





**NORTON** *SG*  
**BLAZE**

*Norton*  
**BLUEFIRE**

**TWIN**★**STAR**

**MERIT**



## CATEGORY DEFINITION

Flap discs are versatile grinding and finishing tools, consisting of three main components: a backing plate, adhesive, and abrasive cloth flaps. The rectangular flaps are overlapped and glued to the backing plate. Flap discs are designed for right angle grinder applications ranging from heavy stock removal to surface blending.

- APPLICATIONS: Grinding, stock removal, edge chamfering/beveling, weld blending, deburring/deflashing, rust removal, blending, cleaning and finishing
- SIZE RANGE: 4": 5/8" hole  
4-1/2" - 7": 5/8"-11 discard mount and 7/8" hole
- GRIT RANGE: 24 – 120
- ABRASIVE GRAIN: Ceramic Alumina, Zirconia Alumina, Aluminum Oxide, Silicon Carbide
- ABRASIVE FLAPS: Polyester or cotton
- FLAP DISC SHAPE: Type 27 Flat and Type 29 Conical
- ABRASIVE FLAP DENSITY: Standard or high
- BACKING PLATE MATERIAL: Fiberglass, plastic or aluminum

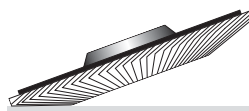
## FLAP DISC SHAPES



GRIND AT FLATTER ANGLES:  
0° – 15°

### Type 27 Flat – The Best Choice for Finishing

- Used primarily on flat surfaces
- The best choice for blending and smooth finishing

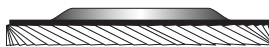


GRIND AT STEEPER ANGLES:  
15° – 25°

### Type 29 Conical – The Best Choice for Aggressive Stock Removal

- Conical flap discs have angled flaps and may be used on both contoured and edge work
- The angle provides greater surface contact for stock removal on flat surfaces
- The best choice when speed and stock removal are primary considerations

## ABRASIVE FLAP DENSITIES



### Standard Density

- Excellent for heavy-duty applications and rapid stock removal

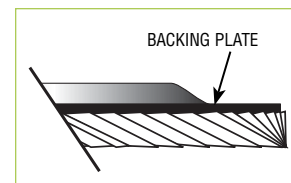


### High Density

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

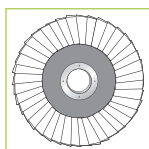
## BACKING PLATE MATERIALS

All flap discs are a combination of abrasive flaps adhered to a rigid backing plate. It is the backing plate that provides stability during operation. There are three main materials used: fiberglass, plastic or aluminum. The fiberglass backing plate, along with the flap shape, helps to absorb vibration and is consumed during use with no smearing. Fiberglass is the most popular material because of its high strength and light weight. The plastic backing plate offers some additional conformability and is trimmable. The aluminum backing plate provides extra high strength and rigid support as needed. While not consumable during use, an aluminum plate can be recycled.



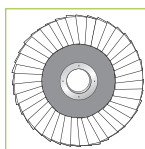
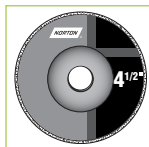
## WHY CHOOSE FLAP DISCS?

Flap discs replace both grinding wheels and fiber discs. The same flap disc can be used for applications ranging from stock removal to blending.



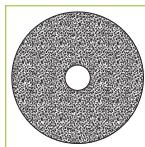
### Flap Discs vs. Grinding Wheels

- Faster stock removal
- Smoother finish, no gouging
- Cooler cutting, less glazing
- Lightweight, easier to control
- Less vibration, less operator fatigue
- Reduced noise



### Flap Discs vs. Fiber Discs

- 20X longer life, reduced abrasive cost
- Fewer disc changes, reduced labor cost
- More consistent finish
- No back-up pad required
- Easier storage, no curling
- Reduced loading
- Use flap discs one grit size coarser than fiber discs, except in 36 grit.

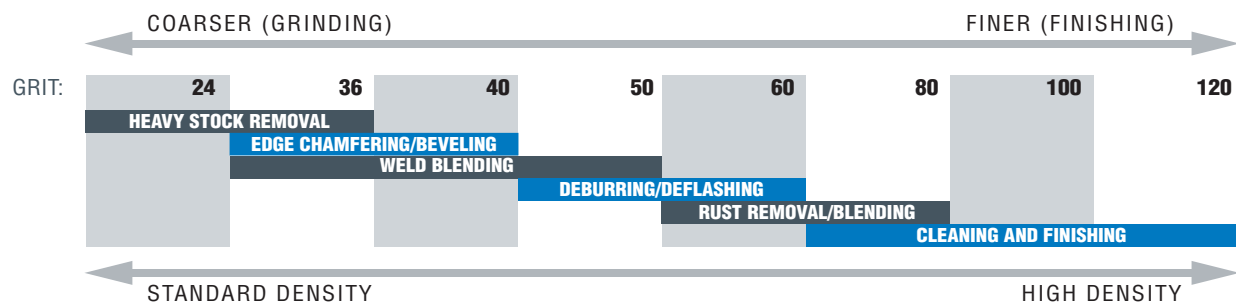




## MATERIAL-TO-PRODUCT RECOMMENDATION GUIDE

	BEST HIGHEST PRODUCTIVITY LOWEST TOTAL COST	BETTER EXCELLENT BLEND OF PERFORMANCE & PRICE	GOOD CONSISTENT PERFORMANCE LOW INITIAL PRICE
<b>TYPE 29 FOR STOCK REMOVAL</b>			
Stainless Steel / Titanium / Super Alloys	Norton SG Blaze R980P	NorZon BlueFire R884	Merit Metal
Mild Carbon Steel / Welds	Norton TwinFiber	NorZon BlueFire R884	Merit Metal
Ferrous Metals / Cast Iron	Norton TwinFiber	NorZon BlueFire R884	Merit Metal
Brass / Bronze / Aluminum	–	NorZon BlueFire R884	Merit Silicon Carbide
Paint / Glue / Adhesive	–	–	Merit Silicon Carbide
Concrete / Stone / Fiberglass	–	–	Merit Silicon Carbide
<b>TYPE 27 FOR BLENDING AND FINISHING</b>			
Stainless Steel / Titanium / Super Alloys	Norton SG Blaze R980P	NorZon BlueFire R884	Merit Metal
Mild Carbon Steel / Welds	Norton TwinStar	NorZon BlueFire R884	Merit Metal
Ferrous Metals / Cast Iron	Norton TwinStar	NorZon BlueFire R884	Merit Metal
Brass / Bronze / Aluminum	–	NorZon BlueFire R884	Merit Metal

## APPLICATION/GRIT RECOMMENDATION GUIDE



## CROSS REFERENCE GUIDE

	TOTAL PERFORMANCE		INITIAL PRICE	SPECIALTY	
	BEST SG Blaze R980P	TwinFiber / TwinStar	BETTER NorZon BlueFire R884	GOOD	
				Metal / Zirconia	Silicon Carbide
<b>NORTON</b>					
<b>MERIT</b>					
<b>3M</b>	947D	747D	563D, 546D	–	–
<b>DeWalt</b>	–	–	–	Z/A	–
<b>Camel</b>	–	C3	Z-Stainless	Z3, A3	SC
<b>Flexovit</b>	–	–	–	Zircotex Premium, Zircotex HP	–
<b>Garryson</b>	–	–	Zirc+, Zirconium	Aluminum Oxide	–
<b>GemTex</b>	–	Ceramic	–	Zirconia, A/O	–
<b>Hermes</b>	–	–	–	–	–
<b>Klingspor</b>	–	–	SMT 630	SMT 618, 619, 624, 626, 627, 628, 640	–
<b>Metabo</b>	–	–	–	Z/A	–
<b>Pearl</b>	–	Stainless Max	Zirconia Premium, TuffMax	Z/A Silver Line, Premium A/O Classic, Silver Line	SC
<b>Pferd</b>	–	Ceramic	Cool Zirconia, CO-COOL	Zirconia, Cool Aluminum Oxide, Aluminum Oxide	Masonry Silicon Carbide
<b>Sait</b>	–	–	Z	2A, 3A	–
<b>SIA</b>	–	–	–	Z/A	–
<b>Standard</b>	–	Ceramic Oxide	Zirconia Pro	Zirconia	–
<b>Tyrolit</b>	–	–	Z/A	A/O	–
<b>Walter</b>	–	–	Enduro Flex	–	–
<b>Weiler</b>	–	Saber Tooth Ceramic	–	Tiger Zirconium, A/O, Vortec	–



FEATURED PRODUCTS



IMPROVED

**NORTON SG BLAZE R980P / QUICK TRIM NORTON SG BLAZE R980P**  
 BEST/HIGHEST PRODUCTIVITY FOR STAINLESS STEEL, TITANIUM, AND SUPER ALLOYS

FEATURES	BENEFITS
• Latest-generation ceramic alumina abrasive grain	• Last 50% – 200% longer than any flap discs on stainless steel, cobalt, chrome, Inconel, titanium and other hard-to-grind materials
• Supersize grinding aid	• Cool, noticeably fast cut rate
• Y-wt. polyester flaps	• Significantly improve life, grain retention and fray resistance
• Durable fiberglass back	• High strength, lightweight, absorbs vibration
• NEW! Orange, flexible plastic backing plate on Type 27 Quick Trim	• New industry standard for trimmability



IMPROVED

**TWINFIBER / TWINSTAR**  
 BEST/HIGH PRODUCTIVITY FOR MILD CARBON STEEL, AND FERROUS METALS

FEATURES	BENEFITS
• New, premium ceramic and zirconia alumina abrasive blend	• Excellent performance and efficiencies on mild carbon steel and ferrous metal/cast iron applications
• Durable, fiberglass back (Type 29 TwinFiber)	• High strength, lightweight, absorbs vibration
• New plastic backing plate material (Type 27 TwinStar)	• New industry standard for trimmability

NEW



NEW

**NORZON BLUEFIRE R884**  
 BETTER CHOICE FOR MILD CARBON STEEL, AND WELDS

FEATURES	BENEFITS
• High performance zirconia alumina plus abrasive	• Aggressive cut and long life
• Polyester flaps	• Up to 30% longer life than competitive zirconia alumina products
• Durable, fiberglass back	• Improved durability
• Semi-open coat	• High strength, lightweight, absorbs vibration
	• Retards loading on aluminum



NEW

**MERIT METAL**  
 GOOD CHOICE FOR STAINLESS STEEL, CAST IRON, AND ALUMINUM

FEATURES	BENEFITS
• Quality zirconia alumina abrasive	• Good cut rate and life
	• Type 29 for hard to grind materials
	• Type 27 for softer materials
• Engineered blend of X-wt. cotton and Y-wt. polyester flaps	• Longer life and wear resistance
• Durable, fiberglass back	• High strength, lightweight, absorbs vibration
• Competitive initial price point	• Best starting specification for end-user unable to measure performance



NEW

**MERIT SILICON CARBIDE**  
 GOOD CHOICE FOR BRASS, BRONZE AND NON-METALS

FEATURES	BENEFITS
• Silicon carbide abrasive	• Good for very soft (aluminum) to very hard (concrete) materials
• Durable, fiberglass back	• High strength, lightweight, absorbs vibration
• Competitive initial price point	• Ideal starting specification for end-user unable to measure performance



## AVAILABILITY

TIER:	BEST				
BRAND:	Norton				
TRADENAME:	SG BLAZE R980P	SG BLAZE R980P	TWINSTAR	SG BLAZE R980P	TWINFIBER
SHAPE:	Type 27 Flat	Type 27 Flat	Type 27 Flat	Type 29 Conical	Type 29 Conical
FLAP DENSITY:	Standard	Standard	Standard	Standard	Standard
ABRASIVE:	Ceramic Alumina	Ceramic Alumina	Ceramic Alumina/ Zirconia Alumina	Ceramic Alumina	Ceramic Alumina/ Zirconia Alumina
BACKING PLATE:	Fiberglass	Quick Trim Plastic	Quick Trim Plastic/*Plastic	Fiberglass	Fiberglass
OTHER:	Supersize	Supersize		Supersize	

SIZE (D X H)	GRIT	MAX. RPM	STD. PKG.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
4 x 5/8	40	15,300	10			63642536153*		
	60				63642536154*			
	80				63642536155*			
	120							
4-1/2 x 5/8-11	36	13,300	10	66261100005	66254400257	63642536147•	66261183490	63642536156•
	40			66261100006	66254400258	63642536148•	66261183491	63642536157•
	60			66261100007	66254400259	63642536149•	66261183492	63642536158•
	80			66261100008	66254400261		66261183493	63642597115•
4-1/2 x 7/8	36	13,300	10	66261100001	66254400253	63642504876*	66261183486	63642504329
	40			66261100002	66254400254	63642504877*	66261183487	63642504330
	60			66261100003	66254400255	63642504878*	66261183488	63642504331
	80			66261100004	66254400256	63642504879*	66261183489	63642504332
5 x 7/8	36	12,000	10	66261100009	66254400262	63642505281*	66261190001	
	40			66261100010	66254400264	63642505282*	66261190002	
	60			66261100011	66254400265	63642505283*	66261190003	
	80			66261100012	66254400519	63642505284*	66261190004	
5 x 5/8-11	40	12,000	5			66254491941		
	60				66254491942			
	80				66254491943			
6 x 7/8	40	10,200	10					63642541406
	60							63642541407
	80							63642541408
	120							
7 x 5/8-11	36	8,600	10	66261100017	66254461066	63642536150•	66261183498	63642536159•
	40			66261100018	66254461067	63642536151•	66261183499	63642536160•
	60			66261100019	66254461068	63642536152•	66261183500	63642536161•
	80			66261100020	66254461069		66261183501	
7 x 7/8	36	8,600	10	66261100013	66254461059	63642504880*	66261183494	63642504334
	40			66261100014	66254461060	63642504881*	66261183495	63642504335
	60			66261100015	66254461061	63642504882*	66261183496	63642504336
	80			66261100016	66254461063	63642504883*	66261183497	63642504337
120						63642504338		

\* 5/8-11 (HUBBED) TWINSTAR AND TWINFIBER FLAP DISC STD. PKG. QUANTITY = 5



## New Trimmable, Flexible Plastic Backing Plate

### Quick Trim Norton SG Blaze R980P and TwinStar

New higher-performance abrasive flaps are mounted on our new flexible, easily-trimmable plastic backing plate. For custom sizes or to fully use the flaps, the new Quick Trim flap discs are the answer. Available in 7/8" hole or our industry standard 5/8-11 mini mount that ensures maximum safety for all right angle grinders.



## AVAILABILITY



TIER:	BETTER	BETTER
BRAND:	Norton	Norton
TRADENAME:	<b>NORZON BLUEFIRE R884</b>	<b>NORZON BLUEFIRE R884</b>
SHAPE:	Type 27 Flat	Type 29 Conical
FLAP DENSITY:	Standard	Standard
ABRASIVE:	Zirconia Alumina Plus	Zirconia Alumina Plus
BACKING PLATE:	Fiberglass	Fiberglass

SIZE (D X H)	GRIT	MAX. RPM	STD. PKG.	PART NO.	PART NO.
4-1/2 x 5/8-11	36	13,300	10	66254461202	66254461165
	40			66254461203	66254461167
	60			66254461204	66254461170
	80			66254461206	66254461173
4-1/2 x 7/8	36	13,300	10	66254461196	66254461155
	40			66254461197	66254461161
	60			66254461198	66254461163
	80			66254461200	66254461164
5 x 7/8	36	12,000	10	66254461208	66254461174
	40			66254461209	66254461176
	60			66254461210	66254461177
	80			66254461212	66254461178
7 x 5/8-11	36	8,600	10	66254461219	66254461188
	40			66254461221	66254461190
	60			66254461223	66254461192
	80			66254461225	66254461193
7 x 7/8	36	8,600	10	66254461213	66254461180
	40			66254461215	66254461183
	60			66254461216	66254461185
	80			66254461217	66254461186

## When You Want Fast and Tough, You Want Norton

Whether you want maximum productivity or simply the lowest initial cost solution, Norton and Merit have the product for all your right angle grinding and blending applications.



### **BEST** Norton SG Blaze

*Highest Productivity, Lowest Total Cost*

Latest-generation ceramic alumina abrasive provides the industry's fastest cutting discs and 50-200% longer life over any flap disc on stainless, titanium, and super alloys.



### **BETTER** NorZon BlueFire

*Exceptional Blend of Performance and Price*

New zirconia alumina plus abrasive for an increased cut rate and up to 30% longer life over conventional zirconia products on carbon steel and welds.



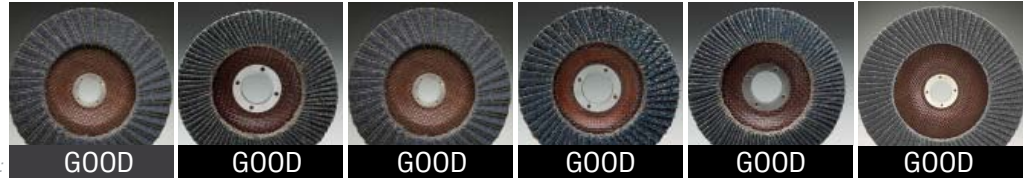
### **GOOD** Merit Metal

*Good Performance, Low Initial Price*

Engineered blend of two high performance zirconia products provides the best starting specification when price is primary consideration.



## AVAILABILITY



TIER:	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
BRAND:	Merit	Merit	Merit	Merit	Merit	Merit
TRADENAME:	<b>METAL</b>	<b>ZIRCONIA</b>	<b>METAL</b>	<b>ZIRCONIA</b>	<b>ZIRCONIA</b>	<b>SILICON CARBIDE</b>
SHAPE:	Type 27 Flat	Type 27 Flat	Type 29 Conical	Type 29 Conical	Type 29 Conical	Type 29 Conical
FLAP DENSITY:	Standard	High	Standard	Standard	High	Standard
ABRASIVE:	Zirconia Alumina	Zirconia Alumina	Zirconia Alumina	Zirconia Alumina	Zirconia Alumina	Silicon Carbide
BACKING PLATE:	Fiberglass	Fiberglass	Fiberglass	Fiberglass	Fiberglass	Fiberglass

SIZE (D X H)	GRIT	MAX. RPM*	STD. PKG.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
4 x 5/8	24	15,300	10				08834193722		
	36					08834193630			
	40					08834193645			
	60					08834193631			
	80					08834193632			
	120					08834193646			
4-1/2 x 5/8-11	24	13,300	10		08834191969		08834193726		
	36			66254472655	08834199749	66254419991	08834193679	08834194447	
	40			66254437013	08834194731	66254419994	08834193680	08834193906	
	60			66254472656	08834199750	66254419996	08834193681	66261044504	66254460664
	80			66254448989	08834190330	66254419997	08834193682	66261044505	08834196277
	120			66254472657	08834191941		08834193683	66261044506	08834196275
4-1/2 x 7/8	24	13,300	10		08834194834		08834193723	08834194833	
	36			66254472653	08834192985	66254419963	08834193633	08834191427	
	40			66254437004	08834190172	66254419978	08834193647	08834190726	
	60			66254448989	08834190767	66254419984	08834193634	08834190175	66254460663
	80			66254448990	08834194360	66254419987	08834193635	08834190924	08834195676
	120				08834194841		08834193648	08834190995	08834195677
5 x 5/8-11	24	12,000	10				08834193727		
	36					08834193684			
	40					08834193685			
	60					08834193686			
	80					08834193687			
	120					08834193688			
5 x 7/8	24	12,000	10				08834193724		
	36			66254472659		66254419998	08834193649		
	40			66254472660	08834190074	66254420001	08834193650		
	60			66254472661	08834190376	66254420002	08834193651	08834190876	66254460694
	80			66254472662	08834192269	66254420003	08834193652	08834190405	66254460463
	120				08834192299		08834193653	08834192209	66254460464
6 x 5/8-11	24	10,200	10				66254407155		
	36					66254407157			
	40			66254491773		66254491779	66254407158		
	60			66254491774		66254491780	66254407159		
	80			66254491775		66254491781	66254407160		
	120						66254407161		
6 x 7/8	24	10,200	10				66261095708		
	36					66261095711			
	40			66254491770		66254491776	66261095716		
	60			66254491771		66254491777	66261095717		
	80			66254491772		66254491778	66261095718		
	120						66261095719		
7 x 5/8-11	24	8,600	10		08834191986		08834193728		
	36			66254472669	08834195073	66254420009	08834193689	08834193830	
	40			66254472670	08834191043	66254420010	08834193690	66261044540	
	60			66254472671	08834197227	66254420012	08834193691	08834199751	66254460666
	80			66254472672	08834191674	66254420013	08834193692	08834192896	08834197186
	120				08834191987		08834193693	66261044541	08834197187
7 x 7/8	24	8,600	10		08834194831		08834193725	08834190877	
	36			66254472664	08834194361	66254420004	08834193636	08834190878	
	40			66254472665	08834190933	66254420006	08834193654	08834192059	
	60			66254472666	08834194514	66254420007	08834193637	08834196985	66254460665
	80			66254472667	08834194362	66254420008	08834193638	08834196986	08834195705
	120				08834194832		08834193655	08834196988	66254460462

\* MAX RPM FOR MERIT ZIRCONIA HIGH DENSITY FLAP DISCS IS 13,000



## 20X High Performance

- Zirconia alumina abrasive disc, packaged for retail/walk-in selling
- Individual hang card provides product selling points
- Product ships in merchandisable display case of small quantities



## AVAILABILITY

TIER:	<b>BEST</b>
BRAND:	Norton
TRADENAME:	<b>20X</b>
SHAPE:	Type 29
FLAP DENSITY:	Standard
ABRASIVE:	Zirconia Alumina Plus
BACKING PLATE:	Fiberglass

SIZE (D X H)	GRIT	MAX. RPM	STD. PKG.	PART NO.
4 x 3/8-24	40	15,300	5	07660703214
	60			07660703215
	80			07660703216
4-1/2 x 5/8-11	40	13,300	5	07660703211
	60			07660703212
	80			07660703213
7 x 5/8-11	40	8,600	5	07660703205
	60			07660703206
	80			07660703207
Wire Rack			2	07660704157

Wire rack (with header card) allows merchandising of 4" and 4-1/2" product three ways: hung on pegboard, mounted on an upright, or placed on a shelf/counter



## Merit Mini Flap Discs



- High performance zirconia alumina abrasive provides maximum cut rate and life
- Layered flaps wear away evenly, producing a high quality and consistent finish

## AVAILABILITY

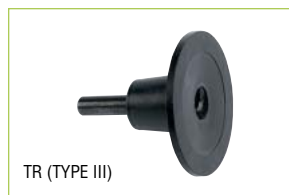
TIER:	<b>BETTER</b>	<b>BETTER</b>
ABRASIVE:	Zirconia Alumina	Zirconia Alumina
FLAP:	Cotton	Cotton
BACKING MATERIAL:	Extra Heavy Duty Plastic	Extra Heavy Duty Plastic
ATTACHMENT:	TS (Type II)	TR (Type III)



SIZE (D)	GRIT	STD. PKG.	PART NO.	PART NO.
2"	36	10	08834195020	08834194550
	40		08834195021	08834194551
	60		08834195022	08834194552
	80		08834195023	08834194553
	120		08834195024	08834194554
3"	36	10	08834195035	08834194563
	40		08834195036	08834194564
	60		08834195037	08834194565
	80		08834195038	08834194566
	120		08834195039	08834194567



TS (TYPE II)



TR (TYPE III)

DESCRIPTION	STD. PKG.	MAX. RPM	PART NO.
<b>MINI FLAP DISC BACK-UP PADS</b>			
2" & 3" TS (Type II) Back-up Pads	1	30,000	08834168539
2" & 3" TR (Type III) Back-up Pads	1	30,000	08834160172



**DRY**ice®



NORTON  
**GOLD** A290™