	10422	10432	10442	10452	10462	10472	10482	10487	10400	10494	10509	100
3/4" x 1-1/2"	10397	10413	10424	10433	10443	10453	10463	10473	10483	10488		10495	10497	100
3/4" x 2"	10398	10414	10425	10434	10444	10454	10464	10474	13082	10489	10401	10405	11185	100
1" x 1/2"	10501	10510	13205	10530	10540	10550	10560	10570	10580	10584	11792	10593	10597	100
1" x 3/4"		10511	10521	10531	10541	10875	10561	10571		10833		15454	15455	100
1" x 1"	10502	10512	10522	10532	10542	10552	10562	10572		10585	10590	10594	10598	100
1" x 1-1/2"	10503	10513	10523	10533	10543	10553	10563	10573	10583	10586	10591	10595	10599	100
1" x 2"	10504	10514	10524	10534	10544	10554	10564	10574	10581	10587	15602	10604	10600	100
1" x 3"	10506	10516	10526	10535	10546	10556	10566	10575	10579	13132	10592	15456	11672	100
1-1/4" x 1/2"					13336		15452	15595		18897				100
1-1/4" x 1"	10608	10610	10620	10630	10640	10650	10661	10672	10678	10681	10685	10686	10689	100
1-1/4" x 1-1/2"	11756	10612	10622	10632	10642	10652	10664	10675	10679	10680	10683	11971	10692	100
1-1/4" x 2"		10613	10623	10634	10643	10653	10663	10674		11818		15457	15458	100
1-1/2" x 1/2"	10701	10718	11658	10729	10748	10750	10760	10770	11376	10781	13041	10791		100
1-1/2" x 3/4"	10711		10721	10730	10741	10751	10761	10771	19131	10670				100
1-1/2" x 1"	10702	10712	10722	10732	10742	10752	10764	10772	10780	10782	10788	10792	10794	100
1-1/2" x 1 1/2"	10703	10713	10723	10733	10743	10753	10765	10773	10779	10783	10789	10793	10795	100
1-1/2" x 2"	10704	10714	10724	10734	10744	10754	10766	10774			11940	10797	10939	100
1-1/2" x 3"	10708	10715	10725	10737	10745	10755	10767	10775	10785	16019	13184	15366	13185	100
1-3/4" x 1/2"					10837	36915		10867		10880		13305	13304	100
1-3/4" x 1"			13218		10838	10850		10870		11622		36677		100
1-3/4" x 2"		10811	10821	10831	10841	10851	10861	10871					11531	100
2" x 1/2"	10121	10910	10921	10931	10940	10950		10970	11378			13224		100
2" x 1"	10902	10912	10922	10932	10942	10952	10962	10972	10101	10982	10988	10993	10995	100

Spiral bands also available in silicon carbide and zirconia grain, available upon request.

**premium aluminum oxide material (continued)**

dia. x length	grit												pkg qty	
	24	36	40	50	60	80	100	120	150	180	220	240		320
2" x 1-1/2"	10903	10913	10923	10933	10943	10953	10963	10973	10979	10891	10989	10992	10996	100
2" x 2"	10904	10914	10924	10934	10944	10954	10964	10974	10881	10984	10991	10994	10997	100
2" x 3"	10905	10916	10925	10935	10945	10955	10965	10975	11001	10986	15030	10834	10998	50
2 1/4" x 1/2"					11040	13289		10819		16014		13307	13306	50
2 1/4" x 1"		11005		11030	11041		11062	11070	11050				12036	50
2 1/4" x 3"	11856	11009		11033	11043	11053	11065	11073		11083	11092	16009	11094	50
2 1/2" x 1"		11748		11129	11140	11150	13325	11176	10890	11191		11197	11199	50
3" x 1/2"			15789	11229	10007	11844	11264	11026		11523		11931	11932	50
3" x 1"	11200	11210	11220	11230	11240	11250	11260	11270	11279	11284	11293	11505	10688	50
3" x 1-1/2"	35868	11211	11221	11231	11241	11251	11261	11271	11280	11286	11294	11510	11298	50
3" x 2"	11202	11212	11121	11232	11242	11252	11262	11272	11281	11287		11515	11297	50
3" x 3"	11203	11213	11223	11233	11243	11253	11263	11273	11282	11289	11295	11520	11292	50
4" x 1"		11368			11341	11351		11370		11967	11390			50
4" x 1-1/2"	11302	11312	11322	11332	11342	11352	11362	11372	11380	11382		11393	11395	50
4" x 2"	11303	11313	11323	11333	11343	11353	11363	11373	11379	11383		11392		50
4" x 3"	11304	11314	11329	11335	11344	11355	11364	11374		11387		11901	11900	50
5" x 1"	13183	15704	15727	15715	15722	15736	15716	13329						50
5" x 1-1/2"		15705				15731	13188		16000					50
5" x 2"	15700	15706	15708	15719	15724	15732	15741	15749						50
5" x 3"	15775	15694	15712	15717	15723	15733	15743	15750		15756				50
6" x 1"	11401	11410	11420	13259	11440	11450		11471				11498		50
6" x 1-1/2"	13121	11411		11430	11441	11451	11461	10696		11480		11500		50
6" x 2"	11402	11412	11422	11432	11442	11452	11462	11472	11478	11481	11485		11495	50
6" x 3"	11403	11414	11068	11433	11444			11475	18843	11483		11503		50
8" x 1-1/2"	15824		15830	15850	15879	15880				15888		15890		50

**silicon carbide**

dia. x length	grit											pkg qty		
	36	40	50	60	80	100	120	180	220	320	400			
1/2" x 1/2"	17804		17805	17235	17806		17807							100
2" x 2"	35995		35996		17957		17958							100
1" x 1"		17423	17432	17444	17453		17943	10802						100
2" x 2"	17415			17443	17452	11477	17474	17935						100
2" x 2"	17617			17644	17654		17665	17693	10731					50
3" x 3"	17815			17846	17853		17874	17876	17781	17883	17603			50

**zirconia**

dia. x length	grit						pkg qty	
	36	40	50	60	80	120		
1/2" x 1/2"	19450				19600	18771	19471	100
1" x 1"	18773				19470	19602	18774	100
1" x 1"		19622				19440	19421	100
1-1/2" x 1-1/2"	19640			19642	19643	19400	18788	100
2" x 2"					19657	19401	18795	50
3" x 3"	19672			19673		19443	19409	50



## RUBBER EXPANDING WHEELS

Cut rubber expanding wheels are manufactured to close tolerances to firmly hold the spiral band on the rubber drum through controlled expansion. The drums are balanced to maximize band life, produce the finest finishes and allow for maximum operating speeds.

### rubber expanding wheels

dia. x length	shank	part no.
1/4" x 1/2"	1/8"	20005
1/4" x 1/2"	1/4"	20030
1/4" x 1"	1/8"	20007
1/4" x 1"	1/4"	20012
3/8" x 1/2"	1/8"	23818
3/8" x 3/4"	1/4"	20021
3/8" x 1"	1/4"	20022
1/2" x 1/2" x 1/8"	1/8"	21218
1/2" x 1/2"	1/4"	21212
1/2" x 3/4"	1/8"	21238
1/2" x 3/4"	1/4"	21234
1/2" x 1"	1/8"	20032
1/2" x 1"	1/4"	21210
1/2" x 2"	1/4"	21220
1/2" x 3"	1/4"	20048
5/8" x 1/2"	1/4"	20055
5/8" x 1"	1/4"	25810
5/8" x 1-1/2"	1/4"	20056
5/8" x 2"	1/4"	25820
3/4" x 1/2"	1/4"	23412
3/4" x 3/4"	1/4"	23434
3/4" x 1"	1/4"	23410
3/4" x 1-1/2"	1/4"	23414
3/4" x 2"	1/4"	23420
3/4" x 2-1/2"	1/4"	20084
3/4" x 3"	1/4"	20083
1" x 1/2"	1/4"	21120
1" x 3/4"	1/4"	21340
1" x 1"	1/4"	21100
1" x 1-1/2"	1/4"	21140

dia. x length	shank	part no.
1" x 2"	1/4"	21200
1" x 3"	1/4"	20103
1-1/4" x 3/4"	1/4"	21134
1-1/4" x 1"	1/4"	21410
1-1/4" x 1-1/2"	1/4"	20114
1-1/4" x 2"	1/4"	21420
1-3/8" x 3"	1/4"	20128
1-1/2" x 1/2"	1/4"	21122
1-1/2" x 3/4"	1/4"	21123
1-1/2" x 1"	1/4"	21121
1-1/2" x 1-1/4"	1/4"	20133
1-1/2" x 1-1/2"	1/4"	21124
1-1/2" x 2"	1/4"	21125
1-1/2" x 3"	1/4"	21128
1-5/8" x 3"	3/8"	20141
1-3/4" x 1"	1/4"	20145
1-3/4" x 1-1/2"	1/4"	20150
1-3/4" x 2"	1/4"	20144
2" x 1/2"	1/4"	22120
2" x 3/4"	1/4"	22340
2" x 1"	1/4"	22100
2" x 1-1/2"	1/4"	22112
2" x 2"	1/4"	22200
2-1/2" x 1/2"	1/4"	20215
2-1/2" x 1"	1/4"	20172
2-1/2" x 1-1/2"	3/8"	20217
3" x 1"	1/4"	23110
3" x 1"	3/8"	23111
3" x 1"	1/2"	23114
3" x 1-1/2"	3/8"	23121
3" x 1-1/2"	1/2"	23126
3" x 2"	3/8"	23021
3" x 2"	1/2"	23211
3" x 2"	5/8" - 11	23026
3" x 3"	3/8"	23131
3" x 3"	1/2"	23132
3" x 3"	1/2" - 20	20207
3" x 3"	5/8" - 11	23135

maximum safe operating speeds for properly maintained rubber expanding wheels mounted with the corresponding spiral bands are as follows:

dia. x length	shank dia.	max RPM
1/4" x 1/2"	1/8"	30,000
3/8" x 1/2"	1/8"	30,000
1/2" x 1/2"	1/8"	30,000
1/2" x 1/2"	1/4"	30,000
1/2" x 3/4"	1/4"	25,000
1/2" x 1"	1/4"	15,000
1/2" x 1-1/2"	1/4"	12,000
1/2" x 2"	1/4"	10,000
3/4" x 1/2"	1/4"	27,000
3/4" x 3/4"	1/4"	24,000

dia. x length	shank dia.	max RPM
3/4 x 1	1/4"	17,000
3/4 x 1-1/2	1/4"	10,000
3/4 x 2	1/4"	10,000
1 x 1/2	1/4"	20,000
1 x 1	1/4"	18,000
1 x 1-1/2	1/4"	10,000
1 x 2	1/4"	8,000
1-1/2 x 1/2	1/4"	16,000
1-1/2 x 1	1/4"	12,000

dia. x length	shank dia.	max RPM
1-1/2 x 1-1/2	1/4"	10,000
1-1/2 x 2	1/4"	8,000
2 x 1/2	1/4"	12,000
2 x 1	1/4"	11,000
2 x 1-1/2	1/4"	8,000
2 x 2	1/4"	6,000
3 x 1	1/4"	3,000
3 x 2	1/4"	3,000
3 x 3	1/4"	3,000

**slotted expanding wheels**

shank mounted

dia. x length	shank	part no.
1/2" x 1/2"	1/4"	24295
1/2" x 3/4"	1/4"	24299
3/4" x 3/4"	1/4"	24300
3/4" x 1"	1/4"	24301
3/4" x 1-1/2"	1/4"	24302
3/4" x 2"	1/4"	24303
1" x 1"	1/4"	24304
1" x 1-1/2"	1/4"	24305
1" x 2"	1/4"	24306
1-1/4" x 3/4"	1/4"	25084
1-1/4" x 1"	1/4"	25030
1-3/8" x 2"	1/4"	25088
1-1/2" x 1"	1/4"	24307
1-1/2" x 1-1/2"	1/4"	24308
1-1/2" x 2"	1/4"	24309
2" x 1"	1/4"	24311
2" x 1-1/2"	1/4"	24312
2" x 2"	1/4"	24313
2"-1/4" x 1-1/2"	1/4"	25073
2-1/2" x 1"	1/4"	25087
3" x 1"	1/4"	24328
3" x 3"	1/2"	25089

**slotted expanding wheels**

arbor mounted

dia. x length	arbor	part no.
2" x 3"	5/8"-11	24314
3" x 1-1/2"	5/8"-11	25085
3" x 3"	5/8"-11	24317
4" x 1-1/2"	5/8"-11	25079
4" x 1"	5/8"-11	24322
8" x 1-1/2"	1"	25113

**RUBBER SLOTTED  
EXPANDING WHEELS**

Rubber slotted expanding wheels are designed to maximize the life of the spiral band while enhancing the finish produced in the machining operation. Expanding wheels rely on centrifugal force to engage the spiral band; there is no need for special tools or adjustments to insure a tight fit. This allows for quick changeover once the momentum of the wheel has stopped.

## SPIRAL SLEEVES

Cut spiral sleeves are used on oscillating spindle sanders or are adaptable to bench grinders when mounted on rubber cylinders. The construction of a spirally wound sleeve results in a "joint-less" sanding surface, which ensures consistent finishes on flat or contoured surfaces.

**spiral sleeves – cloth backed**

for oscillating spindle sanders premium aluminum oxide material

dia. x length	grit													pkg qty
	24	36	40	50	60	80	100	120	150	180	220	240	320	
1/4" x 6"		10014	10024	10032	10043	10053	10064	10076	10001	11975	11710	10102	13103	20
1/4" x 9"		10017	10025	10033	10046	10058	10067	11839	13288	13050				20
3/8" x 6"		10115	10125	10135	10145	10155	10165	10175	10183	10188	11816		15438	20
3/8" x 9"			10127	10136		10116	15485	10177	10178					20
1/2" x 4-1/2"				19596	11960	10846	15886	11764	12002	13290	19344	19885	13010	20
1/2" x 6"	10206	10218	10225	10235	10247	10258	10266	10278	10000	10284	10306	10295	13102	20
1/2" x 9"		10219	10227	10236	10248	10259	10268	10279	13181					20
5/8" x 6"	15202	15225	15212	15229	15238		15260	15270	15272	13100	15277		13101	20
3/4" x 4-1/2"	13125	13246	18868	12049	11518	10847	15887	12050	19751	12063	13321	19886		20
3/4" x 6"		10417	10427	10438	10448	10458	10466	10478						20
3/4" x 9"	10399	10419	10429	10439	10449	10459	10469	10479	10484	13099	11711		11836	20
1" x 4-1/2"		12061	13179	19752	11961	19753	15891	11765	19754		19346	19887		20
1" x 6"	13323	15505			10547		10565							20
1" x 9"		10518	10528	10538	10548	10558	15048	10576	15604	10588	11712	19111	11835	20
1-1/2" x 4-1/2"		19069		19755	11831	10759	15892	82398	19757		13322	19888		20
1-1/2" x 5-1/2"				16027	16034	15904	11806	11636						20
1-1/2" x 6"		10716	13006	10738	10746	10756	10762	10776		13317			13316	20
1-1/2" x 9"	10709	10717	10727	10740	10747	10757	10769	10777	15971	10882	11713	12033	13098	20
2" x 4-1/2"	13123	13247	11698	11838	11632	11011	15893	11766	11972	11784	13011	19889	11786	20
2" x 6"	13264	10918	10926	10217	11715	10957	10966	10682		11785		11738	11739	20
2" x 9"	10907	10919	10927	10937	10947	10959	10967	10977	10980	10987	11709	11000	11834	20
2-1/2" x 4-1/2"					13220	11927		13319						20
2-1/2" x 6"					11143	11155	11169	13008						20
2-1/2" x 9"		11114	11120	11137	11149	11158	11167	13146						20
3" x 4-1/2"	13122	13248	11130	11237	15761	10818	15894	11840	19763	13061	13190	19890		20
3" x 5-1/2"	11783	11216		11239	11172	15296	11697	15297	15298	15614				20
3" x 6"		11214	11225	11238	11245	11256		11276						20
3" x 9"	11207	11219	11126	11234	11249	11259	11269	11274	11283	10457	11296	11717	11718	20
4" x 6"		11316	11325	11334	11308	11358		11922						20
4" x 9"	11307	11317	11327	11337	11347	11357	11367	11377	11381	11388	11391		11397	20
6" x 9"	13240	11415	11425	11435	11448	11455	11465	11473						20

*Spiral sleeves also available in other materials.*

**garnet paper**

dia. x length	grit				pkg qty
	40	60	80	100	
1/4" x 5"	18011	18019	18024	18028	20
3/8" x 6"	18042	18054	18057	18060	20
1/2" x 6"	18072	18080	18084	18092	20
5/8" x 6"	18112	18120	18126	18130	20
3/4" x 9"	18153	18160	18166	18172	20
1" x 9"	18212	18226	18232	18235	20
1-1/2" x 9"	18262	18270	18278	18280	20
2" x 9"	18355	18366	18376	18382	20
3" x 9"	18514	18534	18544	18554	20
4" x 9"	18612	18632	18642	18652	20

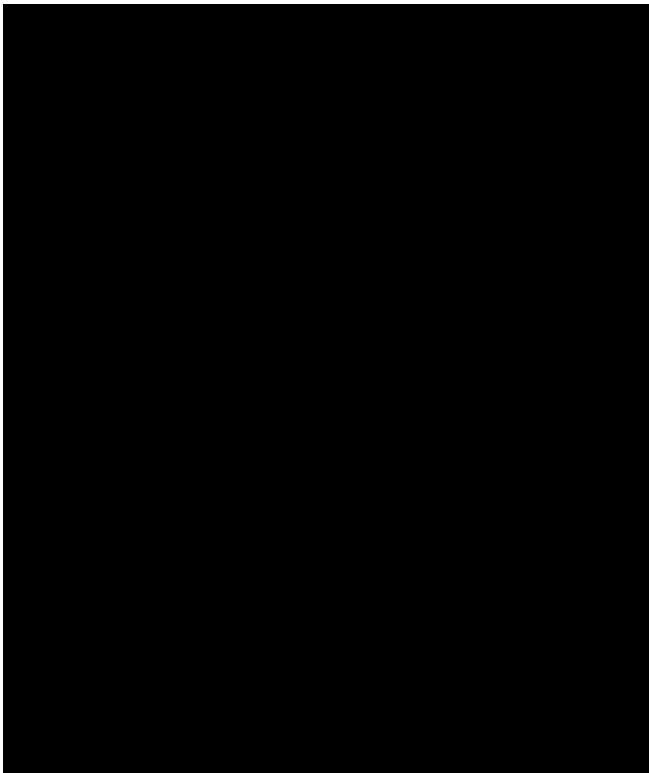
**rubber cylinders**

dia.	length	center hole	part no.
1"	4-1/2"	1/2"	49077
	6"		71811
	9"		71812
1"	4-1/2"	3/4"	71814
	6"		71815
	9"		49012
1-1/2"	4-1/2"	1/2"	49078
	9"		71827
1-1/2"	4-1/2"	3/4"	71828
	9"		49032

dia.	length	center hole	part no.
2"	4-1/2"	1/2"	49079
	9"		71835
2"	4-1/2"	3/4"	71836
	9"		49042
3"	4-1/2"	1/2"	49175
	9"		71848
3"	4-1/2"	3/4"	71850
	9"		49062
4"	9"	3/4"	49072
	9"		49169

RUBBER CYLINDERS

**Cut rubber cylinders are manufactured from the highest quality rubber extruded to our specifications and tolerances to hold the spirally wound products through controlled expansion. Oscillating spindle sanders require special length rubber cylinders to sand with spirally wound products.**



**OVERLAPPED  
SLOTTED DISCS**

Cut overlapped slotted discs are made from aluminum oxide resin bond cloth. The overlapped slotted construction makes this disc more aggressive than plain slotted discs. Overlapped slotted discs are available in the standard 2 per set or 4 per set, and with a quick change threaded eyelet, they are ideal for use on inside diameters of tubes and pipes as a very flexible polishing and deburring tool.

**overlapped slotted discs**  
two discs per set – aluminum oxide x weight cloth

dia.	eyelet	no. per set	grit					pkg qty
			60	80	100	120	180	
3/4"	#3-48	2		57101		57683		100
1"	#8-32	2	57107	57105	57109	57110		100
1-1/2"	#8-32	2	57145	57152	57154	57156	55061	100
2"	#8-32	2	57240	57245	57601	57250	57689	100
2-1/2"	1/4"-20	2	57290	57400	38024	38025	38026	100
3"	1/4"-20	2	57345	57350	57670	57434	57690	100
4"	1/4"-20	2	57390	54857	57691	57392	57692	100
5"	1/4"-20	2	57551	57634	54858	57636	38038	100
6"	1/4"-20	2	57660	57662		57635	57643	100

**overlapped slotted discs**  
four discs per set – aluminum oxide x weight cloth

dia.	eyelet	no. per set	grit				pkg qty
			60	80	120	180	
2"	1/4"-20	4	57241	57520	57252	38021	100
2-1/2"	1/4"-20	4	38027	54974	38029	38030	100
3"	1/4"-20	4	38031	57430	38033	38034	100
4"	1/4"-20	4	38035	38036	57621	38037	100

**safe operating speeds**  
**overlapped slotted discs**

disc diameter	maximum RPM
to 1-1/4"	23,000
1-1/2"	20,000
2"	18,000
3"	14,000
4"	12,000
5"	7,000
6"	5,500

**square pads**

pad diameter	maximum RPM
to 1"	23,000
1-1/2"-2"	20,000
2-1/2"	18,000
3"-3-1/2"	14,000

**cross pads**

pad diameter	maximum RPM
to 1"	23,000
1-1/2"	20,000
2"	18,000
3"	14,000
4"	12,000
5"	7,000
6"	5,500

**cross pads**

aluminum oxide material

dia. x width	ply	eyelet	grit			pkg qty
			60	80	120	
3/4" x 3/8"	8	#3-48	48275	67062	67061	100
1" x 3/8"	8	#3-48	48276	67002	67103	100
1-1/2" x 1/2"	8	#8-32	67005	66643	67008	100
2" x 1/2"	8	#8-32	67159	67013	67147	100
2" x 3/4"	8	1/4"-20	69997	48168	67178	100
2" x 3/4"	10	1/4"-20	67056	48310	48311	100
2" x 1"	8	#8-32	67158	67157	66594	100
2" x 1"	8	1/4"-20	67100	67085	67015	100
2" x 1"	10	1/4"-20	68707	48330	48350	100
3" x 1"	8	1/4"-20	67028	67029	67032	100
3" x 1-1/2"	8	1/4"-20	67128	67026	66599	100
3-1/2" x 1-1/2"	8	1/4"-20	66602	66603	67156	100
4" x 1"	8	1/4"-20	67116	67115	67112	100
4" x 1-1/2"	8	1/4"-20	67154	66605		100
5" x 1-1/2"	8	1/4"-20	48237	48297	48345	100
6" x 1-1/2"	8	1/4"-20		48278	48281	100

**square pads**

aluminum oxide material

width x thickness	eyelet	grit			pkg qty
		60	80	120	
1" x 1/4"	#8-32	68538	68652	68653	100
1" x 1/2"	#8-32	68512	68532	68665	100
1-1/2" x 1/4"	#8-32	68162	68176	68180	100
1-1/2" x 3/8"	1/4"-20	68161	68174	68190	100
1-1/2" x 1/2"	1/4"-20	68164	68178	66579	100
2" x 1/4"	#8-32	68654	68655	68656	100
2" x 1/4"	1/4"-20	68222	68229		100
2" x 3/8"	1/4"-20	68227	68232	68660	100
2" x 1/2"	1/4"-20	68228		68252	100
3" x 1/4"	1/4"-20	66575	68320	68104	100
3" x 3/8"	1/4"-20	68310	68324	68342	100
3" x 1/2"	1/4"-20	68312	68326		100

**mandrels**

for overlapped, slotted, cross pads and square pads

fits arbor size	shank dia.	style	part no.	pkg qty
#3-48	1/4"	straight	26108	1
#8-32	1/4"	straight	26112	1
1/4"-20	1/4"	straight	26113	1
#8-32	1/4"	mushroom	26122	1
1/4"-20	1/4"	mushroom	26123	1

**CROSS PADS**

Cut cross pads are manufactured with either 8 or 10 ply of premium aluminum oxide abrasive cloth, folded and secured with a threaded eyelet. This eyelet enables the operator to quickly change worn pads, increasing efficiency. The design of the cross pad allows the operator to see the polishing operation thus ensuring closer tolerances. In addition, as the outer layers wear away, new abrasive is continually exposed. Cut cross pads are ideal for deburring pipe and tube ends or blending and polishing odd configurations and radii that require a flexible conformable tool.

**SQUARE PADS**

Cut square pads are produced by interleaving multiple layers of premium aluminum oxide abrasive cloth into a square shape. Dimensions and thickness of the square pad are normally a function of operator preference or part configuration. Cut square pads are used for blending and polishing corners, channels and seams. These pads are designed to wear evenly while continuously exposing new abrasive and cloth surfaces for long use and consistent finishes. Most square pads are held together by a threaded eyelet which enables quick change over when the pad is worn out. Plain holes can also be supplied for customer designed holding devices.

**MANDRELS FOR OVERLAPPED DISCS, SLOTTED DISCS, CROSS PADS AND SQUARE PADS**

Mandrels are machined to close tolerances to insure concentricity between the power tool and the cross pad or square pad.

**BODY CONES**

**Cut body cones are manufactured from either aluminum oxide resin bond cloth or non-woven surface conditioning material. Our unique splice is designed to increase life expectancy and allow specialized finishes in the automotive, aircraft and prosthetics industries where precision and durability are a must. Mounted on the appropriate sized mandrel, they are used to polish, deburr and finish irregular contours and tapered openings.**

**body cones**

aluminum oxide material

die ref no.	base dia.	slant height	top dia.	grit									pkg qty		
				24	36	40	50	60	80	100	120	180			
202	5/8"	2"	5/16"						39314						100
400	1-1/2"	4"	1"		39329					39201		39202			100
413	1"	4"	1/2"	39218											100
418	1"	4"	5/8"		39203					39337		39204			100
426	1-3/8"	4"	1"	39211	39304	39317				39309	39208	39308			100
427	2"	4"	1-1/2"	39327	39216	81217					39217	80822			100
502	1-3/4"	5-5/8"	1-1/4"	39229	39301	39302	39209	39205	39303	39228	39300				100
550	1-5/16"	4"	1-1/8"	43055											100
588	3"	3-1/2"	2"	39340	39334	39212	39310			39345					100
1592	2"	4"	1"		39315										100
1615	7/8"	3"	3/8"	80834						81208			81099		100
1616	1-3/4"	3-1/2"	3/4"	80809		39338									100

**body cones**

surface conditioning material

die ref no.	base dia.	slant height	top dia.	grit	part no.	pkg qty
380	1-5/8"	3-13/16"	1-1/4"	A/Coarse	42678	50
				A/Medium	42679	50
				A/Fine	42680	50
418	1"	4"	5/8"	A/Medium	42685	50
455	1-13/16"	4"	5/8"	A/Coarse	81107	50
				A/Medium	81138	50
				A/Fine	81089	50
456	1-3/8"	4"	1-1/4"	A/Coarse	42716	50
				A/Medium	81139	50
				A/Fine	81195	50
457	2"	4"	1-1/2"	A/Coarse	42690	50
				A/Medium	42691	50
				A/Fine	81197	50
502	1-3/4"	5-5/8"	1-1/4"	A/Coarse	42693	50
				A/Medium	42694	50
550	1-5/16"	4"	1-1/8"	A/Fine	43056	50
1619	3-5/8"	7-1/8"	1/8"	A/Medium	81233	50
				A/Fine	81232	50

**AO cloth PSA discs**

dia.	grit													pkg qty
	24	36	40	50	60	80	100	120	150	180	220	240	320	
1/2"		54790	51009	51012	51018	51022	51030	51036	51040	51044		51046	51048	100
3/4"		54791	51061	51063	51069	51078	51081	51083	51088	51090	51091	51092	51099	100
1"		51108	51112	51116	51124	51126	51132		51139	51140		51146	51148	100
1-1/2"		51153	49047	51155	51160	51166	49004	51180	51185	51188		51193	51196	100
2"	51220	51216	51214	51212	51210	51208	51206	51204	51202	51219		51200	51218	100
3"	51303	51306	51317	51320	51330	51340	51343	51362	51370	51381		51393	51396	100
4"	54793	54794	49136	51414	51425	51430	51440	51454	51460	51473		51476	51478	50
5"	51522	51523	51524	49031	51530	51540	51550	51560	51571	51575		51595	51596	50
6"	51602	51610	51615	51620	49005	51635	51640	51642	51656	51657		51668	51669	50
8"	54795	51718	51720	51725	51730	51732	51733	51734	54796	54797		49021	51745	50
9"	54798	51752	51753	51755	51756	51757	51760	51765	49107	54799		49026	51766	25
10"	54800	51803	51805	54801	51810	51813	51814	51820	51831	51832		54802	54803	25
12"	51845	51847	51855	51860	51865	51870	51875	51880	51882	51891		51895		25
14"		51910	51911	51915		51916								25
16"	51932	51933	51935	51931	51934	51936	54808	51938		51930		54809	54810	25
18"	51946	51943	51941	51942	51944	51939	51945	54811					54813	25
20"	51957	51955	51958	51952	51954	51950	49052	51959						25
24"	54816	51974	51975	51973	51970	51971	49063	51972	51960	54817		55121		25
30"	51994	51991	51993	51995	51996	51998	52000	51999						25

PRESSURE SENSITIVE ADHESIVE PRODUCTS

Cut pressure sensitive adhesive (PSA) products include Cloth Discs, Paper Discs in rolls and boxed, File Board. Our Hook and Loop products include Paper Discs and File Board. Our PSA Cloth product is Aluminum Oxide X weight material. Our PSA paper product is available as an Aluminum Oxide Gold C Weight Streatated Paper or a Silicon Carbide White B Weight Streatated Product. Our file File Board product is available in 5" or 6" discs with holes or without. Our Hook and Loop product offering is available in the same size and grit range as PSA.

**backup pads for PSA discs**

dia.	shank	part no.	dia.	shank	part no.
1/2"	1/8"	25000	3"	1/4"	25010
1/2"	1/4"	25001	4"	1/4"	25012
3/4"	1/8"	25002	5"	1/4"	25020
3/4"	1/4"	25003	1"	1/4"	Sponge 25008
1"	1/8"	25004	1-1/2"	1/4"	Sponge 25009
1"	1/4"	25005	2"	1/4"	Sponge 25011
1-1/2"	1/4"	25006	3"	1/4"	Sponge 25013
2"	1/4"	25007			

**premium file board**

width	grit	17-1/2"			pkg qty
		16-1/2" long PSA gold A/O	non-adhesive gold A/O	16-1/2" H&L gold A/O	
2-3/4"	36	50539	50547	50555	25
2-3/4"	40	50540	50548	50556	25
2-3/4"	60	50541	50549	50557	50
2-3/4"	80	50542	50550	50558	50
2-3/4"	100	50543	50551	50559	50
2-3/4"	120	50544	50552	50560	50
2-3/4"	150	50545	50553	50561	50
2-3/4"	180	50546	50554	50562	50

(continued on page 32)



**safe operating  
speeds  
PSA discs**

wheel diameter	max RPM
to 2"	22,000
3"	12,000
4"	7,500
5"	5,500
6"	4,000

**(continued from page 31)  
aluminum oxide gold PSA C weight  
streated paper discs**

dia.	grit	linked roll		tabbed disc		discs/ roll
		w/o vacuum hole	w/ vacuum hole	w/o vacuum hole	w/ vacuum hole	
5"	40	50299	50310	50379	50390	100
	60	50300	50311	50380	50391	100
	80	50301	50312	50381	50392	100
	100	50302	50313	50382	50393	100
	120	50303	50314	50383	50394	100
	150	50304	50315	50384	50395	100
	180	50305	50316	50385	50396	100
	220	50306	50317	50386	50397	100
	240	50307	50318	50387	50398	100
	320	50308	50319	50388	50399	100
	400	50309	50320	50389	50400	100
6"	40	50321	50332	50401	50412	100
	60	50322	50333	50402	50413	100
	80	50323	50334	50403	50414	100
	100	50324	50335	50404	50415	100
	120	50325	50336	50405	50416	100
	150	50326	50337	50406	50417	100
	180	50327	50338	50407	50418	100
	220	50328	50339	50408	50419	100
	240	50329	50340	50409	50420	100
	320	50330	50341	50410	50421	100
	400	50331	50342	50411	50422	100

**aluminum oxide gold H&L C  
weight streated paper discs**

dia.	grit	linked roll w/o	linked roll w/	discs per box
		vacuum hole	vacuum hole	
5"	40	50459	50470	50
	60	50460	50471	50
	80	50461	50472	50
	100	50462	50473	100
	120	50463	50474	100
	150	50464	50475	100
	180	50465	50476	100
	220	50466	50477	100
	240	50467	50478	100
	320	50468	50479	100
	400	50469	50480	100
6"	40	50481	50492	50
	60	50482	50493	50
	80	50483	50494	50
	100	50484	50495	100
	120	50485	50496	100
	150	50486	50497	100
	180	50487	50498	100
	220	50488	50499	100
	240	50489	50500	100
	320	50490	50501	100
	400	50491	50502	100

**silicon carbide white PSA B weight  
streated paper discs**

dia.	grit	linked roll		tabbed disc		discs/ roll	
		w/o vacuum hole	w/ vacuum hole	w/o vacuum hole	w/ vacuum hole		
5"	80	50343	50352	50423	50432	50/100	
	100	50344	50353	50424	50433	100	
	120	50345	50354	50425	50434	100	
	150	50346	50355	50426	50435	100	
	180	50347	50356	50427	50436	100	
	220	50348	50357	50428	50437	100	
	240	50349	50358	50429	50438	100	
	320	50350	50359	50430	50439	100	
	400	50351	50360	50431	50440	100	
	6"	80	50361	50370	50441	50450	50/100
		100	50362	50371	50442	50451	100
120		50363	50372	50443	50452	100	
150		50364	50373	50444	50453	100	
180		50365	50374	50445	50454	100	
220		50366	50375	50446	50455	100	
240		50367	50376	50447	50456	100	
320		50368	50377	50448	50457	100	
400		50369	50378	50449	50458	100	

**silicon carbide white H&L B weight  
streated paper discs**

dia.	grit	linked roll w/o	linked roll w/	discs per box	
		vacuum hole	vacuum hole		
5"	80	50503	50512	50	
	100	50504	50513	100	
	120	50505	50514	100	
	150	50506	50515	100	
	180	50507	50516	100	
	220	50508	50517	100	
	240	50509	50518	100	
	320	50510	50519	100	
	400	50511	50520	100	
	6"	80	50521	50530	50
		100	50522	50531	100
120		50523	50532	100	
150		50524	50533	100	
180		50525	50534	100	
220		50526	50535	100	
240		50527	50536	100	
320		50528	50537	100	
400		50529	50538	100	

**drywall screen sheets – 4-3/8" x 11"**  
to fit pole sander

grit	backing material	part no.	pkg qty
80M	screen	50563	50
100M	screen	50564	50
120M	screen	50565	50
150M	screen	50566	50
180M	screen	50567	50
220M	screen	50568	50
80	C weight	50569	50
100	C weight	50570	50
120	C weight	50571	50
150	C weight	50572	50
180	C weight	50573	50

**flint cloth sheets – 9" x 10"**

grit	backing material	part no.	pkg qty
fine	cloth	64553	50
medium	cloth	64550	50
coarse	cloth	64554	50

**crocus cloth sheets – 9" x 11"**

grit	backing material	part no.	pkg qty
crocus	cloth	66485	50

**emery cloth sheets – 9" x 11"**

grit	backing material	part no.	pkg qty
fine	cloth	64603	50
medium	cloth	64606	50
coarse	cloth	66484	50

**silicon carbide sand screen sheets – 9" x 11"**

grit	backing material	part no.	pkg qty
80	screen cloth	64040	50
100	screen cloth	64041	50
120	screen cloth	64042	50
180	screen cloth	64043	50
220	screen cloth	64044	50
320	screen cloth	64045	50

**A/O resin cloth sheets – 9" x 11"**

grit	backing material	part no.	pkg qty
36	X weight	64000	50
40	X weight	64001	50
50	X weight	64002	50
60	J weight	64003	50
80	J weight	64004	50
100	J weight	64005	50
120	J weight	64007	50
150	J weight	64008	50
180	J weight	64009	50
220	J weight	64010	50
240	J weight	64011	50
320	J weight	64012	50
400	J weight	64013	50
500	J weight	64014	50
600	J weight	64015	50

**garnet paper sheets – 9" x 11"**

grit	backing material	part no.	pkg qty
50	D weight	64467	50
60	D weight	64468	50
80	D weight	64466	50
100	C weight	64471	50
120	C weight	64472	50
150	C weight	64473	50
180	A weight	69474	50
220	A weight	66479	50
240	A weight	64475	50
280	A weight	64608	50
320	A weight	66480	50

**silicon carbide waterproof paper sheets – 9" x 11"**

grit	backing material	part no.	pkg qty
80	C weight	64006	50
100	C weight	64111	50
120	C weight	64602	50
150	C weight	66499	50
180	A weight	64498	50
220	A weight	64500	50
240	A weight	64551	50
320	A weight	64506	50
400	A weight	64503	50
500	A weight	64504	50
600	A weight	64505	50

ABRASIVE SHEETS

Cut abrasive sheets are general purpose sanding sheets in a variety of backings and grits and grains. Choose the product that is right for the job and cut or fold the sheet to fit. All Cut sheet products are sold in packages of 50.

## SHOP ROLLS

Cut shop rolls are a convenient and versatile product for a multitude of applications. An aluminum oxide grain bonded to J weight cotton backing with a resin bond, these rolls can be cut and shaped to fit the toughest jobs.

Abrasive also offers a 30 yard Clean and Finish shop roll for a less aggressive alternative to our J weight product. Our screen cloth comes in a variety of widths to better meet your application.

**aluminum oxide  
J weight resin bond**  
50 yard length

width	grit	part no.
1"	60	66733
	80	66734
	100	66735
	120	66736
	150	66737
	180	66738
	240	66739
	280	66136
	320	66740
	400	66137
1-1/2"	60	66741
	80	66742
	100	66743
	120	66744
	150	66745
	180	66746
	240	66747
	320	66748
	400	66725
	500	66140
2"	60	66749
	80	66750
	100	66751
	120	66752
	150	66753
	180	66754
	240	66755
	320	66756
	400	66732
	500	66320

**clean and finish  
shop roll**  
30 yard length

width	grit	part no.
3"	A/Fine	42322
	A/Med	42321
	A/VF	42323
	A/SF	42324
4"	A/Fine	42326
	A/VF	42327
	A/SF	42328
6"	A/Fine	42330
	A/Med	42329
	A/SF	42332

**silicon carbide screen  
cloth roll**  
25 yard length

width	grit	part no.	
1"	60	50574	
	80	50575	
	100	50576	
	120	50577	
	150	50578	
	180	50579	
	220	50580	
	320	50581	
	1-1/2"	60	50582
		80	50583
100		50584	
120		50585	
150		50586	
180		50587	
2"	60	50574	
	80	50575	
	100	50576	
	120	50577	
	150	50578	
	180	50579	
3"	60	50574	
	80	50575	
	100	50576	
	120	50577	
	150	50578	
	180	50579	
4"	60	50574	
	80	50575	
	100	50576	
	120	50577	
	150	50578	
	180	50579	
	220	50580	
	320	50581	
	8"	60	50574
		80	50575
100		50576	
120		50577	
150		50578	
180		50579	
12"	60	50574	
	80	50575	
	100	50576	
	120	50577	
	150	50578	
	180	50579	
20"	60	50574	
	80	50575	
	100	50576	
	120	50577	
	150	50578	
	180	50579	

**sandscreen plumber's  
roll**  
1-1/2" width

length	grit	part no.
10 yd	80	50634
	120	50632
	180	50630
25 yd	80	50635
	120	50633
	180	50631

**abrasive cords**

cord no.	approx width	grit/ grain	part no.
46	0.15"	120-SC	63003
48	0.093"	150-A/O	63005
49	0.082"	120-A/O	63007
	0.082"	120-SC	63008
	0.082"	CROCUS	63027
50	0.07"	180-A/O	63033
	0.07"	180-SC	63006
	0.07"	CROCUS	66055
51	0.055"	120-A/O	63012
	0.055"	120-SC	63009
52	0.055"	150-A/O	63010
	0.055"	150-SC	63011
	0.055"	CROCUS	63039
53	0.04"	180-A/O	63013
	0.04"	180-SC	63014
	0.04"	CROCUS	63034
54	0.03"	200-A/O	63015
	0.03"	200-SC	63019
	0.03"	CROCUS	63016
54H	0.025"	200-AO	63017
	0.025"	CROCUS	63018
55	0.018"	200-SC	63020
	0.018"	CROCUS	63038
60	0.015"	200-SC	63031
	0.015"	CROCUS	63032
66	0.012"	280-SC	63036

**abrasive tapes**

tape no.	approx width	grit/ grain	part no.
#01	1/16"	180-A/O	63001
		180-SC	63002
56	3/32"	180-A/O	63021
		180-SC	63023
		CROCUS	63022
57	1/8"	180-A/O	63024
		180-SC	63025
58	3/16"	150-A/O	63026
59	1/4"	150-A/O	63029
		150-SC	63030

**ABRASIVE CORDS & TAPES**

**Cut abrasive cords and tapes are made with aluminum oxide, silicon carbide or crocus abrasive grain bonded to high strength cord or flat tape and wound onto 25 yard spools. Use this product for deburring and polishing of small openings and narrow channels.**



## SURFACE CONDITIONING SPIRAL BANDS

Cut surface conditioning bands are produced from the highest quality nylon web fiber impregnated with resin and abrasive grain bonded to a tough reinforced backing material. Spiral bands mounted on rubber wheels work best on flat or contoured surfaces.

## E STRIP SURFACE CLEANING DISCS

Cut E Strip products are used for aggressive removal of corrosion, rust, weld splatter and contaminants. E Strip is made from a heavy duty nylon fiber web impregnated with resins and coarse abrasive grains. Available as a Type 27 discs bonded to a rugged backing plate, a plain disc with center hole, as a quick change type R disc or as a double thick 2" disc with a 1/4" shank. Our product will run smoothly and resists loading while producing a controlled finish with little heat build up.

## surface conditioning spiral bands reinforced scrim back material

dia. x length	A/Coarse	A/Medium	A/V Fine	maximum RPM	pkg qty
1" x 1"	13279	13281	13280	18,000	25
1" x 1-1/2"	18801	18802	18803	10,000	25
1" x 2"	13308	13251	13252	8,000	25
1-1/2" x 1"	13277	13278	13268	14,000	25
1-1/2" x 1-1/2"	18804	18805	18806	10,000	25
2" x 1"	13275	12065	12066	11,000	25
2" x 1-1/2"	18807	18808	18809	8,000	25
2" x 2"	13253	13254	13255	6,000	25
3" x 1"	18810	18811	13261	7,000	25
3" x 2"	13256	13258	13260	4,000	25
3" x 3"	18813	18814	18815	3,000	25

See page 26 for rubber expanding wheels for spiral bands

## e strip surface cleaning discs

dia.	arbor hole	plate type	part no.	maximum RPM	pkg qty
4-1/2"	7/8"	Type 27 Fiberglass	42230	12,000	10
4-1/2"	5/8"-11	Type 27 Fiberglass	42231	12,000	10
7"	7/8"	Type 27 Fiberglass	42234	4,200	10
7"	5/8"-11	Type 27 Fiberglass	42235	4,200	10

## e strip discs

dia.	arbor hole	part no.	pkg qty
4"	1/4"	50826	10
4"	1/2"	50827	10
6"	1/2"	50828	10
6"	5/8"	50829	10
7"	7/8"	50834	10

## quick change type R e strip disc

dia.	part no.	pkg qty
2"	50830	10
3"	50831	10
4"	50832	10

## e strip shank mounted 2 ply disc — 1/4" shank

dia.	part no.	pkg qty
3"	50833	10

**surface conditioning stars**  
reinforced scrim back material

dia.	eyelet	A/Coarse	grit A/Medium	A/VFine	pkg qty
1-1/2"	1/4"-20	42280	42281	42456	50
2"	1/4"-20	42282	42283	42457	50
3"	1/4"-20	42284	42285	42458	25
4"	1/4"-20	42286	42287	42459	25

**mandrel for surface conditioning stars**

for eyelet thread	shank dia.	part no.	pkg qty
1/4"-20	1/4"	26113	1

**surface conditioning discs**  
hook & loop

dia.	A/Coarse	grit A/Medium	A/VFine	pkg qty
2"	42250	42251	42252	10
3"	42253	42254	42255	10
4"	42256	42257	42258	10
4-1/2"	42259	42260	42261	10
5"	42262	42263	42264	10
7"	42265	42266	42267	10
8"	42279	42269	42270	10

**surface conditioning disc**  
hook & loop holders

dia.	shank	part no.	pkg qty
2"	1/4"	42271	1
3"	1/4"	42272	1
4"	1/4"	42273	1
4"	5/8"-11	42274	1
4-1/2"	5/8"-11	42275	1
5"	5/8"-11	42276	1
7"	5/8"-11	42277	1
8"	5/8"-11	42278	1

**SURFACE CONDITIONING  
STARS AND DISCS**

Manufacturer offers a complete line of stars and disc products for the removal of corrosion, rust, and burs while minimizing loading and shedding. Surface conditioning products are produced from the highest quality nylon web fiber impregnated with resin and abrasive grain bonded to a tough reinforced nylon web backing material. Stars are designed for tube ID's, pipe and other recessed applications. With a quick change eyelet they can be used on die grinders, drill presses or lathes. Mounted on hook and loop holders surface conditioning discs are best for finishing, cleaning, or light deburring on a variety of flat surfaces including steel, aluminum, and plastic.

**CLEAN & FINISH**

Factory offers clean and finish products for the removal of surface imperfections, corrosion, rust and burs. Clean and finish products are produced from the highest quality nylon web fiber impregnated with resin and abrasive grain. Polishing rolls are available in 30' lengths for use in the tool room or on the shop floor. Hand pads are an excellent choice for general cleaning and hand finishing of metal and wood.

**CLEAN & FINISH DISCS**

Clean and finish discs can be stacked to the width required and mounted on a 1/4" shank mandrel making a very flexible and conformable wheel for specific applications.

**polishing rolls****non-woven nylon finishing material**

width x length	grit	part no.	pkg qty
3" x 30 feet	A/Medium	42321	1
	A/Fine	42322	1
	A\Fine	42323	1
	SC/Ultra Fine	42324	1
4" x 30 feet	A/Fine	42326	1
	A\Fine	42327	1
	SC/Ultra Fine	42328	1
6" x 30 feet	A/Medium	42329	1
	A/Fine	42330	1
	SC/Ultra Fine	42332	1

**polishing hand pads****non-woven nylon finishing**

width x length	color	grit	part no.	pkg qty
6" x 9"	maroon	A/Medium	80512	60
	gray	SC/Ultra Fine	80514	60
	tan	A/Heavy duty	80518	60
	green	A/Scouring	80516	60

**clean and finish non-woven discs**

dia.	hole size	grit	part no.
2"	1/4	A/Fine	42268
2"	1/4	A/Medium	42300
2"	1/4	A\Fine	42302
3"	1/4	A/Medium	42303
3"	1/4	A/Medium	42304
3"	1/4	A\Fine	42305
4"	1/4	A/Medium	42306
4"	1/4	A/Fine	42307
4"	1/4	A\Fine	42308

**mandrels****for non-woven discs**

assembled max. wheel thickness	shank dia.	end plate dia.	part no.	pkg qty
1/2"	1/4"	7/16"	22931	1
1"	1/4"	13/16"	22932	1
1"	1/4"	1"	22933	1
2-1/4"	1/4"	1"	22934	1

**shank mounted disc wheels**

non-woven finish/polish material

dia./ thickness	shank	material grit	max RPM	part no.	pkg qty
2" x 1/2"	1/4"	A/Medium	12,000	66970	10
		A/Fine	12,000	66991	10
		A/VFine	12,000	66971	10
2" x 1"	1/4"	A/Medium	12,000	47144	10
		A/Fine	12,000	42315	10
		A/VFine	12,000	66973	10
3" x 1/2"	1/4"	A/Medium	8,000	66974	10
		A/Fine	8,000	42316	10
		A/VFine	8,000	47150	10
3" x 1"	1/4"	A/Medium	8,000	47152	10
		A/Fine	8,000	42317	10
		A/VFine	8,000	66977	10
4" x 1/2"	1/4"	A/Medium	6,000	66978	10
		A/Fine	6,000	42318	10
		A/VFine	6,000	66979	10
4" x 1"	1/4"	A/Medium	6,000	66980	10
		A/Fine	6,000	42319	10
		A/VFine	6,000	66981	10

**shank mounted unitized wheels**

dia./ thickness	shank	material grit	max RPM	part no.	pkg qty
1" x 1/4"	1/8"	cut & polish coarse	25,000	80785	50
		cut & polish medium	25,000	80777	50
		level cut fine	25,000	80779	50
1" x 1/4"	1/4"	cut & polish coarse	25,000	80784	50
		cut & polish medium	25,000	80776	50
		level cut fine	25,000	80778	50
1" x 1/4"	#8-32	cut & polish coarse	25,000	80786	50
		cut & polish medium	25,000	80782	50
		level cut fine	25,000	80780	50
1-1/2" x 1/4"	#8-32	cut & polish coarse	22,000	80787	50
		cut & polish medium	22,000	80783	50
		level cut fine	22,000	80781	50

**SHANK MOUNTED DISCS**

Cut non-woven finish/polish mounted disc wheels have a 1/4" shank. Available in 1/2" and 1" widths. The design will allow this product to be used on it's side or face. These wheels will conform to the application, run smoothly and are ideal for hand held power tools.



UNMOUNTED  
UNITIZED WHEELS  
Cut unmounted unitized wheels or mini bobs are made from high quality non-woven unitized material impregnated with aluminum oxide grain. These products are best suited for light material removal while imparting a final finish with no change to part geometry.

**unmounted unitized wheels**

dia./ thickness	hole	material grit	max RPM	part no.	pkg qty
1" x 1"	3/16"	XL6S fine	25,000	50638	50
		XL6A medium	25,000	50639	50
		XL86A medium	25,000	50640	50
		XL86A coarse	25,000	50641	50
		BP7A coarse	25,000	50642	50
3" x 1/4"	1/4"	XL6S fine	25,000	50643	50
		XL6A medium	25,000	50644	50
		XL86A medium	25,000	50645	50
		XL86A coarse	25,000	50646	50
		BP7A coarse	25,000	50647	50
3" x 1/2"	1/2"	XL6S fine	25,000	50648	50
		XL6A medium	25,000	50649	50
		XL86A medium	25,000	50650	50
		XL86A coarse	25,000	50651	50
6" x 1/2"	1"	XL6S fine	25,000	50652	50
		XL6A medium	25,000	50653	50
		XL86A medium	25,000	50654	50
		XL86A coarse	25,000	50655	50
6" x 1"	1"	XL6S fine	25,000	50656	50
		XL6A medium	25,000	50657	50
		XL86A medium	25,000	50658	50
		XL86A coarse	25,000	50659	50

## SPECIALTY PRODUCTS

**Manufacturer** has specialty products available in various forms that utilize six minerals, two backings, four bonds and two coatings, resulting in numerous options suited to your needs.

### ABRASIVE GRAINS

**Emery** is a natural mineral found primarily on sheet goods. **Garnet** is also a natural mineral that is used on sheet goods as well as spiral sleeves and discs. Specialty abrasive products with garnet grain are primarily used in wood sanding operations.

**Aluminum Oxide** is a synthetic mineral that is extremely hard and resistant to wear. This grain is the most commonly used mineral in specialty abrasives and is appropriate for both wood and metal sanding.

**Silicon Carbide** is an extremely hard and brittle material that fractures as it wears, presenting fresh surfaces for continued sanding. Specialty products made with this grain are generally found in the woodworking, metal and stone finishing industries.

**Zirconia Alumina** is a blend of zirconia and alumina minerals developed for high-pressure heavy stock removal operations.

**Ceramic Aluminum Oxide** is the hardest and the toughest synthetic mineral and is well suited for high-pressure grinding applications.

### BACKING MATERIALS

Specialty abrasives utilize numerous types and thicknesses of backing material.

**Paper Backing** is primarily found in sheet goods, the finer the grit the lighter the backing material. Paper backing is available from the lightest weight, A, to the heaviest weight, F. Spiral Sleeves and Garnet discs are manufactured using paper backing appropriate to the grit.

**Cloth Backing** is the most commonly used backing on specialty abrasives. Like paper, cloth is available in various weights from a flexible J weight and X weight to the heavier Y weight. Most specialty abrasives are manufactured from X weight cloth as this material is strong and durable and is appropriate to most sanding operations.

### COATINGS

**Open Coat** refers to the partial coverage of the backing by the abrasive grain (40–70%). An open coat abrasive is used where the material being machined tends to clog or load the surface of the specialty abrasive, such as wood and soft metals.

**Closed Coat** refers to the complete coverage of the backing by the abrasive grain. Closed coat abrasives are considered the standard design and are used where loading is less of a problem.

## BONDS

Abrasive minerals are electrostatically spread on the treated backing material and held in place with a bonding agent.

The first layer or treatment is known as the “make” coat which holds the mineral in place. The second treatment is called the “size” coat, which generally “locks” everything together. These “make” and “size” coats are available in a number of combinations and are generally specific to a particular specialty product or to applications that are customer or application driven.

**Glue/Glue** refers to the use of animal hide glue for both coats. This type of abrasive product is generally referred to as Glue Bond and is typically found in discs and economy shop rolls.

**Resin over Glue** refers to the application of synthetic resins (the size coat) over the grain which is already held in place by the glue bond make coat. Generally a less expensive abrasive product, this abrasive will normally be found in sheet goods, discs and shop rolls.

**Resin over Resin** is considered to be the standard for most specialty abrasives. Synthetic resins are used for both the make and size coats to enhance the performance and life expectancy of the specialty product. With the increased bonding characteristics of resin over resin, the grain is less likely to shed from the backing material and is capable of withstanding higher heat and pressures.

**Waterproof or Wet/Dry** refers to the application of resins for both the make coat and size coat onto waterproof backing materials. This permits the use of water, oils or other lubricants when using specialty coated abrasives.

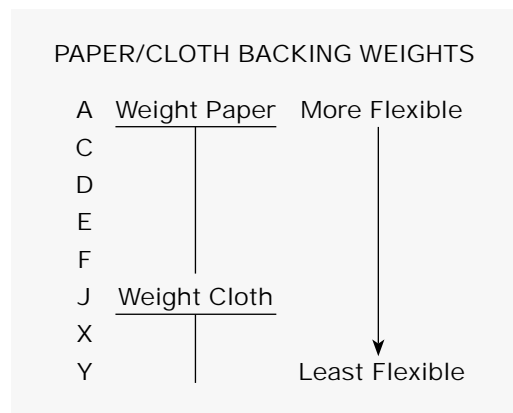
## SAFETY INSTRUCTIONS

1. Always wear eye protective equipment to shield against sparks, airborne dust and fumes.
2. Do not exceed Maximum Safe Free Speed (MSFS).
3. Store abrasives properly according to manufacturer’s recommendations.
4. Select appropriate abrasive for your application.
5. Never alter abrasive from its original form.
6. Always keep all machine guards in place.
7. Follow all safety operation procedures.
8. Follow ANSI Standard Z87.1 standards for safely using abrasives.

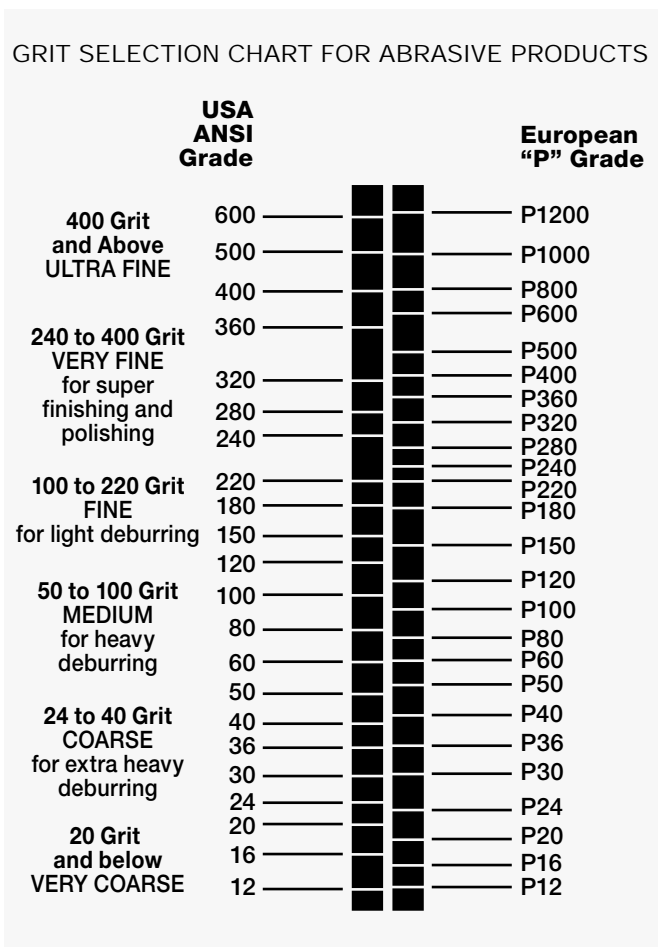
### GENERAL RECOMMENDATIONS FOR GRIT SELECTION

Abrasive specialty products are manufactured in grit sizes ranging from a very coarse 12 grit to an ultra fine 1200 grit. The most commonly used grits range from 24 to 400.

The chart below right illustrates the different grit sizes and the two grading systems used. The USA ANSI grading system has been typically used by North American manufacturers, while European manufacturers have favored the P-Grade system.



Most specialty abrasives manufactured are produced from the highest-quality X weight and y weight materials available. Standard grain types listed are aluminum oxide. Products manufactured from silicon carbide, zirconia alumina and ceramics are also available.



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