





NORZON PLUS

Charger

Gemini

SMALL DIAMETER REINFORCED CUT-OFF WHEELS

MACHINES USED



CATEGORY DEFINITION

The Norton small diameter cut-off wheel line consists of Type 01 straight and Type 27 depressed center cut-off wheels from 1-1/2" to 9" diameters. These wheels come in ultra thin .035 for quick burn/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 plate dimensioning (metal fabrication)
SIZE RANGE:	1-1/2" – 9" diameter
THICKNESS RANGE:	.035, .040, .045, .060, .090, and .125
ABRASIVE GRAIN:	Ceramic Alumina/Zirconia Alumina, Zirconia Alumina/Aluminum Oxide, Aluminum Oxide, Silicon Carbide
SHAPE:	Type 01 Straight and Type 27 Depressed Center

TYPE-TO-APPLICATION RECOMMENDATION GUIDE

WHEEL TYPE/THICKNESS	APPLICATIONS		
TYPE 01	Type 1 cut-off wheels are designed for traditional cut-off applications. All are supplied with full fiberglass reinforcing.		
.035, .040, .045, .060	Where fast cutting and low kerf loss are desired	■	■
.090, .125	For tough cutting and notching applications where stability is important	■	■
TYPE 27	Type 27 cut-off wheels are designed with a depressed center to provide a recess for the hub, which allows flush cutting		
.040, .045, .060	Where fast cutting and low kerf loss are desired		■
.090, .125	For tough cutting and notching applications where stability is important		■

HOW TO PICK THE RIGHT BOND TYPE

All Purpose	<i>Unmarked</i>	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	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/surface contamination cutting aluminum/soft materials

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	NorZon Plus	Charger	Metal
Stainless Steel / Alloys	NorZon Plus	Charger	Gemini
Contaminate Free		Charger INOX	Gemini INOX
Cast Iron	NorZon Plus	Charger	Gemini
Aluminum / Bronze / Brass			Gemini ALU
Asphalt / Brick / Concrete			Masonry



CROSS REFERENCE GUIDES

TYPE 01 .035 - .125 CUT-OFF WHEELS FOR DIE GRINDERS

NORTON	TOTAL PERFORMANCE			INITIAL PRICE		SPECIALTY	
	BEST NorZon Plus	BETTER Charger	GOOD Gemini Fast Cut	Gemini	Metal	GOOD Gemini INOX	
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	SG-A-R-INOX	
Sait	Saittech	—	A60S	A24R, A36T, A60T	—	—	
SpedeCut	—	—	—	—	A46, 60 TBXX	—	
Walter	—	—	A24 ZIP	A60 ZIP	—	—	

TYPE 01 AND 27 .040 - .125 CUT-OFF WHEELS FOR RIGHT ANGLE GRINDERS

NORTON	TOTAL PERFORMANCE				INITIAL PRICE			SPECIALTY		
	BEST NorZon Plus Fast Cut	NorZon Plus	BETTER Charger Fast Cut	Charger	GOOD Gemini Fast Cut	Gemini	Metal	GOOD Gemini ALU	Gemini INOX	Masonry
Brilliant	—	—	—	—	Brill-Blade Extra FC	Brill-Blade Heavy Duty	Hornet Stinger	—	—	—
Bullard	—	—	—	ZA60T	SGA60U	TA46T, TA60T, TA60U	A46T, A60T Comp.	AL46N	—	C24R
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	—	C30U
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	SG-C-R
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	C-30-ZIP

FEATURED PRODUCTS



NORZON PLUS CUT-OFF / RIGHTCUT

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

FEATURES

- Patented Norton SG (ceramic alumina) / NorZon (zirconia alumina) grain combination
- Highly advanced bond system

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



CHARGER CUT-OFF / RIGHTCUT

BETTER CHOICE FOR ALL STEEL AND STAINLESS STEEL APPLICATIONS

FEATURES

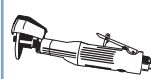
- A unique blend of premium NorZon (zirconia alumina) and aluminum oxide grain

BENEFITS

- 2X – 3X the life of aluminum oxide wheels
- Up to 2X faster cutting versus aluminum oxide wheels

SMALL DIAMETER REINFORCED CUT-OFF WHEELS

MACHINES USED



AVAILABILITY

TIER:
TRADENAME:

BEST	BETTER	BETTER	GOOD	GOOD	GOOD
NORZON PLUS	CHARGER	A60-OBNA2	GEMINI	GEMINI LONG LIFE	NORTON METAL

SHAPE:
ABRASIVE:

Type 01	Type 01	Type 01	Type 01	Type 01	Type 01
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
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SIZE
(D X T X H)

MAX.
RPM

STD.
PKG.

PART NO.

PART NO.

PART NO.

PART NO.

PART NO.

PART NO.

TYPE 01 – CUT-OFF

SIZE (D X T X H)	MAX. RPM	STD. PKG.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
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 .060 x 1/4	30,560	25			66243427993			
2 x .060 x 1/4	30,560	25					66243411395	FC
2 x .060 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 .060 x 1/4	30,560	25					66243510640	FC
2-1/2 x .060 x 3/8	30,560	25					66243510641	FC
2-7/8 x .035 x 1/4	25,465	25						07660789019
3 x .035 x 1/4	25,465	25	66243510668		66243528573		66243510627	FC
3 x .035 x 3/8	25,465	25	66243510669	66243527753	66243528574		66243510628	FC
3 x .060 x 1/4	25,465	25	66243510670		66243528471		66243510645	FC
3 x .060 x 3/8	25,465	25	66243510671	66243527755	66243528552		66243510647	FC
		25	66243510835	LL			66243510648	LL
3 x .125 x 1/4	25,465	25					66243510650	FC
3 x .125 x 3/8	25,465	25	66243510673				66243510652	LL
4 x .035 x 1/4	19,100	25			66243529606		66243510651	FC
4 x .035 x 3/8	19,100	25	66243510675	66243527340	66243529621		66243510653	LL
4 x .035 x 1/2	19,100	25			66243529622			
4 x .035 x 5/8	15,280	25			66243529590			
4 x .035 x 3/4	19,100	25			66243529609			
4 x .040 x 5/8	15,280	25						07660701616
4 x .045 x 5/8	15,280	25					66243527956	
4 x .060 x 1/4	19,100	25	66243510676				66243510654	FC
4 x .060 x 3/8	19,100	25	66243510677	66243527338	66243529604		66243510655	FC
4 x .090 x 5/8	15,280	25					66243527955	
4 x .125 x 1/4	19,100	25					66243510658	FC
4 x .125 x 3/8	19,100	25	66243510841	66243527339			66243510659	FC
		25	66243510680	LL			66243510661	LL
5 x .035 x 3/8	12,225	25			66252830653			
6 x .035 x 3/8	10,185	25			66252835064			
6 x .035 x 1/2	10,185	25			66252835053			
6 x .035 x 5/8	10,185	25			66252835054		66252809714	
6 x .040 x 3/8	12,225	25						66252840608
6 x .060 x 5/8	10,185	25					66252809718	
7 x .060 x 5/8	8,730	25					66252905957	
8 x .060 x 5/8	7,640	25			66253017771	LL	66253007025	
		10					66253017795	
Drill Mount Mandrel		5						07660747769*

* FOR MOUNTING 2" AND 3" x 3/8" HOLE CUT-OFF WHEELS ON TO A DRILL

CUT-OFF DESCRIPTION CODES

INOX = CONTAMINANT FREE	FC = FAST CUT	LL = LONG LIFE	BLANK = ALL PURPOSE
■ = STAINLESS	■ = STEEL / METAL	■ = MASONRY	



AVAILABILITY

TIER:
TRADENAME:
SHAPE:
ABRASIVE:
MATERIAL:

	BEST	BETTER	GOOD	GOOD
	NORZON PLUS RIGHTCUT	CHARGER RIGHTCUT	GEMINI RIGHTCUT	NORTON METAL RIGHTCUT
	Type 01	Type 01	Type 01	Type 01
	Ceramic Alumina/ Zirconia Alumina	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
	STAINLESS STEEL / METAL	STAINLESS STEEL / METAL	STAINLESS STEEL / METAL	STAINLESS STEEL / METAL
	PART NO.	PART NO.	PART NO.	PART NO.

SIZE (D X T X H) MAX. RPM STD. PKG.

TYPE 01 – 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 .090 x 5/8	15,280	25			66243527955	
4-1/2 x .040 x 7/8	13,580	25		66252837011		66252840001
4-1/2 x .045 x 7/8	13,580	25	66252830730	66252826569	66252823602	
		25			66252832906	
4-1/2 x .090 x 7/8	13,580	25			66252823599	
5 x .040 x 7/8	12,225	25		66252837012		
		15				07660701618
5 x .045 x 7/8	12,225	25	66252830731	66252826570	66252823603	
		25			66252832907	
5 x .090 x 7/8	12,225	25			66252823600	
6 x .040 x 3/8	12,225	25				66252840608
6 x .040 x 7/8	10,185	25				07660702757
6 x .045 x 7/8	10,185	25	66252830734	66252826571	66252823604	
		25			66252832908	
6 x .090 x 7/8	10,185	25			66252823601	
7 x .060 x 7/8	8,600	25	66252900652		66252832323	07660704732

Norton Type 01 & 27 RightCut Line – 4" - 9"

Norton RightCut wheels provide lowest total cost versus competitive initial cutting solutions for right angle grinders. Available in 4" through 9" diameters in Type 01 straight and Type 27 depressed center shapes.



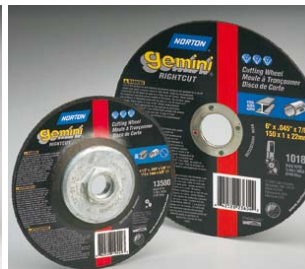
BEST NorZon Plus RightCut

Highest Productivity, Lowest Total Cost
Advanced grain technology – a blend of Norton SG® (seeded gel) ceramic alumina and NorZon zirconia alumina abrasives – in the fastest cutting bond system. Across all grinding jobs, testing shows performance up to 100% better than competitive high-performance wheels and up to 10 times better than aluminum oxide wheels.



BETTER Charger RightCut

Exceptional Blend of Performance and Price
Zirconia alumina and aluminum oxide combination provides up to 2X cut rate and up to 3X longer life over conventional aluminum oxide products on stainless and carbon steel.



GOOD Gemini RightCut

Good Performance, Wide Variety and Good Initial Price
Engineered blend of high-performance aluminum oxide provides the best starting specification on a wide variety of sizes and thicknesses at a good initial price.



GOOD Norton Metal RightCut

Good Performance, Low Initial Price
Popular aluminum oxide starting specification where good performance at a low price is the primary consideration.



AVAILABILITY



TIER:	BEST	BETTER	GOOD	GOOD
TRADENAME:	NORZON PLUS RIGHTCUT	CHARGER PLUS RIGHTCUT	GEMINI RIGHTCUT	NORTON METAL RIGHTCUT
SHAPE:	Type 27	Type 27	Type 27	Type 27
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

SIZE (D X T X H)	MAX. RPM	STD. PKG.	PART NO.	PART NO.	PART NO.	PART NO.
TYPE 27 – RIGHTCUT CUT-OFF						
4 x .045 x 5/8	15,280	20			66252833840	07660705249
4 x .125 x 3/8	15,280	20	66243529883			
4-1/2 x .040 x 5/8-11	13,580	20		66252837013		
4-1/2 x .045 x 5/8-11	13,580	20	66252830748	66252832009	66252819549	
4-1/2 x .045 x 7/8	13,580	20	66252830742	66252830125	66252819548	66252836497
4-1/2 x .090 x 5/8-11	13,580	20			66252823102	INOX
4-1/2 x .090 x 7/8	13,580	20			66252835320	
		20			66252823103	INOX
4-1/2 x .125 x 5/8-11	13,580	20	66252815010		66252813301	
4-1/2 x .125 x 7/8	13,580	20	66252830443		66252801860	
5 x .040 x 5/8-11	12,225	20		66252837014		
5 x .045 x 5/8-11	12,225	20			66252830586	
5 x .045 x 7/8	12,225	20	66252830744	66252830126	66252819550	
5 x .090 x 7/8	12,225	20			66252823106	INOX
		20			66252836984	LL
5 x .125 x 7/8	12,225	20			66252801862	
6 x .045 x 5/8-11	10,185	20			66252830587	
6 x .045 x 7/8	10,185	20	66252830745	66252830127	66252819551	66252840486
6 x .090 x 7/8	10,185	20			66252832487	INOX
7 x .060 x 7/8	8,600	20			66252912626	
		10				07660705251
7 x .090 x 7/8	8,600	20			66252914638	INOX
7 x .125 x 5/8-11	8,600	10	66252912625			
7 x .125 x 7/8	8,600	20			66252900619	
9 x .060 x 5/8-11	6,600	10			66253019115	

RIGHTCUT WHEELS ARE TO BE USED FOR CUTTING ONLY



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

SIZE (D X T X H)	MAX. RPM	STD. PKG.	PART NO.	PART NO.	PART NO.	PART NO.
TYPE 01 – CIRCULAR SAW						
6 x .035 x 5/8	10,185	25		66252809714		
6 x .060 x 5/8	10,185	25		66252809718		
6-1/2 x 1/8 x DM-5/8	9,405	10			07660789098	07660789089
7 x .060 x 5/8	8,730	25		66252905957		
7 x 1/8 x DM-5/8	8,730	25			07660789097	07660789088
8 x .060 x 5/8	7,640	25	66253017771 LL	66253007025		
		10		66253017795		
8 x 1/8 x DM-5/8	7,640	10			07660789096	07660789086

DM DENOTES DIAMOND MOUNT; 5/8" HOLE BUSHINGS INCLUDED

CUT-OFF DESCRIPTION CODES

INOX = CONTAMINANT FREE	FC = FAST CUT	LL = LONG LIFE	BLANK = ALL PURPOSE
■ = STAINLESS	■ = STEEL / METAL	■ = MASONRY	

**HIGH SPEED
CUT-OFF WHEELS**





CATEGORY DEFINITION

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

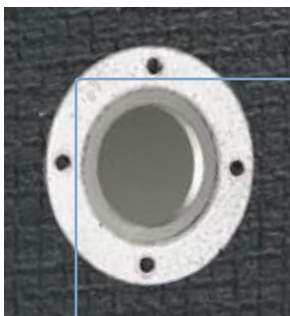
APPLICATIONS:	<p>Metalworking: steel, stainless, ductile, cast iron, rail steel and metal decking</p> <p>Non-Metal Building Materials: concrete, brick, masonry, asphalt, aggregate, stone and schedule 40 and 80 PVC pipe</p> <p>Rescue and Demolition: steel, acrylic, fiberglass, rubber, glass, wood, concrete, brick and asphalt</p>
SIZE RANGE:	12" – 16" diameter
THICKNESS RANGE:	1/8"
ABRASIVE GRAIN:	Aluminum Oxide, Silicon Carbide
SHAPE:	Type 01 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 a patent-pending universal arbor that accommodates both 20mm (Stihl®) and all other machines with 1" arbors

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 that stands up to the sharp edges of sheet metal and roof decking.
	Rail Steel A finer grit, harder grade aluminum oxide wheel designed for straight, fast cuts on all sizes of rail track. Additional high-performance lines of rail cut wheels are available for production applications.
	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 product line.

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 horsepower machines where the application is heavy-duty, and durability is the primary selection criterion.



Universal Arbor

Two Blade Sizes in One

Our Norton patent-pending 1 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

SPECIALTY

NORTON

	GOOD Metal	Metal Decking	Rail Steel	Ductile	Concrete	Asphalt
Abmast	A 24 R, Kompetitor Metal	A 24 T	Rail-Kut A 24 Z	AC 24 R, Kompetitor Ductile Iron	C 24 R, Kompetitor Concrete	C 16 T, Kompetitor Asphalt
Brilliant	Metal/Stainless	—	A24PB	—	Concrete/Masonry	—
Bullard Blaze & Road Warrior	A24R, ZA24Q, The Competitor	TA24R	A30R	AC24R	C24R, The Competitor	CC20R
Camel	A24-R	A24-T	—	AC24-R	C24-R	C16-U
Flexovit	A24/30SB	A24TB	A30PB	AC24SB	C30UB	C16UB
Husqvarna	Blue XHS, Blue QMS-CM, Blue EHS	Grey QMS-CM	Yellow 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	A 24 Q SG-RAIL	AC 24 Q SG	C 24 R SG	—
Sait	A24R, A30S, XFC	Brute	Hobo	Ductile	C24R	Big M.A.C, XFC
Tyrolit	A30P, A30BF	—	—	AC24, AC30BF	1C24, C30BF	—
Virginia Abrasives	Metal	—	—	Ductile	Concrete	Asphalt
Walter	A-24	—	—	—	—	—

AVAILABILITY



TIER:	GOOD	GOOD	GOOD	GOOD	GOOD
TRADENAME:	METAL HD	METAL	METAL DECKING	RAIL STEEL	RESCUE
SHAPE:	Type 01	Type 01	Type 01	Type 01	Type 01
ABRASIVE:	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
REINFORCING:	3 layers	2 layers	2 layers	2 layers	2 layers
MATERIAL:					

SIZE D X T X H	MAX. RPM	STD. PKG.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
TYPE 01 CUT-OFF – FOR GAS & ELECTRIC-POWERED SAWS							
12 x 1/8 x 1" / 20mm	6,360	10	66252836708	66252837838			
14 x 1/8 x 1" / 20mm	5,400	10	66252835386	66252837841	66252832521		66243578262
14 x 1/8 x 1"	5,400	10				66253260462	
16 x 1/8 x 1" / 20mm	4,800	10		66252830886			
16 x 1/8 x 1"	4,800	10				66253259935	



TIER:	GOOD	GOOD	GOOD	GOOD	GOOD
TRADENAME:	DUCTILE HD	DUCTILE	CONCRETE HD	CONCRETE	ASPHALT
SHAPE:	Type 01	Type 01	Type 01	Type 01	Type 01
ABRASIVE:	Silicon Carbide	Silicon Carbide	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 NO.	PART NO.	PART NO.	PART NO.	PART NO.
TYPE 01 CUT-OFF – FOR GAS & ELECTRIC-POWERED SAWS							
12 x 1/8 x 1" / 20mm	6,360	10		66252837840	66252836709	66252837839	70184670243
14 x 1/8 x 1" / 20mm	5,400	10	66252835388	66252837843	66252835387	66252837842	70184672877
16 x 1/8 x 1" / 20mm	4,800	10				70184623029	



CATEGORY DEFINITION

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:	24 – 36
ABRASIVE GRAIN:	Zirconia Alumina and Aluminum Oxide
SHAPE:	Type 01 Straight
REINFORCEMENT:	Side reinforced with R sides
SPEED RATING:	All wheels are rated for 20,000 SFPM applications

CROSS REFERENCE GUIDE AND MACHINE-TO-PRODUCT RECOMMENDATION GUIDE

NORTON	BEST	GOOD
	NorZon IV Rail FastCut and BETTER NorZon III	A30X
Bullard Abrasive	Trackmaster Pro ZA24 Q-BF (Blue)	Trackmaster A30 R-BF (Red)
Flexovit USA	-	A30-PB
Giesmar	AM303-R	NR242-Q
Klingspor	A 24 SX Special	-
Portaco	A30 R-BF	-
Racine Kwik Kut	A24R	-

	BEST	BETTER	GOOD
	HIGHEST PRODUCTIVITY / LOWEST TOTAL COST	EXCELLENT BLEND OF PERFORMANCE & PRICE	CONSISTENT PERFORMANCE / LOW INITIAL PRICE
Hydraulic Saw	NorZon IV Rail FastCut		A30X
Gas Saw			
High Horsepower / Newer Machine		NorZon III RailCut	A30X
Low Horsepower / Older Machine		NorZon III FastCut	A30X

FEATURED PRODUCTS



NORZON IV RAIL FASTCUT

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

FEATURES

- Zirconia alumina abrasive blend
- New, free cutting bond

BENEFITS

- Ideal for high powered, well-maintained machines
- Maximized cut rate, while maintaining straight cuts

AVAILABILITY

SIZE (D X T X H)	MAX. RPM	STD. PKG.	TIER:	BEST				BETTER				BETTER				GOOD			
			TRADENAME:	NORZON IV RAIL FASTCUT				NORZON III RAILCUT				NORZON III RAIL FASTCUT				A30X RAILCUT			
			ABRASIVE:	Zirconia Alumina				Zirconia Alumina				Zirconia Alumina				Aluminum Oxide			
				PART NO.				PART NO.				PART NO.				PART NO.			
TYPE 01 CUT-OFF																			
14 x 1/8 x 1	5,400	10		66253048511				66253360493				66253363694				66253260462			
16 x 1/8 x 1	4,800	10		69936614383				66253464607				66253464415				66253259935			



CATEGORY DEFINITION

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 low initial cost, conventional abrasives wheels.

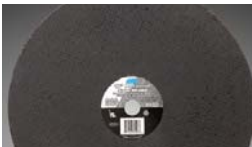


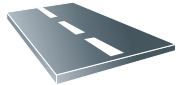
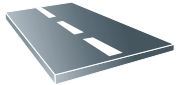
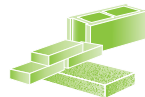
APPLICATIONS:	Cutting straight sections of concrete surfaces
SIZE RANGE:	14" and 18" diameter
THICKNESS RANGE:	3/16" – 3/8"
ABRASIVE GRAIN:	Silicon Carbide
SHAPE:	Type 01 Straight
BOND:	Hot Pressed (HP) – for higher horsepower machine applications where additional durability is needed, may be used wet or dry Cold Pressed (CP) – for lower horsepower machines, which need a free-cutting wheel
ARBOR:	All are 1" with a drive pin



CROSS REFERENCE GUIDE

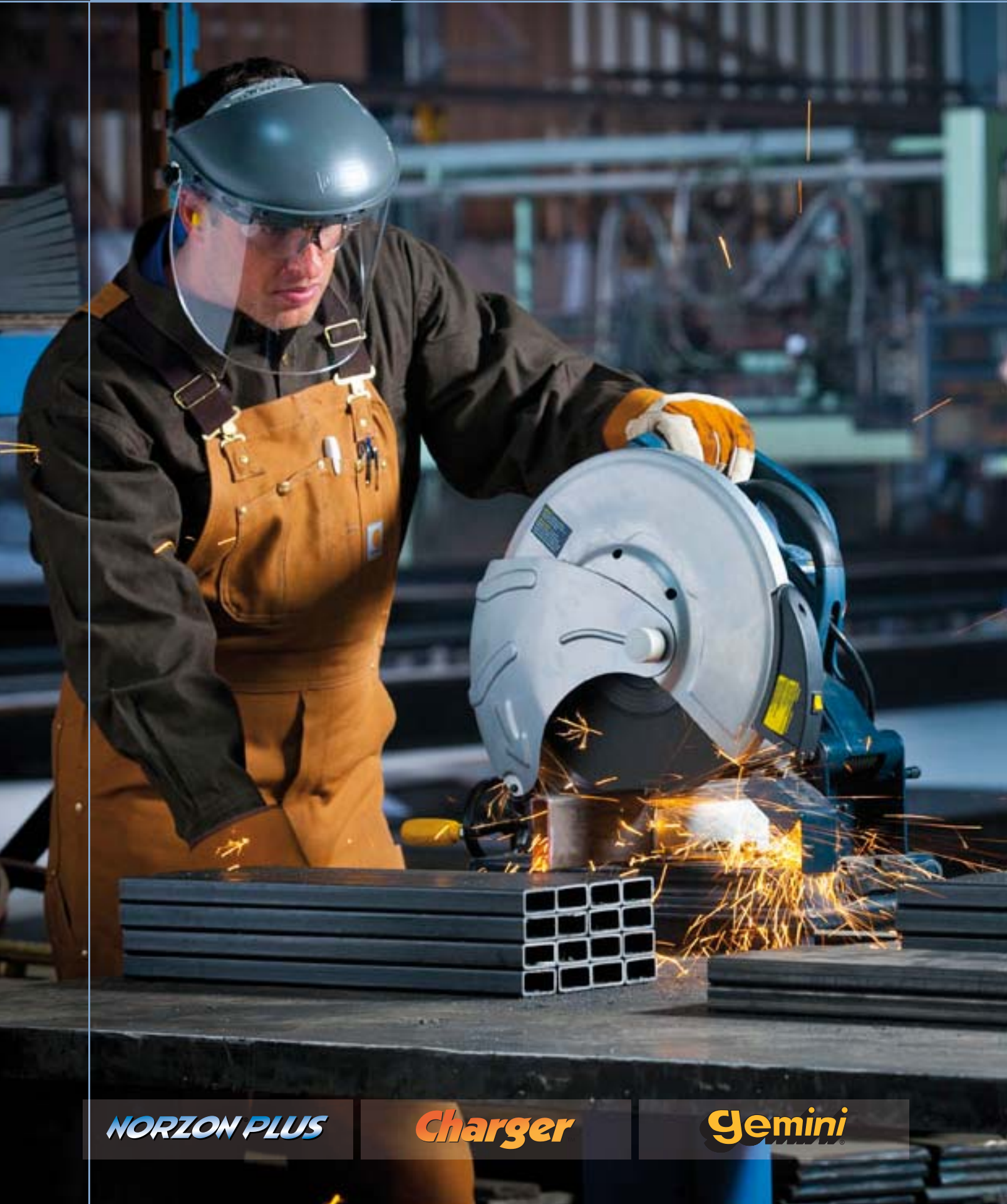
	SPECIALTY		
	BETTER Norton Asphalt / Green Concrete – HP	GOOD Norton Asphalt	GOOD Norton Concrete
Abmast	—	C 16 T. Kompetitor Asphalt/Concrete	C 24 R
Bullard Blaze & Road Warrior	—	C16R & T, C16R3	—
Camel	—	C16-U	C24-R
Flexovit	HPC16AG	C16 G.P. C16UB	C20SB/C16TB
Husqvarna	Red GC-7A	Black EWC	Gold RTC, 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

AVAILABILITY

	 BETTER	 GOOD	 GOOD		
TIER:	BETTER	GOOD	GOOD		
TRADENAME:	ASPHALT – HP	ASPHALT – CP	CONCRETE		
SHAPE:	Type 01	Type 01	Type 01		
ABRASIVE:	Silicon Carbide	Silicon Carbide	Silicon Carbide		
BOND:	Hot Pressed	Cold Pressed	Cold Pressed		
MATERIAL:					
SIZE (D X T X H)	MAX. RPM	STD. PKG.	PART NO.	PART NO.	PART NO.
TYPE 01 CUT-OFF – FOR WALK-BEHIND SAWS					
14 x 3/16 x 1 Pin Hole	4,365	10	70184670100	70184680324	70184680323
14 x 1/4 x 1 Pin Hole	4,365	5	70184670099	70184670535	70184670533
18 x 1/4 x 1 Pin Hole	4,250	5	70184670103	70184670098	
18 x 3/8 x 1 Pin Hole	4,250	5	70184648998		



For higher-production applications, that require optimum speed of cut and product life, please see our complete selection of high-speed diamond blades in our Diamond, Abrasives and Equipment for the Construction Market Catalog #7719 found on www.nortonconstructionproducts.com.



NORZON PLUS

Charger

Gemini



CATEGORY DEFINITION

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: 7/64"
- ABRASIVE GRAIN: Zirconia Alumina/Aluminum Oxide Blend, Aluminum Oxide, Silicon Carbide
- SHAPE: Type O1 Straight
- REINFORCEMENT TYPE: Side reinforced, centrally reinforced

CROSS REFERENCE GUIDE

	TOTAL PERFORMANCE ←			INITIAL PRICE →			SPECIALTY →		
	BETTER			GOOD			GOOD		
NORTON	Charger Fast Cut	Charger Rapid Cut	Charger Long Life	Gemini Fast Cut	Gemini Rapid Cut	Gemini Long Life	Stud Cutter	Gemini Aluminum	Masonry
Brilliant	—	—	—	Super-G	Tube/Pipe	—	Drywall Stud	Aluminum	—
Bullard	ZA36T	—	—	TA36T A46T The Competitor	A36R The Competitor	A36R Ironmaster	A46T Studmaster	AL36R	—
Camel	—	—	ZA24-S	A36-P, WA36-P	—	A36-S	A30-R Mr. Stud	A30-N	—
Dewalt	—	—	XP	GP, Stainless Fabrication	—	—	Stud Cutting	—	—
Flexovit	—	—	—	A30R Fast Cut A30-Q Free Cut	—	A30S Long Life	A30T Drywall Stud	—	—
Makita	—	—	—	—	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	—	C 36 K SG-CHOP
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 O1 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, Fast Cut, and Long Life are side reinforced.

TYPE O1 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
- Fast Cut** *FC* Used when fast 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



FEATURED PRODUCTS



CHARGER CHOP SAW REINFORCED CUT-OFF WHEELS

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

FEATURES

- Zirconia alumina/aluminum oxide abrasive blend
- Fast 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



GEMINI CHOP SAW REINFORCED CUT-OFF WHEELS

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

FEATURES

- Fast 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



METAL STUD CUTTER CHOP SAW REINFORCED CUT-OFF WHEELS

GOOD CHOICE FOR DRYWALL STUDS

FEATURES

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

BENEFITS

- Designed specifically for cutting steel studs

AVAILABILITY



TIER:	BETTER	BETTER	GOOD	GOOD	GOOD	GOOD
TRADENAME:	CHARGER	CHARGER	GEMINI	GEMINI	METAL	MASONRY
SHAPE:	Type 01	Type 01	Type 01	Type 01	Type 01	Type 01
ABRASIVE:	Zirconia Alumina/ Aluminum Oxide	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Aluminum Oxide	Silicon Carbide
REINFORCEMENT:	Side	Central	Side	Central	Side	Side
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 NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
TYPE 01 STRAIGHT CUT-OFF								
10 x 7/64 x 1	6,110	10			66253106109	LL		
12 x 7/64 x 1	5,095	10	66253207552		66253207554	LL	66253214561	RC
14 x 7/64 x 1	4,365	10	66253306624	FC	66253309614	RC	66253306627	FC
			66253306625	LL		66253306626	LL	
						66253314816	ALU	
							07660789405	STUD
							07660703970	
								07660789402
16 x 7/64 x 1	3,820	10	66253410196	FC			66253410198	LL
			66253410197	LL				

DEPRESSED CENTER DESCRIPTION CODES

FC = FAST CUT	LL = LONG LIFE	RC = RAPID CUT	ALU = ALUMINUM	STUD = STUD CUTTER
■ = STAINLESS	■ = STEEL / METAL	■ = MASONRY		



CATEGORY DEFINITION

The Norton stationary saw reinforced cut-off wheel line consists of Type 01 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" - 24" 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 Straight

CROSS REFERENCE GUIDE

	TOTAL PERFORMANCE				INITIAL PRICE	SPECIALTY
	BETTER Charger	GOOD Gemini Fast Cut	Gemini Long Life	Gemini Rapid Cut*	Norton Masonry	GOOD 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 REFER TO GEMINI RAPID CUT WHEELS IN CHOP SAW CUT-OFF WHEEL SECTION OR AT WWW.NORTONABRASIVES.COM

** FOR FOUNDRY AND OTHER PRODUCTION CUT-OFF WHEELS, PLEASE REFER TO THAT SECTION OF THE NORTON FULL LINE CATALOG #7362 OR AT WWW.NORTONABRASIVES.COM

AVAILABILITY

TIER:	BETTER	GOOD	GOOD	GOOD
TRADENAME:	CHARGER	GEMINI FAST CUT	GEMINI LONG LIFE	MASONRY
SHAPE:	Type 01	Type 01	Type 01	Type 01
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 NO.	PART NO.	PART NO.	PART NO.
TYPE 01 STRAIGHT CUT-OFF						
10 x 3/32 x 5/8	6,110	10	66253106108	66253106101	66253106102	07660789391
12 x 1/8 x 1	5,095	10	66253207550	66253207547	66253207548	07660789350
14 x 1/8 x 1	4,365	10	66253306623	66253306609	66253306611	07660789353
16 x 1/8 x 1	3,820	10		66253422942		70184623029
16 x 5/32 x 1	3,820	10	66253410194	66253410183	66253410184	
18 x 5/32 x 1	3,015	10		66253410185		
20 x 5/32 x 1	2,710	5	69078609045 FC 69078609046 LL	69078609031	69078609032	
20 x 3/16 x 1	2,710	5		69078609033	69078609034	
24 x 3/16 x 1-3/4	2,260	5		61463650196		

DEPRESSED CENTER DESCRIPTION CODES

FC = FAST CUT	LL = LONG LIFE	BLANK = ALL PURPOSE
■ = STAINLESS	■ = STEEL / METAL	■ = MASONRY



CATEGORY DEFINITION

Foundry cut-off wheels are designed with abrasives, bonds and reinforcement types specific to machine parameters and materials.

- SIZE RANGE: Reinforced: 12" – 30" diameter; Non-reinforced: 12" – 20" diameter
- GRIT RANGE: 20 – 46 grit
- ABRASIVE GRAIN: Ceramic Alumina, Zirconia Alumina, Aluminum Oxide
- REINFORCEMENT: 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.

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

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.

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

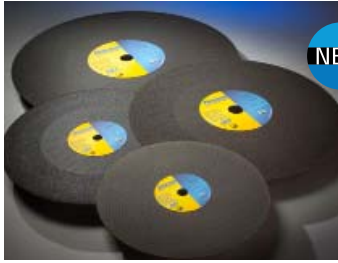
	BEST HIGHEST PRODUCTIVITY LOWEST TOTAL COST	BETTER EXCELLENT BLEND OF PERFORMANCE & PRICE	GOOD CONSISTENT PERFORMANCE LOW INITIAL PRICE
Investment Cast Alloys			
SS	B97	NZ Foundry	Foundry AP
Carbon and Alloy Steel	Norton Quantum	NZ Foundry	Foundry AP
Nickel and Cobalt Based (Hastalloy, Inconel, Waspalloy)	Norton Quantum	NZ Foundry	Foundry AP
Titanium		NZ Foundry	Foundry AP
Cast Iron		NZ Foundry Casting Cut	Foundry AP
Cast Steel			
Carbon & Low Alloy		NZ Foundry Casting Cut	Foundry AP
SS & High Alloy	Norton Quantum	NZ Foundry	Foundry AP
Aluminum Alloy			Foundry AP
Copper Alloys, Brass, Bronze		NZ Foundry Free Cut	Foundry AP

CROSS REFERENCE GUIDE

	TOTAL PERFORMANCE ←			→ INITIAL PRICE
	BEST Norton Quantum	BETTER NorZon Foundry	BETTER NorZon Foundry Casting Cut	GOOD Foundry All Purpose
Allison	TA362 R6 8045HA, YW462MRB2HA	TA302-T6-B6HA, A46-T6-BX5T6A	HF 1247 K – CHALLENGER	
Avery		TA30-V680		A 3226 C7A, C11922 W071
Buckeye			Steel Shark	
Dia-Tool	BV1734R 710	BV 1397-5284-C		
Flexovit		A24PB, A30RB		
Klingpor	20A24-QBF			
NATAB				T 1584 HA
Rappoid		6Z30U-B3F2		



FEATURED PRODUCTS



NEW

NORTON QUANTUM CERAMIC REINFORCED
BEST CHOICE ON AEROSPACE ALLOYS, CAST IRONS, AND STEEL

FEATURES

- New engineered ceramic grain shape and chemistry

BENEFITS

- Superior performance on steel, aerospace alloys, and cast iron with advanced Norton bond technology
- More aggressive; can withstand demanding applications
- Longer wheel life; shorter cycle times



NORZON FOUNDRY REINFORCED
BETTER CHOICE ON STAINLESS STEEL, AEROSPACE ALLOYS, CAST IRONS, AND STEEL

FEATURES

- Durable zirconia alumina abrasive

BENEFITS

- For premium performance on stainless steel, aerospace alloys, cast irons and steel

- New, thicker Casting Cut with extra reinforcement

NEW

AVAILABILITY REINFORCED



TIER:
TRADENAME:
ABRASIVE:

BEST	BEST	BETTER	GOOD
NORTON QUANTUM	B97	NORZON	U57A
Ceramic Alumina	Zirconia Alumina/ Aluminum Oxide	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide

SIZE (D X T X H)	MAX. RPM	STD. PKG.	SPEC.	PART NO.	SPEC.	PART NO.	SPEC.	PART NO.	SPEC.	PART NO.
TYPE O1 FLAT CUT-OFF – FOUNDRY REINFORCED										
12 x 1/8 x 1	5,095	10					AP	66253249600		
14 x 1/8 x 1	4,365	10					AP	66253319576	AP	66253464576
16 x 5/32 x 1	3,820	10	FC	61463619480	90A244-TB97N	66253422205	AP	66253466437		
			LL	61463619481			LL	66253431488		
20 x 5/32 x 1	2,710	10	FC	61463619482	90A244-YB97B	69078650375	AP	69078627986	AP	69078627989
			LL	61463619484	90A244-YB97N	69078650377	FC	69078627987		
							LL	69078627988		
							CC	69078608926		
20 x 3/16 x 1	2,710	10	FC	61463619486	90A204-YB97B	69078650380	AP	69078649613	AP	69078649612
			LL	61463619487			LL	69078627993		
24 x 7/32 x 1-3/4	2,260	10	FC	61463619488	90A204-YB97B	69083150382	AP	69083149615	AP	69083125993
			LL	61463619489			FC	69083125991	FC	69083125994
							LL	69083125992		
24 x 1/4 x 1-3/4	2,260	10					CC	69936666839		
26 x 7/32 x 1-3/4	2,090	10					U57A244-YB65B	69083166431		
30 x 1/4 x 1-3/4	1,810	10	FC	61463619492	90A204-YB97B	69210450386	4NZ24-TB65B	69210466453		
			LL	61463619493	90A204-ZB97B	69210450387	4NZ24-YB65B	69210466464		

AVAILABILITY NON-REINFORCED



TIER:
TRADENAME:
ABRASIVE:

BETTER	GOOD
U57A	GEMINI
Aluminum Oxide	Aluminum Oxide

SIZE (D X T X H)	MAX. RPM	STD. PKG.	SPEC.	PART NO.	SPEC.	PART NO.
TYPE O1 FLAT 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		

CUT-OFF DESCRIPTION CODES

- AP = ALL PURPOSE**
Where an excellent blend of cut rate and life is needed
- CC = CASTING CUT**
Extra Reinforcement for straighter cuts
- FC = FREE CUT**
Where fast stock removal is needed, or the application only allows for low-pressure or under-horsepowered grinders
- LL = LONG LIFE**
Where durability is needed due to severe application, and when horsepower of the grinder allows for heavy pressure



CATEGORY DEFINITION

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 O1 Straight

CROSS REFERENCE GUIDE

<i>NORTON</i>	BETTER		
	Reinforced A60-OBNA2	Reinforced 57A364-TB25N	Non-Reinforced 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	-	-

TECHtip

- Smooth side pattern – Used when a precise thickness tolerance is needed
- Rough (R) sides pattern – Abrasive particles protrude from sides of wheel; used wet or dry on most metals

TROUBLESHOOTING GUIDE

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

TECHtip

- 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.

FEATURED PRODUCTS



TOOLROOM REINFORCED CUT-OFF WHEELS

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

FEATURES

- OBNA2 – side reinforced, resin bond
- B25N – constructed with full diameter fiberglass reinforcement

BENEFITS

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

AVAILABILITY

TIER:

BETTER

SIZE (D X T X H)	MAX. RPM	STD. PKG.	SPEC.	PART NO.
TYPE 01 FLAT 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 1/2	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

TIER:

BETTER

SIZE (D X T X H)	MAX. RPM	STD. PKG.	SPEC.	PART NO.
TYPE 01 FLAT 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 CUT-OFF WHEELS

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)
- R55 bond (rough 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
- Versatile, free cutting, rubber bond used primarily for wet cut-off

AVAILABILITY

TIER:

BETTER

SIZE (D X T X H)	MAX. RPM	STD. PKG.	SPEC.	PART NO.
TYPE 01 FLAT 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
			57A60-Q8B	66252922986
			57A60-Q8B	66252922987
7 x .035 x 1-1/4	5,460	25	57A601-PB25	66252922988
			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-Q8B	66252922672
7 x .060 x 1-1/4	6,550	25	57A46-M8B	66252922677
			57A60-M8B	66252922681
			57A60-Q8B	66252922684

TIER:

BETTER

SIZE (D X T X H)	MAX. RPM	STD. PKG.	SPEC.	PART NO.
TYPE 01 FLAT CUT-OFF – NON-REINFORCED				
7 x .060 x 1-1/4	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
			57A60-M8BW	66253122818
10 x .060 x 5/8	4,585	25	57A46-P4R55	66253122815
			57A80-P6R55	66253122819
10 x .090 x 5/8	4,585	25	57A60-M8BW	66253122824

*EXCEPTION: ROUGH SIDES



CATEGORY DEFINITION

The Norton metallurgical line of Type O1 straight cut-off wheels was developed specifically for sectioning of 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" – 14" diameter

MATERIALS CUT: Steels, Nonferrous Materials, and Titanium / Titanium Alloys

CROSS REFERENCE GUIDE

SIZE	MATERIAL	Norton		Buehler		LECO		Struers	
		SPEC.	UPC	METABRASE PART NO.	BUHLERMET II PART NO.	PART NO.	PART NO.	PART NO.	AXITOM/-5 PART NO.
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*
	Hard Steels (Rc 40 - 55)	ML-209	66253117875	10-4112-010	10-5110-010	811-035-010			50A24*
	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*
	Nonferrous Materials	ML-509	66253117829	10-4145-010		811-053-010			10S24*
Titanium / Titanium Alloys	ML-609	66253117878	10-4150-010		811-053-010			20S24*	
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•
	Nonferrous Materials	ML-510	66253117831	10-4245-010	10-5245-010	810-313-010			10S25•
Titanium / Titanium Alloys	ML-610	66253117882	10-4246-010		810-313-010	811-077-010		20S25•	
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†
	Medium Steels (Rc 30 - 40)	ML-312	66253322153	10-4416-010	10-5412-010	811-089-010	810-311-010		40A30†
	Soft Steels (Rc 20 - 30)	ML-412	66253322099	10-4420-010	10-5416-010	811-095-010	810-311-010		30A30†
	Nonferrous Materials	ML-512	66253322100	10-4445-010	10-5445-010	810-314-010			10S30†
Titanium / Titanium Alloys	ML-612	66253322154	10-4450-010		810-314-010			20S30†	
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
	Medium Steels (Rc 30 - 40)	ML-314	66253322157	10-4316-010	10-5312-010	811-976-010	811-977-010		40A35▲ 30A35
	Soft Steels (Rc 20 - 30)	ML-414	66253322158	10-4320-010		811-978-010			30A35▲ 20A35
	Nonferrous Materials	ML-514	66253322159	10-4345-010	10-5345-010	811-980-010			10S35▲ 10S35
Titanium / Titanium Alloys	ML-614	66253322160	10-4350-010		811-980-010			30S35▲ 20S35	

*DISCOTOM/LABOTOM • DISCOTOM-5/-6/LABOTOM-3 † UNITOM/DISCOTOM-50/-60/-65 ▲ EXOTOM/UNITOM-2/-5/-50

AVAILABILITY

SIZE (D X T X H)	MAX. RPM	STD. PKG.	PRODUCT NO.	APPLICATION	TIER:
					BEST
TYPE O1 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
			ML-209	Hard Steels (Rc 40 - 55)	66253117875
			ML-309	Medium Steels (Rc 30 - 40)	66253117877
			ML-409	Soft Steels (Rc 20 - 30)	66253117828
			ML-509	Nonferrous Materials	66253117829
10 x .063 x 1-1/4 (254mm x 1.6mm x 32mm)	3,500	10	ML-609	Titanium / Titanium Alloys	66253117878
			ML-110	Very Hard Steels (Rc 55 - 68)	66253117879
			ML-210	Hard Steels (Rc 40 - 55)	66253117880
			ML-310	Medium Steels (Rc 30 - 40)	66253117881
			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-510	Nonferrous Materials	66253117831
			ML-610	Titanium / Titanium Alloys	66253117882
			ML-112	Very Hard Steels (Rc 55 - 68)	66253322151
			ML-212	Hard Steels (Rc 40 - 55)	66253322152
			ML-312	Medium Steels (Rc 30 - 40)	66253322153
13.75 x .098 x 1-1/4 (350mm x 2.5mm x 32mm)	2,770	10	ML-412	Soft Steels (Rc 20 - 30)	66253322099
			ML-512	Nonferrous Materials	66253322100
			ML-612	Titanium / Titanium Alloys	66253322154
			ML-114	Very Hard Steels (Rc 55 - 68)	66253322863
			ML-214	Hard Steels (Rc 40 - 55)	66253322156
	2,770		ML-314	Medium Steels (Rc 30 - 40)	66253322157
			ML-414	Soft Steels (Rc 20 - 30)	66253322158
			ML-514	Nonferrous Materials	66253322159
			ML-614	Titanium / Titanium Alloys	66253322160
			3,330		