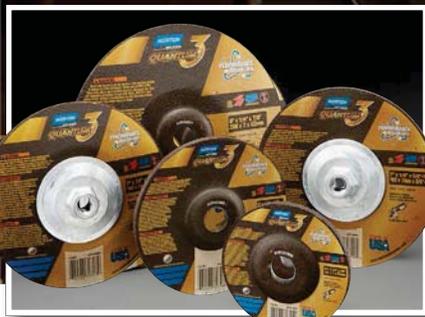


when the going gets rough
RELY ON NORTON INNOVATION

For stock removal, rough blending, cleaning castings and welds...Norton depressed center, portable snagging, and floorstand wheels are constructed to tackle the demanding work of all material types.



Choose a Quantum Leap in Technology

Maximum operator comfort – less cutting vibration means reduced hand fatigue. Sharper wheel for fastest cutting action; highest metal removal rate, less pressure, and longest life – for highest productivity.



Performance on Fire

Engineered with a proprietary zirconia grain upgrade, the Norton BlueFire design offers faster removal rate, longer product life, and increased productivity for better performance value.



Conquering Your Toughest Jobs

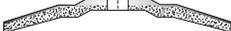
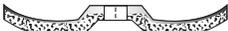
From foundry, welding, metal fabrication, steel mill to shipyard, master imperfection removal, cleaning, and beveling jobs with our line of strong, aggressive snagging products.



Depressed center wheels may also be referred to as raised hub wheels or by their shape designation of "Type", with Type 27 being the most popular. The depressed center design allows the flange/lock nut to recess within the wheel so that it can be used for various grinding and cutting applications. Depressed center wheels are designed to handle the most severe right angle grinding applications from heavy stock removal to rough blending. More recently, depressed center wheels have been designed to increase the utility of the tool for cut-off applications. While large right angle grinders (7" & 9") have been around for many years, small or mini grinders that handle 4", 4-1/2", 5", and 6" wheels have made this machine, and wheel category, the most popular in power tools.

- Applications: Grinding, stock removal, edge chamfering, beveling, weld blending, and cutting-off
- Size Range: 2" – 9"
- Thickness Range: .040 – 1/4"
- Grit Range: 24 – 46 grits for stock removal;
60, 80 grits for blending and finishing
- Abrasive Grain: Ceramic Alumina, Diamond, Zirconia Alumina, Aluminum Oxide, Silicon Carbide
- Mounting Options: Plain hole (3/8", 5/8" and 7/8") and discard mount (5/8"-11)
- Shape: Type 27, Type 28, Type 29
- Machine Used: 

TYPE-TO-APPLICATION RECOMMENDATION GUIDE

Wheel Type/Thickness	Applications		
TYPE 27 	Type 27 wheels are essentially straight wheels that have a "depressed center/ raised hub". Different types of fiberglass reinforcement mesh give the product stability for use on the periphery, on the face, or a combination of the two.	 90° ANGLE	 30° ANGLE
.040", .045", and 1/16" Type 27/42 RightCut	Cutting only, where fast cutting and low kerf loss are desired	■	
3/32" and .125" Type 27/42	For tough cutting and notching applications where stability is important; cutting and cleaning burr-free narrow root pass welds	■	
1/8" Type 27	For multiple applications ranging from cutting-off, notching and light-duty side grinding	■	■
1/8" Pipe Notcher Type 27	2-1/2 pieces of reinforcement; durable face grinding; root pass grinding without removing pipe material	■	■
1/8" Type 27 Flexible	For light stock/blending/finishing/polishing		■
.140" and 1/8" Type 27 Foundry Notchers	Triple-reinforced for grinding steel and dirty/scale-covered castings; removing and cleaning gates and risers	■	■
1/4" Type 27	For light- to heavy-duty grinding on the bottom/face of the wheel		■
1/4" Type 27 Foundry Snaggers	Designed for cleaning parting lines, pads and slag		■
1/4" Type 27 Heavy-Duty Foundry	Triple-reinforced for the most aggressive foundry applications		■
TYPE 28 	Type 28 wheels are constructed with a downward angle built into the grinding section to facilitate a flatter grinding angle. These wheels can only be used on the face and never on the periphery for cutting-off.		 15° ANGLE
1/4" Type 28 Saucers	Smooth, gouge-free grinding at shallow angles		■
TYPE 29 	Type 29 wheels are constructed with an upward angle built into the grinding section to provide full face contact for light stock removal and blending operations. These wheels can only be used on the face and never on the periphery for cutting-off.		 15° ANGLE
1/8" Type 29 Flexible, AVOS	Polishing and blending applications		■

MATERIAL/APPLICATION-TO-PRODUCT RECOMMENDATION GUIDE

	BEST Highest Productivity; Lowest Total Cost	BETTER Excellent Blend of Performance & price	GOOD Consistent Performance; Low Initial Price
CUTTING			
Mild Carbon / High Tensile Steel	Norton NorZon Plus	Norton BlueFire	Norton Gemini / Norton Metal
Stainless Steel / Alloys	Norton NorZon Plus	Norton BlueFire	Norton Gemini INOX/SS / Norton Metal
Contaminate Free		Norton BlueFire FC/INOX/SS	Norton Gemini INOX/SS
Cast Iron	Norton NorZon Plus		Norton Gemini
Gray Iron			
Aluminum / Bronze / Brass			Norton Gemini Aluminum
Asphalt / Brick / Concrete			Norton Masonry
Fiberglass / Plastic			Norton Masonry
NOTCHING			
Mild Carbon / High Tensile Steel	Norton NorZon Plus	Norton BlueFire	Norton Gemini / Norton Metal
Stainless Steel / Alloys	Norton NorZon Plus	Norton BlueFire	Norton Gemini INOX/SS
Contaminate Free		Norton BlueFire FC/INOX/SS	Norton Gemini INOX/SS
Cast Iron	Norton NorZon Plus	Norton BlueFire Foundry	Norton Gemini
GRINDING			
Mild Carbon / High Tensile Steel	Norton Quantum3/NorZon Plus	Norton BlueFire	Norton Gemini / Norton Metal
Stainless Steel / Alloys	Norton Quantum3	Norton BlueFire INOX/SS	Norton Gemini INOX/SS
Contaminate Free	Norton Quantum3	Norton BlueFire FC/INOX/SS	Norton Gemini INOX/SS
Cast Iron	Norton NorZon Plus	Norton BlueFire Foundry	Norton Gemini
Gray Iron	Norton Quantum3	Norton BlueFire Foundry	Norton Gemini
Aluminum / Bronze / Brass			Norton Gemini Aluminum
Asphalt / Brick / Concrete			Norton Masonry
BLENDING			
Mild Carbon / High Tensile Steel			Norton Gemini Flexible
Stainless Steel / Alloys			Norton Gemini Flexible
Aluminum / Bronze / Brass			Norton Gemini Flexible
Fiberglass / Plastic			Norton Gemini Flexible

Typical Steel, Stainless Steel, Cast Iron Products: Angle Iron, Bar Stock, Ductile Pipe, Channel Iron, Decking, Rebar, I-Beams, Rail Steel, Studs, Tubing, and Welds

HOW TO PICK THE RIGHT BOND TYPE

Standard	Unmarked	Where an excellent blend of cut rate and life is needed
Fast Cut	FC	Where fast stock removal is needed, or the application only allows for low-pressure or under-horsepowered grinders
Long Life	LL	Where durability is needed due to severe application, and when horsepower of the grinder allows for heavy pressure
Contaminate Free	INOX/SS	Contain <0.1% iron, sulfur or chlorine for rust-free and corrosion-free results. Will not contaminate stainless steel

HOW TO PICK THE RIGHT MOUNT

Most wheel sizes come with a plain hole or a discard mount option. While the plain hole has a small, initial cost advantage, the discard mount can provide a labor cost advantage with the quicker wheel change.

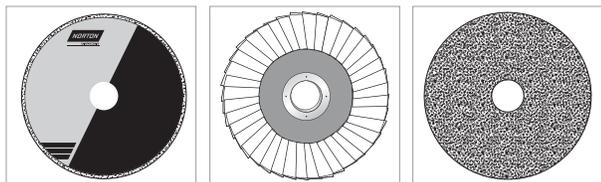


Mini-Mount Hub

Our unique, patented mini-mount hub used on 4-1/2" and 5" depressed center wheels provides up to 30% more wheel life because the hub covers just a small surface area, providing maximum grinding area exposure and usage.

Standard throw-away hub size

WHY CHOOSE DEPRESSED CENTER WHEELS?



Depressed Center Wheels vs. Flap Discs or Fiber Discs

- Up to 5X life over flap discs, less downtime and inventory
- Up to 100X life over fiber discs, less downtime and inventory
- Rigidity for severe operations and high power grinders
- 1/8" wheels can be used for cutting and grinding
- Can be used to grind inside corners at outer edge of wheel

CROSS REFERENCE GUIDES

Type 27/42 RightCut – .040" - 1/16"

	TOTAL PERFORMANCE			INITIAL PRICE			SPECIALITY	
	BEST	BETTER	GOOD				GOOD	
NORTON	NorZon Plus	BlueFire	Gemini INOX/SS	Gemini Long Life	Gemini	Metal	Gemini Aluminum	
Brilliant	—	—	—	Brill-Blade Heavy Duty	Brill-Blade Extra FC	Hornet	—	
Bullard	—	ZA60T	—	TA46T, TA60T TA60U	SGA60U	A46T, A60T Comp.	AL46N	
Camel	—	ZA Quickie Cut	A60-T-BF, WA60R Quickie Cut	Super Quickie Cut	A36-S-BF	—	A46 Quickie Cut	
Flexovit	—	—	—	Razorblade A60SST	Razorblade A24T, 30V, 36T	—	—	
Pearl	—	Redline Max Slimcut	—	Slimcut	—	Slimcut Pro-V, Silverline	—	
Pferd	—	SGP-ZA-Q-INOX	SG-A-R-INOX, SGP-A-S-INOX	SG-A-S, SGP-A-T	—	PSF-A-P	S-G-N-ALU	
Sait	—	Z-tech	XA46R	—	A60S, Saitech	SAIT.M.X	A46N	
Spedecut	—	—	—	—	—	A46, 60 TBXX	—	
Walter	—	—	A-60SS-ZIP	—	A-60-ZIP, A-30-ZIP	—	A-60-ZIP-ALU	

Type 27 and 28 – 1/8" and 1/4"

	TOTAL PERFORMANCE					INITIAL PRICE					SPECIALITY		
	BEST	BETTER	GOOD	BETTER	GOOD						BETTER	GOOD	
NORTON	Quantum3	NorZon Plus LL	NorZon Plus	BlueFire	BlueFire FC/INOX/SS	Gemini XXL	Gemini	Gemini Fast Cut	Gemini SS	Metal	BlueFire Foundry	Gemini ALU	Masonry
3M	Cubitron II	—	—	—	—	High Perform., Green Corps	—	—	—	—	—	—	—
Arc	—	—	—	—	—	—	Predator A24R	—	—	—	—	—	—
Brilliant	—	—	—	—	Brill-Max Z24R	—	Brill-Tex A24UHPXL, A30T	Brill-Tex A24R Super-G	Brill-Tex A30P	Hornet Metal	—	Brill-Tex 30ALU	Brill-Tex C30P, Hornet Concrete
Bullard	—	—	TA24S	ZA24R Competitor	ZA24R	—	A24R	A24N	A46Q	A24R Competitor	—	AL36N	C24R
Camel	—	—	—	—	ZA24T	—	A24R	Ultra A24-N-BF, A24T Super Quickie Cut	WA24S	A24N, R&T Fast Cut	—	*A30N, Fast Cut*	C24R
DeWalt	—	XP Ceramic	XP	—	HP	—	—	—	HP SS	Metal	—	—	—
Flexovit	—	Flexon ZA24P ZA30T	Flexon ZA20Q	Metalhog, AXT24S	—	—	High Perform. A24/30T	High Performance A30S, Specialist A30Q & R	Free Grind A30Q	—	Flexon ZA16U	Specialist A24ALU	High Perform. C24/30P
Metabo	M-Calibur	—	—	ZA24T	—	—	A24R & T	A24N	A360	—	—	A36M	C24N
Pearl	—	—	—	—	Z24T	—	Premium Metal A24S, Redline Max A/WA24S	Premium Metal A24R, Redline Max A/WA24R	WA24R, SRT24	Silver Line A24R & S	—	D.A. Series AL24M	Silver Line C24S
Pferd	SG-Elastic Ceramic C024Q	—	—	ZA SGP, ZA T SGP	ZA R SGP, Z-SG	SG-Elastic	A-PS, A-SG	—	A-SG INOX, A-PS INOX	—	—	A-SG ALU	S-SG, Masonry
Sait	The Ultimate Grind	Saitech Ultimate Perform.	Saitech Attacker, Pipeline	Z24R Z-Tech	Stainless	—	A24R, A24Turbo	A24N	XA24Q	A24T	CA24R - Foundry	A46N-ALU	C24N
Tyrolit	—	—	—	ZA24P-BFX	ZA24N-BFX	—	A30S & Q-BFX	A30R-BFX	A30-BF INOX	A30-BF	ZZA24R-BFX	A36N-BFX WA46-BF	C30-BF
Walter	—	—	—	Allsteel XX	Double-X	Allsteel	HP	—	Stainless	—	—	—	—
Weiler	—	—	—	Tiger Zirc	Tiger Inox	Tiger LL	Wolverine A24R	—	—	Wolverine A24N	—	—	—

Type 27 – Flexible 1/8"

	GOOD	GOOD	GOOD
NORTON	Gemini Flexible	Gemini Flexible	Gemini Flexible
Brilliant	Brill-Flex	Flexovit	Pferd SG-Flex
Bullard	Flexlite AC	Metabo Z-Plus	Sait Challenger II
Camel	FGF, Special Wheel	Pearl Flexible AC	Walter Flexcut

DEPRESSED CENTER WHEELS

NORTON QUANTUM3 CERAMIC ALUMINA

BEST CHOICE FOR STAINLESS AND CARBON STEEL APPLICATIONS; EFFICIENTLY GRINDS AND CUTS A VARIETY OF MATERIALS FROM ALLOYS TO GRAY IRON

FEATURES & BENEFITS

- 5X–6X the life of aluminum oxide wheels and up to 100 percent increase in performance and life over competitive ceramic alumina wheels from our proprietary formulation of next-generation, uniquely-shaped, 100% ceramic alumina abrasive grain and tough new bond system
- Fastest metal removal rates, with less pressure (because of more uniform grain distribution and adhesion) significantly increase production, for the lowest total grinding cost of any wheel in the market place today
- Better operator control, improved comfort, and exceptional finished part quality with a more robust, sharper, yet smoother cutting action; wheels don't grab or dig
- Contaminate-free with <0.1% iron, sulfur or chlorine for rust-free results.

NORTON NORZON PLUS C/A AND Z/A BLEND

BEST/HIGH PRODUCTIVITY FOR STEEL, STAINLESS STEEL AND ALL OTHER FERROUS METALS

FEATURES

- Combination of Norton SG ceramic alumina and NorZon (zirconia alumina) with an advanced bond system
- The original All Purpose – lowest total cost and best overall value
- Long Life – longest lasting
- Foundry Snagger
- RightCut wheels for cutting only

BENEFITS

- 50 to 200% better overall performance versus competitive zirconia and ceramic wheels
- Lowest total grinding cost; highest productivity for ceramic/zirconia blended wheels
- Up to 10X the performance of aluminum oxide wheels
- Easy on the operator and equipment
- Best option when the best combination of life, cut rate, and lowest heat generation is primary concern, and able to measure total cost
- Best option when longest possible life is primary concern, rough grinding conditions require wheel durability, using high cycle, high horsepower grinders and lower labor cost are key
- Designed to withstand the most aggressive foundry application
- Noticeably longer life and faster cut rate versus competitive wheels
- Less pressure required for first cut

NORTON BLUEFIRE Z/A AND A/O BLEND

BETTER CHOICE FOR STAINLESS STEEL, CARBON STEEL, ALLOYS AND GRAY IRON

FEATURES

- A blend of R&D advanced chemistry and shaped zirconia alumina abrasive and premium aluminum oxide grain
- Contaminate-free BlueFire FC (FastCut/Inox/SS)
- BlueFire Foundry
- **IMPROVED PERFORMANCE!** RightCut wheels for cutting only

BENEFITS

- 2-3 times the life of aluminum oxide wheels
- Broad utility from light-to heavy-pressure applications, on a wide range of materials
- Excellent performance-to-price ratio for lower total grinding costs
- Contain <0.1% iron, sulfur, or chlorine for rust-free and corrosion-free results; will not contaminate stainless steel
- Zirconia alumina/silicon carbide abrasive blend and an exceptionally strong reinforcement structure
- Versatile choice for aggressive, foundry applications
- Over 50% more life; the true choice for broad versatility and better value, to lower production costs.
- Less pressure required for first cut

DEPRESSED CENTER WHEELS

NORTON GEMINI ALUMINUM OXIDE

GOOD CHOICE FOR STEEL AND FERROUS METALS AS WELL AS SPECIALTY APPLICATIONS IN ALUMINUM AND FOUNDRIES

FEATURES

- Quality aluminum oxide
- Gemini Contaminate Free **INOX/SS**
- 1/8" and 1/4" thick Gemini XXL grinding wheels
- .040 and .045 ultra-thin Gemini RightCut wheels for cutting only
- Gemini Aluminum wheels

BENEFITS

- Consistent performance at a competitive price
- Contain <0.1% iron, sulphur or chlorine for rust-free and corrosion-free results; will not contaminate stainless steel
- Fastest 100% aluminum oxide grinding wheels in the market today
- 50% more life and metal removal than standard aluminum oxide wheels
- Best on hard-grade carbon steel applications, weld repairs, flashing, and any job that requires a quick turnaround
- Precise cutting; very stable, with a narrow pass
- Up to 70% longer life and 20% faster cut rate than standard aluminum oxide wheels – for substantial savings
- Require less pressure, providing increased operator comfort
- Grind aluminum and soft metals without loading
- Contain no wax or rubber fillers



NORTON METAL / NORTON MASONRY

GOOD CHOICE FOR STEEL/FERROUS METAL AND MASONRY APPLICATIONS WITH LOW INITIAL PRICE

FEATURES

- Low initial price point
- Metal – aluminum oxide
- Masonry – sharp silicon carbide

BENEFITS

- Ideal for small-volume jobs where performance need not be measured
- Engineered for all steel/ferrous materials
- Engineered for all masonry materials such as concrete, brick and asphalt



NORTON DIALAST DIAMOND WHEELS

BEST FOR METAL PLATE, PIPE, TUBING, CAST IRON, CARBON AND MILD STEEL, FOUNDRY AND WELDING APPLICATIONS, AND CERAMICS

FEATURES

- A combination of high-quality diamond and advanced brazed single-layer bonding technology
- Environmentally friendly grinding

BENEFITS

- Extra-long life versus conventional abrasives or other vacuum-brazed diamond tools
- Retains the diamond grains and wheel shape for full life with low sparks, while keeping a continuous grinding depth for exceptional wheel life
- Less blade changes reduce downtime and labor costs
- Generate minimal dust for less clean-up and safer working conditions



DEPRESSED CENTER WHEEL DESCRIPTION CODES

BLANK = All Purpose **FC** = Fast Cut **HD** = Heavy Duty **INOX/SS** = Contaminant Free **LL** = Long Life **1-2-3** = Cutting/Notching/Grinding
■ = Aluminum **■** = Foundry **■** = Masonry **■** = Stainless **■** = Steel / Metal



Less Body Stress, Shorter Work Days, and Bigger Pay Days!

- Let Norton Quantum3 wheels take a bite out of your daily grind so you can focus on your off hours
- Our R & D engineers met all your challenges with a proprietary, highest-performing formulation of uniquely-shaped, 100% ceramic alumina grain and a tough new resin bond
- 1. Less Grinding Time with a sharper wheel for highest metal removal and reduced pressure from faster cutting action
- 2. Less Downtime, Waste, and Cost with longer wheel life using fewer wheels
- 3. Operator Comfort with reduced hand fatigue from less cutting vibration

Try These New Wheels On Our Norton No Risk Test Policy – Because Right Choices Matter



TIER:	BEST	BETTER	GOOD	GOOD
TRADENAME:	NORTON NORZON PLUS	NORTON BLUEFIRE	NORTON GEMINI	NORTON METAL
SHAPE:	Type 27/42	Type 27/42	Type 27/42	Type 27/42
ABRASIVE:	Ceramic Alumina/ Zirconia Alumina	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
MATERIAL:	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL
			ALUMINUM	

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #
.040, .045, 1/16" – RightCut Cut-off – Type 27/42						
4 x .045 x 5/8	15,280	25			66252842180	07660705249
4-1/2 x .040 x 5/8-11	13,580	10			66252843227	
4-1/2 x .045 x 5/8-11	13,580	10	66252842006		66252842025	
	13,580	10			66252841913 INOX/SS	
4-1/2 x .045 x 7/8	13,580	25	66252843320		66252842026	66252843604
	13,580	25			66252841912 INOX/SS	
	13,580	25			66252841909 ALU 36	
	13,580	25*			66252842161 5-Pk	
	13,580	250			66253370065 250-Pk	
4-1/2 x 1/16 x 5/8-11	13,580	10		66252843223		
4-1/2 x 1/16 x 7/8	13,580	10		66252843219		
5 x .040 x 5/8-11	12,225	10			66252843228	
5 x .045 x 5/8-11	12,225	10			66252841939	
5 x .045 x 7/8	12,225	25	66252843329		66252842036	66252843849
	12,225	25			66252841914 INOX/SS	
	12,225	25			66252841910 ALU 36	
	12,225	25*			66252842171 5-Pk	
	12,225	250			66253370066 250-Pk	
5 x 1/16 x 7/8	12,225	25		66252843220		
6 x .045 x 5/8-11	10,185	10	66252842007		66252830587	
6 x .045 x 7/8	10,185	25	66252842009		66252842202	66252842015
	10,185	25			66252841916 INOX/SS	
	10,185	25			66252841911 ALU 36	
	10,185	25*			66252842176 5-Pk	
	10,185	250			66253370067 250-Pk	
6 x 1/16 x 7/8	10,185	25		66252843221		
7 x .045 x 5/8-11	8,600	10			66252841919 INOX/SS	
7 x .045 x 7/8	8,600	20			66252912626	
	8,600	20			66252841918 INOX/SS	
7 x 1/16 x 7/8	8,600	10				07660705251
9 x 1/16 x 5/8-11	6,600	10			66253019115	
9 x 1/16 x 7/8	6,600	10			66253017734	
<i>RightCut wheels are to be used for cutting only.</i>						
3/32", .125" – Cut-off – Type 27/42						
4 x .125 x 3/8	15,280	25	66252842001			
4-1/2 x 3/32 x 5/8-11	13,580	10			66252841903	
	13,580	10			66252842027 INOX/SS	
4-1/2 x 3/32 x 7/8	13,580	25			66252841940	
	13,580	25			66252842028 INOX/SS	
	13,580	25			66252843582 1-2-3	
4-1/2 x .125 x 5/8-11	13,580	10	66252843321		66252843588	
4-1/2 x .125 x 7/8	13,580	25	66252843322		66252843589	
5 x 3/32 x 5/8-11	12,225	10			66252841904	
5 x 3/32 x 7/8	12,225	25			66252842037 INOX/SS	
	12,225	25			66252843587 LL	
	12,225	25			66252843583 1-2-3	
5 x .125 x 7/8	12,225	25			66252843595	
6 x 3/32 x 5/8-11	10,185	10			66252841905	
6 x 3/32 x 7/8	10,185	25			66252841906	
	10,185	25			66252832487 INOX/SS	
6 x .125 x 5/8-11	10,185	10			66252841192	
6 x .125 x 7/8	10,185	25			66252842021	
7 x 3/32 x 5/8-11	8,600	10			66252841907	
7 x 3/32 x 7/8	8,600	20			66252841908	
	8,600	20			66252914638 INOX/SS	
7 x .125 x 5/8-11	8,600	10	66252912625			
7 x .125 x 7/8	8,600	20	66252912624		66252900619	
9 x 3/32 x 5/8-11	6,600	10		66252842378		
9 x 3/32 x 7/8	6,600	20		66252842343		

*These wheels are to be used for cutting only. * 5-wheel Job Packs; wheels are packed 5 wheels/Pack, with 5 Job Packs/carton. Order per each wheel in standard package quantities of 25. Order in multiples of 25.*



TIER:	BEST	GOOD
TRADENAME:	NORTON NORZON PLUS	NORTON GEMINI
SHAPE:	Type 27/42	Type 27/42
ABRASIVE:	Ceramic Alumina/ Zirconia Alumina	Aluminum Oxide
MATERIAL:	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #
1/8" (5/32") – Pipe Notching – Type 27				
4-1/2 x 1/8 (5/32) x 5/8-11	13,580	10		66253370272 XXL
4-1/2 x 1/8 (5/32) x 7/8	13,580	25		66253370271 XXL
5 x 1/8 (5/32) x 5/8-11	12,225	10		66253370273 XXL
5 x 1/8 (5/32) x 7/8	12,225	25		66252842038 XXL
6 x 1/8 (5/32) x 5/8-11	10,185	10		66252841193 XXL
6 x 1/8 (5/32) x 7/8	10,185	20		66252835580 XXL
7 x 1/8 (5/32) x 5/8-11	8,600	10	66252939184	66253370274 XXL
7 x 1/8 (5/32) x 7/8	8,600	20		66252835581 XXL
9 x 1/8 (5/32) x 5/8-11	6,600	10	66253049066	66253370275 XXL
9 x 1/8 (5/32) x 7/8	6,600	20		66253370276 XXL

Pipe Notchers are to be used for cutting/notching only.

See Type 27 .040 – 1/4" Foundry, Type 28 Saucer, Type 27 Flexible, and Type 29 Blending Wheels at the end of this section.



TIER:	BEST	BETTER	GOOD	GOOD	GOOD
TRADENAME:	NORTON NORZON PLUS	NORTON BLUEFIRE	NORTON GEMINI	NORTON METAL	NORTON MASONRY
SHAPE:	Type 27	Type 27	Type 27	Type 27	Type 27
ABRASIVE:	Ceramic Alumina/ Zirconia Alumina	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Silicon Carbide
MATERIAL:	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL ALUMINUM	STAINLESS STEEL/METAL	MASONRY

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #
1/8" – Cutting / Notching / Light Grinding – Type 27						
3 x 1/8 x 3/8	18,000	25	66252842177			
4 x 1/8 x 3/8	15,280	25	66252842004	66252843178	66252842016	
4 x 1/8 x 5/8	15,280	25	66252842005	66252843176	66252842017	66252842014
4-1/2 x 1/8 x 5/8-11	13,580	10	66252843323	66252843211	66252843590	66252843609
	13,580	10		66252843191 FC/INOX/SS	66252842029 ALU 46	
4-1/2 x 1/8 x 7/8	13,580	10 V		66252842166 2-Pk		
	13,580	25	66252843324	66252843212	66252843591	66252843611
	13,580	10 V		66252843190 FC/INOX/SS	66252842030 ALU 46	
5 x 1/8 x 5/8-11	12,225	10	66252843330	66252843215		66252843615
	12,225	10		66252843195 FC/INOX/SS		
5 x 1/8 x 7/8	12,225	25	66252843331	66252843216	66252843596	66252843616
	12,225	25		66252843194 FC/INOX/SS		
6 x 1/8 x 5/8-11	10,185	10	66252841891	66252843199 FC/INOX/SS	66252833965	
6 x 1/8 x 7/8	10,185	20		66252843202	66252801864	
	10,185	20		66252843198 FC/INOX/SS		
7 x 1/8 x 5/8-11	8,600	10	66252938855	66252843233	66252939259	07660702678
	8,600	10		66252843183 FC/INOX/SS		
7 x 1/8 x 7/8	8,600	20	66252938854	66252843234	66252939207	
	8,600	20		66252843182 FC/INOX/SS		
9 x 1/8 x 5/8-11	8,600	25*				07660775956 5-Pk
	6,600	10	66253048897	66252843244	66253048983	
9 x 1/8 x 7/8	6,600	10		66252843187 FC/INOX/SS		
	6,600	20	66253048896	66252843245	66253048994	
	6,600	20		66252843186 FC/INOX/SS		

* 5-wheel Job Packs; wheels are packed 5 wheels/Pack, with 5 Job Packs/carton. Order per each wheel in standard package quantities of 25. Order in multiples of 25.

V Vendible 2-wheel Package. Ideal for vending machinings and small jobs. 5 packs/carton. Order in multiples of 10.

DEPRESSED CENTER WHEEL DESCRIPTION CODES

BLANK = All Purpose	FC = Fast Cut	HD = Heavy Duty	INOX/SS = Contaminant Free	LL = Long Life	1-2-3 = Cutting/Notching/Grinding
■ = Aluminum	■ = Foundry	■ = Masonry	■ = Stainless	■ = Steel / Metal	



TIER:	BEST	BEST	BETTER	GOOD	GOOD
TRADENAME:	NORTON QUANTUM3	NORTON NORZON PLUS	NORTON BLUEFIRE	NORTON GEMINI	NORTON METAL OR NORTON MASONRY
SHAPE:	Type 27				
ABRASIVE:	Ceramic Alumina	Ceramic Alumina/ Zirconia Alumina	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide – Metal Silicon Carbide – Masonry
MATERIAL:	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL MASONRY

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #	PART #
1/4" – Grinding – Type 27							
3 x 1/4 x 3/8	18,000	25		66252842178		66252842179	
4 x 1/4 x 3/8	15,280	25	66253371180	66252842002	66252843179	66252842018	
4 x 1/4 x 5/8	15,280	25	66253371181	66252842003	66252843177	66252842020 FC	66252842011
	15,280	25				66252842019	66252842010 Masonry
	15,280	25				66252842183 ALU 46	
4-1/2 x 3/16 x 7/8	13,580	25				66252843592	
4-1/2 x 1/4 x 5/8-11	13,580	10	66253370793	66252843326	66252843213	66252843593	66252843605
	13,580	10		66252843327 LL	66252843193 FC/INOX/ss	66252843585 FC	66252843599 Masonry
	13,580	10				66252842032 INOX/SS	
	13,580	10				66252843785 XXL	
	13,580	10				66252842031 ALU 46	
	13,580	40					66252819559
	13,580	10 V		66252829541 2-Pk	66252842162 2-Pk	66252842163 2-Pk	
4-1/2 x 1/4 x 7/8	13,580	25	66253370794	66252843328	66252843214	66252843594	66252843607
	13,580	25			66252843192 FC/INOX/ss	66252843584 FC	66252843600 Masonry
	13,580	25				66252842033 INOX/SS	
	13,580	25				66252843784 XXL	
	13,580	25				66252842034 ALU 46	
	13,580	50					66252836796
	13,580	10 V		66252829540 2-Pk	66252842164 2-Pk	66252842165 2-Pk	
5 x 1/4 x 5/8-11	12,225	10	66253370795	66252843332	66252843217	66252843597	66252843613
	12,225	10		66252843333 LL	66252843197 FC/INOX/ss	66252843787 XXL	
	12,225	10					
5 x 1/4 x 7/8	12,225	25	66253370796	66252843334	66252843218	66252843598	66252843614
	12,225	25			66252843196 FC/INOX/ss	66252843586 FC	
	12,225	25				66252842040 INOX/SS	
	12,225	25				66252843786 XXL	
	12,225	25				66252842039 ALU 46	
	12,225	10 V				66252842172 2-Pk	
6 x 1/4 x 5/8-11	10,185	10	66253370797	66252841920	66252843224	66252832390	
	10,185	10			66252843201 FC/INOX/ss	66252843789 XXL	
6 x 1/4 x 7/8	10,185	20	66253370798	66252809376	66252843203	66252801865	
	10,185	20			66252843200 FC/INOX/ss	66252843788 XXL	
7 x 1/4 x 5/8-11	8,600	10	66253370799	66252917881	66252843235	66252940147 FC	66252912633
	8,600	10		66252835578 LL	66252843185 FC/INOX/ss	66252940148 LL	07660775942 Masonry
	8,600	10				66252843791 XXL	
	8,600	10				66252940514 ALU 24	
	8,600	10				66252940515 ALU 46	
	8,600	25*					07660775940 5-Pk
7 x 1/4 x 7/8	8,600	20	66253370800	66252917880	66252843236	66252940099 FC	
	8,600	20			66252843184 FC/INOX/ss	66252940098 LL	07660775937 Masonry
	8,600	20				66252843790 XXL	
	8,600	20				66252940516 ALU 24	
	8,600	25*					07660775936 5-Pk
9 x 1/4 x 5/8-11	6,600	10	66253370801	66253021634	66252843246	66253049105 FC	
	6,600	10		66252830728 LL	66252843189 FC/INOX/ss	66253049104 LL	
	6,600	10				66252843793 XXL	
	6,600	10				66253049045 ALU 24	
	6,600	25*					07660775938 5-Pk
9 x 1/4 x 7/8	6,600	20	66253370802	66253021633	66252843247	66253049077 FC	
	6,600	20		66253049069	66252843188 FC/INOX/ss	66253048991 LL	
	6,600	20		NorZon III – Rail Grind			
	6,600	20				66252843792 XXL	

* 5-wheel Job Packs; wheels are packed 5 wheels/Pack, with 5 Job Packs/carton. Order per each wheel in standard package quantities of 25. Order in multiples of 25.
 V Vendible 2-wheel Package. Ideal for vending machinings and small jobs. 5 packs/carton. Order in multiples of 10.

See 1/4 inch thick Type 27 Foundry and Type 28 Saucer Wheels on the next page.



TIER:	BEST	BEST	BEST	BEST	BETTER	GOOD
TRADENAME:	NORTON QUANTUM3	NORTON NORZON PLUS	NORTON DIALAST	NORTON DIALAST	NORTON BLUEFIRE	NORTON GEMINI
SHAPE:	Type 28	Type 28	Type 29	Reversible	Type 28	Type 28
ABRASIVE:	Ceramic Alumina	Ceramic Alumina/ Zirconia Alumina	Diamond	Diamond	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide
MATERIAL:	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #				
1/4" – Grinding – Type 28 Saucer							
7 x 1/4 x 5/8-11	8,600	10	66253370803	66252905369		66252843229	66252940149
7 x 1/4 x 7/8	8,600	20		66252905368			66252940095
9 x 1/4 x 5/8-11	6,600	10	66253370804	66253006335		66252843237	66253049106
9 x 1/4 x 7/8	6,600	20	66253370805				66253049081
Light Grinding – Type 29							
4-1/2 x 5/8-11	13,600	1		66253370009			
5 x 5/8-11	12,225	1		66253370010			
6 x 5/8-11	10,200	1		66253370011			
7 x 5/8-11	8,600	1		66253370012			
9 x 5/8-11	6,600	1		66253370013			
1/4" – Grinding – Reversible Grinding Disc							
4-1/2 x 1/4 x 5/8-11	13,600	1			66253370019		
7 x 1/4 x 5/8-11	8,600	1			66253370020		



TIER:	BEST	BEST	BEST	BETTER	GOOD
TRADENAME:	NORTON QUANTUM3	NORTON NORZON PLUS	NORTON DIALAST	NORTON BLUEFIRE	NORTON FOUNDRY X
SHAPE:	Type 27	Type 27	Type 29	Type 27	Type 27
ABRASIVE:	Ceramic Alumina	Ceramic Alumina/ Zirconia Alumina	Diamond	Zirconia Alumina/ Silicon Carbide	Aluminum Oxide
MATERIAL:	FOUNDRY	FOUNDRY	FOUNDRY	FOUNDRY	FOUNDRY

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #	PART #
.140", 1/8" – Cutting / Notching / Lt. Grinding – Type 27 and Type 29							
4-1/2 x 1/8 x 5/8-11	13,580	10				66252843206	
4-1/2 x 1/8 x 7/8	13,580	25				66252843204	
7 x .140 x 5/8-11	8,600	1		66253370014			
7 x 1/8 x 5/8-11	8,600	10				66252843232	
7 x 1/8 x 7/8	8,600	20				66252915526	
9 x .140 x 5/8-11	6,600	1		66253370015			
9 x 1/8 x 5/8-11	6,600	10				66252843240	
9 x 1/8 x 7/8	6,600	20				66252843238	
1/4" – Grinding – Type 27 and Type 29							
4 x 1/4 x 3/8	15,280	25				66252843181	
4 x 1/4 x 5/8	15,280	25				66252843180	
4-1/2 x 1/4 x 5/8-11	13,580	10				66252843207	
4-1/2 x 1/4 x 7/8	13,580	25				66252843205	
7 x 1/4 x 5/8-11	8,600	10				66252843231	
7 x 1/4 x 7/8	8,600	20				66252843230	
9 x 1/4 x 5/8-11	6,600	10	66253370849 HD	66253007014		66252843241	
	6,600	10				66252843261 HD	
9 x 1/4 x 7/8	6,600	20	66253370848 HD	66253007013		66252843239	66252842776
	6,600	20				66252843260 HD	

DEPRESSED CENTER WHEEL DESCRIPTION CODES

BLANK = All Purpose FC = Fast Cut HD = Heavy Duty INOX/SS = Contaminant Free LL = Long Life 1-2-3 = Cutting/Notching/Grinding
 ■ = Aluminum ■ = Foundry ■ = Masonry ■ = Stainless ■ = Steel / Metal



TIER:	GOOD	BETTER	GOOD
TRADENAME:	NORTON GEMINI FLEXIBLE	NORTON GEMINI AVOS	NORTON GEMINI
SHAPE:	Type 27	Type 29	Type 29
ABRASIVE:	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
MATERIAL:	ALUMINUM	ALUMINUM	ALUMINUM
	STEEL/METAL	STEEL/METAL	STEEL/METAL

SIZE (D x T x H)	MAX. RPM	STD. PKG.	GRIT	PART #	PART #	PART #
1/8", 1/4" – Blending – Type 27 and 29						
2 x 1/8 x 3/8	30,560	25	60	66252835632*		
	30,560	25	80	66252835633*		
4 x 1/8 x 5/8	15,280	20	36	66243529721#		
	15,280	20	60	66243529722#		
4-1/2 x 1/8 x 5/8-11	12,000	10	36		66252842208	66252842203
4-1/2 x 1/8 x 7/8	12,000	25	36	66252830424#	66252842209	66252842204
	12,000	25	60	66252830425#	66252842211	
5 x 1/8 x 7/8	12,225	25	36		66252842212	66252842205
7 x 1/8 x 5/8-11	8,600	10	36	66252939024		66252917052
7 x 1/8 x 7/8	8,600	20	36	66252939028#		66252917051
Plastic Back-up Pad for Type 27 Flexible Wheels						
		5		66252844332		66252844332

*5 wheels per display pack; 5 display packs per standard package.

These wheels are packed 20 per box, and must be used with this specific back plate. Two back plates are included in each box.

DEPRESSED CENTER WHEEL DESCRIPTION CODES

BLANK = All Purpose	FC = Fast Cut	HD = Heavy Duty	INOX/SS = Contaminant Free	LL = Long Life	1-2-3 = Cutting/Notching/Grinding
■ = Aluminum	■ = Foundry	■ = Masonry	■ = Stainless	■ = Steel / Metal	



Norton Depressed Center Adapter Kit

This reusable adapter kit contains everything you need to mount depressed center wheels and saucers with 7/8" center holes on to portable right angle or vertical shaft grinders. Adapter hubs are threaded for mounting on to standard 5/8"-11 NCRH spindles.

KIT NO.	WHEEL DIAMETER	WHEEL THICKNESS	PART #	STD. PKG.
114	6" thru 9"	1/16" thru 1/4"	07660789275	1

For consistent, quality performance in foundries, welding shops, fabrication facilities, steel mills and shipyards, Norton portable snagging wheels maximize your productivity. Used on horizontal/straight shaft grinders or right angle portable cup grinders.

- Applications: Removing flaws, cracks, gates, risers and parting lines, smoothing weld seams, cleaning castings, and rough beveling
- Size Range: Type 01 Straight Wheels: 2-1/2" – 8" diameter
Type 06 and 11 Cup Wheels: 4" – 6" diameter
Cones and Plugs: Type 16, 17, 17R, 18 and 18R
- Grit Range: 14 – 24
- Abrasive Types: Zirconia Alumina NZ and NV; Zirconia Alumina/Silicon Carbide Blend NVC; Aluminum Oxide 57A and Metal; Aluminum Oxide/Silicon Carbide Blend 57AC, Silicon Carbide 37C and Masonry
- Machine Used:



MATERIAL-TO-PRODUCT RECOMMENDATION GUIDE

		BEST Highest Productivity; Lowest Total Cost	BETTER Excellent Blend of Performance & Price	GOOD Consistent Performance; Low Initial Price
IRON	Gray	NorZon Plus NZ14-R	BlueFire NV16-Q	Gemini 57A16-Q, Metal
	Ductile/Malleable	NorZon Plus NZ14-R	BlueFire NV16-Q	Gemini 57A16-Q, Metal
	Dirty/Scale-covered		BlueFire NVC16-Q	Gemini 57AC16-Q
STEEL	Carbon and Low Alloy	NorZon Plus NZ16-Q	BlueFire NV16-Q	Gemini 57A16-Q, Metal
	Stainless and High Alloy	NorZon Plus NZ16-P	BlueFire NV16-Q	Gemini 57A16-Q, Metal
ALUMINUM, COPPER, BRASS, & BRONZE ALLOYS			BlueFire NVC16-Q	Gemini 57AC16-Q

NOTE: Grade, Grit and Abrasive tuning may be necessary to obtain optimum performance

CROSS REFERENCE GUIDE FOR TYPE 01, 06 AND 11 WHEELS

	TOTAL PERFORMANCE			INITIAL PRICE		
	BEST	BETTER	GOOD			
NORTON	NorZon Plus NZ	BlueFire NV	BlueFire NVC	Gemini 57A/Metal	Gemini 57AC	Gemini 37C/Masonry
Brilliant	—	ZA16QB	—	A16QB	—	C16QB
Bullard	—	ZA16PB	—	A16R	AC16	C16P
Camel	—	—	—	A	CA	C
Flexovit	ZA16PB	—	—	A16QB	AC16QB	C16PB
Gulf States	Zirconium	—	—	A16	—	C16
Pacific	Z, Z-GPC	—	—	A	CA	—
Pearl	—	—	—	A16Q	—	C16-Q
Pferd	ZA 16 Q SG	—	—	A 16 Q SG	—	C 16 Q SG
Sait	—	Z16	—	A16, 20	CA16	C16
Tyrolit	—	—	—	A16PB	—	C16PB
Walter	—	—	—	A	—	C

NORTON NORZON PLUS ZIRCONIA ALUMINA

BEST CHOICE FOR HEAVY-DUTY STOCK REMOVAL ON MEDIUM- AND HIGH-HORSEPOWER GRINDERS

FEATURES

- NZ Plus (NA IV) – premium zirconia alumina grain

BENEFITS

- Engineered for medium- and high-powered machines; 10X life, 50% faster grinding versus aluminum oxide products

NORTON BLUEFIRE ZIRCONIA ALUMINA

BETTER CHOICE FOR STOCK REMOVAL ON HIGH- AND MEDIUM-HORSEPOWER GRINDERS

FEATURES

- More friable zirconia alumina grain and durable resin bond technologies
- NVC – zirconia alumina/silicon carbide blend

BENEFITS

- Higher metal removal rates, faster, freer-cutting than standard zirconia alumina blends
- Up to 5X the life of aluminum oxide products; better grinding action
- Highly effective on dirty, scale-covered castings

NORTON NORZON III ZIRCONIA ALUMINA

BETTER CHOICE FOR HIGH-POWERED MACHINES

FEATURES

- NorZon III (NZ III) – Durable zirconia alumina grain

BENEFITS

- Engineered for high-powered machines; outstanding cut rate and wheel life

NORTON GEMINI ALUMINUM OXIDE

GOOD CHOICE FOR STEEL AND FERROUS METALS AS WELL AS SPECIALTY APPLICATIONS IN ALUMINUM AND FOUNDRIES

FEATURES

- Quality aluminum oxide

BENEFITS

- Consistent performance at a competitive price

NORTON METAL A/O AND MASONRY S/C

GOOD CHOICE FOR STEEL/FERROUS METAL AND MASONRY APPLICATIONS WITH LOW INITIAL PRICE

FEATURES

- Norton Metal: aluminum oxide abrasive
- Norton Masonry: silicon carbide
- Low initial price point

BENEFITS

- Engineered for all steel/ferrous materials
- Engineered for concrete and non-ferrous applications
- Ideal for small-volume jobs where performance need not be measured



TIER:	BEST	BETTER	BETTER	GOOD	GOOD
BRAND:	Norton	Norton	Norton	Norton	Norton
TRADENAME:	NZ IV	BLUEFIRE	NZ III	GEMINI	METAL/MASONRY
SHAPE:	Type 01, 06, and 11	Type 01 and 11	Type 01, 06, and 11	Type 01 and 11	Type 11
ABRASIVE:	Premium Zirconia Alumina	Zirconia Alumina NV Zirconia Alumina/ Silicon Carbide NVC	Zirconia Alumina	Aluminum Oxide 57A, Silicon Carbide 37C, Aluminum Oxide/ Silicon Carbide 57AC	Metal – Aluminum Oxide Masonry – Silicon Carbide

SIZE (D x T x H)	MAX. RPM	STD. PKG.	SPEC	PART #	SPEC	PART #	SPEC	PART #	SPEC	PART #	SPEC	PART #
Type 01 Straight												
2-1/2 x 1/2 x 3/8	21,700	20							57A24-R	66243522381		
3 x 1/4 x 3/8	20,370	25			NV20-T	66253343872**			57A24-T	66243528831		
3 x 3/8 x 3/8	18,080	10							57A24-R	66243522415		
3 x 1/2 x 3/8	18,080	10							57A24-P	66243522417		
4 x 1/4 x 3/8	15,280	10			NV20-T	66253344098			57A24-R	66243522221		
6 x 1 x 5/8	8,000	5			NV14-R	66253198589	NZ III 14-Q	66252838075	57A16-QS	66252809563		
S Webs	8,000	5					NZ III 14-R	66252837961				
8 x 3/4 x 5/8	6,000	10			NV14-S	66253344347						
S Webs												
8 x 1 x 5/8	6,000	5	NZ IV 16-O	66253030778	NV16-Q	66253198590						
S Webs	6,000	5	NZ IV 16-Q	66253044532								
	6,000	10			NV14-R	66253344355						
	6,000	10			NV14-T	66253344365						
	6,000	10			NVC16-Q	66253198592						
Type 06 Straight Cup												
6 x 2 x 5/8-11	6,000	5					NZ III 16-R	66252838577				
Rim 2" Back 3/4"												
Type 11 Flaring Cup												
4/3 x 2 x 5/8-11	9,070	10	NZ IV 16-Q	66243530761	NV16-Q	66253198583			57A16-Q	66243510512	Metal 16-Q	66243510512
Rim 3/4" Back 3/4"											Masonry	07660789431
											C16-Q	
5/3-3/4 x 2 x 5/8-11	7,260	5			NV16-Q	66253146918			57A16-Q	66252809598	Metal 16-Q	07660789430
Rim 1" Back 3/4"											Masonry	07660789432
											AC16-P	
6/4-3/4 x 2 x 5/8-11	6,000	5			NV16-Q	66253146925	NZ III 16-Q	66252838568	57A16-Q	66252825201		
Rim 1" Back 3/4"	6,000	5					NZ III 16-R	66252838566				
6/4-3/4 x 2 x 5/8-11	6,000	5	NZ IV 16-P	66252830765	NV14-R	66253344371			37C16-P	66252809609	Masonry	66252809609
Rim 1-1/2" Back 3/4"											C16-P	
	6,000	5			NV16-Q	66253198584			57A16-Q	66252809618		
	6,000	5			NVC16-Q	66253146922			57AC16-Q	66252809608		
Type 11 Flaring Cup with Steel Back												
4/3 x 2 x 5/8-11	9,070	10			NV16-Q	66253146917						
Rim 3/4" Back 3/4"												
5/3-13/16 x 2 x 5/8-11	7,260	10			NV16-Q	66253146920						
Rim 1" Back 3/4"												
6/4-13/16 x 2 x 5/8-11	6,000	5			NV14-R	66253344373			57A16-Q	66252809599		
Rim 1-1/2" Back 3/4"	6,000	5			NV16-Q	66253198586			57AC16-Q	66252809600		
	6,000	5			NVC16-Q	66253146929						

** Std.Pkg. = 50



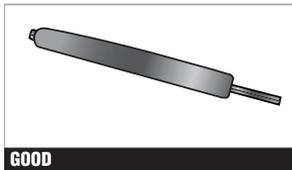
TIER: **BEST** **BETTER** **GOOD** **GOOD**
 TRADENAME: **NORTON NORZON PLUS** **NORTON BLUEFIRE** **NORTON GEMINI** **NORTON METAL**
 ABRASIVE: Zirconia Alumina Zirconia Alumina/Aluminum Oxide Aluminum Oxide Aluminum Oxide

SIZE (D x T x H)	MAX. RPM	STD. PKG.	SPEC	PART #	SPEC	PART #	SPEC	PART #	SPEC	PART #
Type 16 Cones										
1 x 3 x 3/8-24 (ME 107019)	36,290	10			NV20-S	66253344376	57A24-R	61463622342	Metal 24	66253349752
1-1/2 x 2-1/2 x 3/8-24 (ME 44436)	24,190	10					57A24-R	61463622349	Metal 24	66253349754
1-1/2 x 3 x 3/8-24 (ME 139029)	24,190	10			NV20-S	66253344377				
1-1/2 x 3 x 5/8-11 (ME 70535)	24,190	10	NZ IV 20-R	61463644231	NV20-S	66253344379	57A24-R	61463622190	Metal 24	66253349757
	24,190	1 V					57A24-R	66253325911		
1-3/4 x 3 x 3/8-24 (ME49226)	20,735	10					57A24-R	61463614503	Metal 24	66253349840
1-3/4 x 3 x 5/8-11 (ME 33432)	20,740	10					57A24-R	61463622195	Metal 24	66253349841
2 x 3 x 5/8-11 (ME 28229)	18,145	10	NZ IV 20-R	61463644232	NV20-S	66253344381	57A24-R	61463622218	Metal 24	66253349846
2-3/4 x 3-1/2 x 5/8-11 (ME 18265)	13,195	10			NV20-S	66253344383	57A24-R	61463622387	Metal 24	66253349855
3 x 3 x 5/8-11 (ME70537)	12,100	10							Metal 24	66243496885
Type 17 Cones, Square Tip										
1-1/2 / 1/2 x 3 x 3/8-24	24,190	10					57A24-R	61463622194	Metal 24	66253349753
2 / 1/2 x 3 x 5/8-11	18,145	10					57A24-R	61463615722	Metal 24	66253349845
Type 17R Cones, Round Tip										
2 / 3/4 x 3 x 5/8-11 (ME 151373)	18,145	10			NV20-S	66253344384				
Type 18 Plugs, Square Tip										
1-1/2 x 2-1/2 x 3/8-24	24,190	10					57A24-R	61463622217	Metal 24	66253349755
	24,190	1 V					57A24-R	66253325902		
1-1/2 x 2-1/2 x 5/8-11	24,190	10	NZ IV 20-R	61463644224	NV20-S	66253344385	57A24-R	61463622351		
	24,190	1 V					57A24-R	66253325905		
1-1/2 x 3 x 5/8-11	24,190	10			NV20-S	66253344386	57A24-R	61463622191	Metal 24	66253349838
	24,190	1 V					57A24-R	66253325909		
2 x 3 x 5/8-11	18,145	10	NZ IV 20-R	61463644234	NV20-S	66253344387	57A24-R	61463622219	Metal 24	66253349847
	18,145	10			NV24-S	66253344391				
2 x 4 x 5/8-11	18,145	10					57A24-R	61463622366	Metal 24	66253349850
Type 18R Plugs, Round Tip										
1-1/2 x 3 x 3/8-24	24,190	10					57A24-R	61463622192	Metal 24	66253349756
	24,190	1 V					57A24-R	66253325907		
2 x 3 x 5/8-11	18,145	10			NV20-S	66253344389	57A24-R	61463622220	Metal 24	66253349849

V = Vendible Package. IDEAL FOR VENDING MACHINES & SMALL JOBS .

Core Files

These files consist of coarse grit silicon carbide abrasive in a hard grade, resin-bonded to a reinforcing rod. Half-round in shape, they are a frequent choice for easy cleaning of rough castings.



TIER: **GOOD**
 BRAND: Norton
 ABRASIVE: Silicon Carbide

SIZE (T x W x L)	STD. PKG.	SPEC.	PART #
Stock Resinoid Core Files – Silicon Carbide			
1/2 x 1 x 10	5	37C24-SB	61463610314



Norton snagging wheels maximize your productivity in foundries, welding shops, fabrication facilities, steel mills, and ship yards.

Applications:	Removing unwanted metal on castings, removing flaws and cracks, removing gates, risers and parting lines
Size Range:	24" and 30" diameters in stock; other diameters available as made-to-order
Abrasive Grain:	Zirconia Alumina, Zirconia Alumina/Silicon Carbide blend, Aluminum Oxide
Shape:	Type O1 Straight
Reinforcement:	Strong fiberglass webbing and steel rings for maximum strength

FLOORSTAND SNAGGING WHEEL MATERIAL-TO-PRODUCT RECOMMENDATION GUIDE

CASTING TYPE		BEST Highest Productivity; Lowest Total Cost	BETTER Excellent Blend of Performance & Price	GOOD Consistent Performance; Low Initial Price
IRON	Gray	4ZF1434-R5B38S, ZI/25-R, ZI/26-Q	Charger Long Life	Gemini All Purpose
	Ductile / Malleable	4ZF1434-Q5B38S, ZI/25-R, ZI/26-Q	Charger Long Life	Gemini All Purpose
STEEL	Carbon and Low Alloy	4NZ1434-R5B38S	Charger Free Cut	Gemini All Purpose
	Stainless and High Alloy	4NZ1634-Q5B38S	Charger Free Cut	Gemini All Purpose

Note: Grade, Grit and Abrasive tuning may be necessary to obtain optimum performance

SWINGFRAME SNAGGING WHEEL MATERIAL-TO-PRODUCT RECOMMENDATION GUIDE

CASTING TYPE		BEST Highest Productivity; Lowest Total Cost	GOOD Consistent Performance; Low Initial Price
IRON	Gray	4ZF1234-R5B38S, ZI/25-R, ZI/26-Q	Gemini All Purpose
	Ductile / Malleable	4ZF1234-R5B38S, ZI/25-R, ZI/26-Q	Gemini All Purpose
STEEL	Carbon and Low Alloy	4ZF1434-R5B38S	Gemini All Purpose
	Stainless and High Alloy		Gemini All Purpose
ALUMINUM ALLOY		NZC142-R5B38S	
COPPER ALLOYS / BRASS / BRONZE		NZC142-R5B38S	

Note: Grade, Grit and Abrasive tuning may be necessary to obtain optimum performance

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	SUGGESTED CORRECTION
Poor stock removal	Insufficient pressure applied	Increase pressure to use all available power
	Wheel too coarse or hard	Use finer grit and/or softer grade wheel
	Inadequate abrasive	Try NorZon, 4ZF, or ZI/25 specification
Grinding costs too high	Wheel acting too soft	Use harder and/or coarser wheel
	Low performance specification	Try NorZon or ZI products
Wheel loading or glazing	Grade too hard	Try softer grade
	Grit too coarse	Try finer grit
	Dirty, scale-covered parts	Try NZC wheels
Wheels "dusty"	Wheel too soft	Try harder grade
Wheel doesn't hold corner or wheel spalling	Wheel too coarse	Use finer grit and/or 2 grit combination
	Wheel too soft	Use harder grade
Burning the workpiece	Wheel too hard	Use softer grade
	Wheel glazed or loaded	Dress the wheel face
	Grinding pressure too low	Increase grinding force
	Grinding pressure too high	Reduce grinding force
Surface finish too rough	Wheel too coarse	Try finer grit or try ZI/26 specification
	Wheel speed too slow	Try higher speed machine (Do not exceed maximum operating speed of wheel)
	Worn machine bearings	Rebuild machine
Vibration	Wheel worn out of round	Try truing the wheel
	Faulty flanges	Check flanges for flatness and burrs (see ANSI B7.1)
	Bent machine spindle	Check spindle run-out
	Worn machine bearings	Rebuild machine
Wheel stalls or slows	Grinding force too high	Reduce pressure or contact area
	Wheel too hard	Use softer grade wheel
	Machine power too low	Replace machine with higher power grinder

FLOORSTAND AND SWINGFRAME SNAGGING

4ZF, 4NZ, ZI, AND NZC ZIRCONIA ALUMINA

BEST CHOICE FOR DEMANDING APPLICATIONS

FEATURES

- 4ZF – zirconia alumina grain for long life
- 4NZ – zirconia alumina grain for sharpness
- ZI – zirconia alumina grain stays sharper, longer
- NZC – zirconia alumina and silicon carbide blend

BENEFITS

- Engineered for high-pressure, heavy-duty, snagging operations, particularly on iron
- Exceptional wheel life
- Developed for low- to medium-pressure operations, especially on steel and steel castings
- Exceptionally high cut rate
- The most operator-friendly wheels
- The choice for iron castings: ZI/25 for tough metal removal, ZI/26 for finer surface finish
- Ideal for dirty, scale-covered castings

CHARGER ZIRCONIA ALUMINA

BETTER CHOICE FOR STRONG PERFORMANCE TO PRICE RATIO

FEATURES

- Strong zirconia alumina abrasive

BENEFITS

- Very good cut rate and life

5ZF ZIRCONIA ALUMINA AND GEMINI ALUMINUM OXIDE

GOOD CHOICE FOR NUMEROUS SMALL JOBS

FEATURES

- Gemini – versatile aluminum oxide formulation
- Low initial price
- 5ZF – zirconia alumina

BENEFITS

- Works well with a variety of machines, horsepower, and operations
- The choice for initial-price-conscious end-users
- Ideal for lower horsepower or low-pressure applications

SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BEST		BETTER		GOOD	
			SPEC.	PART #	SPEC.	PART #	SPEC.	PART #
Type 01 Straight								
24 x 3 x 12	1,990	1	4ZF1234-R5B38S	69083166310			5ZF14-QS	69083166858
HS Steel Rings with Fine Centers, S Webs	1,990	1	ZI/25-R	66253119637			Gemini All Purp.	69083167173
30 x 2 x 12	1,595	1	4NZ1634-Q5B38S	69210421412	Charger Free Cut	69210421417	5ZF14-R	69210467105
HS Steel Rings with Fine Centers, S Webs	1,595	1	4ZF1434-R5B38S	69210466458	Charger Long Life	69210421418	Gemini All Purp.	69210417463
	1,595	1	4ZF1634-Q5B38S	69210466460				
	1,595	1	ZI/25-R	66253119636				
	1,595	1	ZI/26-Q	66253119638				
	1,595	1	NZC142-R5B38S	69210421414				

For your safety: all floorstand and swingframe wheels have strong fine centers, steel rings and high-strength fiberglass reinforcement construction.

TECH TIP

- Always ensure proper mounting of floorstand and swingframe wheels by mounting with arrow down as marked on wheel
- Always use safety guard
- Always run wheel for 1 minute before grinding
- For optimum performance, ensure adequate air pressure and air volume when using pneumatic machines
- Use constant surface foot per minute machines for highest efficiency
- Do not overdress the wheel face
- Avoid loading or glazing by changing the contact angle
- Use pressure assist whenever possible to obtain maximum cut rate



It is the user's responsibility to refer to and comply with ANSI B7.1

no short cuts taken here
**SATISFY ALL YOUR
CUT-OFF REQUIREMENTS**

From small diameter portable cut-off wheels to large diameter foundry cut-off wheels; from portable high-speed gas saw wheels to precision toolroom and Metlab wheels, our Norton offering encompasses the broadest range of applications.



Work Smarter, Not Harder

The fastest cutting wheels in today's market; the ultimate choice for highest productivity on steel, stainless steel, and all ferrous metals.



A Wheel for Every Chop Saw Job

Free Cut side-reinforced wheels for large cross-sections, Long Life wheels for small cross-sections and centrally-reinforced non-binding wheels for burr and burn-free cuts.



Performance on Fire

No job is too tough for our FoundryX wheels to tackle. Designed with tough, durable abrasives, bonds and reinforcement types specific to foundry machine parameters and materials.

SMALL DIAMETER REINFORCED CUT-OFF

The Norton small diameter cut-off wheel line consists of Type 01/41 straight and Type 27/42 depressed center cut-off wheels from 1-1/2" to 9" diameters. These wheels come in ultra thin .035 for quick burn-free and burr-free cutting to .125" for more durable applications. All are reinforced for the demanding nature of portable cut-off.

Applications: Cutting sheet metal, cutting pipe, and metal fabrication
 Size Range: 1-1/2" - 9" diameter
 Thickness Range: .035, .040, .045, .050, .060, 1/16, .090, 3/32 and .125
 Abrasive Grain: Ceramic Alumina/Zirconia Alumina, Zirconia Alumina/Aluminum Oxide, Aluminum Oxide, Silicon Carbide, Diamond
 Shape: Type 01/41 Straight and Type 27/42 Depressed Center
 Machine Used:



TYPE-TO-APPLICATION RECOMMENDATION GUIDE

Wheel Type/Thickness	Applications	
TYPE 01/41 	Type 01/41 straight cut-off wheels are designed for portable cut-off tool applications. All are supplied with full fiberglass reinforcing.	
.035, .040, .060, and 1/16	Where fast cutting and low kerf loss are desired	■
.125	For tough cutting and notching applications where stability is important	■
TYPE 01/41 RIGHTCUT 	Type 01/41 RightCut straight cut-off wheels are designed for use on right angle grinder cut-off applications. All are supplied with full fiberglass reinforcing.	
.035, .040, .045, .050, 1/16	Where fast cutting and low kerf loss are desired	■
3/32	For tough cutting and notching applications where stability is important	■
TYPE 27/42 RIGHTCUT 	Type 27/42 RightCut depressed center cut-off wheels are designed for use on right angle grinder cut-off applications. Their depressed center shape provides a recess for the hub, which allows flush cutting. All are supplied with full fiberglass reinforcing.	
.040, .045, 1/16	Where fast cutting and low kerf loss are desired	■
3/32, .125	For tough cutting and notching applications where stability is important	■

HOW TO PICK THE RIGHT BOND TYPE

All Purpose	Unmarked	Where an excellent blend of cut rate and life is needed
Free Cut	FC	Where fast stock removal is needed, or the application only allows low-pressure or under-horsepowered grinders
Long Life	LL	Where durability is needed due to severe application, and when horsepower of the grinder allows heavy pressure
Contaminate Free	INOX/SS	Contain <0.1% iron, sulfur or chlorine for rust-free and corrosion-free results; will not contaminate stainless steel
Aluminum	ALU	Specially formulated bond for reduced loading and surface contamination while cutting aluminum and soft materials

SAFETY

Dangerous Pairing: Die Grinders and Cut-off Wheels

While die grinders and cut-off tools may look similar, they are not interchangeable. Small diameter cut-off wheels can be used only on portable cut-off tools. Several crucial differences exist between the two handheld machines.

- Small diameter cut-off wheels must be used on portable cut-off tools with guards for the safety of the operator and bystanders. Also, portable cut-off tool guards prevent use of an oversize wheel.
- These cut-off wheels must be mounted between proper flanges on portable cut-off tools as described in the national safety standard for abrasive wheels, ANSI B7.1. Die grinders make use of a collet for mounting.
- All cut-off wheels must be used at or below their maximum operating speed, marked clearly on the side of the wheel. Die grinders operate above cut-off wheel speeds. Excessive speed can result in breakage and serious personal injury.



It is the user's responsibility to refer to and comply with ANSI B7.1

SMALL DIAMETER REINFORCED CUT-OFF

MATERIAL-TO-PRODUCT RECOMMENDATION GUIDE

	BEST Highest Productivity; Lowest Total Cost	BETTER Excellent Blend of Performance & price	GOOD Consistent Performance; Low Initial Price
CUTTING			
Mild Carbon / High Tensile Steel	Norton NorZon Plus	Norton BlueFire	Norton Metal
Stainless Steel / Alloys	Norton NorZon Plus	Norton BlueFire INOX/SS	Norton Gemini INOX/SS
Contaminate Free		Norton BlueFire INOX/SS	Norton Gemini INOX/SS
Cast Iron	Norton NorZon Plus	Norton BlueFire	Norton Gemini
Aluminum / Bronze / Brass			Norton Gemini ALU
Asphalt / Brick / Concrete			Norton Masonry

CROSS REFERENCE GUIDES

Type 01/41 .035 - .125 Reinforced Cut-off Wheels for Portable Cut-off Tools



	TOTAL PERFORMANCE ←			INITIAL PRICE →	
	BEST	BETTER	GOOD		
NORTON	NorZon Plus	BlueFire	Gemini Free Cut	Gemini Long Life	Metal
Brilliant	—	Brill-Max ZA	—	—	Safe-Tex FC, LL
Bullard	—	ZA46T, ZA60T	TA36T	TA46T, TA60T	A36T, A60T Comp.
Camel	—	ZA60-TBF	A36 RBF	A60 RBF	Fast Cut RBF
Flexovit	Flexon Fast Cut A46, 60	—	High Perf Fast Grind A36	High Perf Fast Cut A36, 46, 60	—
Pearl	—	SRT, Zirconia	—	Premium	Silver Line
Pferd	—	—	—	—	PSF-A
Sait	Saittech	—	A60S	A24R, A36T, A60T	—
Spedecut	—	—	—	—	A46, 60 TBXX
Walter	—	—	A24 ZIP	A60 ZIP	—

Type 01/41 and Type 27/42 .035 - .125 Reinforced Cut-off Wheels for Right Angle Grinders



	TOTAL PERFORMANCE ←			INITIAL PRICE →		SPECIALITY →	
	BEST	BETTER	GOOD			GOOD	
NORTON	NorZon Plus	BlueFire	Gemini Free Cut	Gemini	Metal	Gemini ALU	Gemini INOX/SS
Brilliant	—	—	Brill-Blade Extra FC	Brill-Blade Heavy Duty	Hornet Stinger	—	—
Bullard	—	ZA60T	SGA60U	TA46T, TA60T, TA60U	A46T, A60T Comp.	AL46N	—
Camel	—	ZA Quickie Cut	A36-S-BF	Super Quickie Cut	Quickie Cut	A46 Quickie Cut	A60-T-BF, WA60R Quickie Cut
Flexovit	—	—	Razorblade A60SST	Razorblade A24T, 30V, 36T	—	Razorblade A30Q	—
Metabo	—	A 60 XP Super Slicer	—	A 60 TX Slicer-Plus	A 60 TZ Slicer	—	—
Pearl	—	Redline Max Slimcut	—	Slimcut	Slimcut Pro-V, Silverline	—	—
Pferd	—	SGP-ZA-Q-INOX	—	SG-A-S, SGP-A-T	PSF-A-P	S-G-N-ALU	SG-A-R-INOX, SGP-A-S-INOX
Sait	Saittech	Z-tech	SAIT.M.X	A60S	—	A46N	XA46R
SpedeCut	—	—	—	—	A46, 60 TBXX	—	—
Walter	—	—	A-30-ZIP	A-60-ZIP	—	A-60-ZIP-ALU	A60-SS-ZIP

SMALL DIAMETER REINFORCED CUT-OFF NORTON NORZON PLUS CERAMIC/ZIRCONIA BLEND

BEST CHOICE FOR HIGHEST PRODUCTIVITY FOR STEEL, STAINLESS STEEL AND ALL FERROUS METALS



FEATURES

- Norton SG (ceramic alumina) / NorZon (zirconia alumina) grain combination
- Highly-advanced bond system
- RightCut right angle grinder wheels

BENEFITS

- Fastest cutting wheel available on the market, up to 3X faster cutting versus aluminum oxide
- 3X – 10X life versus aluminum oxide wheels on carbon steel, stainless and cast iron
- Noticeably longer life and faster cut rate
- Less pressure required for first cut

NORTON BLUEFIRE ZIRCONIA ALUMINA/AO BLEND

BETTER CHOICE FOR STAINLESS STEEL, CARBON STEEL, ALLOYS AND GRAY IRON



FEATURES

- A blend of R&D advanced chemistry and shaped zirconia alumina abrasive and premium aluminum oxide grain
- IMPROVED PERFORMANCE! RightCut right angle grinder wheels

BENEFITS

- 2-3 times the life of aluminum oxide wheels
- Broad utility from light-to heavy-pressure applications
- Excellent performance-to-price ratio for lower total grinding costs
- Over 50% more life; the true choice for broad versatility and better value, to lower production costs
- Less pressure required for first cut

NORTON GEMINI ALUMINUM OXIDE

GOOD, VERSATILE CHOICE FOR STEEL AND FERROUS METALS



FEATURES

- Quality, versatile aluminum oxide
- Gemini Contaminate-Free INOX/SS
- .040 and .045 ultra-thin Gemini RightCut right angle grinder Type 01/41 straight and T27/42 depressed center cut-off wheels

BENEFITS

- Consistent performance at a competitive price
- Contain <0.1% iron, sulfur or chlorine for rust-free and corrosion-free results; will not contaminate stainless steel
- Precise cutting; more stability and a narrower pass
- Up to 70% longer life and 20% faster cut rate than standard aluminum oxide wheels – for substantial savings
- Require less pressure, providing increased operator comfort

NORTON METAL ALUMINUM OXIDE

GOOD CHOICE FOR GRINDING ALLOYS, METALS, STEELS, AND FERROUS METALS



FEATURES

- Quality aluminum oxide
- Low initial cost per wheel

BENEFITS

- Consistent performance at a competitive price
- Ideal for small-volume jobs where performance need not be measured

NORTON DIALAST DIAMOND WHEELS

BEST FOR METAL PLATE, PIPE, TUBING, CAST IRON, CARBON AND MILD STEEL, FOUNDRY AND WELDING APPLICATIONS, AND CERAMICS



FEATURES

- A combination of high-quality diamond and advanced brazed single-layer bonding technology
- Environmentally-friendly grinding

BENEFITS

- Extra-long life versus conventional abrasives or other vacuum-brazed diamond tools
- Retains the diamond grains and wheel shape for full life with low sparks, while keeping a continuous grinding depth for exceptional wheel life
- Less blade changes reduce downtime and labor costs
- Generate minimal dust for less clean-up and safer working conditions

SMALL DIAMETER REINFORCED CUT-OFF

TIER: BEST	BETTER	BETTER	GOOD	GOOD	GOOD
TRADENAME: NORTON NORZON PLUS	NORTON BLUEFIRE	NORTON A60-OBNA2	NORTON GEMINI	NORTON GEMINI LONG LIFE	NORTON METAL
SHAPE: Type 01/41	Type 01/41	Type 01/41	Type 01/41	Type 01/41	Type 01/41
ABRASIVE: Ceramic Alumina/ Zirconia Alumina	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
MATERIAL: STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #	PART #	PART #
.035", .040", .060", 1/16" and .125" Type 01/41 – Cut-off								
1-1/2 x .035 x 1/16	40,745	25			66243427764			
1-1/2 x .035 x 1/8	40,745	25			66243427831			
1-1/2 x .035 x 1/4	40,745	25			66243427875			
2 x .035 x 1/8	30,560	25				66243411392 FC		
2 x .035 x 1/4	30,560	25			66243428014	66243411393 FC		
2 x .035 x 3/8	30,560	25				66243411394 FC		
2 x .060 x 1/8	30,560	25			66243428041			
2 x 1/16 x 1/4	30,560	25				66243411395 FC		
2 x 1/16 x 3/8	30,560	25				66243411396 FC		
2 x .125 x 1/4	30,560	25				66243411402 FC		
2 x .125 x 3/8	30,560	25				66243411403 FC		
2-1/2 x .035 x 1/8	30,560	25			66243528476			
2-1/2 x .035 x 1/4	30,560	25			66243528425			
2-1/2 x 1/16 x 1/4	30,560	25				66243510640 FC		
2-1/2 x 1/16 x 3/8	30,560	25				66243510641 FC		
3 x .035 x 1/4	25,465	25	66243510668		66243528573	66243510627 FC		
	25,465	25*	66243531753 5-Pk					
3 x .035 x 3/8	25,465	25	66243510669	66252843174	66243528574	66243510628 FC	66243537271 LL	07660789451
	25,465	25*		66243534821 5-Pk				
3 x 1/16 x 1/4	25,465	25	66243510670		66243528471	66243510645 FC	66243510649 LL	
3 x 1/16 x 3/8	25,465	25	66243510671	66252843175	66243528552	66243510647 FC	66243510648 LL	66252835553
	25,465	25	66243510835 LL					
	25,465	25*						07660747767 5-Pk
	25,465	100						07660789012
	25,465	10-Pk+						66252843624 5 Whls & 1 Mandrel/Pack
3 x .125 x 1/4	25,465	25				66243510650 FC	66243510652 LL	
3 x .125 x 3/8	25,465	25	66243510673			66243510651 FC	66243510653 LL	
4 x .035 x 1/4	15,300	25			66243529606			
	19,100	25				66243510629 FC		
4 x .035 x 3/8	19,100	25	66243510675	66252843173	66243529621	66243510630 FC	66243537273 LL	07660789453
4 x .035 x 1/2	19,100	25			66243529622			
4 x .035 x 3/4	19,100	25			66243529609			
4 x .040 x 3/8	19,100	25			66243529516			
4 x 1/16 x 1/4	19,100	25	66243510676			66243510654 FC		
4 x 1/16 x 3/8	19,100	25	66243510677	66252843171		66243510655 FC	66243510657 LL	66252843848
4 x 1/16 x 5/8	19,100	100			66243527827 FabCut			
4 x .125 x 1/4	19,100	25				66243510658 FC		
4 x .125 x 3/8	19,100	25	66243510841	66252843172		66243510659 FC	66243510661 LL	
	19,100	25	66243510680 LL					
Drill Mount Mandrel		5						07660747769+

+ For mounting 2" and 3" x 3/8" hole cut-off wheels on to a drill
 * 5-wheel Job Packs; wheels are packed 5 wheels/Pack, with 5 Job Packs/carton. Order per each wheel in standard package quantities of 25. Order in multiples of 25.
 +- Order per number of pack, in multiples of 10 packs. Priced per pack.

WHEEL DESCRIPTION CODES			
BLANK = All Purpose	FC = Fast Cut	INOX/SS = Contaminant Free	LL = Long Life
■ = Masonry	■ = Stainless	■ = Steel / Metal	

SMALL DIAMETER REINFORCED CUT-OFF



TIER:	BEST	BEST	BETTER	GOOD	GOOD
TRADENAME:	NORTON NORZON PLUS RIGHTCUT	NORTON DIALAST RIGHTCUT	NORTON BLUEFIRE RIGHTCUT	NORTON GEMINI RIGHTCUT	NORTON METAL RIGHTCUT
SHAPE:	Type 01/41	Type 01/41	Type 01/41	Type 01/41	Type 01/41
ABRASIVE:	Ceramic Alumina/ Zirconia Alumina	Diamond	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
MATERIAL:	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #	PART #
.035", .040", .045", .050", 1/16, and 3/32" Type 01/41 – RightCut Cut-off							
4 x .040 x 5/8	15,280	25					07660701616
4 x .045 x 5/8	15,280	25				66243527956	
4 x 3/32 x 5/8	15,280	25				66243527955	
4-1/2 x .035 x 7/8	13,580	25					66252843846
4-1/2 x .040 x 7/8	13,580	25				66252843225	07660701617
	13,580	50					66253370222
	13,580	250•					66252840001 250-Pk
	13,580	25*					66252842158 5-Pk
4-1/2 x .045 x 7/8	13,580	25	66252830730			66252823602	
	13,580	25				66252841994 ALU	
	13,580	25				66252841997 INOX/SS	
	13,580	250•				66252841213 250-Pk	
	13,580	25*				66252842160 5-Pk	
4-1/2 x .050 x 7/8	13,580	1		66253370016			
4-1/2 x 1/16 x 7/8	13,580	25			66252843208		66252843845
	13,580	25*			66252842159 5-Pk		
	13,580	250•			66253371660		
4-1/2 x 3/32 x 7/8	13,580	25				66252823599	
5 x .040 x 5/8	12,225	25					66252843847
5 x .040 x 7/8	12,225	25				66252843226	07660701618
5 x .045 x 7/8	12,225	25	66252830731			66252823603	
	12,225	25				66252841995 ALU	
	12,225	25				66252841998 INOX/SS	
	12,225	250•				66252841214 250-Pk	
	12,225	25*				66252842170 5-Pk	
5 x .050 x 7/8	12,225	25	66252809829 NZ ThinCut				
	12,225	1		66253370017			
5 x 1/16 x 7/8	12,225	25			66252843209		
	12,225	250•			66253371661		
	12,225	25*			66252842169 5-Pk		
5 x 3/32 x 7/8	12,225	25				66252823600	
6 x .040 x 7/8	10,185	25					07660702757
	10,185	50					66253370223
	10,185	250•					66252841212 250-Pk
6 x .045 x 7/8	10,185	25	66252842008			66252823604	
	10,185	25				66252841996 ALU	
	10,185	25				66252841999 INOX/SS	
	10,185	250•				66252841215 250-Pk	
	10,185	25*			66252842174 5-Pk	66252842175 5-Pk	
6 x .050 x 7/8	10,185	1		66253370018			
6 x 1/16 x 7/8	10,185	25			66252843210		
	10,185	250•			66253371662		
6 x 3/32 x 7/8	10,185	25				66252823601	
7 x .045 x 7/8	8,600	25				66252832323	
	8,600	20				66252842000 INOX/SS	
7 x 1/16 x 7/8	8,600	25	66252900652				
	8,600	1		70184694055			
9 x .060 x 7/8	6,600	1		70184694056			

RightCut wheels are to be used for cutting only

* 5-wheel Job Packs; wheels are packed 5 wheels/Pack, with 5 Job Packs/carton. Order per each wheel in standard package quantities of 25. Order in multiples of 25.

• Bulk packed 250 Wheels/carton; 5 inner boxes of 50 wheels each. Order in multiples of 250 wheels.



BlueFire RightCut Right Angle Grinder Cut-off Wheels

- Double your production with the improved performance of Norton BlueFire RightCut right angle grinder wheels
- Gain over 50% more wheel life with our advanced-chemistry blend of zirconia and aluminum oxide abrasives
- Excellent performance/price ratio, with broadest versatility, guaranteed to lower your production costs
- Available in Type 01/41 straight and Type 27/42 depressed center wheels.

And, that's money in the bank!

SMALL DIAMETER REINFORCED CUT-OFF



TIER:	BEST	BETTER	GOOD	GOOD
TRADENAME:	NORTON NORZON PLUS	NORTON BLUEFIRE	NORTON GEMINI	NORTON METAL
SHAPE:	Type 27/42	Type 27/42	Type 27/42	Type 27/42
ABRASIVE:	Ceramic Alumina/ Zirconia Alumina	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
MATERIAL:	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL
			ALUMINUM	

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #
.040, .045, 1/16" – RightCut Cut-off – Type 27/42						
4 x .045 x 5/8	15,280	25			66252842180	07660705249
4-1/2 x .040 x 5/8-11	13,580	10			66252843227	
4-1/2 x .045 x 5/8-11	13,580	10	66252842006		66252842025	
	13,580	10			66252841913 INOX/SS	
4-1/2 x .045 x 7/8	13,580	25	66252843320		66252842026	66252843604
	13,580	25			66252841912 INOX/SS	
	13,580	25			66252841909 ALU 36	
	13,580	25*			66252842161 5-Pk	
	13,580	250			66253370065 250-Pk	
4-1/2 x 1/16 x 5/8-11	13,580	10		66252843223		
4-1/2 x 1/16 x 7/8	13,580	10		66252843219		
5 x .040 x 5/8-11	12,225	10			66252843228	
5 x .045 x 5/8-11	12,225	10			66252841939	
5 x .045 x 7/8	12,225	25	66252843329		66252842036	66252843849
	12,225	25			66252841914 INOX/SS	
	12,225	25			66252841910 ALU 36	
	12,225	25*			66252842171 5-Pk	
	12,225	250			66253370066 250-Pk	
5 x 1/16 x 7/8	12,225	25		66252843220		
6 x .045 x 5/8-11	10,185	10	66252842007		66252830587	
6 x .045 x 7/8	10,185	25	66252842009		66252842202	66252842015
	10,185	25			66252841916 INOX/SS	
	10,185	25			66252841911 ALU 36	
	10,185	25*			66252842176 5-Pk	
	10,185	250			66253370067 250-Pk	
6 x 1/16 x 7/8	10,185	25		66252843221		
7 x .045 x 5/8-11	8,600	10			66252841919 INOX/SS	
7 x .045 x 7/8	8,600	20			66252912626	
	8,600	20			66252841918 INOX/SS	
7 x 1/16 x 7/8	8,600	10				07660705251
9 x 1/16 x 5/8-11	6,600	10			66253019115	
9 x 1/16 x 7/8	6,600	10			66253017734	
<i>RightCut wheels are to be used for cutting only.</i>						
3/32", .125" – Cut-off – Type 27/42						
4 x .125 x 3/8	15,280	25	66252842001			
4-1/2 x 3/32 x 5/8-11	13,580	10			66252841903	
	13,580	10			66252842027 INOX/SS	
4-1/2 x 3/32 x 7/8	13,580	25			66252841940	
	13,580	25			66252842028 INOX/SS	
	13,580	25			66252843582 1-2-3	
4-1/2 x .125 x 5/8-11	13,580	10	66252843321		66252843588	
4-1/2 x .125 x 7/8	13,580	25	66252843322		66252843589	
5 x 3/32 x 5/8-11	12,225	10			66252841904	
5 x 3/32 x 7/8	12,225	25			66252842037 INOX/SS	
	12,225	25			66252843587 LL	
	12,225	25			66252843583 1-2-3	
5 x .125 x 7/8	12,225	25			66252843595	
6 x 3/32 x 5/8-11	10,185	10			66252841905	
6 x 3/32 x 7/8	10,185	25			66252841906	
	10,185	25			66252832487 INOX/SS	
6 x .125 x 5/8-11	10,185	10			66252841192	
6 x .125 x 7/8	10,185	25			66252842021	
7 x 3/32 x 5/8-11	8,600	10			66252841907	
7 x 3/32 x 7/8	8,600	20			66252841908	
	8,600	20			66252914638 INOX/SS	
7 x .125 x 5/8-11	8,600	10	66252912625			
7 x .125 x 7/8	8,600	20	66252912624		66252900619	
9 x 3/32 x 5/8-11	6,600	10		66252842378		
9 x 3/32 x 7/8	6,600	20		66252842343		

*These wheels are to be used for cutting only. * 5-wheel Job Packs; wheels are packed 5 wheels/Pack, with 5 Job Packs/carton. Order per each wheel in standard package quantities of 25. Order in multiples of 25.*

SMALL DIAMETER REINFORCED CUT-OFF



TIER:	BEST	BETTER	GOOD	GOOD	GOOD
TRADENAME:	NORTON DIALAST	NORTON CHARGER	NORTON GEMINI	NORTON METAL	NORTON MASONRY
SHAPE:	Type 01/41	Type 01/41	Type 01/41	Type 01/41	Type 01/41
ABRASIVE:	Diamond	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Silicon Carbide
MATERIAL:	STAINLESS	STEEL/METAL	STEEL/METAL	STEEL/METAL	MASONRY

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #	PART #
Type 01/41 – Circular Saw							
6 x .035 x 5/8	10,185	25			66252809714		
6 x 1/16 x 5/8	10,185	25			66252809718		
6-1/2 x .125 x DM-5/8	9,405	10				07660789098	07660789089
7 x 1/16 x 5/8	8,730	25			66252905957		
7 x .060 x 7/8	8,600	1	70184694055				
7 x 1/8 x DM-5/8	8,730	25				07660789097	07660789088
8 x 1/16 x 5/8	7,640	25		66253017771 LL	66253007025		
	7,640	10			66253017795		
8 x 1/8 x DM-5/8	7,640	10				07660789096	07660789086
9 x .060 x 7/8	6,600	1	70184694056				

DM Denotes Diamond Mount; 5/8" hole bushings included



WHEEL DESCRIPTION CODES

BLANK = All Purpose	FC = Fast Cut	INOX/SS = Contaminant Free	LL = Long Life
■ = Masonry	■ = Stainless	■ = Steel / Metal	



Dialast Diamond: Introducing The Last Cut-Off and Depressed Center Wheels Standing!

Metal working demands tools that will cut or grind fast, throw a minimum of sparks, and above all, LAST. Norton DiaLast diamond cutting and grinding wheels give the operator everything needed to get the job done right, the very first time:

- Right angle grinder, circular saw, and chop saw blades for cutting steel, metal studs, stainless steel, nonferrous materials, tile, brick, plastic, and much more.
- DiaLast depressed center cutting and grinding wheels are an excellent choice on steel, cast iron, ductile pipe, tubing, and metal plate when high stock removal is desired

To learn more, see DiaLast depressed center (page 11) and cut-off wheel Features and Benefits (page 19).

HIGH-SPEED REINFORCED CUT-OFF

Norton high-speed cut-off abrasive wheels provide the industry's leading performance in all high-speed gas and electric-powered applications.

- Applications: Metalworking: steel, stainless, ductile, cast iron, rail steel and metal decking
 Non-Metal Building Materials: concrete, brick, masonry, asphalt aggregate, stone and schedule 40 and 80 PVC pipe
 Rescue and Demolition: steel, acrylic, fiberglass, rubber, glass, wood, concrete, brick and asphalt
- Size Range: 12" – 16" diameter
- Thickness Range: 1/8" and 5/32"
- Abrasive Grain: Aluminum Oxide, Silicon Carbide, Silicon Carbide/Aluminum Oxide Blend
- Shape: Type 01/41 Straight
- Reinforcement: Wheels are offered in standard two-layer reinforcement as well as three-layer reinforcement for higher-speed saws and heavy-duty applications
- Arbor: Wheels are offered with patented universal arbor that accommodates both 20mm and all other machines with 1" arbors
- Machine Used:



MATERIAL / APPLICATION-TO-PRODUCT RECOMMENDATION GUIDE

Icon		Application
	Metal	High-performance aluminum oxide grain wheels designed for general purpose cutting of all steel and stainless parts including rebar, steel pipe, structural steel, sheet metal, cable and small to medium diameter solid pieces.
	Metal Decking	High-performance aluminum oxide abrasive combined with a thicker wheel (5/32") that stands up to the sharp edges of sheet metal and roof decking.
	Ductile/Cast Iron	A special blend of silicon carbide abrasive for cutting and aluminum oxide abrasive for life, designed to cut ductile and cast iron pipe, concrete-lined water pipes, sewer construction and heavy duty PVC.
	Rescue	For ventilation, forcible entry, rescue and demolition. A versatile abrasive formula that can be used on a wide range of materials including all types of metals and masonry.
	Concrete	Coarse grit silicon carbide abrasive provides a low initial cost solution for cutting brick, block, concrete or other masonry materials. For higher-production applications that require optimum speed of cut and product life, please see our complete selection of high-speed diamond wheels in our Norton Construction diamond product line.
	Asphalt	A special blend of extra coarse silicon carbide abrasive grains provides a low initial cost solution for cutting asphalt, green concrete, asphalt over concrete, a wide range of aggregates and abrasive materials. For higher-production applications that require optimum speed of cut and product life, please see our Norton Construction diamond blade product offering in the Construction Product section of this catalog -and the complete offering in our "Diamond, Abrasives and Equipment for the Construction Market Catalog" #7719 found on www.nortonabrasives.com

HOW TO PICK THE RIGHT REINFORCEMENT

	Two full layers of reinforcing are offered for lower power machines, and light-to-medium applications where speed of cut is the primary selection criterion.
	Three full layers of reinforcing are recommended for high-speed, high-power machines where the application is heavy-duty, and durability is the primary selection criterion.



Universal Arbor

Two Blade Sizes in One

Our Norton patented 1"/20mm knock-out arbor fits all gas and electric high-speed saws. A 20mm bushing is pre-mounted into the 1" molded arbor hole. The wheel, with the 20mm bushing, can be mounted directly on any 20mm arbor high-speed saw. With the bushing removed, exposing the 1" arbor hole, the wheel can be mounted on any 1" arbor high-speed saw. Combining this arbor, with heavy-duty triple reinforcing results in a higher performing, extra strong, longer lasting cutting wheel. Once the 20mm bushing is removed, it cannot be replaced.

CROSS REFERENCE GUIDE

SPECIALITY

	GOOD				
NORTON	Gemini Metal	Gemini Metal Decking	Gemini Ductile	Gemini Concrete	Gemini Asphalt
Abmast	A 24 R, Kompetitor Metal	A 24 T	AC 24 R, Kompetitor Ductile Iron	C 24 R, Kompetitor Concrete	C 16 T, Kompetitor Asphalt
Brilliant	Metal/Stainless	—	—	Concrete/Masonry	—
Bullard Blaze & Road Warrior	A24R, ZA24Q, The Competitor	TA24R	AC24R	C24R, The Competitor	CC20R
Camel	A24-R	A24-T	AC24-R	C24-R	C16-U
Flexovit	A24/30SB	A24TB	AC24SB	C30UB	C16UB
Husqvarna	Blue XHS, Blue QMS-CM, Blue EHS	Grey QMS-CM	Green QMS-CM, Green EHS	Red XHS, Red QHS-CM, Red EHS	Black QMS-AS
Pearl	SRT, Premium A36S, Silver Line A30R	—	AC30S	Premium C36S, Silver Line C24R	—
Pferd	A 24 R SG	A 24 Q SG-RAIL	AC 24 Q SG	C 24 R SG	—
Sait	A24R, A30S, XFC	Brute	Ductile	C24R	Big M.A.C, XFC
Tyrolit	A30P, A30BF	—	AC24, AC30BF	1C24, C30BF	—
Virginia Abrasives	Metal	—	Ductile	Concrete	Asphalt
Walter	A-24	—	—	—	—

TIER: GOOD	GOOD	GOOD	GOOD
BRAND: Norton	Norton	Norton	Norton
TRADENAME: GEMINI METAL HD	GEMINI METAL	GEMINI METAL DECKING	GEMINI RESCUE
SHAPE: Type 01/41	Type 01/41	Type 01/41	Type 01/41
ABRASIVE: Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Silicon Carbide/Aluminum Oxide Blend
REINFORCING: 3 Layers	2 Layers	2 Layers	2 Layers
MATERIAL:			

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #
Type 01/41 Cut-off – for Gas & Electric-Powered Saws						
12 x 1/8 x 1" / 20mm	6,300	10	66252836708	66252837838		
14 x 1/8 x 1" / 20mm	5,400	10	66252835386	66252837841		66243578262
14 x 5/32 x 1" / 20mm	5,400	10			66252832521	
16 x 1/8 x 1" / 20mm	4,800	10		66252830886		
16 x 1/8 x 1"	4,800	10				

See additional Rail Cut wheels on the next page for larger-volume jobs.

TIER: GOOD	GOOD	GOOD	GOOD	GOOD
BRAND: Norton	Norton	Norton	Norton	Norton
TRADENAME: GEMINI DUCTILE HD	GEMINI DUCTILE	GEMINI CONCRETE HD	GEMINI CONCRETE	GEMINI ASPHALT
SHAPE: Type 01/41	Type 01/41	Type 01/41	Type 01/41	Type 01/41
ABRASIVE: Silicon Carbide / Aluminum Oxide Blend	Silicon Carbide / Aluminum Oxide Blend	Silicon Carbide	Silicon Carbide	Silicon Carbide
REINFORCING: 3 Layers	2 Layers	3 Layers	2 Layers	2 Layers
MATERIAL:				

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #
Type 01/41 Cut-off – for Gas & Electric-Powered Saws						
12 x 1/8 x 1" / 20mm	6,300	10		66252837840		66252837839
14 x 1/8 x 1" / 20mm	5,400	10	66252835388	66252837843	66252835387	66252837842
16 x 1/8 x 1" / 20mm	4,800	10				70184623029
						70184670243
						70184672877

The Norton RailCut line is designed for high-speed fixtured hydraulic or gas-powered rail saws.

Applications: Fixed rail track cutting
 Size range: 14" and 16" diameter
 Thickness range: 1/8"
 Grit range: 14 – 16
 Abrasive grain: Zirconia Alumina/Aluminum Oxide Blend, Zirconia Alumina, and Aluminum Oxide
 Shape: Type 01/41 Straight
 Reinforcement: Side reinforced with R (rough) sides
 Speed rating: All wheels are rated for 20,000 SFPM applications
 Machines Used:



CROSS REFERENCE GUIDE AND MACHINE-TO-PRODUCT RECOMMENDATION GUIDE

	BEST	BETTER	GOOD	GOOD
NORTON	RailCut X	RailCut NorZon III	RailCut A30X	RailCut Metal
Bullard Abrasive	Trackmaster Pro ZA24 Q-BF (Blue)	Trackmaster Pro ZA24 Q-BF (Blue)	Trackmaster A30 R-BF (Red)	
DiaTool				RailMaster Rail Cut 27
Flexovit USA	-		A30-PB	
Giesmar	AM303-R	AM303-R	NR242-Q	NR242-Q
Klingspor	A 24 SX Special	A 24 SX Special	-	
Portaco	A30 R-BF	A30 R-BF	-	
Racine Kwik Kut	A24R	A24R	-	

	BEST Highest Productivity; Lowest Total Cost	BETTER Excellent Blend of Performance & Price	GOOD Consistent Performance; Low Initial Price
HYDRAULIC SAW	RailCut X		RailCut A30X, RailCut Metal
GAS SAW			
High-Horsepower / Newer Machine	RailCut X	RailCut NorZon III	RailCut A30X, RailCut Metal
Low-Horsepower / Older Machine	RailCut X	RailCut NorZon III FastCut	RailCut A30X, RailCut Metal

NORTON RAILCUT X ZIRCONIA ALUMINA / A/O BLEND

BEST CHOICE FOR HIGH PERFORMANCE CUTTING OF RAILS ON APPLICATIONS WHERE THE HYDRAULIC OR GAS SAW IS FIXTURED AND HAS ADEQUATE POWER

FEATURES

- High-performance zirconia alumina/ engineered aluminum oxide blend; R (rough) sides

BENEFITS

- Expertly cuts a broad range of materials
- Longest lasting and fastest cutting wheels

NORTON RAILCUT METAL ALUMINUM OXIDE

GOOD CHOICE FOR PRICE-SENSITIVE JOBS WITH LOWEST INITIAL PRICE

FEATURES & BENEFITS

- Good choice for small jobs, applications where performance is not measured, and price-sensitive operations
- Great versatility from multi-purpose aluminum oxide abrasive formulated specifically for cutting rail
- Consistent performance at a low initial price

TIER:	BEST	BETTER	BETTER	GOOD	GOOD
TRADENAME:	NORTON RAILCUT X	NORTON RAILCUT NORZON III	NORTON RAILCUT NORZON III FASTCUT	NORTON RAILCUT A30X	NORTON RAILCUT METAL
ABRASIVE:	Zirconia Alumina/ Aluminum Oxide Blend	Zirconia Alumina	Zirconia Alumina	Aluminum Oxide	Aluminum Oxide
SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #
Type 01/41 Cut-Off					
14 x 1/8 x 1	5,400	10	66253337716	66253360493	66253363694
16 x 1/8 x 1	4,800	10	66253335024	66253464607	66253464415

WALK-BEHIND REINFORCED CUT-OFF

These powerful, self-propelled machines are designed to cut concrete slabs and asphalt and are normally fitted with diamond blades. For inexperienced operators or small jobs, the machines can accommodate these low initial cost, conventional abrasives wheels.

- Applications: Cutting straight sections of concrete surfaces
- Size Range: 14" and 18" diameter
- Thickness Range: 3/16" – 3/8"
- Abrasive Grain: Silicon Carbide
- Bond: Hot Pressed (HP) – for higher-horsepower machine applications where additional durability is needed, may be used wet or dry
Cold Pressed (CP) – for lower-horsepower machines, which need a free-cutting wheel
- Shape: Type 01/41 Straight
- Arbor: All are 1" with a drive pin
- Machine Used: 

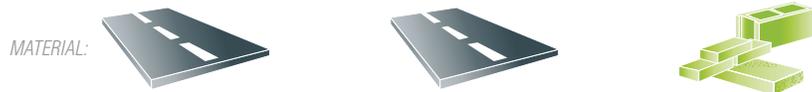


CROSS REFERENCE GUIDE

NORTON	SPECIALITY		
	BETTER	GOOD	GOOD
Gemini Asphalt / Green Concrete – HP	Gemini Asphalt - CP	Gemini Concrete - CP	
Abmast	—	C 16 T. Kompetitor Asphalt/Concrete	C 24 R
Bullard Blaze & Road Warrior	—	C16R & T, C16R3	—
Camel	—	C16-U	C24-R
Flexovit	HPC16AG	C16 G.P. C16UB	C20SB/C16TB
Husqvarna	Red GC-7A	Black EWC	Gold RTC, Blue RTC, Blue EWC
Pearl	—	—	Premium C36S, Silver Line C24R
Pferd	—	C 24 R SG ASP	C 24 R SG GP
Sait	Street Runner	C16	C24R, Street Walker
Tyrolit	Concrete/Asphalt CHP	Asphalt CP	Concrete CP
Virginia Abrasives	—	GC/Asphalt	Concrete
Walter	—	—	C-24



TIER:	BETTER	GOOD	GOOD
BRAND:	Norton	Norton	Norton
TRADENAME:	GEMINI ASPHALT - HP	GEMINI ASPHALT - CP	GEMINI CONCRETE - CP
SHAPE:	Type 01/41	Type 01/41	Type 01/41
ABRASIVE:	Silicon Carbide	Silicon Carbide	Silicon Carbide
BOND:	Hot Pressed - Long Life	Cold Pressed - Free Cut	Cold Pressed - Free Cut



SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #
Type 01/41 Cut-off – For Walk-Behind Saws					
14 x 3/16 x 1 Pin Hole	4,365	10		70184680324	70184680323
14 x 1/4 x 1 Pin Hole	4,365	5			70184670533
18 x 1/4 x 1 Pin Hole	4,250	5	70184670103	70184670098	

For higher-production applications, optimum speed of cut and product life, please see our diamond blade product offering for walk-behind saws in the Construction Product section of this catalog and the complete offering in our Diamond, Abrasives and Equipment for the Construction Market Catalog #7719 found on www.nortonabrasives.com.

CHOP SAW REINFORCED CUT-OFF

A chop saw is a light, low-horsepower portable machine. Although very similar to a compound miter saw, it is designed for cutting denser materials, like metal bar, tubing or pipe. Chop saw cut-off wheels are designed specifically for this machine with finer grit, softer grades, and reinforcement layers that match the application.

- Applications: Cutting small-diameter metal pieces, bar stock, metal pipe, tubing, decking, cable, drywall studs, and metal plate dimensioning
- Size Range: 10" - 16" diameter
- Thickness Range: 3/32" and 7/64"
- Abrasive Grain: Zirconia Alumina/Aluminum Oxide Blend, Aluminum Oxide, and Diamond
- Shape: Type 01/41 Straight
- Reinforcement Type: Side reinforced, centrally reinforced
- Machine Used:



CROSS REFERENCE GUIDE

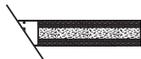
	TOTAL PERFORMANCE ←			INITIAL PRICE			→ SPECIALITY	
	BETTER			GOOD			GOOD	
NORTON	BlueFire Free Cut	BlueFire Rapid Cut	BlueFire Long Life	Gemini Free Cut	Gemini Rapid Cut	Gemini Long Life	Stud Cutter	Gemini Aluminum
Brilliant	—	—	—	Super-G	Tube/Pipe	—	Drywall Stud	Aluminum
Bullard	ZA36T	—	—	TA36T	A36R	A36R	A46T	AL36R
				A46T	The Competitor	Ironmaster	Studmaster	
Camel	—	—	ZA24-S	The Competitor				
Dewalt	—	—	XP	A36-P, WA36-P	—	A36-S	A30-R Mr. Stud	A30-N
				GP, Stainless Fabrication	—		Stud Cutting	—
Flexovit	—	—	—	A30R Fast Cut	—	A30S Long Life	A30T Drywall Stud	
Makita	—	—	—	A30-Q Free Cut				
				—	General Purpose	—	—	—
Pearl	SRT36	—	—	A36P Premium	A30P Silver Line		A46S Stud Cutting	—
Pferd	—	—	—	A 36 K SG CHOP	PSF CHOP		A 36 K SG-STUD	—
Sait	Saitech Steel Worker	Z-tech	—	EZ-Chop	EZ-Chop Attacker	Iron Worker	Stud King	Aluminum
Walter	—	—	—	—	A-30	A-30-HC+	—	A30-ALU

APPLICATION-TO-PRODUCT RECOMMENDATION GUIDE

Wheel Type/Reinforcement

TYPE 01/41 STRAIGHT SIDE-REINFORCED CUT-OFF WHEEL

Side-reinforced wheels have two full layers of reinforcing and are designed for a fast cut and the most aggressive applications. All Purpose, Free Cut, and Long Life are side reinforced.



TYPE 01/41 STRAIGHT CENTRALLY-REINFORCED CUT-OFF WHEEL

Centrally-reinforced wheels have a single layer of reinforcing with exposed rough sides for free-cutting, non-binding applications where minimal burr and burn are the key requirements. Rapid Cut wheels are centrally reinforced.



HOW TO PICK THE RIGHT BOND TYPE

All Purpose	Unmarked	Where an excellent blend of cut rate and life is needed
Free Cut	FC	Used when fast, burn-free cutting is desired or when cutting pieces with larger cross sections
Long Life	LL	Where durability is needed due to severe application, and when cutting parts with small cross sections
Rapid Cut	RC	Where a free cutting, non-binding wheel is needed for burn-free and burr-free cuts
High-Performance	STUD	High-performance aluminum oxide/resin bond combination designed for cleaner cuts and longer life when cutting steel studs
Aluminum	ALU	Specially formulated bond for reduced loading/surface contamination when cutting aluminum/soft materials

CHOP SAW REINFORCED CUT-OFF NORTON BLUEFIRE ZIRCONIA ALUMINA / A/O BLEND

BETTER CHOICE FOR STEEL, STAINLESS STEEL AND ALL OTHER FERROUS METALS

FEATURES

- Durable zirconia alumina / premium aluminum oxide abrasive blend
- Free Cut: side reinforced
- Long Life: side reinforced
- Rapid Cut: centrally reinforced, rough sides

BENEFITS

- 2X the life and cut rate of aluminum oxide
- Engineered for larger cross-sections and/or hard-to-cut materials
- Ideal for small cross-section workpieces
- Free cutting, non-binding; burr- and burn-free cuts



NORTON GEMINI ALUMINUM OXIDE

GOOD CHOICE FOR ALL STEEL AND FERROUS METALS AS WELL AS SPECIALTY APPLICATIONS IN ALUMINUM

FEATURES

- Free Cut: side reinforced
- Long Life: side reinforced
- Rapid Cut: centrally reinforced, rough sides
- Aluminum: specially formulated bond for aluminum and other soft, nonferrous metals; no wax or rubber fillers

BENEFITS

- Engineered for larger cross-sections and/or hard-to-cut materials
- Ideal for small cross-section workpieces
- Free cutting, non-binding; burr- and burn-free cuts
- Free cutting; resist loading
- No surface contamination



NORTON METAL STUD CUTTER ALUMINUM OXIDE

GOOD CHOICE FOR DRYWALL STUDS

FEATURES

- Stud Cutter: thin, side-reinforced; with high-performance aluminum oxide abrasive

BENEFITS

- Designed specifically for cutting steel studs



NORTON DIALAST DIAMOND

DESIGNED FOR CUTTING STEEL, METAL STUDS, STAINLESS STEEL, NONFERROUS MATERIALS, TILE, BRICK, PLASTIC AND MUCH MORE

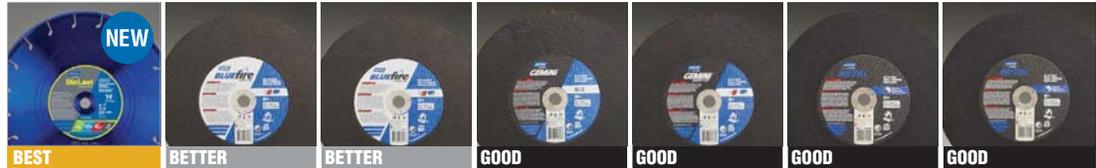
FEATURES

- A combination of high-quality diamond and advanced brazed single-layer bonding technology
- Environmentally friendly grinding
- Engineered with sound-dampening technology

BENEFITS

- Extra-long life vs. conventional abrasives or other vacuum-brazed diamond tools
- Retains the diamond grains and wheel shape for full life with low sparks, while keeping a continuous grinding depth for exceptional wheel life
- Less blade changes reduce downtime and labor costs
- Generates minimal dust for less clean-up and safer working conditions
- Makes the blade environmentally-friendly when cutting indoors or out



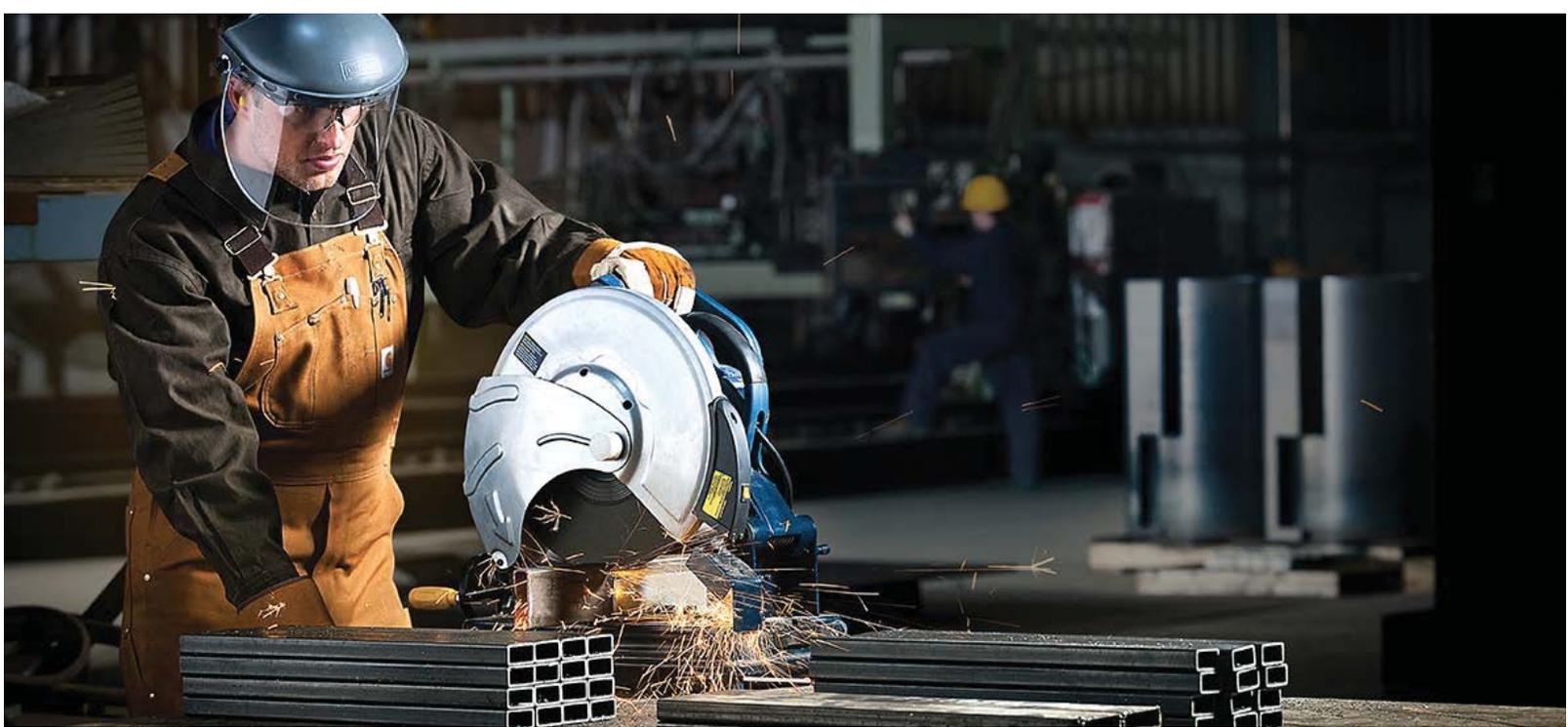


TIER:	BEST	BETTER	BETTER	GOOD	GOOD	GOOD	GOOD
TRADENAME:	NORTON DIALAST	NORTON BLUEFIRE	NORTON BLUEFIRE	NORTON GEMINI	NORTON GEMINI	NORTON METAL	NORTON METAL
SHAPE:	Type 01/41	Type 01/41	Type 01/41	Type 01/41	Type 01/41	Type 01/41	Type 01/41
ABRASIVE:	Diamond	Zirconia Alumina/ Aluminum Oxide	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
REINFORCING:		Side	Central	Side	Central	Side	Central
MATERIAL:	STAINLESS	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #	PART #	PART #
Type 01/41 Straight Cut-off								
10 x 7/64 x 1	6,110	10			66253106109 LL			
12 x 7/64 x 1	5,095	10	66252843250		66253207554 LL	66253214561 RC		
	5,095	5					07660789400	
14 x 3/32 x 1	4,365	10			66253306627 FC	66253313588 RC	66252835554	
	4,365	10			66253306626 LL		07660789405 STUD	
	4,365	5 V						07660789399
14 x 7/64 x 1	4,365	10	66252843252 FC	66252843254 RC	66253314816 ALU			
	4,365	10	66252843253 LL					
	4,365	25						07660703970 5-Pk
14 x .155 x 1	5,400	1	70184694053					
16 x 3/32 x 1	3,820	10			66253410198 LL			
16 x 7/64 x 1	3,820	10	66252843256 FC					
	3,820	10	66252843257 LL					



CUT-OFF WHEEL DESCRIPTION CODES					
BLANK = All Purpose	ALU = Aluminum	FC = Free Cut	LL = Long Life	RC = Rapid Cut	STUD = Stud Cutter
■ = Masonry	■ = Stainless	■ = Steel / Metal			



STATIONARY SAW REINFORCED CUT-OFF

The Norton stationary saw reinforced cut-off wheel line consists of Type 01/41 straight 10" - 24" wheels, designed to fit on fixed-base stationary saws that are free-standing or mounted on a workbench.

- Applications: Primary applications are cutting of all metal parts (flat stock, bars, studs, pipes, tubes, angle iron, cable), wire rope and hydraulic hose used in fabrication, construction and plant maintenance.
- Size Range: 10" - 20" diameter
- Thickness Range: 3/32", 1/8", 5/32", 3/16"
- Abrasive Grain: Zirconia Alumina/Aluminium Oxide Blend, Aluminum Oxide, Silicon Carbide
- Shape: Type 01/41 Straight
- Machine Used:



CROSS REFERENCE GUIDE

	TOTAL PERFORMANCE				INITIAL PRICE	SPECIALITY
	BETTER	GOOD				GOOD
NORTON	BlueFire	Gemini Free Cut	Gemini Long Life	Gemini Rapid Cut*	Norton Masonry	Foundry Cut**
Abmast	Z 24 R3	A 30 R	—	—	—	AC 24 R3
Brilliant	—	GP Fast Cut	GPX Long Life	XL , XLX	—	—
Bullard	—	A30-R	A30-T	A300	C20R	—
Camel	ZA24-R	A24-R, A46-T	—	—	C24-R	WA24-S
Flexovit	—	A30RB Multi Purpose	A30SB Long Life, A24TB Long Life	—	C24RB	AC24PB Heavy Duty
Metabo	—	A30N, A30R	A30S, A30V	—	C30S	—
Pearl	SRT36	A30P Premium, A30Q Silver Line	A30S Premium, A36R Premium	—	C24 Silver Line	—
Pferd	ZA 24 Q/R SG-HD	A 24 N/P SG-HD	A 24 Q/S SG-HD	—	C 24 0 SG	—
Sait	—	A24N, A36R	A24R	—	C24R	—
Tyrolit	—	A30BF	—	—	C30BF	—
Walter	—	A-24-FC	A-24-RIP	—	—	—

* For Burr-Free applications, please see centrally-reinforced BlueFire Rapid Cut and Gemini Rapid Cut wheels in Chop Saw cut-off wheel section or at www.nortonabrasives.com

** For Foundry and other cut-off wheels, please refer to that section of this Norton Full Line Catalog #7362 or at www.nortonabrasives.com



TIER:	BETTER	GOOD	GOOD	GOOD
TRADENAME:	NORTON BLUEFIRE	NORTON GEMINI FREE CUT	NORTON GEMINI LONG LIFE	NORTON MASONRY
SHAPE:	Type 01/41	Type 01/41	Type 01/41	Type 01/41
ABRASIVE:	Zirconia Alumina/Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Silicon Carbide
MATERIAL:	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	STAINLESS STEEL/METAL	MASONRY

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PART #	PART #	PART #	PART #
Type 01/41 Straight Cut-Off						
10 x 3/32 x 5/8	6,110	10	66252843248	66253106101 FC	66253106102 LL	
	6,110	5				07660789391
12 x 1/8 x 1	5,095	10	66252843249		66253207548 LL	
	5,095	5				
14 x 1/8 x 1	4,365	10	66252843251	66253306609 FC	66253306611 LL	
	4,365	5				
16 x 1/8 x 1	3,820	10		66253422942		
16 x 5/32 x 1	3,820	10	66252843255	66253410183 FC	66253410184 LL	
18 x 5/32 x 1	3,015	10		66253410185 FC		
20 x 5/32 x 1	2,710	5	66252843258 FC	69078609031 FC	69078609032 LL	
	2,710	5	66252843259 LL			
20 x 3/16 x 1	2,710	5		69078609033 FC	69078609034 LL	

CUT-OFF WHEEL DESCRIPTION CODES

BLANK = All Purpose FC = Free Cut LL = Long Life ■ = Masonry ■ = Stainless ■ = Steel / Metal

Foundry cut-off wheels are designed with abrasives, bonds and reinforcement types specific to foundry machine parameters and materials. Most of the specifications are non-stock. This stock listing is designed to provide popular size and starting specifications.

Size Range: Reinforced: 14" – 30" diameter; Non-reinforced: 12" – 20" diameter
 Grit Range: 24 – 46 grit
 Abrasive Grain: Ceramic Alumina (Norton Quantum; non-stock only), Zirconia Alumina, Aluminum Oxide
 Reinforcement: Reinforced: Engineered with strengthening fabric or filaments, which make wheels resistant to cross-bending breakage. All portable cut-off, swingframe, locked-head push-through and foundry chop stroke operations require reinforced cut-off wheels.

B: One or more full diameter pieces of filament molded inside each wheel. This construction leaves the abrasive exposed on the side of the wheel, improving freeness of cut. Used for fixed work operations with low probability of side pressure.

N: Full diameter pieces of reinforcement on the side of the wheel. Offers greatest possible resistance to side pressure and bending.

Non-Reinforced: Designed for use on fixed-base types of machines where the work is securely clamped and guarded, and where the wheel operates on a controlled cutting plane.

W: Reinforcement around the center hole only. These wheels are not considered to be truly reinforced.

Side Patterns: Smooth sides: Used for precision cutting applications
 Rough (R) sides: Abrasive particles protrude from sides of wheel
 Used wet or dry on most metals



MATERIAL-TO-PRODUCT RECOMMENDATION GUIDE

	BEST Highest Productivity; Lowest Total Cost	BETTER Excellent Blend of Performance & Price	GOOD Consistent Performance; Low Initial Price
INVESTMENT CAST ALLOYS			
Stainless Steel	Foundry X Quantum	Foundry X BlueFire	Foundry Metal
Titanium	Foundry X Quantum	Foundry X BlueFire	Foundry Metal
CAST IRON	Foundry X Quantum	Foundry X BlueFire	Foundry Metal
CAST STEEL			
Carbon and Low Alloy	Foundry X Quantum	Foundry X BlueFire	Foundry Metal
Stainless Steel and High Alloy	Foundry X Quantum	Foundry X BlueFire	Foundry Metal
Aluminum Alloy	Foundry X Quantum	Foundry X BlueFire	Foundry Metal
Copper Alloys, Brass, Bronze	Foundry X Quantum	Foundry X BlueFire	Foundry Metal

Foundry X Quantum wheels are custom, made-to-order to your exact requirements. Contact your Norton representative for recommendations, quotations, and lead-times.

CROSS REFERENCE GUIDE

	TOTAL PERFORMANCE ←			INITIAL PRICE →
	BEST	BETTER	GOOD	GOOD
NORTON	Foundry X Quantum and B97 (Non-stock; custom-made to your exact requirements)	Foundry X BlueFire	Foundry X	Foundry Metal
Allison	TA362 R6 8045HA, YW462 MR B2HA	TA302-T6-B6HA, A46-T6-BX5T6A, HF 1247 K – CHALLENGER		Economiser
Avery		TA30-V680	A 3226 C7A, C11922 W071	92871H
Buckeye		Steel Shark		
DiaTool	BV1734R 710	BV 1397-5284-C		
Flexovit		ZAX30TB	A24PB, A30RB	
Klingspor	20A24-QBF			
NATAB			T 1584 HA	
Rappold		6Z30U-B3F2		

NORTON FOUNDRY X BLUEFIRE REINFORCED

BETTER CHOICE ON STAINLESS STEEL, AEROSPACE ALLOYS, CAST IRON, AND STEEL

FEATURES

- Durable zirconia alumina/aluminum oxide blend with Foundry X bond technology

BENEFITS

- Excellent value on stainless steel and exotic aerospace alloys
- More aggressive; can withstand demanding applications
- Improved durability and heat resistance result in longer abrasive life, showing up to 80% better G-ratios (material removed/wheel wear); cost effective wheels



NORTON FOUNDRY X ALUMINUM OXIDE

GOOD CHOICE ON GENERAL PURPOSE APPLICATIONS

FEATURES

- Strong aluminum oxide abrasive with Foundry X bond technology

BENEFITS

- Consistent performance
- Tough and versatile abrasive
- Low initial price

NORTON FOUNDRY METAL ALUMINUM OXIDE

GOOD CHOICE FOR PRICE-SENSITIVE JOBS WITH LOWEST INITIAL PRICE

FEATURES & BENEFITS

- Good choice for small jobs, applications where performance is not measured, and price-sensitive operations
- Great versatility from multi-purpose aluminum oxide abrasive formulated specifically for typical foundry cutting applications
- Lowest initial price
- Consistent performance



Reinforced



TIER: BETTER
BRAND: Norton
TRADENAME: **FOUNDRY X BLUEFIRE**
ABRASIVE: Zirconia Alumina/ Aluminum Oxide



GOOD
BRAND: Norton
TRADENAME: **FOUNDRY X**
ABRASIVE: Aluminum Oxide



GOOD
BRAND: Norton
TRADENAME: **FOUNDRY METAL**
ABRASIVE: Aluminum Oxide

SIZE (D x T x H)	MAX. RPM	STD. PKG.	SPEC.	PART #	SPEC.	PART #	SPEC.	PART #
Type 01/41 Straight Cut-off – Foundry Reinforced								
14 x 1/8 x 1	4,365	10	NV24-TB75N	66253347674	U57A30-TB75N	66253345779	Side Reinforced	66243485918
	4,365	10	NV24-VB75N	66253179193	U57A30-VB75N	66253179191		
	4,365	10	NV24-YB97N	66253347698	U57A30-YB97N	66253347692		
16 x 5/32 x 1	3,820	10	NV24-TB75N	66253347676	U57A30-TB75N	66253345781	Side Reinforced	66243485919
	3,820	10	NV24-VB75N	66253179147	U57A30-VB75N	66253179148		
	3,820	10	NV24-YB97N	66253347693				
20 x 5/32 x 1	2,710	10	NV24-TB75N	66253347683	U57A30-TB75N	66253347546	Side Reinforced	66243485920
	2,710	10	NV24-VB75N	66253179363	U57A30-VB75N	66253179364		
	2,710	10	NV24-YB97N	66253347694	U57A30-YB97N	66253347701		
20 x 3/16 x 1	2,710	10	NV24-TB75B	66253347684	U57A30-TB75B	66253347547	Centrally Reinforced	66243485921
	2,710	10	NV24-VB75B	66253179366	U57A30-VB75B	66253179367		
	2,710	10	NV24-YB97B	66253347699	U57A30-YB97B	66253347702		
24 x 7/32 x 1-3/4	2,260	10	NV24-TB75B	66253347685				
	2,260	10	NV24-VB75B	66253179374	U57A30-VB75B	66253179375		
	2,260	10	NV24-YB97B	66253347697				
30 x 1/4 x 1-3/4	1,810	10	NV24-TB75B	66253347722	U57A30-TB75B	66253347720		
	1,810	10	NV24-YB97B	66253347723	U57A30-YB97B	66253347721		

Specifications ending in "B" are centrally reinforced; specifications ending in "N" are side reinforced.

Non-Reinforced



TIER: BETTER
BRAND: Norton
TRADENAME: **U57A**
ABRASIVE: Aluminum Oxide



GOOD
BRAND: Norton
TRADENAME: **GEMINI**
ABRASIVE: Aluminum Oxide

SIZE (D x T x H)	MAX. RPM	STD. PKG.	SPEC	PART #	SPEC	PART #
Type 01/41 Straight Cut-off – Foundry Non-Reinforced R-Sides						
12 x 3/32 x 1	5,095	10	U57A461-PB25	66253261887		
16 x 1/8 x 1	3,820	10			AP	66253422942
20 x 1/8 x 1	2,710	10	U57A304-VB25W	69078665497		

Ask your Norton representative about our custom, made-to-order Norton Foundry X Quantum ceramic alumina wheels for high alloys, stainless steel, and aerospace applications.

CUT-OFF WHEEL DESCRIPTION CODES

AP = All Purpose

Where a good blend of cut rate and life is needed

Reinforced and non-reinforced engineered cut-off wheels for cutting all types of tool steel with fixed-based cut-off machines.

Applications: Reinforced cut-off wheels are designed to resist breakage caused by severe cross-bending and are required on any operation where the work is not securely clamped.
 Non-Reinforced cut-off wheels are designed for use on fixed-based machines where the work is securely clamped, guarded, and where the wheel operates on a controlled cutting plane.

Size range: 6" – 12" diameter
Grit range: 36 – 90 grit
Abrasive grain: Aluminum Oxide
Bond: Resinoid, Rubber, and Shellac
Shape: Type 01/41 Straight



CROSS REFERENCE GUIDE

	BETTER		
NORTON	Reinforced	Reinforced	Non-Reinforced
	A60-OBNA2	57A364-TB25N	57A60-M8B
Bates	A602-T-BF	A36-R-BF	-
Buffalo	A60-R-BF2	-	-
Dia. Tool	A80-SP	A46-SP	-
Radiac	A54-N6-B20	-	A54-N6-B20
Tyrolit	A60-QBF38A2	-	-

TECH TIP

- Smooth side pattern – Used when a precise thickness tolerance is needed
- Rough (R) side pattern – Abrasive particles protrude from sides of wheel

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	SUGGESTED CORRECTION
Poor cut rate	Insufficient power used	Increase feed or pressure to full power
	Wheel too hard	Use softer grade, or thinner wheel
	Contact area too large	Reduce contact area
	Wheel too coarse	Use finer grit
	Wheel side out of truth	Check spindle runout
Non-square cuts	Work not clamped properly	Check clamp and clean to remove swarf
	Misaligned spindle bearings	Check for bearing truth and alignment
	Poor coolant distribution	Ensure equal volume of coolant to each wheel side
	Wheel is too hard	Use softer acting wheel: softer grade, or finer grit
Workpiece burn	Insufficient feed rate	Work machine to maximum power available
	Poor coolant flow	Increase volume and direct at cutting point
	Wheel is too coarse	Use finer grit or more machine power
	Wheel is too hard	Use softer grade wheel
	Wheel is running out	Check spindle and flanges
	Wheel speed is too slow	Ensure tight flanges and maximum safe operating speed being used
Poor finish	Too much burr	Use finer grit, or softer grade
	Wheel too coarse	Use finer grit

TECH TIP

- Wheels with a "W" reinforcement (reinforcement around the hole) are not considered to be truly reinforced.
- Clamp or fixture the workpiece for straightest cuts.
- Run wheels at the highest possible speed marked on the wheel and make cuts as quickly as possible. Do not overspeed wheels.
- It is recommended that a cut-off machine should have 1 horsepower for every inch of wheel diameter. For less than this, we recommend using a softer specification.
- Using a harder grade wheel increases wheel life, but it also increases burn, power required and decreases cut rate.
- Using a coarser grit wheel increases wheel life and cut rate, but it also increases burr and power required.

TOOLROOM REINFORCED ALUMINUM OXIDE

BETTER CHOICE FOR CUTTING TOOL STEEL ON FIXED-BASED MACHINES WHEN WORK IS NOT SECURELY CLAMPED

FEATURES

- OBNA2 full side reinforced, resin bond
- B25N full side reinforced, resin bond

BENEFITS

- Yields maximum cut rate and minimum kerf loss; ideal when thin cut is desired
- Versatile; durable, free cutting; offer greatest stiffness



SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER SPEC.	PART #
Type 01/41 Straight Cut-off – Reinforced				
6 x .035 x 1/2	10,190	25	A60-OBNA2	66252835053
6 x .035 x 1-1/4	10,190	25	A60-OBNA2	66252835055
6 x .060 x 1/2	10,190	25	A60-OBNA2	66252835164
6 x .060 x 1-1/4	10,190	25	57A364-TB25N	66252822969
6 x .060 x 1-1/4	10,190	25	A60-OBNA2	66252835165
7 x .035 x 1/2	8,730	25	A60-OBNA2	66252938786
7 x .035 x 1-1/4	8,730	25	A60-OBNA2	66252938788
7 x .060 x 1/2	8,730	25	A60-OBNA2	66252938816
7 x .060 x 1-1/4	8,730	25	A60-OBNA2	66252938796
7 x .060 x 1-1/4	8,730	25	57A364-TB25N	66252922676

SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER SPEC.	PART #
Type 01/41 Straight Cut-off – Reinforced				
8 x .035 x 1/2	7,640	25	A60-OBNA2	66253043014
8 x .035 x 1-1/4	7,640	25	A60-OBNA2	66253042980
8 x .060 x 1/2	7,640	25	A60-OBNA2	66253043009
8 x .060 x 1-1/4	7,640	25	A60-OBNA2	66253042983
8 x .060 x 1-1/4	7,640	25	57A364-TB25N	66253022705
10 x .060 x 5/8	6,110	25	A60-OBNA2	66253149317
10 x .060 x 1-1/4	6,110	25	A60-OBNA2	66253149186
12 x .060 x 1	5,095	10	A60-OBNA2	66253261811
12 x .075 x 1	5,095	10	A60-OBNA2	66253261910
12 x .075 x 1-1/4	5,095	10	A60-OBNA2	66253261858

TOOLROOM NON-REINFORCED ALUMINUM OXIDE

BETTER CHOICE FOR CUTTING TOOL STEEL ON FIXED-BASED MACHINES WHEN THE WORK IS SECURELY CLAMPED

FEATURES

- B bond (smooth sides)
- B25 bond (smooth sides)
- E7 bond (smooth sides)
- R30 bond (smooth sides)

BENEFITS

- A mild acting resin bond for light cut-off applications
- A versatile, free-cutting, more durable resin bond
- Ideal for dry cutting metal in high production runs
- A shellac bond with very mild cutting action, recommended for highly critical applications where no burr, heat checks, or discoloration is permitted
- Mild acting rubber bond primarily for wet, ultra-thin cutting



SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER SPEC.	PART #
Type 01/41 Straight Cut-off – Non-Reinforced				
6 x .015 x 1-1/4	6,370	25	57A90-R0R30	66252822953
6 x .020 x 1-1/4	6,370	25	57A90-R0R30	66252822954
6 x .035 x 1-1/4	6,370	25	57A60-M8B	66252822958
6 x .060 x 1/2	7,640	25	57A541-RB25	66252822970
6 x .060 x 1-1/4	7,640	25	57A60-M8B	66252822975
7 x .035 x 1-1/4	5,460	25	57A60-M8B	66252922983
	5,460	25	57A60-O8B	66252922986
	5,460	25	57A60-Q8B	66252922987
7 x .035 x 1-1/4	5,460	25	57A601-PB25	66252922988
	5,460	25	57A601-RB25	66252922989
7 x .035 x 1-1/4	5,185	25	57A60-OE7	66252922985
7 x .035 x 1-1/4	5,460	25	23A601-PB25	66252938701
7 x .050 x 1-1/4	5,460	25	23A601-PB25	66252938724*
7 x .060 x 1/2	6,550	25	57A60-O8B	66252922672

*Exception: rough sides

SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER SPEC.	PART #
Type 01/41 Straight Cut-off – Non-Reinforced				
7 x .060 x 1-1/4	6,550	25	57A46-M8B	66252922677
	6,550	25	57A60-M8B	66252922681
	6,550	25	57A60-O8B	66252922684
	5,185	25	57A60-OE7	66252922683
7 x .090 x 1-1/4	6,550	25	57A60-M8B	66252922690
7 x .125 x 1-1/4	6,550	25	57A60-M8B	66252922692
8 x .035 x 1-1/4	4,775	25	57A60-N8B	66253022694
8 x .060 x 1/2	5,730	25	57A60-M8B	66253022702
8 x .060 x 1-1/4	5,730	25	57A60-M8B	66253022708
8 x .060 x 1-1/4	4,540	25	57A60-OE7	66253022709
10 x .060 x 5/8	4,585	25	57A46-Q8BW	66253122816
	4,585	25	57A60-M8BW	66253122818
10 x .090 x 5/8	4,585	25	57A60-M8BW	66253122824

METALLURGICAL NON-REINFORCED CUT-OFF

The Norton metallurgical line of Type 01/41 straight cut-off wheels was developed specifically for sectioning off metal samples; burr-free cutting, minimal burn and distortion.

Applications: Designed specifically for cutting off metal samples ranging from mild steel to super alloys on fixed-based machinery by scientists, engineers, and lab technicians
 Size range: 9" – 13.75" diameter



CROSS REFERENCE GUIDE

SIZE	MATERIAL CUT	NORTON		BUEHLER		LECO		LECO		STRUERS	
		SPEC.	PART #	METABRASE PART #	BUEHLERMET II PART #	PART #	PART #	PART #	PART #	AXITOM/-5 PART #	
9 x .063 x 1-1/4 (229mm x 1.6mm x 32mm)	Very Hard Steels (Rc 55 - 68)	ML-109	66253117874	10-4110-010							60A24*
	Medium Steels (Rc 30 - 40)	ML-309	66253117877	10-4116-010	10-5112-010	811-043-010					40A24*
	Soft Steels (Rc 20 - 30)	ML-409	66253117828	10-4120-010	10-5116-010	811-049-010					30A24*
10 x .063 x 1-1/4 (254mm x 1.6mm x 32mm)	Very Hard Steels (Rc 55 - 68)	ML-110	66253117879	10-4210-010		808-673	812-231				60A25•
	Hard Steels (Rc 40 - 55)	ML-210	66253117880	10-4212-010	10-5210-010	811-059-010	810-310-010				54A25•
	Medium Steels (Rc 30 - 40)	ML-310	66253117881	10-4216-010	10-5212-010	811-067-010	810-310-010				40A25•
	Soft Steels (Rc 20 - 30)	ML-410	66253117830	10-4220-010	10-5216-010	811-073-010					30A25•
12 x .078 x 1-1/4 (305mm x 2.0mm x 32mm)	Very Hard Steels (Rc 55 - 68)	ML-112	66253322151	10-4410-010		808-674	811-065-010				60A30†
	Hard Steels (Rc 40 - 55)	ML-212	66253322152	10-4412-010	10-5410-010	811-081-010	810-311-010				50A30†
13.75 x .098 x 1-1/4 (350mm x 2.5mm x 32mm)	Very Hard Steels (Rc 55 - 68)	ML-114	66253322863	10-4310-010		808-675	812-232				60A35▲ 50A35
	Hard Steels (Rc 40 - 55)	ML-214	66253322156	10-4312-010	10-5310-010	809-346	811-977-010				50A35▲ 40A35

*Discotom/Labotom • Discotom-5/-6/Labotom-3 † Unitom/Discotom-50/-60/-65 ▲ Exotom/Unitom-2/-5/-50

SIZE (D x T x H)	MAX. RPM	STD. PKG.	PRODUCT #	APPLICATION	TIER: BEST
					PART #
Type 01/41 Straight Cut-off – Non-Reinforced					
9 x .063 x 1-1/4 (229mm x 1.6mm x 32mm)	4,025	10	ML-109	Very Hard Steels (Rc 55 - 68)	66253117874
	4,025	10	ML-309	Medium Steels (Rc 30 - 40)	66253117877
	5,085	10	ML-409	Soft Steels (Rc 20 - 30)	66253117828
10 x .063 x 1-1/4 (254mm x 1.6mm x 32mm)	3,500	10	ML-110	Very Hard Steels (Rc 55 - 68)	66253117879
	3,500	10	ML-210	Hard Steels (Rc 40 - 55)	66253117880
	3,500	10	ML-310	Medium Steels (Rc 30 - 40)	66253117881
	4,585	10	ML-410	Soft Steels (Rc 20 - 30)	66253117830
12 x .078 x 1-1/4 (305mm x 2.0mm x 32mm)	3,820	10	ML-112	Very Hard Steels (Rc 55 - 68)	66253322151
	3,820	10	ML-212	Hard Steels (Rc 40 - 55)	66253322152
13.75 x .098 x 1-1/4 (350mm x 2.5mm x 32mm)	2,770	10	ML-114	Very Hard Steels (Rc 55 - 68)	66253322863
	2,770	10	ML-214	Hard Steels (Rc 40 - 55)	66253322156

B82 BOND NON-REINFORCED WHEELS

A HIGH-PERFORMANCE RESIN BOND FOR WET CUTTING METALLURGICAL APPLICATIONS

SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER	
			SPEC.	PART #
Type 01/41 Straight Cut-off – Non-Reinforced				
10 x 1/16 x 1-1/4	4,585	5	88A901-HB82 Metlab	66253149449
12 x 1/16 x 1-1/4	3,820	5	88A901-HB82 Metlab	66253262172