

# MAGNUM

## PRECISION ENGINEERED CUTTING & GRINDING ABRASIVES

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#### TYPE 1 CUSTOM FORMULATED WHEELS, UP TO 30 INCH DIAMETER

Magnum is the industry leader in Very High Performance, custom formulated cutting and grinding wheels. MAGNUM can create the ULTIMATE cutting or grinding wheel for your specific requirements. 3,5

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## CONFIDENTIAL DISTRIBUTOR PRICE LIST

EFFECTIVE FEBRUARY 2009

**PLEASE NOTE: MAGNUM'S PREMIUM PLATINUM grade wheels are now also offered with a new Fe FREE, INOX RATED formulation; FREE of IRON, SULPHUR and CHLORINATED FILLERS, for CONTAMINATE FREE cutting of STAINLESS STEEL. (NFE PART NUMBERS) SEE PAGE 16**

ORDER TOLL FREE:

**1 (800) 262-4686**

FAX: (909) 890-1005

LOCAL PHONE: (909) 890-1100

[www.MagnumAbrasives.com](http://www.MagnumAbrasives.com)



## TERMS AND CONDITIONS:

**TERMS OF SALE: 2% 10 NET 30 DAYS**  
**MINIMUM ORDER FROM FACTORY: \$35.00**

This price list is effective **January 2009**, and supersedes all previous versions. Magnum Abrasives Inc. reserves the right to discontinue or change the price or specifications of any product listed herein, without prior notice.

**PREPAID FREIGHT:** Freight charges will be prepaid on all orders of **\$600.00** or more to one destination. All items ordered in standard pack quantities can be **combined** to qualify for prepaid freight. Requests for special shipments other than regular will be charged. Shipments outside the United States will be made to point of export. (Does not apply to nonstandard items.)

**PLEASE NOTE: NON-STANDARD PACK QUANTITIES:** All orders for quantities other than standard pack lots are subject to an additional handling charge.

**WE RESERVE THE RIGHT TO SHIP +/- 10% COMPLETE.** No returns, except as authorized by factory. All returns are subject to a 15% restocking charge. Carton weights are approximate and may vary slightly. All items in the catalog are **standard stock**. Prices are subject to change without notice.

**COMBINED QUANTITY PRICING:** All items ordered in standard pack quantities may be **combined for best bracket price** per item.

**CUSTOM WHEELS** are **non-standard** items. Pricing is based on a normal order quantity, and is generally quoted F.O.B. factory. **Do not calculate for combined quantity pricing.**

**WARRANTY:** Magnum Abrasives products are guaranteed to be free from defects. Our obligation to the user shall be to replace any items proven to be defective, or to refund the purchase price. User assumes responsibility for selecting the appropriate product for use and for complying with safety regulations set by OSHA and ANSI SAFETY CODE B7.1 covering wheel speed, safety guards, eye and face protection, flanges and mounting procedures, and assumes all other risks, if any.

**STANDARD SIZES AND GRADES:** Magnum Abrasives offers a full range of standard grades and sizes to meet the requirements of most "general" cutting and grinding operations. A user's operation may require a special grade or formulation for best results, and we are ready to address these unique requirements. Contact the factory with your inquiry.

**SAMPLE POLICY:** We encourage comparative job-site tests of our products with other brands. The user can determine our product quality and performance under actual conditions, using on-site equipment and materials.

Test samples of custom formulated wheels can be purchased in small quantities, with pricing based on a normal ordering quantity. If test performance is unsatisfactory, the customer will receive full refund or credit adjustment toward re-engineered or standard product.

## SAFETY IS OUR CONCERN:

Magnum Abrasives products are manufactured under strict quality controls and specifications. We use the highest quality grains, bond systems and reinforcement fabrics available, all designed for optimal performance, with operator safety in mind.

Users of abrasive products should familiarize themselves with ANSI B7.1, OSHA and EURO 12413 published standards concerning the proper use, handling and storage of resin-bonded abrasive wheels.

**All Magnum Abrasives cutting and grinding wheels are manufactured in the United States of America, by skilled personnel using modern equipment, advanced production methods, and high-quality raw materials.**

[www.MagnumAbrasives.Com](http://www.MagnumAbrasives.Com)

## MAGNUM ABRASIVES, INC.

758 SOUTH ALLEN STREET,  
SAN BERNARDINO, CA 92408

FAX: (909) 890-1005

PHONE: (909) 890-1100

NATIONAL TOLL FREE ORDER NUMBER:

**1 (800) 262-4686**

**e-mail: [info@MagnumAbrasives.Com](mailto:info@MagnumAbrasives.Com)**



We also accept major credit cards:



DOES YOUR CUSTOMER...  
HAVE A **UNIQUE** INDUSTRIAL APPLICATION?  
CUT OR GRIND **EXOTIC** MATERIALS?  
NEED A **METRIC** DIMENSIONED WHEEL?

## **MAGNUM IS YOUR CUSTOMER'S BEST SOURCE OF "APPLICATION-SPECIFIC", CUSTOM FORMULATED & SIZED WHEELS:**

Magnum has more than 20 years experience formulating and producing high-performance resin bonded abrasive products. We have our own in-house laboratory, as well as our complete facility for precision machined mold making .

We have the expertise and resources to make nearly any shape, size and grade abrasive that your customer might require, in diameters ranging from 1 to 30 inches.

If your customer has equipment that requires specially sized or shaped wheels, or has an idea for a new piece of "application specific" machinery, we can probably help.

We are actively involved in designing, engineering and manufacturing specialized and improved abrasives for many different industries.

In addition to our standard line of excellent cutoff and grinding wheel products, Magnum custom sized and formulated abrasives can be found in dental labs, specialized rail grinding machines, in-the-field skill-saw blade sharpeners, automated large pipe deburring equipment, automated nickel alloy foundry cutoff equipment, and a wide variety of other specialized applications.

### **CUSTOM WHEEL SPECIFICATION GUIDELINES**

We design, formulate and manufacture premium grade resin-bonded & rubber resin-bonded abrasive cutting wheels up to 30" in diameter, custom formulated for specific cutting operations, on specific materials, with specific results. Please refer to pages 4 & 5 for general information. Contact our factory technical customer service for test samples. We have the knowhow, and we'll guide you through the process.

#### **You provide the following information about your customer's specific job requirements:**

**MATERIAL** - Type of material to be cut: it's hardness, size and shape, quality of cut sought.

**MACHINE** - Type to be used: chop-stroke, oscillating or swing-frame, make and model, size, horsepower, spindle speed, how the workpiece is secured, wet or dry cutting.

**WHEEL** - Dimensional features of wheel currently in use: diameter, thickness, arbor size and pinhole pattern, reinforcement pattern, manufacturer's specifications (name, grade, rpm).

**We'll do the rest.**

*(Note: Use a copy of the convenient form on page 20.)*

Call Magnum at **1(800)262-4686** with your customer's requirements. We will provide you with an expert analysis and recommendation for your customer.

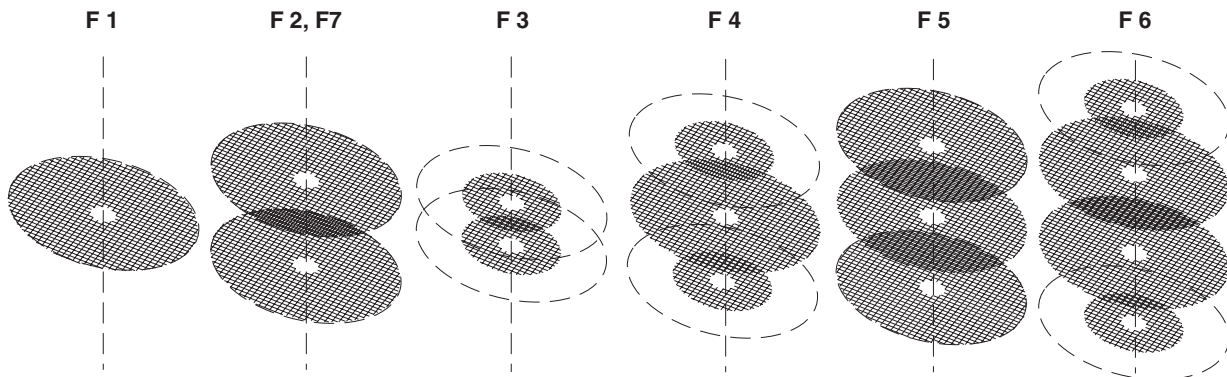


## A GENERAL GUIDE TO MAGNUM WHEEL GRADE CODE

# A 24 R B F2 5

ABRASIVE TYPE	GRAIN SIZE	HARDNESS	BOND TYPE	REINFORCEMENT (NO F = NONE)	SPECIAL MFG. CODE
<b>A</b> = Standard Aluminum Oxide	<b>12</b> = Coarse	<b>A</b> = Softest	<b>B</b> = Resinoid	<b>F1</b> = Internal Reinforced	(optional)
<b>TA</b> = Treated Aluminum Oxide	<b>16</b> =	...	<b>B33</b> = Premium Resinoid	<b>F2</b> = Double Reinforced	Indicates
<b>C</b> = Silicon Carbide	<b>20</b> =	...	<b>R55</b> = Premium Rubber- Resin	<b>F3</b> = Hub Reinforced	specific bonds,
<b>CA</b> = Silicon Carbide & Aluminum Oxide	<b>24</b> =	...		<b>F4</b> = Hub & Internal Reinforced	special side
<b>SKA</b> = Special coated Alumina blend	<b>30</b> = Medium	...		<b>F5</b> = Triple Reinforced	treatments or
<b>SKZ</b> = Special Alumina blend	<b>36</b> =	<b>M</b> = Medium		<b>F6</b> = Hub & Double Full Internal Reinforced	manufacturing
<b>2Z</b> = Zirconium & Aluminum Oxide	<b>46</b> =	...		<b>F7</b> = Double Full Internal Reinforced	processes.
<b>4Z</b> = Premium Zirconium & Aluminum Oxide	<b>60</b> =	...			
	<b>80</b> = Fine	...			
	<b>90</b> =	...			
	<b>100</b> =	...			
	<b>120</b> =	...			
	<b>220</b> =	<b>Z</b> = Hardest			

### ABRASIVE WHEEL REINFORCEMENT CONFIGURATIONS



### ABRASIVE WHEEL COMPONENTS

The abrasive wheel brings thousands of miniature cutting tools (abrasive grains) into contact with the work-piece, in rapid succession, as the wheel spins. These grains are harder than the metal alloys being cut, and each individual grain removes a small chip of metal as it comes in contact with the workpiece repeatedly, at high speed. This results in the rapid cutting of the material.

The design and manufacture of high quality cut-off wheels requires a knowledgeable integration of key components:

**ABRASIVES** - Several kinds of abrasives are commonly used; Aluminum Oxide, Silicon Carbide, and Zirconia - Aluminum Oxide; all designed with variations in size and structure, to significantly affect the specific cutting or grinding application.

**BOND** - The bonding system holds the abrasives together in the wheel shape. Consisting of resins & fillers, it allows the wheel to wear away at a specific rate, to achieve the

required cutting action. Wheels with tenacious bonds are called "hard"; those that break down more rapidly are considered "soft". Resinoid bonding systems are used for dry-cutting of most materials. Rubber-Resin bonding systems are used for most wet-cutting applications.

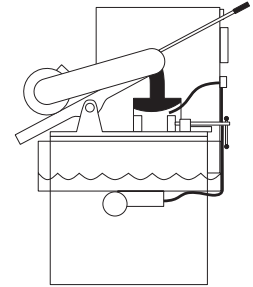
**STRUCTURE** - To provide space for the abrasive grain - bond matrix, the wheel must be constructed with the proper number, size and distribution of minute "spaces" in the structure. Structures with more spaces are considered "open", those with fewer spaces are considered "closed".

**REINFORCEMENT** - For added strength, a woven fabric of long strand fiberglass, impregnated with phenolic resins, is molded into the wheel during the manufacturing process. The strand size, weave and strength is determined by the requirements of the cutting job, and is engineered to meet the stresses of the application.



**PREMIUM CUT-OFF WHEELS UP TO 30" DIAMETER, FORMULATED FOR SPECIFIC CUTTING OPERATIONS ON SPECIFIC MATERIALS, WITH SPECIFIC RESULTS.**

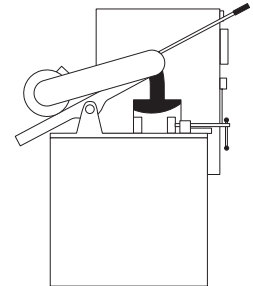
*When cutting expensive materials, an ordinary wheel may not provide the cool, smooth, burr-free and burn-free cuts that are required. An incorrectly designed wheel can quickly turn expensive castings, forgings, extrusions, spinings, formings, composites, & etc. into scrap. Reinforcement is typically used on wheels rated at speeds above 9500 surface feet per minute. High-strength fiberglass reinforcement is generally recommended. Special applications may require zone, or non-reinforced wheels, due to the machine horsepower or the material being cut. A correctly designed wheel provides reduced costs, faster cutting, more cuts per wheel, and a better finished cut.*



*Note: Premium wheels can be ordered in quantities suitable for test and / or minimal production requirements. Please contact factory technical customer service. Provide detailed information on your job requirements; Magnum will provide the expert analysis and recommendation. (See page 2)*

**WET CUT - CUSTOM GRADES FOR PRODUCTION WET CUTTING:**

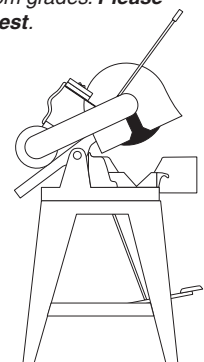
Rubber-resin bonded wheels are used on cut-off machines with coolant tanks and circulating pumps that deliver coolant to the wheel and the workpiece to dissipate heat. The wet cutting process is used on sensitive materials like titanium, ceramics, exotic alloys, stainless steels, non-ferrous and composite materials. Wheel grade selection is extremely important, as these expensive materials can be damaged by heat-checking and breakage. Wet cutting with rubber-resin wheels can provide high quality cuts and good wheel life. Magnum can provide a wheel that will minimize burn and burr, and help to reduce finishing costs. These wheels generally run in the 7500 to 9500 surface feet per minute speed range, however slower speeds may produce better quality cuts without a significant reduction in cutting rates. **Available 6" thru 30" diameters.**



*Note: Consult Magnum's customer technical services for test samples, quantities & pricing details. 5/8", 3/4", 1", 1-1/4", 1-1/2", 1-3/4", 2" & 3" arbor sizes are available. Non-standard arbors or pin-hole patterns are also available in custom grades. Please specify on request.*

**DRY CUT - CUSTOM GRADES FOR PRODUCTION DRY CUTTING:**

Most dry cutting is performed with cold-pressed, resin-bonded wheels. The added durability and extra-fast cutting action of a premium wheel will save enough in reduced labor to make it more cost effective than a standard wheel. Whether cutting cross-sections or tube, a fast rate of cut is the key to efficient operation. In dry cutting, wheel speeds (12,000 to 16,000 surface feet per minute) are higher than those used in wet cutting. Special combinations of thermosetting resins, blended with premium grains and fillers, produce a tough bond that stands up under heat and pressure in most applications. Reinforcement patterns allow for pebbled, rough side surface to reduce side friction and provide faster, cooler cutting, while maximizing the power of a cut-off saw.



**CUSTOM GRADES FOR FOUNDRY CUTTING WITH FIXED-HEAD, PUSH-THRU, CHOP-STROKE OR SWING-FRAME CUT-OFF MACHINES:**

In foundry casting operations, abrasive cut-off wheels are used to trim gates and risers from the castings. These aggressive operations will involve swing frame, floor & table machines, utilizing wheels specifically designed to match the machine type and horsepower, as well as the characteristics and cross-section size of the material being cut. All foundry applications require wheels reinforced with high-strength fiberglass fabric, to provide the ability to withstand the typical twisting and side-pressure forces encountered. These wheels are designed for use on industrial production machines with adequate power.

**The basic Rule-of-Thumb:** the machine should draw about 1 horsepower per inch of wheel diameter. This ratio will minimize "burr" and "burn", and maximize the efficiency of the cut.

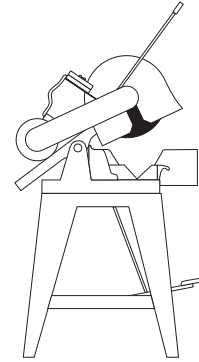
*Note: Triple reinforced patterns are recommended for swing-frame applications. Contact factory for specific grade recommendations based on your customer's material, machines, cutting operations and performance requirements.*

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**COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE**



## STATIONARY CHOP SAWS & CUT-OFF MACHINES REINFORCED CUT-OFF WHEELS FOR GENERAL PURPOSE INDUSTRIAL DRY CUTTING



**A 24 RBF2** - GENERAL PURPOSE CUTTING ON STRUCTURAL STEELS, IRON AND FERROUS METALS. AGGRESSIVE AND DURABLE

**A 36 RBF2** - MINIMUM BURR ON BARS, ANGLES AND TUBING. GOOD LIFE WHEN CUTTING LIGHT GAUGE MATERIAL WITH NOMINAL CONTACT AREA.

**A 24 SBF2 / A 24 SBF4** - GENERAL PURPOSE CUTTING OF MOST STRUCTURAL STEELS. FEATURES AGGRESSIVE CUTTING, LONG LIFE AND DURABILITY

**A 36 RBF2 / A 36 RBF4** - FAST, MINIMUM BURR CUTTING ON MOST PROFILES - ANGLES, BARS, TUBING AND CHANNEL. GOOD LIFE AND PERFORMANCE.

WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS		STD PACK		QUANTITY PRICE PER WHEEL			
		A 24 RBF2	A 36 RBF2	QTY	WT	MIN	20	50	100
12 x 3/32 x 1 12 x 1/8 x 1	5100 5100	2101 2103	2102 2104	10 10	10 LB 14 LB	6.77 6.77	6.21 6.21	5.80 5.80	5.47 5.47
14 x 3/32 x 1 14 x 1/8 x 1	4400 4400	2105 2107	2106 2108	10 10	14 LB 15 LB	8.55 8.55	7.85 7.85	7.34 7.34	6.92 6.92

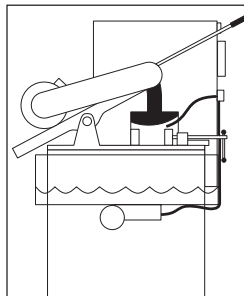
WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS				STD PACK		QUANTITY PRICE PER WHEEL			
		A 24 SBF2	A 36 RBF2	A 24 SBF4	A 36 RBF4	QTY	WT	MIN	20	50	100
16 x 1/8 x 1	3800	2109	2110			10	25 LB	11.14	10.13	9.47	8.89
18 x 5/32 x 1	3400	2111	2112			10	35 LB	14.46	13.39	12.52	11.81
20 x 5/32 x 1	3050	2113	2114			10	46 LB	17.54	16.09	15.02	14.18
22 x 3/16 x 1	2465	2115	2116			10	60 LB	22.98	21.28	19.89	18.88
24 x 7/32 x 1	2260			2117	2118	5	40 LB	35.47	32.85	30.70	28.96
26 x 7/32 x 1	2080			2119	2120	5	47 LB	41.38	38.31	35.81	33.78
30 x 1/4 x 1 (also 1-1/2, 1-3/4 arbors)	1808	<i>*available in custom grades for specific applications. Contact Magnum Technical Services.</i>									

**Note:** Non-standard arbors or pin-hole patterns are available in custom grades. Contact Magnum Technical Services.

**These wheels** are the most commonly used grades for a variety of typical applications. They have been proven over the years to be generally appropriate and cost effective for common uses.

**You may benefit** from a more precisely engineered formulation and configuration for your specific application.

**Magnum** has the experience & technology to provide you with the perfect cutting or grinding wheel for your application.



**Note:** Up to 30" wheels are also available, in custom grades for wet or dry cutting applications.

**USE RUBBER-RESIN BOND WHEELS FOR PRECISION WET CUTTING APPLICATIONS**

Contact Magnum Technical Services.

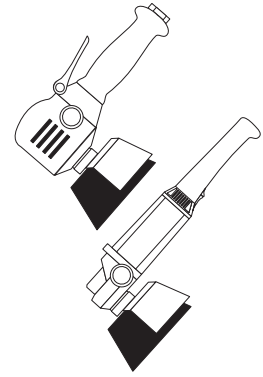
**SEARCHING FOR AN UNUSUAL OR UNIQUE CUTTING OR GRINDING WHEEL?  
UNABLE TO LOCATE A SPECIFIC GRADE OR SIZE? WE ARE HERE TO HELP.  
CONTACT MAGNUM CUSTOMER SERVICE AT 1(800)262-4686 FOR DETAILS.**

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COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE

# HEAVY-DUTY HAND-HELD GRINDERS TYPE 11 FLARED CUP GRINDING WHEELS FOR GENERAL PURPOSE INDUSTRIAL APPLICATIONS



**A 16 QB** - VERY AGGRESSIVE GRINDING, LONG WHEEL LIFE ON WELDMENTS, CASTINGS, STEEL AND FERROUS METALS IN HEAVY-DUTY FOUNDRY WORK

**C 16 PB** - VERY AGGRESSIVE GRINDING, LONG WHEEL LIFE ON MASONRY, POURED CONCRETE, TILT-UP PANELS, LARGE ALUMINUM CASTINGS AND ALL NON-FERROUS METALS.

**4Z 16 RB** - FOR OPTIMUM GRINDING PERFORMANCE, STOCK REMOVAL AND LONG LIFE ON CAST STEEL, ALLOY STEEL, MALLEABLE AND DUCTILE IRON. ZIRCONIA & ALUMINIUM OXIDE GRAINS COMBINED WITH HIGH-PERFORMANCE RESIN BOND.

**Note: Some Part Numbers and Grades on this page have been changed.**

WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS			STD PACK		QUANTITY PRICE PER WHEEL			
		A 16 QB	C 16 PB	4Z 16 RB	QTY	WT	MIN	20	50	100
4/3 x 2 x 5/8-11	9050	5190			5	9 LB	7.48	6.93	6.48	6.11
4/3 x 2 x 5/8-11s	9050	5192			5	11 LB	8.67	7.95	7.43	7.02
5/4 x 2 x 5/8-11	7250	6001			5	15 LB	10.67	9.79	9.14	8.62
5/4 x 2 x 5/8-11s	7250	6005			5	15 LB	11.94	10.95	10.23	9.65
6/4-3/4 x 2 x 5/8-11	6050	6009			5	20 LB	12.27	11.36	10.62	10.02
6/4-3/4 x 2 x 5/8-11s	6050	6013			5	22 LB	14.34	13.16	12.30	11.60
4/3 x 2 x 5/8-11	9050		5191		5	8 LB	7.32	6.72	6.28	5.92
4/3 x 2 x 5/8-11s	9050		5193		5	10 LB	8.51	7.81	7.30	6.89
5/4 x 2 x 5/8-11	7250		6002		5	12 LB	10.00	9.17	8.56	8.08
5/4 x 2 x 5/8-11s	7250		6006		5	12 LB	11.15	10.23	9.56	9.02
6/4-3/4 x 2 x 5/8-11	6050		6010		5	18 LB	12.81	11.74	10.98	10.36
6/4-3/4 x 2 x 5/8-11s	6050		6014		5	20 LB	14.18	13.01	12.16	11.47
4/3 x 2 x 5/8-11	9050			7813	5	8 LB	9.18	8.50	7.94	7.49
4/3 x 2 x 5/8-11s	9050			7814	5	10 LB	11.06	10.24	9.57	9.03
5/4 x 2 x 5/8-11	7250			7815	5	12 LB	13.69	12.68	11.85	11.18
5/4 x 2 x 5/8-11s	7250			7816	5	12 LB	14.74	13.65	12.76	12.04
6/4 x 2 x 5/8-11	6050			7817	5	18 LB	16.42	15.20	14.20	13.40
6/4 x 2 x 5/8-11s	6050			7818	5	20 LB	17.68	16.37	15.30	14.43



**Note:** Type 11 cup wheels with a full steel back for use in extremely rough working conditions are available. (Indicated by letter "S" added to the arbor size).

**PLEASE NOTE!**  
STRAIGHT-SIDED TYPE 6 CUP WHEELS ARE ALSO AVAILABLE. CONTACT CUSTOMER SERVICE FOR DETAILS.

**REMEMBER - YOU MAY COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE**

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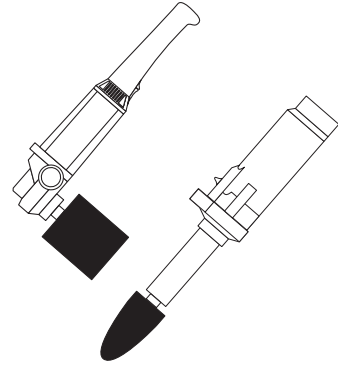
COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE



## HEAVY-DUTY HAND-HELD PORTABLE GRINDERS

### TYPE 16, 17, 18 & 18R PLUGS AND CONES FOR

### FOR TYPICAL INDUSTRIAL PRODUCTION AND CONSTRUCTION USES.



**A 16 PB** - VERY AGGRESSIVE GRINDING, LONG WHEEL LIFE. FOR HEAVY STOCK REMOVAL, BLENDING FERROUS METAL WELDMENTS, CASTINGS AND FORGINGS.

**A 24 PB** - AGGRESSIVE GRINDING, LONG WHEEL LIFE, SMOOTHER FINISH.

**CA 16 PB** - AGGRESSIVE GRINDING & GOOD STOCK REMOVAL ON CAST IRON, DUCTILE AND NON-FERROUS MATERIALS. GOOD STOCK REMOVAL.

**CA 24 PB** - FOR SMOOTHING, FINISHING OF WELDMENTS, GRINDING OFF BURRS AND ROUGH SURFACES.

WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS				STD PACK		QUANTITY PRICE PER WHEEL			
		A 16 PB	A 24 PB	CA 16 PB	CA 24 PB	QTY	WT	MIN	20	50	100

#### TYPE 16

1-1/2 x 2 x 3/8-24	24000	7102				10	4 LB	3.84	3.59	3.38	3.22
1-1/2 x 3 x 3/8-24	24000	7106				10	4 LB	3.84	3.59	3.38	3.22
1-1/2 x 3 x 5/8-11	24000	7110				10	5 LB	3.99	3.73	3.52	3.35
2 x 3 x 3/8-24	18000		7114			10	8 LB	4.30	4.02	3.79	3.61
2 x 3 x 5/8-11	18000	7117	7118	7119	7120	10	8 LB	4.30	4.02	3.79	3.61
2-3/4 x 3-1/2 x 5/8-11	13500	7121	7122	7123		10	12 LB	5.48	5.12	4.83	4.60

#### TYPE 17

1-1/2 x 2-1/2 x 3/8-24	24000	7126				10	5 LB	3.88	3.63	3.42	3.26
1-1/2 x 2-1/2 x 5/8-11	24000		7130	7131	7132	10	5 LB	3.88	3.63	3.42	3.26
2 x 3 x 3/8-24	18000		7134			10	8 LB	4.30	4.02	3.79	3.61
2 x 3 x 5/8-11	18000	7137	7138	7139	7140	10	8 LB	4.30	4.02	3.79	3.61

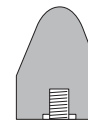
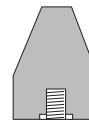
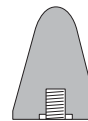
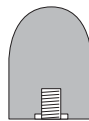
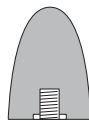
#### TYPE 18

1-1/2 x 3 x 3/8-24	24000		7142			10	8 LB	4.38	4.10	3.86	3.68
1-1/2 x 3 x 5/8-11	24000	7145	7146	7147	7148	10	8 LB	4.38	4.10	3.86	3.68
2 x 3 x 3/8-24	18000	7149	7150	7151	7152	10	14 LB	5.32	4.99	4.69	4.46
2 x 3 x 5/8-11	18000	7153	7154	7155	7156	10	14 LB	5.32	4.99	4.69	4.46
2 x 4 x 5/8-11	18000	7157	7158	7159		5	10 LB	5.78	5.40	5.09	4.85
3 x 3 x 5/8-11	12000	7161	7162	7163		5	10 LB	7.12	6.59	6.16	5.81

#### TYPE 18R

1-1/2 x 3 x 3/8-24	24000		7166			10	8 LB	4.35	4.06	3.83	3.65
1-1/2 x 3 x 5/8-11	24000	7169	7170	7171	7172	10	8 LB	4.35	4.06	3.83	3.65
2 x 3 x 5/8-11	18000	7173	7174	7175		10	14 LB	5.14	4.80	4.53	4.31
3 x 3 x 5/8-11	12000	7177	7178	7179		5	12 LB	6.72	6.22	5.82	5.48

**Notice: Plugs & cones are also available in a Zirconia-Alumina Blend. Contact Customer Service for details.**



TYPE 16

TYPE 17

TYPE 18

TYPE 18R

TYPE 17R

TYPE 19

TYPE 19R

(ALSO AVAILABLE)

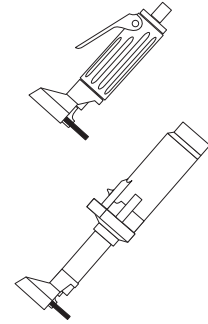
COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE



## ELECTRIC OR PNEUMATIC DIE-GRINDERS TYPE 1 REINFORCED GRINDING WHEELS

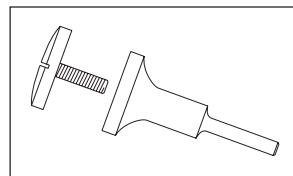
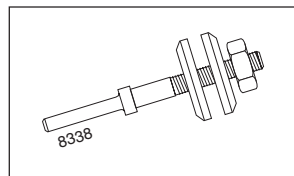
**A 24 TBF2** - GOOD STOCK REMOVAL RATE ON STEEL AND NON-FERROUS METALS. A DURABLE PERFORMER ON WELDS, BURR REMOVAL, AND FOR SURFACE CONDITIONING.

**A 36 TBF2** - RAPID GRINDING, GOOD FINISH ON STEEL. IDEALLY SUITED FOR PREPARATION OF THE CLEAN SURFACES NEEDED FOR GOOD WELDS, AND FOR FINISHING & BLENDING OF COMPLETED WELDS.



WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS		STD PACK		QUANTITY PRICE PER WHEEL			
		A 24 TBF2	A 36 TBF2	QTY	WT	MIN	50	100	200
2 x 3/16 x 1/4	30000	4001	4002	25	2 LB	.84	.77	.72	.68
2 x 3/16 x 3/8	30000	4003	4004	25	2 LB	.84	.77	.72	.68
2 x 1/4 x 1/4	30000	4005	4006	25	2 LB	.87	.79	.74	.70
2 x 1/4 x 3/8	30000	4007	4008	25	2 LB	.87	.79	.74	.70
2 x 3/8 x 1/4	27000	4009	4010	25	3 LB	.95	.88	.83	.78
2 x 3/8 x 3/8	27000	4011	4012	25	3 LB	.95	.88	.83	.78
2 x 1/2 x 1/4	27000	4013	4014	25	4 LB	1.06	.98	.92	.87
2 x 1/2 x 3/8	27000	4015	4016	25	4 LB	1.06	.98	.92	.87
3 x 3/16 x 1/4	23000	4017	4018	25	4 LB	1.03	.94	.88	.83
3 x 3/16 x 3/8	23000	4019	4020	25	4 LB	1.03	.94	.88	.83
3 x 1/4 x 1/4	23000	4021	4022	25	4 LB	1.11	1.02	.95	.90
3 x 1/4 x 3/8	23000	4023	4024	25	4 LB	1.11	1.02	.95	.90
3 x 3/8 x 1/4	18000	4025	4026	20	5 LB	1.30	1.19	1.11	1.05
3 x 3/8 x 3/8	18000	4027	4028	20	5 LB	1.30	1.19	1.11	1.05
3 x 1/2 x 1/4	18000	4029	4030	20	7 LB	1.61	1.49	1.39	1.31
3 x 1/2 x 3/8	18000	4031	4032	20	7 LB	1.61	1.49	1.39	1.31
4 x 3/16 x 3/8	19000	4035	4036	25	6 LB	1.26	1.16	1.08	1.02
4 x 1/4 x 3/8	19000	4039	4040	25	8 LB	1.43	1.31	1.22	1.15
4 x 3/8 x 3/8	13500	4043	4044	20	9 LB	1.73	1.59	1.48	1.40
4 x 1/2 x 3/8	11900	4045	4046	20	11 LB	2.46	2.28	2.13	2.01
5 x 1/4 x 3/8	10800	4049	4050	25	11 LB	2.45	2.25	2.10	1.98
5 x 1/4 x 5/8	10800	4051	4052	25	11 LB	2.45	2.25	2.10	1.98
5 x 1/2 x 5/8	9500	4053	4054	20	17 LB	3.16	2.90	2.71	2.56
6 x 1/4 x 5/8	9040	4059	4060	40	25 LB	2.80	2.57	2.40	2.26
6 x 1/2 x 5/8	7950	4061	4062	20	25 LB	4.47	4.39	4.10	3.87

**These wheels are also available in Silicon Carbide (C) Grades, Silicon Carbide / Aluminum Oxide blend (CA) Grades and Zirconia (ZA) grades. Other sizes available. Call for pricing.**



**Note:** Magnum offers a variety of tool grade, precision machined mandrels for small Type 1 grinding wheels. See page 19.

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**COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE**



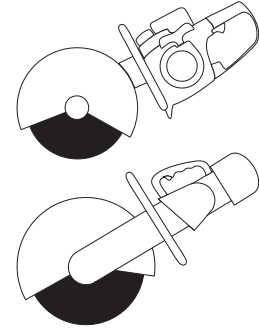
## PORTABLE GAS OR ELECTRIC SAWS HIGH-SPEED REINFORCED CUT-OFF WHEELS

**A 24 TBF2 - METAL** - AGGRESSIVE CUTTING, LONG WHEEL LIFE ON STEEL DECKING, SHEET METAL AND OTHER FERROUS METALS.

**A 30 PBF2 - RAIL** - FAST, STRAIGHT CUTS FOR RAIL CROPPING. DESIGNED FOR USE ON NEW HEAT TREATED OR WEAR-HARDENED RAIL.

**C 24 SBF2 - MASONRY** - HIGH SPEED CUTTING, GOOD WHEEL LIFE ON MASONRY, CONCRETE, AGGREGATE STONE, BRICK AND SOME CAST IRON APPLICATIONS.

**CA 24 SBF2 - DUCTILE** - (BLEND) - FAST CUTTING, GOOD WHEEL LIFE ON DUCTILE & CAST IRON PIPE IN SEWER & WATER-MAIN CONSTRUCTION & MAINTENANCE APPLICATIONS.



WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS				STD PACK		QUANTITY PRICE PER WHEEL			
		A 24 TBF2 METAL	A 30 PBF2 RAIL	C 24 SBF2 MASONRY	CA 24 SBF2 DUCTILE	QTY	WT	MIN	20	50	100
12 x 5/32 x 1	6300	3008	3009			10	14 LB	7.33	6.78	6.34	5.98
12 x 5/32 x 20mm	6300	3013				10	14 LB	7.33	6.78	6.34	5.98
12 x 5/32 x 7/8	6300	3018	3019			10	14 LB	7.33	6.78	6.34	5.98
14 x 5/32 x 1	5200	3023	3024			10	18 LB	9.69	8.98	8.39	7.92
14 x 5/32 x 20mm	5200	3028				10	18 LB	9.69	8.98	8.39	7.92
12 x 5/32 x 1	6300			3010	3012	10	14 LB	7.80	7.22	6.75	6.37
12 x 5/32 x 20mm	6300			3015	3017	10	14 LB	7.80	7.22	6.75	6.37
12 x 5/32 x 7/8	6300			3020	3022	10	14 LB	7.80	7.22	6.75	6.37
14 x 5/32 x 1	5200			3025	3027	10	18 LB	10.09	9.35	8.73	8.24
14 x 5/32 x 20mm	5200			3030	3031	10	18 LB	10.09	9.35	8.73	8.24
16 x 5/32 x 1	4800		3026			10	28 LB	12.40	11.53	10.78	10.17

*These tough wheels are constructed with two layers of heavy-duty fiberglass reinforcement and specially formulated bonds, and are engineered to withstand the rough, hostile conditions and stresses normally encountered on the job-site.*

**DEPENDABLE,  
AGGRESSIVE PERFORMANCE  
FOR DOING THE REAL WORK**

**SEARCHING FOR AN UNUSUAL OR UNIQUE CUTTING OR GRINDING WHEEL?  
UNABLE TO LOCATE A SPECIFIC GRADE OR SIZE? WE ARE HERE TO HELP.  
CONTACT MAGNUM CUSTOMER SERVICE AT 1(800)262-4686 FOR DETAILS.**

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ORDER NUMBER:  
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**COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE**

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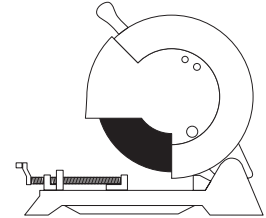
## PORTABLE CHOP-SAWS REINFORCED CUT-OFF WHEELS

**A 36 TBF1** - IDEAL FOR GENERAL PURPOSE CUTTING OF ANGLE & CHANNEL, METAL STUDS, REBAR & PIPE

**A 46 TBF1** - DESIGNED SPECIFICALLY FOR BURR-FREE & BURN-FREE CUTTING ON TUBING & LIGHT GAUGE CHANNEL.

**U.S. Manufactured**, these wheels designed to out-perform generic imports. Precision processes and quality materials are standard for all Magnum wheels, and these are no exception. Balance tested to assure a consistency you can count on. Don't be fooled by imports that may be priced a few cents less.

**Rely on Magnum Quality for Performance.**



WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS		STD PACK		QUANTITY PRICE PER WHEEL			
		A 36 TBF1	A 46 TBF1	QTY	WT	MIN	30	60	120
12 x 7/64 x 1	5100		3034	15	11 LB	7.25	6.65	6.20	5.85
14 x 7/64 x 1	4400	3036		15	15 LB	9.77	8.96	8.37	7.90
16 x 1/8 x 1	3600	3038		15	35 LB	12.50	11.48	10.73	10.12

**Caution:** These wheels are designed for **low power** (up to 3 hp) portable chop saws. Their use on stationary saws may result in poor performance and rapid break-down of the wheel. These specially designed wheels should be used when:

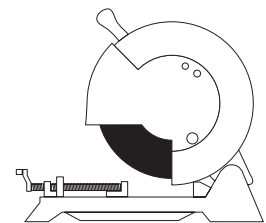
1. The cutting plane is rigidly controlled, with no lateral stresses on the wheel.
2. The work-piece is securely clamped to prevent lateral movement during the cut.
3. The machine has adequate wheel guarding.

## PORTABLE CHOP SAW HIGH PERFORMANCE TYPE 1 REINFORCED CUT-OFF WHEELS PREMIUM GRADE / EXTRA LONG LIFE

**XPA 30 TBF2** - FORMULATED FOR SUPERIOR CUTTING PERFORMANCE ON STAINLESS TUBING, HEAT-SENSITIVE STRUCTURAL SHAPES, EXHAUST TUBING, STEEL STUDS, AND PRODUCTION FABRICATION APPLICATIONS.

**These premium grade wheels will provide:**

- Exceptional wheel life.
- Superior cutting rates on stainless steel, heat-sensitive alloys and other metals.
- Ideal on stainless steel tubing, structural shapes, foundry production & fabrication.
- Outstanding cutting performance on stainless steel exhaust systems & steel studs.



WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS		STD PACK		QUANTITY PRICE PER WHEEL			
		XPA 30 TBF2		QTY	WT	MIN	30	60	105
14 x 3/32 x 1	4400	2514		15	15 LB	12.97	12.12	11.44	10.84
16 x 1/8 x 1	3600	2516		15	24 LB	14.65	13.37	12.92	12.25

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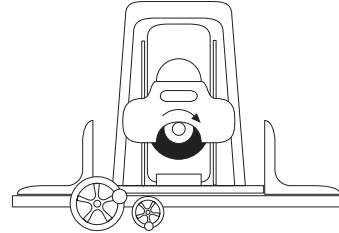


## TOOL ROOM & FABRICATING APPLICATIONS PRECISION MANUFACTURED NON-REINFORCED CUT-OFF WHEELS

A 60 PB - COOL, BURR-FREE PRECISION CUTTING AND SLOTTING ON STAINLESS, ALLOY AND HIGH TENSILE STEEL.

*Non reinforced cut-off wheels offer efficient, economical cuts under conditions where the work-piece is firmly clamped and the wheel motion is mechanically controlled. Recommended only for use by skilled operators, in applications where wheel breakage is not a problem.*

**THESE WHEELS ARE ALSO AVAILABLE IN METRIC DIMENSIONS.**



WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS A 60 PB	STD PACK		QUANTITY PRICE PER WHEEL			
			QTY	WT	MIN	50	100	200
6 x .035 x 1/2	7600	2190	25	2 LB	2.18	2.02	1.87	1.78
6 x .035 x 5/8	7600	2192	25	2 LB	2.18	2.02	1.87	1.78
<b>6 x .035 x 1-1/4</b>	<b>7600</b>	<b>2194</b>	<b>25</b>	<b>2 LB</b>	2.18	2.02	1.87	1.78
6 x 1/16 x 1/2	7600	2196	25	4 LB	2.18	2.02	1.87	1.78
6 x 1/16 x 5/8	7600	2198	25	4 LB	2.18	2.02	1.87	1.78
<b>6 x 1/16 x 1-1/4</b>	<b>7600</b>	<b>2200</b>	<b>25</b>	<b>4 LB</b>	2.18	2.02	1.87	1.78
7 x .035 x 1/2	6800	2202	25	3 LB	2.40	2.22	2.08	1.96
7 x .035 x 5/8	6800	2204	25	3 LB	2.40	2.22	2.08	1.96
<b>7 x .035 x 1-1/4</b>	<b>6800</b>	<b>2206</b>	<b>25</b>	<b>3 LB</b>	2.40	2.22	2.08	1.96
7 x 1/16 x 1/2	6800	2208	25	5 LB	2.40	2.22	2.08	1.96
7 x 1/16 x 5/8	6800	2210	25	5 LB	2.40	2.22	2.08	1.96
<b>7 x 1/16 x 1-1/4</b>	<b>6800</b>	<b>2212</b>	<b>25</b>	<b>5 LB</b>	2.40	2.22	2.08	1.96
8 x .035 x 1/2	5970	2214	25	5 LB	2.68	2.48	2.32	2.19
8 x .035 x 5/8	5970	2216	25	5 LB	2.68	2.48	2.32	2.19
<b>8 x .035 x 1-1/4</b>	<b>5970</b>	<b>2218</b>	<b>25</b>	<b>5 LB</b>	2.68	2.48	2.32	2.19
8 x 1/16 x 1/2	5970	2220	25	8 LB	2.68	2.48	2.32	2.19
8 x 1/16 x 5/8	5970	2222	25	8 LB	2.68	2.48	2.32	2.19
<b>8 x 1/16 x 1-1/4</b>	<b>5970</b>	<b>2224</b>	<b>25</b>	<b>8 LB</b>	2.68	2.48	2.32	2.19
10 x 1/16 x 5/8	4775	2230	25	11 LB	3.41	3.15	2.95	2.79

**Note:** Bold type indicates wheels that are designed for cutting or slotting operations on **surface grinders**.

**Notice:** The part numbers for some of these products have been changed. Use these new part numbers for any re-orders.

**These wheels** are the most commonly used grade for a variety of typical applications. Over the years, they have proved to be generally appropriate and cost effective for many common uses.

**You may benefit** from a more precisely engineered formulation and configuration for your specific application.

**Magnum** has the experience & technology to provide you with the perfect cutting or grinding wheel for your application.

**Non-reinforced wheels** should only be used when three important conditions are met:

1. The cutting plane must be rigidly controlled, with no lateral stresses on the wheel.
2. The work-piece must be securely clamped to prevent lateral movement during the cut.
3. The machine must have adequate wheel guarding.

**THESE WHEELS ARE ALSO AVAILABLE IN RUBBER RESIN BOND GRADES FOR PRECISION WET CUTTING APPLICATIONS. CONTACT CUSTOMER SERVICE FOR DETAILS.**

**SEARCHING FOR AN UNUSUAL OR UNIQUE CUTTING OR GRINDING WHEEL? UNABLE TO LOCATE A SPECIFIC GRADE OR SIZE? WE ARE HERE TO HELP. CONTACT MAGNUM CUSTOMER SERVICE AT 1(800)262-4686 FOR DETAILS.**

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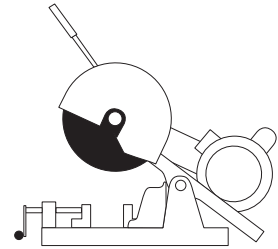


**TOOL ROOM & FABRICATING CHOP-SAWS  
PRECISION MANUFACTURED  
REINFORCED CUT-OFF WHEELS**

**A 36 TBF2** - FAST CUTTING, GOOD WHEEL LIFE ON THIN WALL PIPE, STRUCTURAL STEEL

**A 60 TBF2** - FINE FINISH, BURR-FREE CUTTING ON THIN-WALL TUBE, SMALL SECTION STAINLESS, HARDENED SHEET STEEL.

*These wheels are the most commonly used grades for a variety of typical applications. They have been proven over the years to be generally appropriate and cost effective for common uses. **You may benefit** from a more precisely engineered formulation and configuration for your specific application. **Magnum** has the experience & technology to provide you with the perfect cutting or grinding wheel for your application.*



WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS		STD PACK		QUANTITY PRICE PER WHEEL			
		A 36 TBF2	A 60 TBF2	QTY	WT	MIN	50	100	200
6 x .035 x 1/2	10200		2004	25	2 LB	2.19	2.01	1.88	1.78
6 x .035 x 5/8	10200		2008	25	2 LB	2.19	2.01	1.88	1.78
6 x .035 x 1-1/4	10200		2009	25	2 LB	2.19	2.01	1.88	1.78
6 x 1/16 x 1/2	10200	2010		25	4 LB	2.19	2.01	1.88	1.78
6 x 1/16 x 5/8	10200	2014		25	4 LB	2.19	2.01	1.88	1.78
6 x 1/16 x 1-1/4	10200	2017		25	4 LB	2.19	2.01	1.88	1.78
6 x 1/8 x 1/2	10200	2018		25	6 LB	2.19	2.01	1.88	1.78
6 x 1/8 x 5/8	10200	2022		25	6 LB	2.19	2.01	1.88	1.78
7 x .035 x 1/2	8740		2028	25	3 LB	2.67	2.45	2.29	2.16
7 x .035 x 5/8	8740		2032	25	3 LB	2.67	2.45	2.29	2.16
7 x .035 x 1-1/4	8740		2036	25	3 LB	2.67	2.45	2.29	2.16
7 x 1/16 x 1/2	8740	2038	2040	25	5 LB	2.67	2.45	2.29	2.16
7 x 1/16 x 5/8	8740	2042	2044	25	5 LB	2.67	2.45	2.29	2.16
7 x 1/16 x 1-1/4	8740		2048	25	5 LB	2.67	2.45	2.29	2.16
7 x 1/8 x 1/2	8740	2050		25	11 LB	2.67	2.45	2.29	2.16
7 x 1/8 x 5/8	8740	2054		25	11 LB	2.67	2.45	2.29	2.16
8 x .035 x 1/2	7640		2059	25	5 LB	3.17	2.91	2.72	2.55
8 x .035 x 5/8	7640		2060	25	5 LB	3.17	2.91	2.72	2.55
8 x .035 x 1-1/4	7640		2061	25	5 LB	3.17	2.91	2.72	2.55
8 x 1/16 x 5/8	7640	2062	2064	25	8 LB	3.17	2.91	2.72	2.55
8 x 1/8 x 5/8	7640	2070		25	16 LB	3.17	2.91	2.72	2.55
10 x .035 x 5/8	6100		2076	20	5 LB	3.97	3.64	3.40	3.21
10 x 1/16 x 5/8	6100	2078	2080	10	5 LB	3.97	3.64	3.40	3.21
10 x 1/16 x 1	6100	2082		10	5 LB	3.97	3.64	3.40	3.21
10 x 3/32 x 5/8	6100	2086		10	8 LB	3.97	3.64	3.40	3.21
10 x 3/32 x 1	6100	2090		10	8 LB	3.97	3.64	3.40	3.21

*Reinforced cutting wheels should be used for all off-hand cut-off applications, and in operations where the workpiece is not securely clamped.*

**THESE WHEELS ARE ALSO AVAILABLE IN RUBBER RESIN BOND GRADES FOR PRECISION WET CUTTING APPLICATIONS. CONTACT CUSTOMER SERVICE FOR DETAILS.**

*In operations where the cutting plane is controlled, wheel reinforcing helps to resist side pressure which may occur during the cut.*

*Reinforced wheels should also be used where the rigidity of the cut-off machine is not good.*

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**COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE**

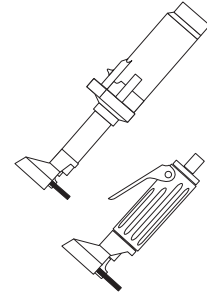


## HIGH SPEED DIE GRINDERS TYPE 1 REINFORCED CUT-OFF WHEELS

**A 36 TBF2** - FAST CUTTING / GOOD WHEEL LIFE ON STAINLESS & STRUCTURAL STEEL, FERROUS & NON-FERROUS METALS.

**A 60 TBF2** - FINE FINISH CUTTING / BURR FREE CUTTING ON THIN-WALL TUBING, LIGHT DIMENSION STRUCTURAL STEEL.

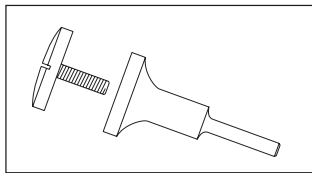
*These wheels are the most commonly used grades for a variety of typical applications. Over the years they have proven to be generally appropriate and cost effective for most common uses. You may benefit from a more precisely engineered formulation and configuration for your specific application. Magnum has the experience & technology to provide you with the perfect cutting wheel for your operation.*



### STANDARD GRADES

WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS		STD PACK		QUANTITY PRICE PER WHEEL				
		A 36 TBF2	A 60 TBF2	QTY	WT	MIN	100	200	400	800
2 x .035 x 1/4	30000		1072	100	1 LB	.60	.60	.56	.53	.50
2 x .035 x 3/8	30000		1078	100	1 LB	.60	.60	.56	.53	.50
2 x 1/16 x 1/4	30000	1088	1090	100	1 LB	.60	.60	.56	.53	.50
2 x 1/16 x 3/8	30000	1094	1096	100	1 LB	.60	.60	.56	.53	.50
2 x 1/8 x 1/4	30000	1106	1108	100	2 LB	.60	.60	.56	.53	.50
2 x 1/8 x 3/8	30000	1112	1114	100	2 LB	.60	.60	.56	.53	.50
2-1/2 x .035 x 1/4	27000		1120	50	1 LB	.68	.63	.59	.56	.53
2-1/2 x .035 x 3/8	27000		1126	50	1 LB	.68	.63	.59	.56	.53
2-1/2 x 1/16 x 1/4	27000	1130	1132	50	2 LB	.68	.63	.59	.56	.53
2-1/2 x 1/16 x 3/8	27000	1136	1138	50	2 LB	.68	.63	.59	.56	.53
3 x .035 x 1/4	25000		1154	50	1 LB	.72	.67	.62	.59	.56
3 x .035 x 3/8	25000		1158	50	1 LB	.72	.67	.62	.59	.56
3 x 1/16 x 1/4	25000	1160	1162	50	2 LB	.72	.67	.62	.59	.56
3 x 1/16 x 3/8	25000	1164	1166	50	2 LB	.72	.67	.62	.59	.56
3 x 1/8 x 1/4	25000	1168	1170	50	4 LB	.72	.67	.62	.59	.56
3 x 1/8 x 3/8	25000	1172	1174	50	4 LB	.72	.67	.62	.59	.56
4 x .035 x 1/4	19000		1178	50	2 LB	.98	.91	.85	.80	.76
4 x .035 x 3/8	19000		1182	50	2 LB	.98	.91	.85	.80	.76
<b>4 x .035 x 5/8</b>	<b>19000</b>		<b>1183</b>	<b>50</b>	<b>2 LB</b>	.98	.91	.85	.80	.76
4 x 1/16 x 1/4	19000	1184	1186	50	4 LB	.98	.91	.85	.80	.76
4 x 1/16 x 3/8	19000	1188	1190	50	4 LB	.98	.91	.85	.80	.76
<b>4 x 1/16 x 5/8</b>	<b>19000</b>	<b>1192</b>		<b>50</b>	<b>4 LB</b>	.98	.91	.85	.80	.76
4 x 1/8 x 1/4	19000	1196	1198	50	7 LB	1.06	1.02	.96	.90	.86
4 x 1/8 x 3/8	19000	1200	1202	50	7 LB	1.06	1.02	.96	.90	.86
5 x .035 x 3/8	12200		1209	50	3 LB	1.39	1.29	1.20	1.13	1.08
5 x 1/16 x 3/8	12200	1212	1214	50	5 LB	1.39	1.29	1.20	1.13	1.08

**Note:** Bold-face part numbers indicate wheels used with right-angle grinders. See pages 15 & 16 for additional right angle grinder wheels.



**Note:** Magnum also offers a variety of excellent, precision machined mandrels for small Type 1 cutting & grinding wheels. See page 20.

**Warning:** Do not exceed recommended wheel speeds. Undue stress caused by over-speed may cause wheel breakage and can cause physical injury.

Refer to catalog page 26 for further information.

**NOTE: SILICON CARBIDE GRADES FOR CUTTING ALUMINUM, BRASS, BRONZE, NON-FERROUS METALS & COMPOSITES ARE ALSO AVAILABLE. CONTACT CUSTOMER SERVICE FOR DETAILS.**

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COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE

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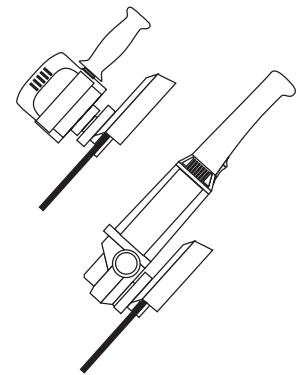
## HIGH SPEED RIGHT ANGLE GRINDERS TYPE 1 REINFORCED CUT-OFF WHEELS

*MAGNUM has engineered and developed this new, high performance line of cutting wheels with special new formulations, integrating premium materials, special high strength reinforcement, and advanced manufacturing processes.*

**These tough wheels will stand up to rigorous use in adverse field conditions.**

**SKZ 46 TBF2** - Designed for fast, cool, easy cutting on steel, mild steel alloys, stainless and non-ferrous metals. Maximum life on sheet and light plate.

**SKA 60 TBF2** - Engineered with premium grains for quick, blade-like cutting action and durability. Ideal choice for stainless, alloys and steel. Designed to withstand the toughness of thin metal cutting, while providing long life performance.

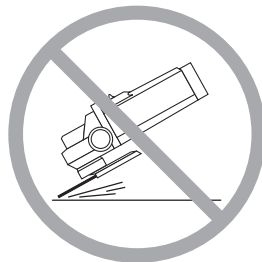
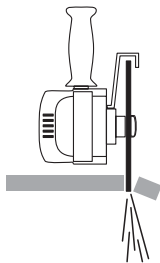


### STANDARD GRADES / HIGH PERFORMANCE

WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	PREMIUM GRADE PART NUMBERS		STD PACK		QUANTITY PRICE PER WHEEL			
		SKZ 46 TBF2	SKA 60 TBF2	QTY	WT	MIN	100	200	400
4 x .040 x 5/8 4 x 1/16 x 5/8	19000 19000	1311 1315	1312 1316	50 50	2 LB 4 LB	.91 .91	.84 .84	.78 .78	.74 .74
4-1/2 x .040 x 7/8 4-1/2 x 1/16 x 7/8	13500 13500	1317 1319	1318 1320	50 50	3 LB 5 LB	1.03 1.03	.95 .95	.89 .89	.84 .84
5 x .040 x 5/8 5 x .040 x 7/8 5 x 1/16 x 5/8 5 x 1/16 x 7/8	12200 12200 12200 12200	1323 1325 1329 1331	1324 1326 1330 1332	50 50 50 50	4 LB 4 LB 7 LB 7 LB	1.30 1.30 1.30 1.30	1.20 1.20 1.20 1.20	1.12 1.12 1.12 1.12	1.10 1.10 1.10 1.10
6 x .040 x 7/8 6 x 1/16 x 7/8	10200 10200	1337 1343	1338 1344	50 25	6 LB 4.5 LB	1.59 1.59	1.47 1.47	1.38 1.38	1.22 1.22
7 x .040 x 7/8 7 x 1/16 x 7/8	8740 8740	1347 1351	1348 1352	50 50	8 LB 13 LB	2.06 2.06	1.91 1.91	1.78 1.78	1.68 1.68

**Warning:** Do not use these wheels for grinding.

**Use for cutting off only.** These **Type 1** wheels are designed specifically for **hand held Right Angle electric & air grinders.**



**Warning:** Do not exceed recommended wheel speeds. Undue stress caused by over-speed may cause wheel breakage and can cause physical injury.

Refer to catalog page 26 for further information.

**Note:** The use of these wheels with right angle grinders requires flat, recessed mounting flanges. Check with your tool manufacturer for availability.

**NOTE: SILICON CARBIDE GRADES FOR CUTTING ALUMINUM, BRASS, BRONZE, NON-FERROUS METALS & COMPOSITES ARE ALSO AVAILABLE. CONTACT CUSTOMER SERVICE FOR DETAILS.**

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COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE



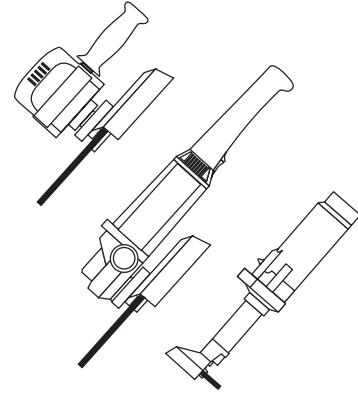
## HIGH SPEED RIGHT-ANGLE & DIE GRINDERS TYPE 1 THIN REINFORCED CUT-OFF WHEELS NEW PREMIUM PLATINUM GRADE / EXTRA LONG LIFE

These **NEW, IMPROVED PREMIUM PLATINUM** grade cutting wheels are blended with **patented ceramic** and other durable abrasive grains. When combined with our **advanced, proprietary bonding system**, they provide **exceptional cutting rates and extra long life**.

**PREMIUM PLATINUM** grade wheels are **also** offered with a new **Fe FREE, INOX RATED** formulation; **FREE of IRON, SULPHUR and CHLORINATED FILLERS**, for **CONTAMINATE FREE** cutting of **STAINLESS STEEL. (NFE PART NUMBERS)**

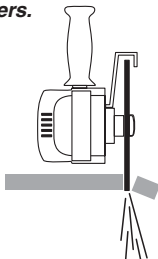
**PLATINUM 36** - EXCEPTIONAL WHEEL LIFE AND SUPERIOR CUTTING RATES. OUTSTANDING PRODUCTIVITY ON STAINLESS STEEL, HEAT-SENSITIVE ALLOYS, TITANIUM AND OTHER METALS.

**PLATINUM 60** - COMBINES FREE CUTTING ACTION & HIGH QUALITY CUTS. WITH OUTSTANDING PRODUCTIVITY ON STAINLESS STEEL, HEAT-SENSITIVE ALLOYS, TITANIUM AND OTHER METALS.



WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	PREMIUM PLATINUM GRADE PART NUMBERS				STD PACK		QUANTITY PRICE PER WHEEL				
		P36	P36NFE	P60	P60NFE	QTY	WT	Trial 5 PK	MIN	100	200	400
3 x .045 x 1/4	26000			1502	1702	50	2 LB	1.80	1.50	1.40	1.32	1.26
3 x .045 x 3/8	26000			1504	1704	50	2 LB	1.80	1.50	1.40	1.32	1.26
3 x 1/16 x 1/4	26000	1507	1707			50	2 LB	1.80	1.50	1.40	1.32	1.26
3 x 1/16 x 3/8	26000	1509	1709			50	2 LB	1.80	1.50	1.40	1.32	1.26
4 x .045 x 1/4	22000			1514	1714	50	2 LB	1.99	1.66	1.55	1.46	1.39
4 x .045 x 3/8	22000			1516	1716	50	2 LB	1.99	1.66	1.55	1.46	1.39
<b>4 x .045 x 5/8</b>	<b>22000</b>			<b>1518</b>	<b>1718</b>	<b>50</b>	<b>2 LB</b>	1.99	1.66	1.55	1.46	1.39
4 x 1/16 x 1/4	22000	1521	1721			50	4 LB	1.99	1.66	1.55	1.46	1.39
4 x 1/16 x 3/8	22000	1523	1723			50	4 LB	1.99	1.66	1.55	1.46	1.39
<b>4 x 1/16 x 5/8</b>	<b>22000</b>	<b>1525</b>	<b>1725</b>			<b>50</b>	<b>4 LB</b>	1.99	1.66	1.55	1.46	1.39
4-1/2 x .045 x 7/8	13500			1530	1730	25	2 LB	2.17	1.81	1.69	1.60	1.52
4-1/2 x 1/16 x 7/8	13500	1533	1733			25	2 LB	2.17	1.81	1.69	1.60	1.52
5 x .045 x 3/8	12500			1536	1736	25	2 LB	2.50	2.08	1.95	1.84	1.75
<b>5 x .045 x 5/8</b>	<b>12500</b>			<b>1538</b>	<b>1738</b>	<b>25</b>	<b>2 LB</b>	2.50	2.08	1.95	1.84	1.75
<b>5 x .045 x 7/8</b>	<b>12500</b>			<b>1540</b>	<b>1740</b>	<b>25</b>	<b>2 LB</b>	2.50	2.08	1.95	1.84	1.75
5 x 1/16 x 3/8	12500	1543	1743			25	4 LB	2.50	2.08	1.95	1.84	1.75
<b>5 x 1/16 x 5/8</b>	<b>12500</b>	<b>1545</b>	<b>1745</b>			<b>25</b>	<b>4 LB</b>	2.50	2.08	1.95	1.84	1.75
<b>5 x 1/16 x 7/8</b>	<b>12500</b>	<b>1547</b>	<b>1747</b>			<b>25</b>	<b>4 LB</b>	2.50	2.08	1.95	1.84	1.75
6 x .045 x 1/2	11000			1552	1752	25	3 LB	2.66	2.22	2.07	1.95	1.86
6 x .045 x 5/8	11000			1554	1754	25	3 LB	2.66	2.22	2.07	1.95	1.86
<b>6 x .045 x 7/8</b>	<b>11000</b>			<b>1556</b>	<b>1756</b>	<b>25</b>	<b>3 LB</b>	2.66	2.22	2.07	1.95	1.86
6 x 1/16 x 1/2	11000	1559	1759			25	5 LB	2.66	2.22	2.07	1.95	1.86
6 x 1/16 x 5/8	11000	1561	1761			25	5 LB	2.66	2.22	2.07	1.95	1.86
<b>6 x 1/16 x 7/8</b>	<b>11000</b>	<b>1563</b>	<b>1763</b>			<b>25</b>	<b>5 LB</b>	2.66	2.22	2.07	1.95	1.86
7 x .045 x 5/8	8800			1568	1768	25	4 LB	3.44	2.87	2.68	2.53	2.41
<b>7 x .045 x 7/8</b>	<b>8800</b>			<b>1570</b>	<b>1770</b>	<b>25</b>	<b>4 LB</b>	3.44	2.87	2.68	2.53	2.41
7 x 1/16 x 5/8	8800	1573	1773			25	7 LB	3.44	2.87	2.68	2.53	2.41
<b>7 x 1/16 x 7/8</b>	<b>8800</b>	<b>1575</b>	<b>1775</b>			<b>25</b>	<b>7 LB</b>	3.44	2.87	2.68	2.53	2.41

**NOTE: BOLD-FACE PART NUMBERS** - These **Type 1** wheels are designed specifically for **hand-held Right-Angle electric and air grinders**.



**PLEASE NOTE! THE WHEELS ON THIS PAGE ARE NEW, IMPROVED PREMIUM PLATINUM GRADE, WITH PART NUMBERS FOR NEW Fe FREE, INOX RATED WHEELS: FREE OF IRON, SULPHUR AND CHLORINATED FILLERS, FOR CONTAMINATE-FREE CUTTING OF STAINLESS STEEL. CONTACT CUSTOMER SERVICE FOR DETAILS.**

**TYPE-1 =TYPE 41 (EUROPEAN STANDARD 12413)  
Fe FREE WHEELS ARE ESPECIALLY SUITED  
FOR POWER-PLANT APPLICATIONS**

COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE



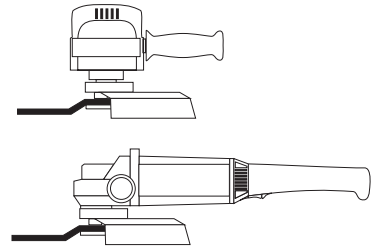
## RIGHT-ANGLE GRINDERS TYPE 27 THIN DEPRESSED CENTER CUT-OFF WHEELS

These new premium Type 27 **thin** cutting wheels have a blend of zirconia-alumina and other durable, coated abrasive grains, combined with an advanced, proprietary bonding system, and have been engineered to provide exceptional wheel life and cutting rates.

**PLATINUM 36** - EXCEPTIONAL WHEEL LIFE AND SUPERIOR CUTTING RATES. OUTSTANDING PRODUCTIVITY ON STAINLESS STEEL, HEAT-SENSITIVE ALLOYS, TITANIUM AND OTHER METALS.

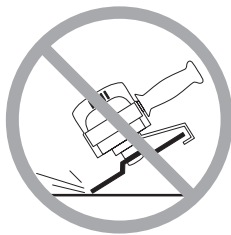
**PLATINUM 60** - COMBINES FREE CUTTING ACTION & HIGH QUALITY CUTS, WITH OUTSTANDING PRODUCTIVITY ON STAINLESS STEEL, HEAT-SENSITIVE ALLOYS, TITANIUM AND OTHER METALS.

- 2 to 3 times the life of ceramic-alumina blended wheels!
- up to 6 times the life of regular aluminum oxide wheels!



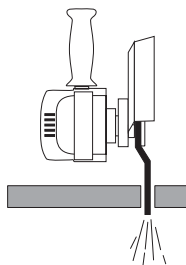
### PREMIUM PLATINUM GRADE / EXTRA LONG LIFE

WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	PREMIUM GRADE PART NUMBERS		STD PACK		QUANTITY PRICE PER WHEEL				
		PLATINUM 36	PLATINUM 60	QTY	WT	Trial 5 PK	MIN	100	200	400
4-1/2 x .045 x 7/8	13500		1630	25	2 LB	1.85	1.68	1.56	1.47	1.40
4-1/2 x 1/16 x 7/8	13500	1631		25	4 LB	1.85	1.68	1.56	1.49	1.40
5 x .045 x 7/8	12500		1632	25	2.5 LB	1.95	1.81	1.68	1.59	1.51
5 x 1/16 x 7/8	12500	1633		25	5 LB	1.95	1.81	1.68	1.59	1.51
6 x .045 x 7/8	11000		1634	25	5 LB	2.30	2.10	1.96	1.85	1.76
6 x 1/16 x 7/8	11000	1635		25	10 LB	2.30	2.10	1.96	1.85	1.76



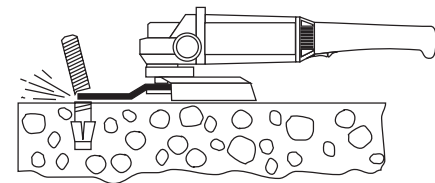
**Warning:** Do not use these wheels for grinding.

**Use for cutting off only.** These **Type 27 Thin** wheels are designed specifically for **hand held Right Angle electric & air grinders.**



**Warning:** Special Speed Rated wheels should only be used on tools that are maintained and tested in accordance with ANSI B-7.1 standards.

# NEW!



**THIN TYPE 27 DEPRESSED-CENTER CUT-OFF WHEELS OFFER PRECISION, CLOSER CUTTING OFF ON FLAT SURFACES WITH RIGHT-ANGLE GRINDERS. OUTSTANDING PERFORMANCE ON HEAT-SENSITIVE ALLOYS, TITANIUM AND OTHER EXOTIC MATERIALS!**

**NEW! ALSO AVAILABLE AS Fe FREE INOX RATED WHEELS: FREE OF IRON, SULPHUR AND CHLORINATED FILLERS, FOR CONTAMINATE-FREE CUTTING OF STAINLESS STEEL. CONTACT CUSTOMER SERVICE FOR DETAILS.**

**TYPE-27 =TYPE 42 (EUROPEAN STANDARD 12413)**

NATIONAL TOLL FREE  
ORDER NUMBER:  
**1 (800) 262-4686**

**SEARCHING FOR AN UNUSUAL OR UNIQUE CUTTING OR GRINDING WHEEL? UNABLE TO LOCATE A SPECIFIC GRADE OR SIZE? WE ARE HERE TO HELP. CONTACT MAGNUM CUSTOMER SERVICE AT 1(800)262-4686 FOR DETAILS.**

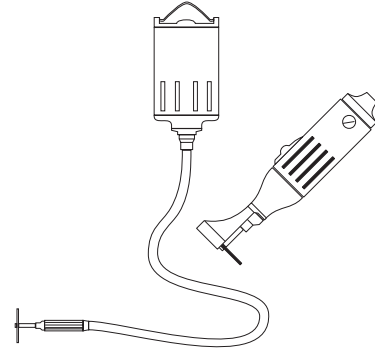
COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE



## VERY HIGH SPEED ROTARY TOOLS MICRO-DIMENSION CUT-OFF WHEELS FOR

**A 80TB** - VERY FINE, BURR-FREE PRECISION CUTTING & SLOTTING ON STAINLESS STEEL, THIN-WALL TUBING AND HIGH TENSILE ALLOYS.

**A 60TBF2** - REINFORCED FOR ADDED STRENGTH / VERY FINE, BURR-FREE CUTTING ON STAINLESS STEEL, THIN-WALL TUBING AND HIGH TENSILE ALLOYS.



### NON-REINFORCED WHEELS

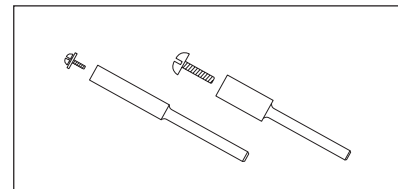
WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS A 80TB	STD PACK		QUANTITY PRICE PER WHEEL			
			QTY	WT	MIN	300	400	800
1 x .025 x 1/16	45830	0926	100	1 LB	.45	.41	.38	.36
1 x .025 x 1/8	45830	0928	100	1 LB	.45	.41	.38	.36
1-1/2 x .030 x 1/16	30550	0930	100	1 LB	.46	.43	.40	.38
1-1/2 x .030 x 1/8	30550	0932	100	1 LB	.46	.43	.40	.38
2 x .035 x 1/8	23000	0934	100	1 LB	.47	.44	.42	.39

### REINFORCED WHEELS

WHEEL SIZE DIA x THICK x ARBOR	MAX RPM	STANDARD GRADES & PART NUMBERS A 60TBF2	STD PACK		QUANTITY PRICE PER WHEEL			
			QTY	WT	MIN	200	500	1000
1 x .035 x 1/16	61000	0940	100	1 LB	.46	.43	.40	.38
1 x .035 x 1/8	61000	0942	100	1 LB	.46	.43	.40	.38
1 x 1/16 x 1/8	61000	0944	100	1 LB	.46	.43	.40	.38
1-1/2 x .035 x 1/16	45000	0946	100	1 LB	.49	.45	.42	.40
1-1/2 x .035 x 1/8	45000	0948	100	1 LB	.49	.45	.42	.40
1-1/2 x .035 x 1/4	45000	0960	100	1 LB	.49	.45	.42	.40
1-1/2 x 1/16 x 1/8	45000	0950	100	1 LB	.49	.45	.42	.40
1-1/2 x 1/16 x 1/4	45000	0952	100	1 LB	.49	.45	.42	.40
2 x .035 x 1/8	30000	0954	100	1 LB	.50	.46	.43	.41
2 x 1/16 x 1/8	30000	0956	100	1 LB	.50	.46	.43	.41

**Note:** See page 14 for additional sizes of small cut-off wheels for high-speed die grinders.

**Notice:** The part numbers for some of these products have been changed. Use these new part numbers for any re-orders.



**Note:** Always use a high quality mandrel with these wheels. See page 20.

**SEARCHING FOR AN UNUSUAL OR UNIQUE CUTTING OR GRINDING WHEEL?  
UNABLE TO LOCATE A SPECIFIC GRADE OR SIZE? WE ARE HERE TO HELP.  
CONTACT MAGNUM CUSTOMER SERVICE AT 1(800)262-4686 FOR DETAILS.**

**NATIONAL TOLL FREE  
ORDER NUMBER:  
1 (800) 262-4686**

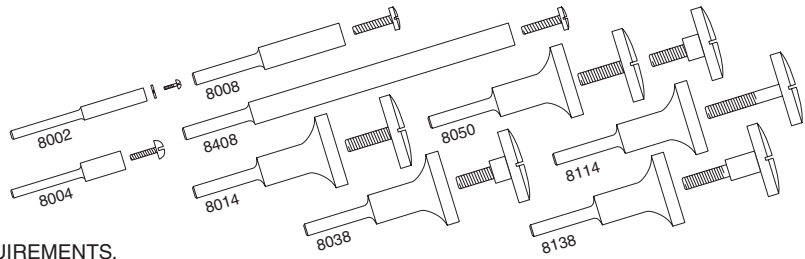


COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE

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## PRECISION MACHINED MOUNTING MANDRELS FOR SMALL TYPE 1 CUTTING & GRINDING WHEELS

**MAGNUM PREMIUM MANDRELS** - ENGINEERED AND MANUFACTURED WITH OPERATOR SAFETY IN MIND. PRECISION MACHINED FROM EXTRA HIGH TENSILE-STRENGTH ALLOY STEEL. RECESSED FLANGES HOLD THE WHEEL STRAIGHT AND TRUE FOR MAXIMUM OPERATOR CONTROL AND LONG WHEEL LIFE.



DESIGNED TO MEET ANSI & OSHA REQUIREMENTS.

### FOR MICRO-DIMENSION CUTTING WHEELS

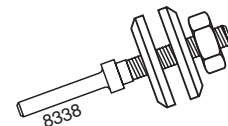
MANDREL SIZE ARBOR x SHANK (1/8" COLLET)	PART NUMBERS for .025"-0.035" thick wheels	TRIAL PACK QTY/PRICE	STD PACK		QUANTITY PRICE PER MANDREL			
			QTY	WT	MIN	20	50	100
1/16 arbor x 1/8 shank <i>(*Includes washer)</i>	8002	2 / 5.00	10	1 LB	2.33	2.16	2.02	1.90
	for .025"-1/16" thick wheels							
1/8 arbor x 1/8 shank	8004	2 / 5.00	10	1 LB	2.33	2.16	2.02	1.90

### FOR SMALL TYPE 1 CUTTING & GRINDING WHEELS

MANDREL SIZE ARBOR x SHANK (1/4" COLLET)	PART NUMBERS for .025"-1/8" thick wheels	TRIAL PACK QTY/PRICE	STD PACK		QUANTITY PRICE PER MANDREL			
			QTY	WT	MIN	20	50	100
1/8 arbor x 1/4 shank	8008	1 / 3.15	10	1 LB	2.89	2.21	2.07	1.95
1/8 arbor x 1/4 shank / 4" shaft	8408	1 / 3.20	10	1 LB	2.94	2.72	2.54	2.40
	for .035"-1/4" thick wheels							
1/4 arbor x 1/4 shank	8014	1 / 4.05	10	1 LB	3.74	3.46	3.23	3.05
3/8 arbor x 1/4 shank	8038	1 / 4.05	10	1 LB	3.74	3.46	3.23	3.05
1/4 & 3/8 combo arbor x 1/4 shank	8050	1 / 5.60	10	1 LB	5.15	4.76	4.45	4.20
	for 1/4"-3/8" thick wheels							
1/4 arbor x 1/4 shank	8114	1 / 5.50	10	1 LB	5.13	4.75	4.46	4.25
3/8 arbor x 1/4 shank	8138	1 / 5.59	10	1 LB	5.13	4.75	4.46	4.25

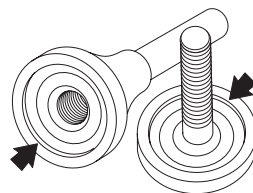
### FOR THICK SMALL TYPE 1 GRINDING WHEELS

Threaded arbor is suitable for mounting other items.

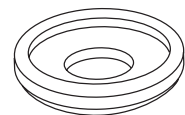


MANDREL SIZE ARBOR x SHANK (1/4" COLLET)	PART NUMBERS for 3/8"-5/8" thick wheels	TRIAL PACK QTY/PRICE	STD PACK		QUANTITY PRICE PER MANDREL			
			QTY	WT	MIN	20	50	100
3/8 threaded arbor x 1/4 shank	8338	1 / 3.95	10	2 LB	3.67	3.35	3.13	2.95

NATIONAL TOLL FREE  
ORDER NUMBER:  
**1 (800) 262-4686**



**Note:** Magnum mandrels for small Type-1 wheels are precision manufactured with recessed flanges to insure straight and true wheel mounting, and to provide improved wheel performance.



COMBINE STANDARD PACK QUANTITIES FOR BEST BRACKET PRICE



## CUSTOM WHEEL SPECIFICATION GUIDELINES

Use this checklist to compile the details we will use to create the best wheel for the job - and for the budget. Please provide accurate data so we can design the best wheel for your customer's application.

### Customer's current wheel information:

Made by:

Part number:

Specification / Grade:

Diameter:                      Thickness:                      Arbor:

Normal order qty:

Like about wheel:

Dislike about wheel:

Other:

**Application:** Wet Cutting ( ) Dry Cutting ( )

**Machine type:** Chop Stroke ( ) Fixed Head ( )

Swing Frame ( ) Push Thru ( ) Oscillating Head ( )

Power Feed ( ) Manual Feed ( )

Horsepower:                      Motor RPM:

Spindle Speed:                      Flange Size:

Motor Pulley Dia:                      Spindle Pulley Dia:

Other:

*(A basic rule-of-thumb: the machine should draw about 1 HP per inch of wheel diameter... this ratio will minimize burr & burn, and maximize the efficiency of the cut.)  
(Refer to pages 3, 4 & 5, for additional information.)*

### List the customer's most important requirements for the wheel we will design:

- 1.
- 2.
- 3.

### Material to be cut:

- bar stock, mild steel
- bar stock, hardened steel
- stainless, alloy steel
- tool steel
- structural materials
- pipe
- thin-wall tube
- tube
- brass, copper, bronze
- aluminum
- cast, malleable, ductile iron
- titanium
- rail
- forgings
- castings
- composites
- ceramics
- exotic alloy:
- other:

### Workpiece cross-section:

- tube
- diameter:
- wall thickness:
- solid / cross-section
- small  large
- approx. dimension:
- other:

If your customer is cutting **Exotic Materials**, such as Alloy Steels, Aluminum, Carbon Steels, Cast Irons, Copper Alloys, Ductile Irons, Electrical Steel, Gray Irons, Honeycomb, Magnesium Alloys, Metal Matrix Composites, Pure Elements, Refractory Alloys, Stainless Steels, Super Alloys, Titanium, Tool Steels, Vanadium, Zirconium, Etc., **Introduce them** to our **Premium Grade**, custom formulated cutting wheels!

When cutting these **expensive materials**, the use of an ordinary wheel may not provide the cool, smooth, burr-free and burn-free cuts that are usually required.

Using an incorrectly designed wheel can quickly turn expensive castings, forgings, extrusions, pinnings, forgings, composites, etc. into worthless scrap.

We can help you show your customers how to reduce costs with faster cutting, with more cuts per wheel, and with a better quality of finished cut.

And don't worry about wrestling with the technical issues. We have the know-how, and we'll guide you through the process. Just fill out the customer information sheet, fax it to us, and we'll do the rest.

