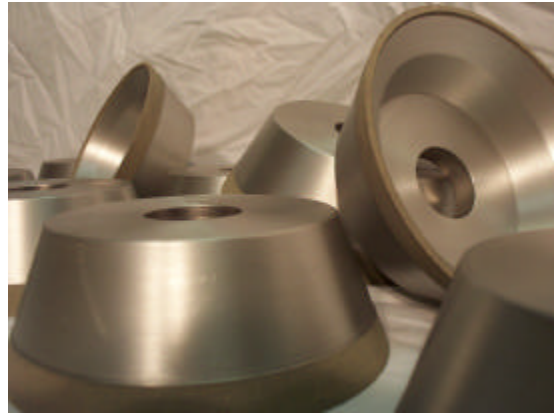


Plated Products



Resin Bonded Products



National Diamond Lab

Manufacturers of Industrial Diamond Tools
Dressers, Plated Products, Metal & Resin Bond Products

800-395-8665

1435 Round Table Drive, Dallas, Texas 75247

Phone: 214-638-1435 Fax: 214-638-1436

Website: <http://www.NDLab.com>



Dressers



Metal Bonded Products



Terms and Policies

Payment Terms:

We accept Visa, MasterCard, and American Express. Credit approved customers are given 2% within 10 days net 30 beginning from the shipping date. All accounts are considered *delinquent* after forty-five days. *Delinquent* accounts are put on hold until brought up to date. Accounts over *sixty* days are collection accounts and put on *permanent* C.O.D. Service charges will be assessed on all collection accounts starting from the original ship date. If you choose to make payment by check there will be an additional \$25.00 return check fee for any checks that are not cleared.

New Customers:

If you are interested in setting up an account with us, fax a copy of your credit reference. If a standard form is not available, we will fax a credit application for you to fill out and return via fax.

Guarantee:

All of NDL of Texas, Inc. products are 100% satisfaction guaranteed. If the product does not meet your standards we will do whatever it takes within reason to see that you are satisfied.

Pricing:

Prices are subject to change without notice. Prices in our catalog are for standard items only. With too many sizes to list as standard, "special sizes" do not always mean costly charges. To obtain pricing on non-standard sizes, please contact our technical sales department at 1-800-395-8665.

Shipping:

Unless otherwise specified, all orders are shipped UPS. Any order to be expedited will be charged 15% of the total invoice amount.

Returns:

All standard return items are credited full invoice value less 25% re-stocking fee.

- Items cannot be more than ninety days old from invoice date
- Products must be standard items (No Special Order Items)
- Freight must be prepaid unless instructed to ship collect with authorization
- The product must be in good resalable condition

NDL of Texas, Inc.
An American Manufacturer!

National Diamond Lab

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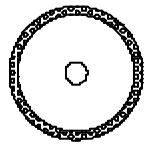
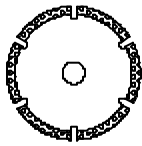
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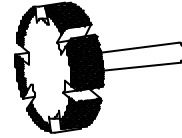
?Technical Information & Charts

Technical Information found in the back of each section of your catalog. Additional Information found on pages 60 & 61.

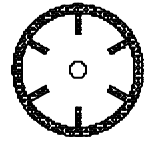
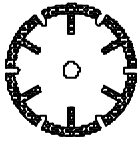
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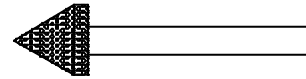
Saw Blades Pg. 5



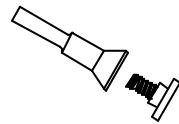
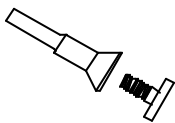
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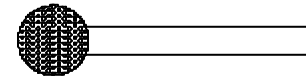
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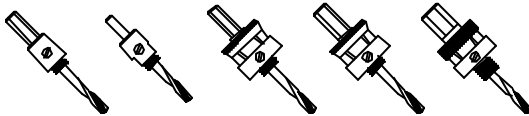
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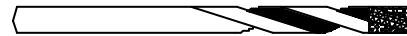
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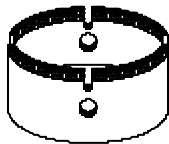
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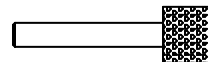
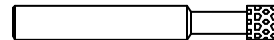
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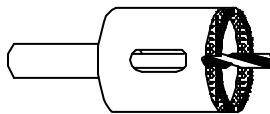
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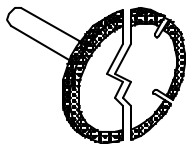
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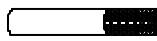
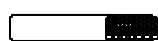
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6A2C Grinding Wheels Pg. 18



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We Manufacture A Full
Line of Industrial Diamond Tools
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National Diamond Lab

Plated Products Introduction

PLATED PRODUCTS

Plated products are usually a single layer of diamonds highly concentrated and held on by a tough, durable nickel alloy. This high concentration, usually about 140-150, enables plated products to remain their original shape and dimension throughout their working life. Unlike the metal or resin bond impregnated products where the diamond particles are buried in the bond, the plated product allows the diamond particles to protrude from the surface and gives a freer, faster cutting action with minimum heat generation.

MATERIALS

Diamond Plated products can be used successfully on the following materials:

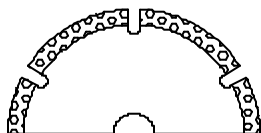
Fiberglass	Polyesters	Melamine
Carbon	Graphite	Asbestos
Ceramics	Pure Glass	Refractory
Micarta	Refrasil	Astralite
Green Carbide	Carbide	Ferrites
Quartz	Silicone	Stone
Marble	Porcelain	Alumina
Glass Bonded Mica	Onyx	Beryllium Oxide
Barium Titanate	Transmission Bands	Clutch Linings
Brake Linings	Epoxy	Taped Graphite
Glass Laminated	Cermets	

MANUFACTURES

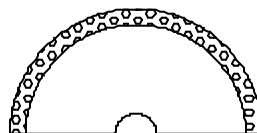
Diamond Plated products are used in the following industries:

Aircraft	Boat	Aerospace
Yacht	Circuit Board	Automotive
Construction	Ceramic	Missile
Casket	Paneling	Tank (Water & Acid)
Diving Boards	Pool Slide	Swimming Pool
Form Grinding	Marble	Glass

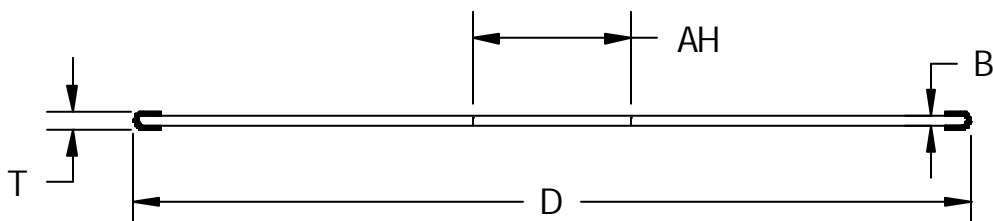
DIAMOND PLATED SAW BLADES



SLOTTED



UNSLOTTED

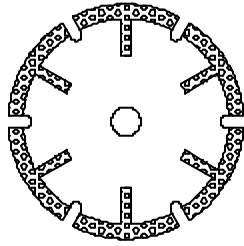


CATALOG NUMBER SLOTTED	CATALOG NUMBER UNSLOTTED	BLADE DIAMETER D	BLANK THICKNESS T	HOLE AH	PRICE
SB1S	SB1U	1"	.040	S	\$22.00
SB1-1/2S	SB1-1/2U	1-1/2"	.040	P	\$24.00
SB2S	SB2U	2"	.040	E	\$24.00
SB2-1/2S	SB2-1/2U	2-1/2"	.050	C	\$34.00
SB3S	SB3U	3"	.050	I	\$45.00
SB3-1/2S	SB3-1/2U	3-1/2"	.050	F	\$49.00
SB4S	SB4U	4"	.050	Y	\$57.00
SB5S	SB5U	5"	.083	S	\$70.00
SB6S	SB6U	6"	.083	P	\$103.00
SB7S	SB7U	7"	.083	E	\$117.00
SB8S	SB8U	8"	.095	C	\$148.00
SB10S	SB10U	10"	.095	I	\$162.00
SB12S	SB12U	12"	.120	F	\$222.00
SB14S	SB14U	14"	.120	Y	\$263.00
SB16S	SB16U	16"	.134	S	\$284.00
SB18S	SB18U	18"	.134	P	\$315.00
SB20S	SB20U	20"	.165	E	\$345.00
SB22S	SB22U	22"	.165	C	\$412.00
SB24S	SB24U	24"	.180	I	\$512.00
SB30S	SB30U	30"	.180	F	\$799.00
SB34S	SB34U	34"	.180	Y	\$1,104.00
SB36S	SB36U	36"	.180		\$1,298.00

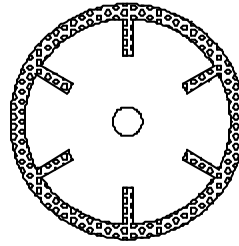
- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, ARBOR HOLE SIZE, AND DIAMOND GRIT SIZE
- ANY ARBOR HOLE CAN BE PROVIDED
- 40 GRIT DIAMOND IS STANDARD, 20-25 THROUGH 325-400 IS AVAILABLE
- ALL STANDARD SAWS HAVE 1/8" RETURN
- FOR LARGER RETURNS PLEASE CALL FOR QUOTE
- STANDARD BLANK THICKNESS LISTED ABOVE: NDL STOCKS MANY SIZES OTHER THAN STANDARD
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

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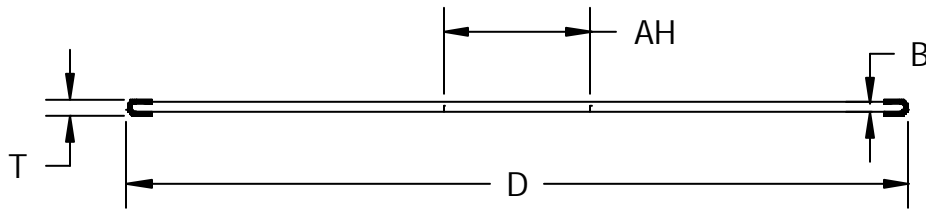
SPOKE SAWS



SLOTTED
SPOKE SAW



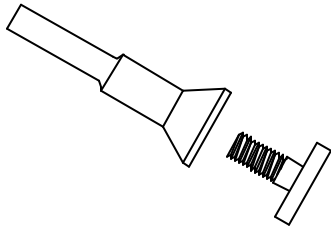
UNSLOTTED
SPOKE SAW



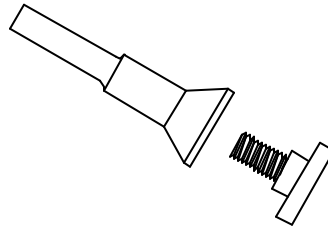
CATALOG NUMBER SLOTTED	CATALOG NUMBER UNSLOTTED	BLADE DIAMETER D	BLANK THICKNESS T	HOLE AH	PRICE
SS2SS	SS2US	2"	.040		\$26.00
SS3SS	SS3US	3"	.050	S	\$55.00
SS4SS	SS4US	4"	.050	P	\$67.00
SS5SS	SS5US	5"	.083	E	\$84.00
SS6SS	SS6US	6"	.083	C	\$124.00
SS7SS	SS7US	7"	.083	I	\$140.00
SS8SS	SS8US	8"	.095	F	\$172.00
SS10SS	SS10US	10"	.095	Y	\$194.00
SS12SS	SS12US	12"	.120		\$266.00
SS14SS	SS14US	14"	.120		\$315.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, ARBOR HOLE SIZE, AND GRIT SIZE
- ANY ARBOR HOLE CAN BE PROVIDED
- 40 GRIT IS STANDARD, 20-25 THROUGH 325-400 AVAILABLE
- ALL STANDARD SAWS HAVE A 1/8" RETURN
- FOR LARGER RETURNS, PLEASE CALL FOR QUOTE
- LENGTH AND NUMBER OF SPOKES ARE DETERMINED BY BLADE DIAMETER
- STANDARD BLANK THICKNESS LISTED ABOVE: NDL STOCKS MANY SIZES OTHER THAN STANDARD
- CAN BE MANUFACTURED PER PRINT
- OTHER SIZES AVAILABLE UPON REQUEST
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

SAW BLADE ARBORS



SBA250

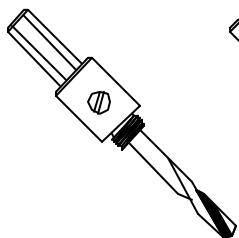


SBA375

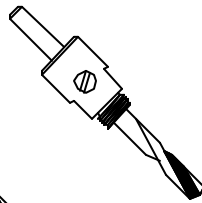
CATALOG NUMBER	BLADE DIAMETER	BLADE ARBOR HOLE	SHANK S x L	PRICE
SBA250	1-1/2" - 3"	1/4"	1/4" - 1/2"	\$8.00
SBA375	3" - 4"	3/8"	1/4" - 1/2"	\$8.00

- OTHER SIZE SAW BLADE ARBORS AVAILABLE UPON REQUEST

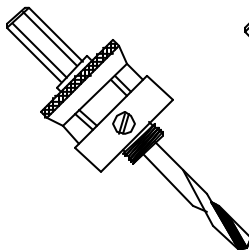
PREFABRICATED HOLE SAW ARBORS



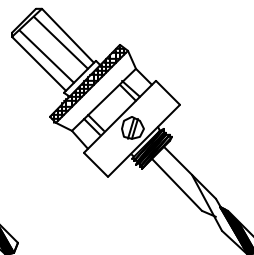
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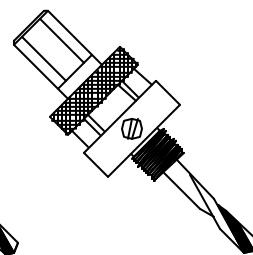
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#PHS-A10



#PHS-A2

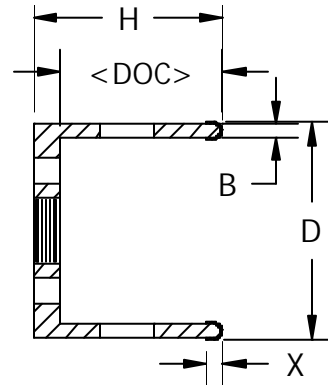
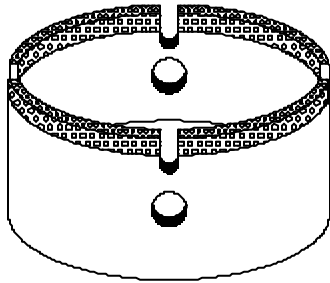


#PHS-M55P

CATALOG NUMBER	FITS HOLE SAW DIAMETER	CHUCK SIZE	SHANK SIZE	SCREW THREAD	PRICE
PHS-A1	9/16"-1 3/16"(14-30mm)	3/8"(9.5mm)	11/32"(8.75mm) Hex	1/2-20	\$9.00
PHS-A4	9/16"-1 3/16"(14-30mm)	1/4"(6.5mm)	1/4"(6.5mm) Round	1/2-20	\$6.00
PHS-A2*	1 1/4"-6"(32-152mm)	1/2"(13mm)	7/16"(11mm) Hex	5/8-18	\$14.00
PHS-A10*	1 1/4"-6"(32-152mm)	3/8"(9.5mm)	11/32"(8.75mm) Hex	5/8-18	\$14.00
PHS-M55P*	1 1/4"-6"(32-152mm)	3/4"(19mm)	5/8"(16mm) Hex	5/8-18	\$18.00
PHS-PD1	Pilot Drill fits all arbors except A4.				\$3.00
PHS-PD2	Pilot Drill fits A4 and all arbors with thru hole in shank.				\$3.00
PHS-A7	Ejector Spring (fits over pilot drill).				\$2.00

* Quick Hitch

DIAMOND PLATED PREFABRICATED HOLESAWS

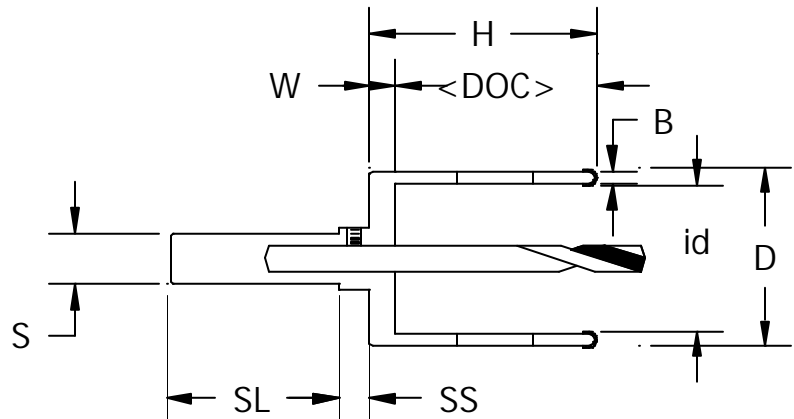
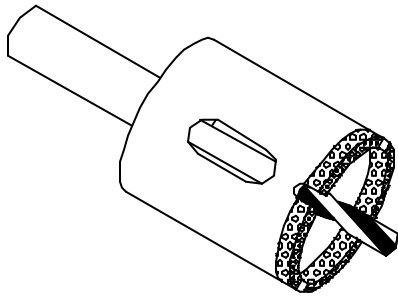


CATALOG NUMBER	HEAD DIAMETER		PRICE
	STANDARD	METRIC	
PHS0562	9/16"	14mm	\$28.00
PHS0625	5/8"	16mm	\$28.00
PHS0687	11/16"	17mm	\$28.00
PHS0750	3/4"	19mm	\$28.00
PHS0812	13/16"	21mm	\$32.00
PHS0875	7/8"	22mm	\$32.00
PHS0937	15/16"	24mm	\$32.00
PHS1000	1"	25mm	\$36.00
PHS1062	1-1/16"	27mm	\$38.00
PHS1125	1-1/8"	29mm	\$40.00
PHS1187	1-3/16"	30mm	\$43.00
PHS1250	1-1/4"	32mm	\$46.00
PHS1312	1-5/16"	33mm	\$48.00
PHS1375	1-3/8"	35mm	\$50.00
PHS1437	1-7/16"	37mm	\$52.00
PHS1500	1-1/2"	38mm	\$55.00
PHS1562	1-9/16"	40mm	\$55.00
PHS1625	1-5/8"	41mm	\$56.00
PHS1687	1-11/16"	43mm	\$56.00
PHS1750	1-3/4"	44mm	\$58.00
PHS1812	1-13/16"	46mm	\$60.00
PHS1875	1-7/8"	48mm	\$63.00
PHS2000	2"	51mm	\$65.00
PHS2062	2-1/16"	52mm	\$67.00
PHS2125	2-1/8"	54mm	\$69.00
PHS2250	2-1/4"	57mm	\$71.00
PHS2312	2-5/16"	59mm	\$72.00

CATALOG NUMBER	HEAD DIAMETER		PRICE
	STANDARD	METRIC	
PHS2375	2-3/8"	60mm	\$75.00
PHS2500	2-1/2"	64mm	\$77.00
PHS2562	2-9/16"	65mm	\$79.00
PHS2625	2-5/8"	67mm	\$82.00
PHS2750	2-3/4"	70mm	\$85.00
PHS2875	2-7/8"	73mm	\$87.00
PSH3000	3"	76mm	\$89.00
PHS3125	3-1/8"	79mm	\$93.00
PHS3250	3-1/4"	83mm	\$100.00
PHS3375	3-3/8"	86mm	\$105.00
PHS3500	3-1/2"	89mm	\$112.00
PHS3625	3-5/8"	92mm	\$118.00
PHS3750	3-3/4"	95mm	\$124.00
PHS3875	3-7/8"	98mm	\$130.00
PHS4000	4"	102mm	\$135.00
PHS4125	4-1/8"	105mm	\$145.00
PHS4250	4-1/4"	108mm	\$155.00
PHS4375	4-3/8"	111mm	\$162.00
PHS4500	4-1/2"	114mm	\$170.00
PHS4750	4-3/4"	121mm	\$180.00
PHS5000	5"	127mm	\$190.00
PHS5500	5-1/2"	140mm	\$205.00
PHS6000	6"	152mm	\$220.00
PHS6312	6-5/16"	160mm	\$264.00
PHS6625	6-5/8"	168mm	\$290.00
PHS6968	6-31/32"	177mm	\$316.00
PHS8281	8-9/32"	210mm	\$395.00

- PHS SERIES HOLE SAWS ARE AVAILABLE ONLY IN SIZES LISTED ABOVE, HS SERIES ON PAGE 9 IS AVAILABLE FOR UNLISTED PREFAB HOLE SAW SIZES
- DRILL DEPTH IS 1 1/2"
- 40 GRIT DIAMOND IS STANDARD. CHANGING THE GRIT SIZE WILL ALSO CHANGE THE CUTTING DIAMETER
- ARBORS AVAILABLE ON PAGE 7

DIAMOND PLATED PRECISION HOLESAWS

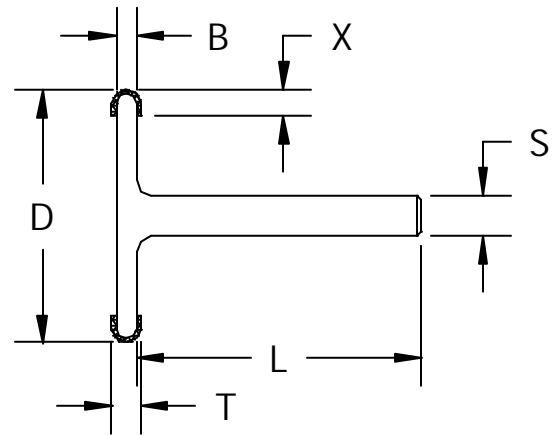
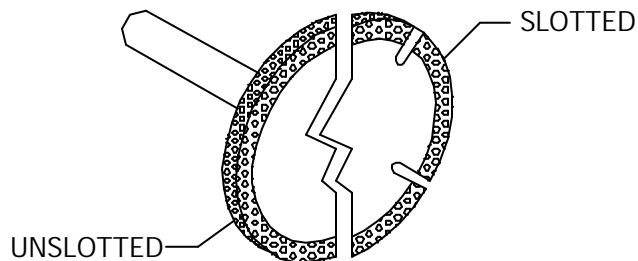


CATALOG NUMBER	DIAMETER D	SHANK S	PRICE
HS0500	1/2"	3/8	\$38.00
HS0750	3/4"	3/8	\$43.00
HS0875	7/8"	3/8	\$52.00
HS1000	1"	3/8	\$65.00
HS1250	1-1/4"	3/8	\$75.00
HS1500	1-1/2"	3/8	\$95.00
HS1750	1-3/4"	3/8	\$105.00
HS2000	2"	3/8	\$115.00
HS2250	2-1/4"	1/2	\$130.00
HS2500	2-1/2"	1/2	\$150.00
HS2750	2-3/4"	1/2	\$165.00
HS3000	3"	1/2	\$180.00
HS3500	3-1/2"	1/2	\$198.00
HS4000	4"	1/2	\$215.00
HS4500	4-1/2"	1/2	\$238.00
HS5000	5"	1/2	\$260.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, SHANK DIAMETER, AND DIAMOND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- ALL HOLE SAWS HAVE WINDOWS AND SLOTS
- STANDARD INSIDE DRILLING DEPTH IS 2"
- STANDARD SHANK LENGTH IS 2"
- STANDARD WALL THICKNESS IS .060"
- I.D. CRITICAL HOLES AW CAN BE FABRICATED UPON REQUEST
- UNPLATED PILOT DRILL IS STANDARD, PLATED PILOT CAN BE PROVIDED AT ADDITIONAL CHARGE
- 40 GRIT DIAMOND IS STANDARD, 20-25 THROUGH 325-400 AVAILABLE
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

Phone: 214-638-1435 Toll Free: 800-395-8665 Fax: 214-638-1436

DIAMOND PLATED MOUNTED SAWS



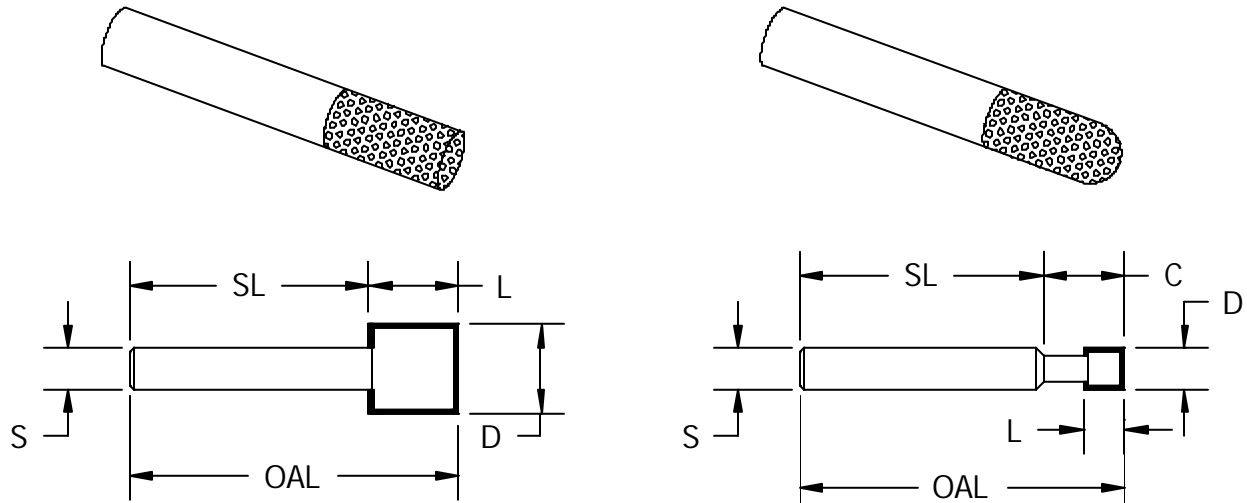
CATALOG NUMBER SLOTTED	CATALOG NUMBER UNSLOTTED	DIAMETER D	BLANK THICKNESS T	SHANK S	PRICE
MS3/4S	MS3/4U	3/4"	.050	S P E C I F Y	\$31.00
MS1S	MS1U	1"	.050		\$36.00
MS1-1/4S	MS1-1/4U	1-1/4"	.065		\$37.00
MS1-1/2S	MS1-1/2U	1-1/2"	.065		\$42.00
MS2S	MS2U	2"	.065		\$52.00
MS2-1/2S	MS2-1/2U	2-1/2"	.065		\$62.00
MS3S	MS3U	3"	.065		\$77.00
MS3-1/2S	MS3-1/2U	3-1/2"	.065		\$97.00
MS4S	MS4U	4"	.075		\$121.00
MS4-1/2S	MS4-1/2U	4-1/2"	.075		\$136.00
MS5S	MS5U	5"	.085		\$151.00
MS6S	MS6U	6"	.090		\$209.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, SHANK SIZE = DIAMETER X LENGTH, AND DIAMOND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- ALL MOUNTED SAWS ARE ONE PIECE CONSTRUCTION
- STANDARD SHANK LENGTH IS 2 1/4"
- 40 GRIT DIAMOND IS STANDARD, 20-25 THROUGH 325-400 IS AVAILABLE
- STANDARD RETURN IS 1/8"
- FOR LARGER RETURNS OR SPOKES PLEASE CALL FOR QUOTE
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

NDL of Texas, Inc.

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DIAMOND PLATED ROUTERS

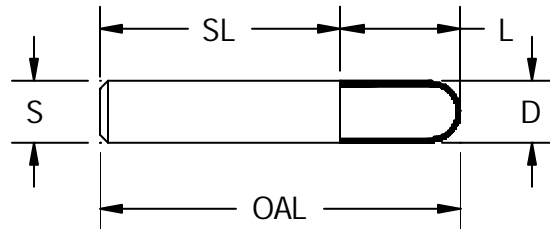
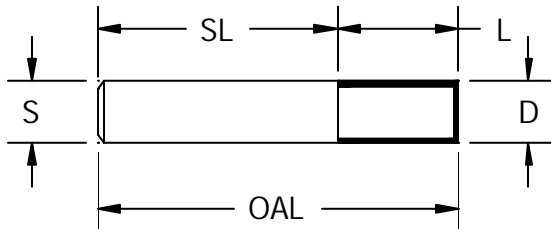
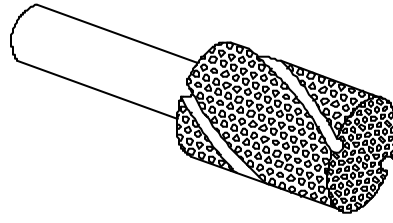
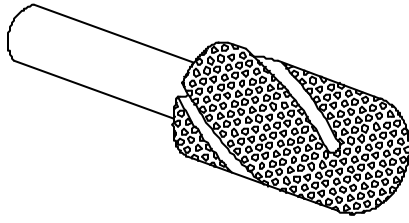


CATALOG NUMBER FLUTED	CATALOG NUMBER UNFLUTED	DIAMETER D	DIAMOND LENGTH L	PRICE
R125-14F	R125-14U	1/8"	1/4"	\$10.00
R125-12F	R125-12U		1/2"	\$13.00
R250-14F	R250-14U		1/4"	\$15.00
R250-12F	R250-12U		1/2"	\$18.00
R250-34F	R250-34U	1/4"	3/4"	\$20.00
R250-1F	R250-1U		1"	\$24.00
R250-112F	R250-112U		1-1/2"	\$28.00
R375-38F	R375-38U		3/8"	\$23.00
R375-12F	R375-12U		1/2"	\$26.00
R375-34F	R375-34U	3/8"	3/4"	\$30.00
R375-1F	R375-1U		1"	\$33.00
R375-112F	R375-112U		1-1/2"	\$35.00
R500-12F	R500-12U		1/2"	\$28.00
R500-34F	R500-34U		3/4"	\$32.00
R500-1F	R500-1U	1/2"	1"	\$35.00
R500-112F	R500-112U		1-1/2"	\$40.00
R500-2F	R500-2U		2"	\$50.00

- WHEN ORDERING PLEASE SPECIFY ND L CATALOG NUMBER, SHANK SIZE = DIAMETER X LENGTH, AND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- STANDARD SHANK LENGTH IS 2"
- ROUTERS COME STANDARD WITH A SQUARE END: BALL NOSE AND CONED ARE ALSO AVAILABLE (BEARINGS ARE AVAILABLE AT ADDITIONAL COST)
- THE SIZE OF THE ROUTER DETERMINES THE NUMBER AND THE SIZE OF THE FLUTES
- HELICAL FLUTES ARE STANDARD ON 1/2" AND LARGER, STRAIGHT FLUTES ARE STANDARD ON ALL ROUTERS UNDER 1/2" DIAMETER
- 40 GRIT DIAMOND IS STANDARD, 20-25 THROUGH 325-400 IS AVAILABLE
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

Phone: 214-638-1435 Toll Free: 800-395-8665 Fax: 214-638-1436

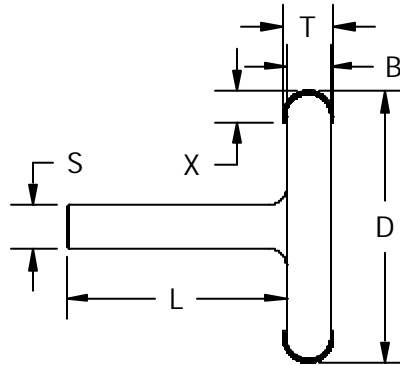
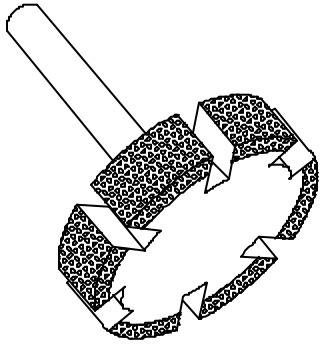
DIAMOND PLATED ROUTERS



CATALOG NUMBER FLUTED	CATALOG NUMBER UNFLUTED	DIAMETER D	DIAMOND LENGTH L	PRICE
R625-12F	R625-12U	5/8"	1/2"	\$32.00
R625-34F	R625-34U		3/4"	\$35.00
R625-1F	R625-1U		1"	\$40.00
R625-112F	R625-112U		1-1/2"	\$52.00
R625-2F	R625-2U		2"	\$60.00
R750-12F	R750-12U	3/4"	1/2"	\$36.00
R750-34F	R750-34U		3/4"	\$42.00
R750-1F	R750-1U		1"	\$50.00
R750-112F	R750-112U		1-1/2"	\$60.00
R750-2F	R750-2U		2"	\$70.00
R1000-12F	R1000-12U	1"	1/2"	\$48.00
R1000-34F	R1000-34U		3/4"	\$55.00
R1000-1F	R1000-1U		1"	\$65.00
R1000-112F	R1000-112U		1-1/2"	\$78.00
R1000-2F	R1000-2U		2"	\$95.00
R2000-1F	R2000-1U	2"	1"	\$115.00
R2000-2F	R2000-2U		2"	\$198.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, SHANK SIZE = DIAMETER X LENGTH, AND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- STANDARD SHANK LENGTH IS 2"
- ROUTERS COME STANDARD WITH A SQUARE END: BALL NOSE AND CONED ARE ALSO AVAILABLE (BEARINGS ARE AVAILABLE AT ADDITIONAL COST)
- THE SIZE OF THE ROUTER DETERMINES THE NUMBER AND THE SIZE OF THE FLUTES
- HELICAL FLUTES ARE STANDARD ON 1/2" AND LARGER, STRAIGHT FLUTES ARE STANDARD ON ALL ROUTERS UNDER 1/2" DIAMETER
- 40 GRIT DIAMOND IS STANDARD, 20-25 THROUGH 325-400 IS AVAILABLE
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

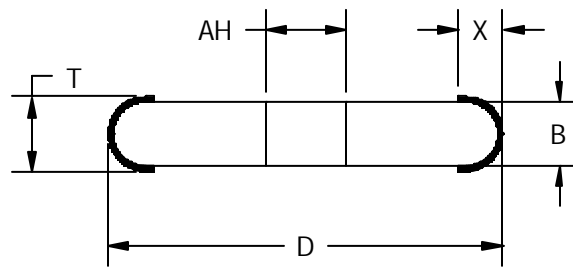
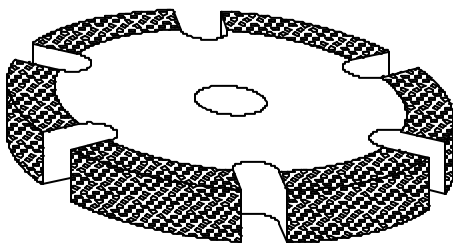
DIAMOND PLATED MOUNTED MILLING CUTTERS



CATALOG NUMBER	DIAMETER D	FINISH THICKNESS T	SHANK S	PRICE
MMC3-12	3"	1/2"	1/2"	\$100.00
MMC3-58	3"	5/8"	1/2"	\$125.00
MMC4-12	4"	1/2"	1/2"	\$157.00
MMC4-58	4"	5/8"	1/2"	\$196.00
MMC6-12	6"	1/2"	3/4"	\$271.00
MMC6-58	6"	5/8"	3/4"	\$399.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, SHANK SIZE = DIAMETER x LENGTH, AND DIAMOND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- ALL MOUNTED MILLING CUTTERS ARE ONE PIECE CONSTRUCTION
- STANDARD FULL RADIUS CAN BE MANUFACTURED FLAT
- 40 GRIT DIAMOND IS STANDARD, 20-25 THROUGH 325-400 AVAILABLE
- FOR LARGER RETURNS PLEASE CALL FOR QUOTE
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

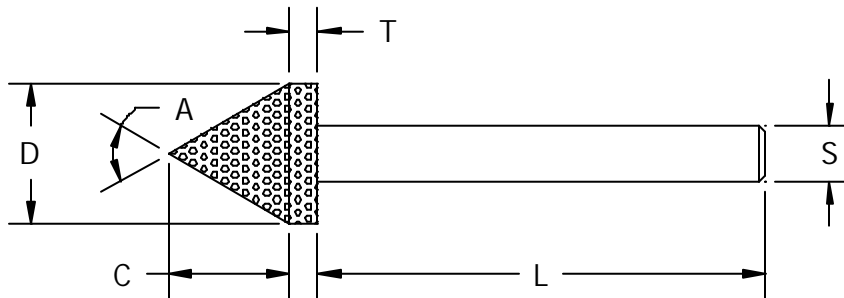
DIAMOND PLATED UNMOUNTED MILLING CUTTERS



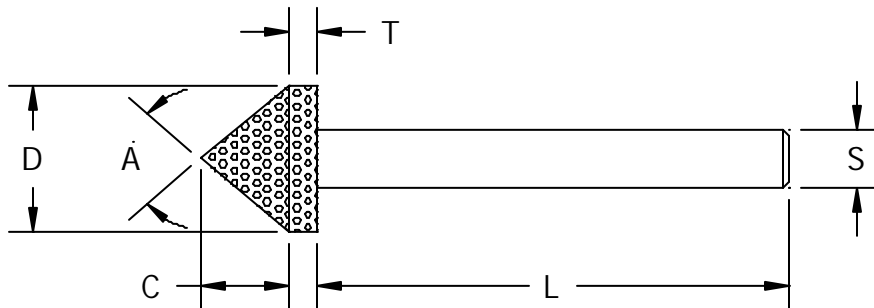
CATALOG NUMBER	DIAMETER D	FINISH THICKNESS T	HOLE H	PRICE
UMC3-14	3"	1/4"	S	\$68.00
UMC3-12	3"	1/2"	P	\$84.00
UMC4-14	4"	1/4"	E	\$90.00
UMC4-12	4"	1/2"	C	\$112.00
UMC6-14	6"	1/4"	I	\$136.00
UMC6-12	6"	1/2"	F	\$168.00
			Y	

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, ARBOR HOLE SIZE, AND DIAMOND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- STANDARD FULL RADIUS CAN BE MANUFACTURED FLAT
- 40 GRIT DIAMOND IS STANDARD, 20-25 THROUGH 325-400 AVAILABLE
- STANDARD RETURN IS 1/4"
- FOR LARGER RETURNS PLEASE CALL FOR QUOTE
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

PLATED DIAMOND & CBN CONE WHEEL



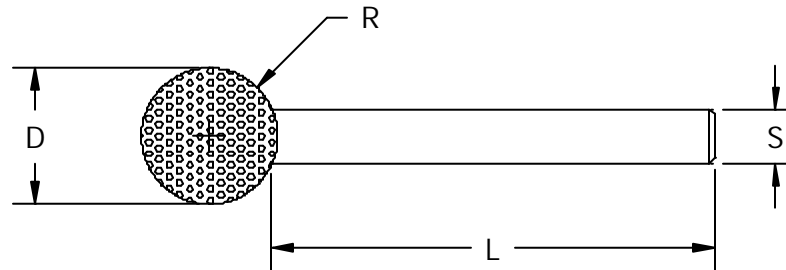
CATALOG NUMBER		DIAMETER D	ANGLE A	SHANK S	LENGTH L	PRICE
DIAMOND	CBN					
PCD250-60	PCBZ250-60	1/4"	60	1/4"	2	\$16.00
PCD375-60	PCBZ375-60	3/8"	60	1/4"	2	\$19.00
PCD500-60	PCBZ500-60	1/2"	60	1/4"	2	\$24.00
PCD625-60	PCBZ625-60	5/8"	60	3/8"	2	\$32.00
PCD750-60	PCBZ750-60	3/4"	60	3/8"	2	\$44.00
PCD875-60	PCBZ875-60	7/8"	60	3/8"	2	\$51.00
PCD1000-60	PCBZ1000-60	1"	60	3/8"	2	\$62.00



CATALOG NUMBER		DIAMETER D	ANGLE A	SHANK S	LENGTH L	PRICE
DIAMOND	CBN					
PCD250-90	PCBZ250-90	1/4"	90	1/4"	2	\$16.00
PCD375-90	PCBZ375-90	3/8"	90	1/4"	2	\$19.00
PCD500-90	PCBZ500-90	1/2"	90	1/4"	2	\$24.00
PCD625-90	PCBZ625-90	5/8"	90	3/8"	2	\$32.00
PCD750-90	PCBZ750-90	3/4"	90	3/8"	2	\$40.00
PCD875-90	PCBZ875-90	7/8"	90	3/8"	2	\$50.00
PCD1000-90	PCBZ1000-90	1"	90	3/8"	2	\$59.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER AND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE OR ANGLE CAN BE MANUFACTURED
- DIAMOND GRIT SIZE AVAILABLE IS 20-25 THROUGH 325-400 FOR DIAMOND AND 60-80 THROUGH 325-400 FOR CBN
- CARBIDE SHANKS AVAILABLE AT ADDITIONAL CHARGE

PLATED DIAMOND AND CBN BALL WHEEL

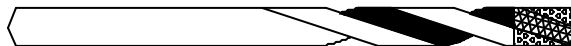


CATALOG NUMBER		DIAMETER	RADIUS	SHANK	LENGTH	PRICE
DIAMOND	CBN	D	R	S	L	
PBWD250	PBWBZ250	1/4"	1/8"	1/4"	2"	\$18.00
PBWD375	PBWBZ375	3/8"	3/16"	1/4"	2"	\$25.00
PBWD500	PBWBZ500	1/2"	1/4"	3/8"	2"	\$32.00
PBWD625	PBWBZ625	5/8"	5/16"	1/2"	2"	\$37.00
PBWD750	PBWBZ750	3/4"	3/8"	1/2"	2"	\$45.00
PBWD875	PBWBZ875	7/8"	7/16"	1/2"	2"	\$54.00
PBWD1000	PBWBZ1000	1"	1/2"	1/2"	2"	\$63.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER AND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- DIAMOND GRIT SIZE AVAILABLE IS 20-25 THROUGH 325-400 FOR DIAMOND AND 60-80 THROUGH 325-400 FOR CBN
- CARBIDE SHANKS AVAILABLE AT ADDITIONAL CHARGE

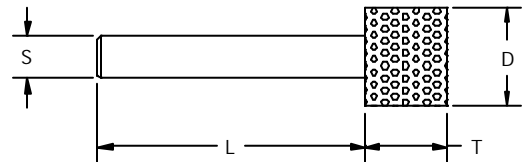
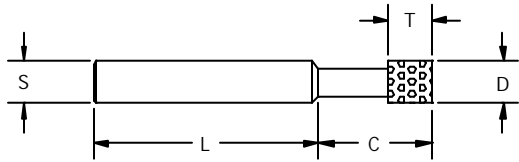
DIAMOND TWIST DRILLS

DRILL DIAMETER RANGE	PRICE
.030-.180	\$12.00
.181-.238	\$13.00
.239-.302	\$16.00
.303-.368	\$17.00
.369-.404	\$18.00
.405-.453	\$20.00
.454-.511	\$22.00
.512-.590	\$25.00
.591-.640	\$27.00
.641-.734	\$34.00
.735-.797	\$44.00
.798-.859	\$49.00
.860-.902	\$52.00
.907-1.00	\$65.00



- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER AND DIAMOND GRIT SIZE
- ALL DRILLS ARE GENERAL PURPOSE JOBBER DRILL LENGTHS; DRILLS ABOVE 1/2" ARE SILVER & DEMING DRILLS WITH 1/2" SHANK
- STANDARD RETURN IS 3/16"
- FOR LARGER RETURNS PLEASE CALL FOR QUOTE

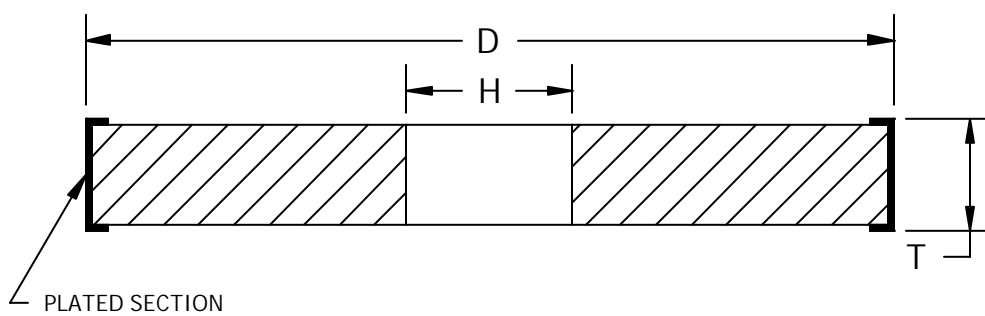
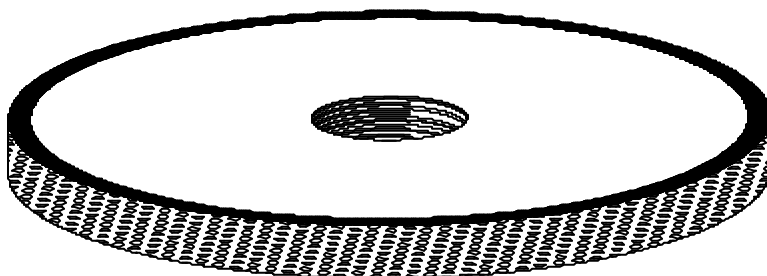
PLATED DIAMOND & CBN GRINDING QUILLS FOR JIG GRINDING



CATALOG NUMBER		GRIT SIZE	D INCH	T INCH	C INCH	S INCH	L INCH	PRICE
DIAMOND	CBN							
P20D	P20BZ	200	.020	.079	.187	1/8	2	\$15.00
P21D	P21BZ	200	.029	.079	.250	1/8	2	\$10.00
P22D	P22BZ	200	.039	.079	.250	1/8	2	\$10.00
P23D	P23BZ	150	.049	.079	.500	1/8	2	\$10.00
P24D	P24BZ	150	.059	.120	.500	1/8	2	\$10.00
P25D	P25BZ	150	.069	.118	.500	1/8	2	\$10.00
P26D	P26BZ	150	.079	.160	.500	1/8	2	\$13.00
P27D	P27BZ	100	.089	.157	.500	1/8	2	\$13.00
P28D	P28BZ	100	.099	.157	.500	1/8	2	\$13.00
P29D	P29BZ	100	.109	.157	.625	1/8	2	\$13.00
P30D	P30BZ	100	.118	.157	.625	1/8	2	\$13.00
P31D	P31BZ	100	.130	.200	.625	1/8	2	\$16.00
P32D	P32BZ	100	.140	.200	.625	1/8	2	\$16.00
P33D	P33BZ	100	.157	.200	.625	1/8	2	\$16.00
P34D	P34BZ	100	.177	.230	.625	1/8	2	\$16.00
P35D	P35BZ	100	.197	.230	.625	1/8	2	\$16.00
P36D	P36BZ	100	.215	.230	1	1/4	2	\$18.00
P37D	P37BZ	100	.236	.250	1	1/8	2	\$18.00
P38D	P38BZ	100	.236	.250	1	1/4	3	\$18.00
P39D	P39BZ	100	.256	.250	1	1/4	3	\$18.00
P40D	P40BZ	100	.275	.300	1	1/4	3	\$18.00
P41D	P41BZ	100	.315	.300	1	1/4	3	\$19.00
P42D	P42BZ	100	.335	.300	1	1/4	3	\$20.00
P43D	P43BZ	100	.390	.190	1	1/4	3	\$20.00
P44D	P44BZ	100	.390	.375	1	3/8	3	\$22.00
P45D	P45BZ	100	.472	.375	1	1/4	3	\$22.00
P46D	P46BZ	100	.472	.375	1	3/8	3	\$32.00
P47D	P47BZ	100	.500	.375	1	3/8	3	\$32.00
P48D	P48BZ	100	.590	.190	1	1/4	3	\$32.00
P49D	P49BZ	100	.590	.375	1	3/8	3	\$36.00
P50D	P50BZ	100	.735	.375	1	3/8	3	\$40.00
P51D	P51BZ	100	1	.375	1	3/8	3	\$50.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER AND GRIT SIZE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- CARBIDE SHANKS AVAILABLE AT ADDITIONAL CHARGE

PLATED 1A1 GRINDING WHEEL

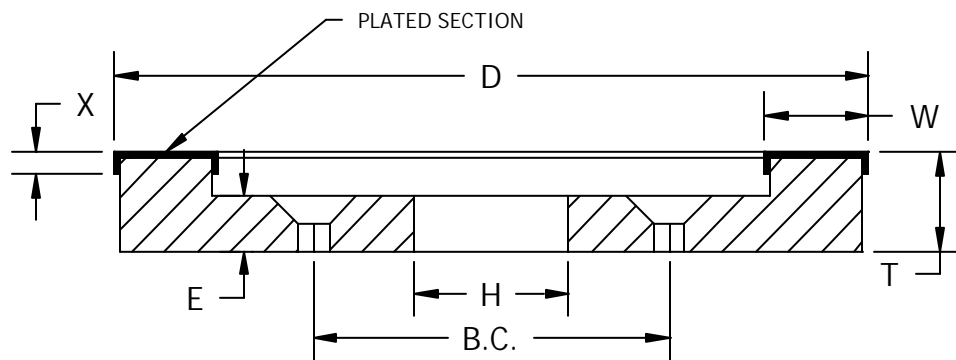
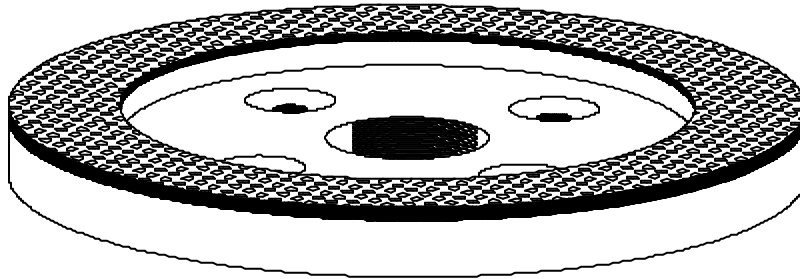


CATALOG NUMBER	WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	PRICE
P-1A1-6-.50	6	1/2"	S P E C I F Y	\$118.00
P-1A1-6-.75	6	3/4"		\$137.00
P-1A1-6-1.0	6	1"		\$155.00
P-1A1-8-.50	8	1/2"		\$156.00
P-1A1-8-.75	8	3/4"		\$181.00
P-1A1-8-1.0	8	1"		\$205.00
P-1A1-10-.50	10	1/2"		\$255.00
P-1A1-10-.75	10	3/4"		\$285.00
P-1A1-10-1.0	10	1"		\$315.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, ARBOR HOLE SIZE, AND GRIT SIZE
- ANY ARBOR HOLE CAN BE PROVIDED
- 20-25 GRIT THROUGH 325-400 GRIT IS AVAILABLE
- ALL STANDARD WHEELS HAVE A 1/8" RETURN
- FOR LARGER RETURNS PLEASE CALL FOR QUOTE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

Phone: 214-638-1435 Toll Free: 800-395-8665 Fax: 214-638-1436

PLATED 6A2C GRINDING WHEEL



CATALOG NUMBER	WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	RIM WIDTH W	GRIT	PRICE
P-6A2C-6R	6	3/4"	S	3/4"	120 ROUGH	\$144.00
P-6A2C-6M	6	3/4"	P E C I F Y	3/4"	220 MEDIUM	\$144.00
P-6A2C-6F	6	3/4"		3/4"	400 FINE	\$144.00

- WHEN ORDERING PLEASE SPECIFY NDL CATALOG NUMBER, ARBOR HOLE SIZE, AND GRIT SIZE
- ANY ARBOR HOLE SIZE CAN BE PROVIDED
- 20-25 GRIT THROUGH 325-400 GRIT IS AVAILABLE
- ALL STANDARD WHEELS HAVE A 1/8" RETURN
- FOR LARGER RETURNS PLEASE CALL FOR QUOTE
- SIZES LISTED ARE GENERAL, ANY SIZE CAN BE MANUFACTURED
- CAN BE MANUFACTURED PER PRINT
- RECOATING SERVICES AVAILABLE WITH DISCOUNTED PRICES

PLATED PRODUCTS TECHNICAL INFORMATION

RECOMMENDATIONS

CIRCULAR SAW BLADES

Whenever a circular saw becomes glazed or loaded with soft materials, such as uncured resins or fused dust, it can be easily cleaned. The optimum cleaning method is to soak over night in Methyl Ethyl Ketone and use a wire brush. When excessive loading and burning has occurred, a soft silicon carbide stick followed by a rubber or cretex abrasive stick, held against the rotating blades cutting edge will usually abrade away the fused materials. When cutting or grinding material that is generally "Gummy" or does not cut freely it is suggested using a slotted blade and if possible using water to help wash away the excess dust to keep from loading and burning.

MOUNTED SAWS

All National Diamond mounted saws are of one-piece construction. We do not braze, solder, or weld our shanks to the saw to prevent separation when in operation. Mounted saws are manufactured continuous or slotted to aid in cooler operation. These special design tools are normally used in hand trimming, grooving, slotting or I.D. grinding operations. They are most efficiently used with air routers 1/2 to 1 horsepower rotating at approximately 15,000 RPM to 17,000 RPM. Both sides of the cutting edge are plated with 1/8" return of diamonds, which allows for relief to prevent binding. In many cases mounted saws can be recoated at a 20% savings, providing the old blank can be reused.

ROUTERS

When using a diamond-coated router, the cutting action does not depend on sharp edges of the tool, but on the abrasive action of the diamond grit. Fiberglass plastics quickly dull the sharp edges of any router. The proper method of removing stock with a diamond-coated router is where the maximum depth of cut is approximately one-third of its diameter. This will allow the tool to get rid of the dust it creates as fast as it is generated. To obtain maximum life out of the router you should never use it as a saw.

Air hand tools as well as electric tools are suitable for all routers. On routers from 1/4" to 2", 20,000 RPM and 3/4 to 1 1/2 horsepower should be used to maintain proper speed under load and permit the diamond grit to scratch out the dust without undue pressure. This will reduce the heat generated by the abrasive cutting action. The high speed will also give you maximum life out of the router bit.

HOLE SAWS

National Diamond hole saws can be manufactured from a one-piece construction for precision core drilling. We can also manufacture these from standard hole saws such as Starrett, Nickleson, Black & Decker, Miller Falls, Milwaukee, and Do All. The teeth are removed and diamond is plated on the cutting surface. On most materials the recommended speeds are as follows; 1/2" to 1 1/4" speed of 2100 RPM, 1 1/4" to 2" speeds 1500 to 1700 RPM, and 2" to 3" speeds of 1100 RPM should be used. On 4 1/2" drill speeds 600 RPM is used, and on the larger than 4 1/2" speeds range from 250 to 400 RPM. The slower speeds are being used as the materials hardness increases. As in most other plated products, hole saws can be recoated at a 20% savings, provided the old blank can be reused.

PLATED PRODUCTS TECHNICAL INFORMATION

RECOATING OR RECONDITIONING

After extended periods of hard usage and the cleaning process has to be done more frequently or excess pressure is needed to pass the tool through the material, it may become evident that the tool is simply worn out. When this occurs, most plated tools can be returned to the factory for complete reconditioning and recoating. This recoating process is done by removing all the old diamond and plating left on the blade and if need be re-worked before diamond is again applied to restore it to its new condition. This recoating service is economically feasible in the fact that it is 20% less than the cost of a new blade.

For maximum value it is often not feasible to send only one blade in at a time. Example: sending 1 #SB2U - 2" Saw Blade to be replated at a 20% discount comes out to \$19.20. New cost would be \$24.00, giving you a savings of \$4.80. Weighing out the savings along with the cost of shipping the part to NDL to be replated might not be cost effective.

*** 20% DISCOUNT FOR STRIPPING & REPLATING ***

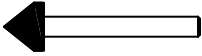
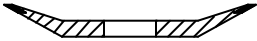
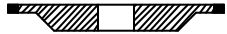
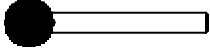
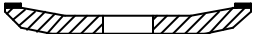

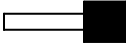
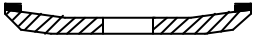
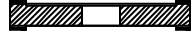

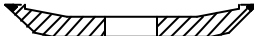

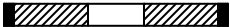
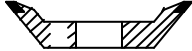
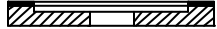
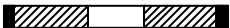
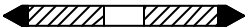
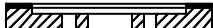
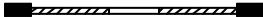

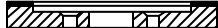
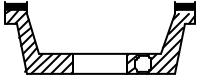
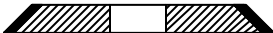
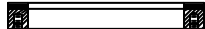
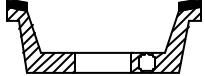

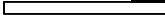
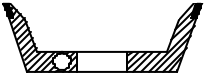

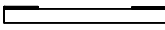
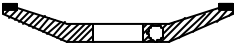
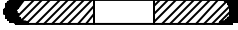
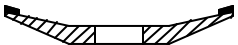
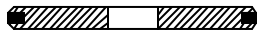
Note: With stripping and replating, the tool(s) sent in must be in reusable condition. Ask for more details.

RPM & SFPM CHART FOUND ON PAGE 60.

DIAMOND GRIT INFORMATION

GRIT CALL OUT	GRIT RANGE	NORMAL RMS FINISH EXPECTED	APPROX. PARTICLE SIZE IN INCHES	# PARTICLES PER CARAT	BUILD UP ON DIAMETER
18	18/20		.0390	110	
20	20/25		.0280	180	.060
25	25/30		.0230	310	.055
30	30/35		.0190	510	.050
35	35/40		.0150	860	.045
40	40/45		.0130	1,450	.040
45	45/50		.0100	2,080	.037
50	50/60		.0080	4,100	.030
60	60/80		.0065	6,900	.025
80	80/100	90-125	.0055	19,500	.020
100	100/120	64-90	.0045	32,800	.017
120	120/140	48-64	.0040	55,200	.014
140	140/170	32-48	.0035	93,000	.012
180	170/200	24-32	.0030	156,000	.010
200	200/230	20-24	.0020	262,000	.007
240	230/270	16-20	.0016	441,000	.006
270	270/325	14-16	.0015	742,000	.005
325	325/400	13-14	.0014	1,250,000	.004

Resin Bond Index

CONE WHEEL Pg. 24 	12V9 Pg. 31 	3A1 Pg. 38 
BALL WHEEL Pg. 25 	15A2 Pg. 32 	14A1 Pg. 38 
DW Pg. 25 	15V4 Pg. 32 	9A3 Pg. 39 
1A8 Pg. 26 	15V9 Pg. 33 	6A9 Pg. 39 
1A1 Pg. 26 	12B Pg. 33 	6A2 Pg. 40 
1A1 (continued) Pg. 27 	1E1 Pg. 34 	6A2H Pg. 40 
1A1R Pg. 28 	1EE1 Pg. 34 	6A2C Pg. 40 
11A2 Pg. 29 	1V1 Pg. 35 	2A2T Pg. 41 
11V4 Pg. 29 	4A2P Pg. 36 	HH1 Pg. 41 
11V9 Pg. 30 	1F1 Pg. 36 	HH2 Pg. 41 
12A2 Pg. 30 	1FF1 Pg. 37 	<p>We Manufacture a Full Line of High Quality Diamond And Borazon Wheels.</p> <p>For More Information, Give Us a Call! (214) 638-1435 1-800-395-8665</p>
12V4 Pg. 31 	1A6Q Pg. 37 	

WHEEL OPERATIONS AND APPLICATIONS

GENERAL CARE

Safe operation practices must be part of every grinding wheel user's operation. Super abrasive wheels are expensive, but performance justifies the cost. To obtain maximum performance from the super abrasive wheel, the procedures for the user's operation must extend to what is done with the wheel both before and after it's actual use. The greatest efficiency and lowest overall abrasive cost can be realized only if proven care and use techniques become standard procedure.

FOR DIAMOND WHEELS

MOUNTING: The following recommendations are given so that the best results may be obtained in using diamond wheels: Care should be taken in mounting a diamond wheel. Flanges; back plates; spindles should be clean, free of burrs, and run true. By using an indicator and tapping lightly on a wood block held against the wheel, indicate the wheel within .0005" of the true rotation. Tighten the flanges securely and recheck with an indicator before using. When mounting a cup type wheel, use shims inserted between the back plate and the wheel to obtain a true running face. The use of permanent mounting should be practiced where convenient.

DRESSING & TRUING: Due to the exceptionally free cutting properties of the diamond wheels, frequent dressing is not necessary. They may be dressed with a soft bonded aluminum oxide or silicon carbide dressing stick. When a beveled or gouged condition has occurred in a face type wheel, the wheel may be removed from the machine and rotated in a figure 8 motion on a cast iron plate sprinkled with 80 to 100 grit silicon carbide dust. To true a peripheral type wheel which has become beveled at the corners, a brake truing device can be used, or let the diamond wheel revolve at a slow speed mounted on a mandrel between lathe centers and true at right angles with a small silicon carbide wheel mounted on a post grinder.

SPEEDS & FEEDS: The best speeds for diamond wheels for grinding carbide is between 4,000 to 6,000 surface feet per minute. Slightly higher speeds are not detrimental, particularly if a flood of coolant is applied and grinding pressure minimized. Table traverse rates of 100" to 500" per minute with cross feeds of .030" to .060" may be used. For general surface grinding operations, down feeds should not exceed .001" per pass for rougher grits up to 120, .0005" for grits 120 to 220, and .00025" should be used for finish grinding or with fine grit wheels.

COOLANTS: It has been found that a generous flow of coolant increases diamond wheel efficiency. The proper placement of coolant is also important. The coolant must be applied in the proper place or it will not cool the wheel or the material being ground, properly. Coolant should always be directed so that the full flow is at the point of contact between the same directions as the rotation of the wheel. **Note:** When ordering always specify wet or dry grinding. Some resin-bonded wheels are made for dry grinding only for better life when coolant is not used.

FOR BORAZON WHEELS

MOUNTING: Unless correctly mounted, BORAZON (CBN) wheels cannot perform well. After mounting, all BORAZON (CBN) wheels, except electroplated wheels, must be correctly trued and conditioned to insure good grinding performance. For the correct mounting of a BORAZON (CBN) wheel, the mounting flanges and faces must be in good condition. To reduce the amount of wheel rim material that has to be removed in truing, the wheel should be mounted as true as possible. With the aid of a dial indicator, it is possible to position the wheel so as to minimize runout. Paper washers, blotters, and metal shims should not be used when mounting a BORAZON (CBN) wheel. They make it difficult for the wheel to be held securely on the mount. Ensure the correct wheel guard is in place before starting the wheel. Allow the wheel to come up to full operating speed before starting to grind.

TRUING & CONDITIONING: In truing, the wheel rim is cut or abraded with a tool to develop perfect roundness, concentricity with the spindle and the desired profile. In conditioning, bond material is removed to expose the sharp cutting edges of the BORAZON (CBN) abrasive crystals. The following guidelines are general. **DO NOT OVER-TRUE THE WHEEL.** Accurate truing is important, an out-of-round wheel will pound the work piece, wear fast and produce poor finishes. Excessive truing simply wastes wheel material and shortens wheel life. BORAZON (CBN) wheels are always trued wet, with a flood of coolant applied as directly as possible to the tool/wheel interface. Single-point and cluster type diamond dressing tools should not be used for truing BORAZON (CBN) wheels. They may damage the wheel. One recommended truing tool for BORAZON (CBN) wheels is a metal-bonded nib containing 40-150 mesh diamond abrasive. With this type of tool, truing increments should be in the .0005" to .001" (0,013 - 0,025mm) range. An alternate to using a diamond nib for truing, is to use a 40/60 grit silicon carbide wheel in a brake-type truing device. Vitrified-bonded wheels with bond hardness in the "J" through "M" range give the best results.

DRESSING & CONDITIONING: Truing glazes BORAZON (CBN) wheels. They will not grind when glazed. Before grinding, they must be conditioned to make them free cutting. BORAZON (CBN) wheels can be effectively conditioned by abrading the wheel surface with a dressing stick containing fine (220 grit) aluminum oxide abrasive in a "G" to "K" grade vitrified bond. The dressing stick is forced into the wheel quite hard. Usually this is done by hand, but a holding device can be used. A small amount of coolant is used to create a paste or slurry that rolls like grains of sand between the wheel and the dressing stick. This abrades out bonding materials which otherwise prevents the wheel from cutting freely. Before dressing, the wheel will feel smooth, while a properly dressed wheel will have a rough texture. Rapid loss of the dressing stick is a good indication that the wheel is being opened.

SPEEDS: BORAZON (CBN) wheels should be used at 6,000 to 7,000 surface feet per minute.

COOLANT: Flood coolant should be used whenever possible. The use of enriched solutions (5 to 10%) of "heavy-duty" water-soluble oils is effective in extending BORAZON (CBN) wheel life.

MATERIALS THAT ARE EFFECTIVELY GROUND WITH BORAZON (CBN) WHEELS: HIGH SPEED STEELS, TOOL & DIE STEELS, CARBURIZED STEELS, NITRIDED STEELS, CAST IRON, BEARING STEELS (52100M - 50 etc.), MARTENSITIC STAINLESS STEELS, COBALT BASED ALLOYS (STELITES), UDIMET HASTELLOY, RENE "71" & "77", NICKLE BASED SUPERALLOYS (INCONEL 718), WASPALOY, Etc...

National Diamond Lab

1435 Round Table Dr.
Dallas, Texas 75247
Toll Free: 1-800-395-8665 Phone: (214) 638-1435
Fax: (214) 638-1436

Website: <http://www.NDLab.com>

We Accept Visa, MasterCard, and American Express!

Ordering Information:

1. Quantity
2. Type (1A1, 11A2, 6A2C, Etc.)
3. Size - Physical Dimensions (Diameter, Thickness, Hole Size, Etc.)
4. Specifications - As Outlines Below
5. Specify Type of Material Grinding (Carbide, Steel, Glass, Etc.)
6. Specify Wet or Dry Grinding

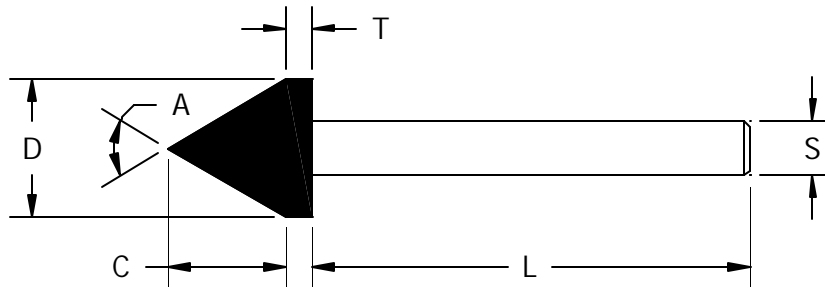
Example: 2 pc. 1A1 6 x 1/2 x 1 1/4 NCD220R100B-1/8 Carbide Wet

Diamond And Borazon Wheel Specifications

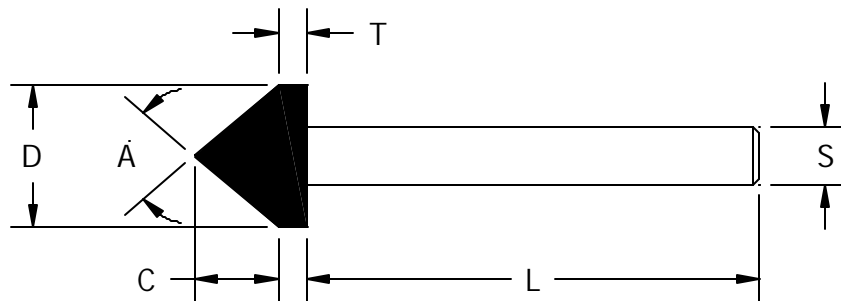
ABRASIVE							ABRASIVE DEPTH	
D = UNCOATED DIAMOND NDC = NICKEL COATED DIAMOND CCD = COPPER COATED DIAMOND BZ = BORAZON		NCD	140	R	100	B	8	1/4
							1/16	
							1/8	
							1/4	
GRIT SIZE		GRADE		CONCENTRATION		BOND TYPE		BOND MOD.
40	320	<u>RESIN</u>	<u>METAL</u>					Designates Bond Modification
60	400	SOFT	N	A - Glass	Low	25	B - RESIN	
80	500		P					
100	600		Q	B - Concrete		50		
120	800		R			75		
140	1200		S	C - Ceramic				
180			T		High	100	M - METAL	
220			U	R - Carbide		125		
280		HARD	V					

Phone: 214-638-1435 Toll Free: 800-395-8665 Fax: 214-638-1436

CONE WHEEL



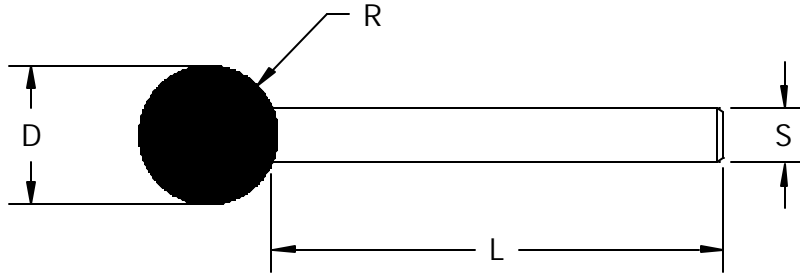
CATALOG NUMBER		DIAMETER D	ANGLE A	SHANK S	LENGTH L	PRICE
DIAMOND	CBN					
RCD250-60	RCBZ250-60	1/4"	60	1/4"	2	\$23.01
RCD375-60	RCBZ375-60	3/8"	60	1/4"	2	\$27.00
RCD500-60	RCBZ500-60	1/2"	60	1/4"	2	\$46.00
RCD625-60	RCBZ625-60	5/8"	60	3/8"	2	\$54.00
RCD750-60	RCBZ750-60	3/4"	60	3/8"	2	\$75.00
RCD875-60	RCBZ875-60	7/8"	60	3/8"	2	\$90.00
RCD1000-60	RCBZ1000-60	1"	60	3/8"	2	\$106.00



CATALOG NUMBER		DIAMETER D	ANGLE A	SHANK S	LENGTH L	PRICE
DIAMOND	CBN					
RCD250-90	RCBZ250-90	1/4"	90	1/4"	2	\$23.00
RCD375-90	RCBZ375-90	3/8"	90	1/4"	2	\$27.00
RCD500-90	RCBZ500-90	1/2"	90	1/4"	2	\$46.00
RCD625-90	RCBZ625-90	5/8"	90	3/8"	2	\$54.00
RCD750-90	RCBZ750-90	3/4"	90	3/8"	2	\$75.00
RCD875-90	RCBZ875-90	7/8"	90	3/8"	2	\$90.00
RCD1000-90	RCBZ1000-90	1"	90	3/8"	2	\$106.00

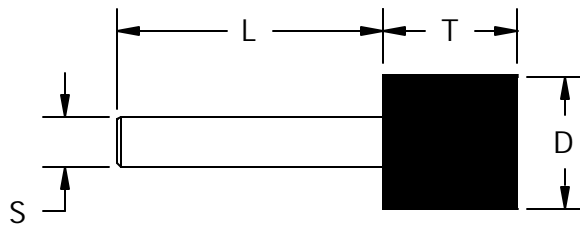
- ALL CONE WHEELS MANUFACTURED WITH STEEL SHANKS
- WHEN ORDERING PLEASE SPECIFY GRIT SIZE, IF SPECIAL DIAMETER OR ANGLE IS NEEDED CALL FOR QUOTE
- CARBIDE SHANKS AVAILABLE FOR RESIN AND METAL BOND WHEELS FOR THE FOLLOWING SHANK DIAMETERS:
 .125 ADD \$5.00; .250 ADD \$8.00

BALL WHEEL



CATALOG NUMBER		DIAMETER D	RADIUS R	SHANK S	LENGTH L	PRICE
DIAMOND	CBN					
RBWD125	RBWBZ125	1/8"	1/16"	1/8"	2"	\$16.00
RBWD250	RBWBZ250	1/4"	1/8"	1/4"	2"	\$26.00
RBWD375	RBWBZ375	3/8"	3/16"	1/4"	2"	\$38.00
RBWD500	RBWBZ500	1/2"	1/4"	3/8"	2"	\$70.00
RBWD625	RBWBZ625	5/8"	5/16"	1/2"	2"	\$90.00
RBWD750	RBWBZ750	3/4"	3/8"	1/2"	2"	\$110.00
RBWD875	RBWBZ875	7/8"	7/16"	1/2"	2"	\$205.00
RBWD1000	RBWBZ1000	1"	1/2"	1/2"	2"	\$206.00

- SHANK DIAMETERS CAN VARY TO HEAD DIAMETERS

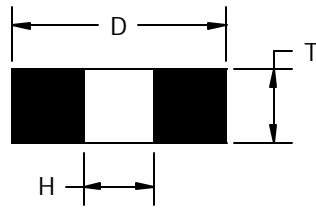


DW

Mounted on Mandrel

Diamond Throughout *CARBIDE SHANKS: Available at Additional Cost

WHEEL DIAMETER D	WHEEL THICKNESS T	MANDREL DIAMTER		WHEEL DIAMETER D	WHEEL THICKNESS T	MANDREL DIAMTER
1/8	1/8	1/8		1/2	1/4	1/8
1/8	1/4	1/8		1/2	3/8	1/8
3/16	3/16	1/8		1/2	1/2	1/8
3/16	1/4	1/8		1/2	1/2	1/4
1/4	1/8	1/8		5/8	1/4	1/4
1/4	1/4	1/8		5/8	3/8	1/4
1/4	3/8	1/8		5/8	1/2	1/4
1/4	1/2	1/8		3/4	1/4	1/4
5/16	1/4	1/8		3/4	3/8	1/4
5/16	5/16	1/8		3/4	1/2	1/4
3/8	1/4	1/8		3/4	3/4	1/4
3/8	3/8	1/8		1	1/4	1/4
3/8	1/2	1/8		1	3/8	1/4
1/2	1/8	1/8		1	1/2	1/4

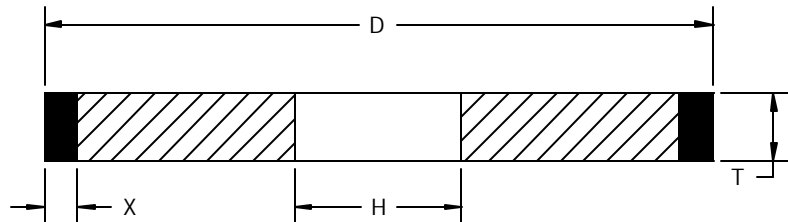


1A8

Straight Wheel

Diamond Throughout

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H		WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H
1/4	1/4	1/8		5/8	3/8	1/4
5/16	1/4	1/8		5/8	1/2	1/4
3/8	1/4	1/8		3/4	1/4	1/4
3/8	3/8	1/8		3/4	3/8	1/4
7/16	7/16	1/8		3/4	1/2	1/4
1/2	1/4	1/8		3/4	3/4	1/4
1/2	3/8	1/4		1	1/4	1/4
1/2	1/2	1/4		1	3/8	1/4
5/8	1/4	1/4		1	1/2	1/4



1A1

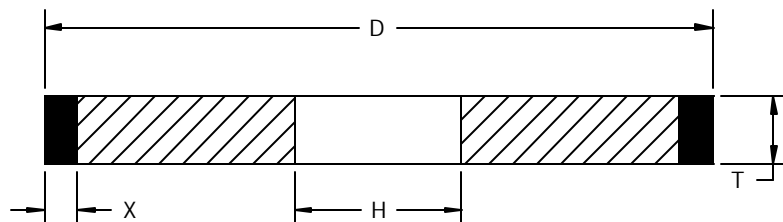
Straight Wheel

Diamond in Periphery

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	DIAMOND DEPTH X			WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	DIAMOND DEPTH X	
3/4	1/4	S P E C I F Y	1/8	1/4		3	1/8	S P E C I F Y	1/8	1/4
3/4	1/2					3	1/4			
3/4	3/4					3	3/8			
1	1/8	S P E C I F Y	1/8	1/4		3	1/2	S P E C I F Y	1/8	1/4
1	1/4					4	1/8			
1	1/2					4	3/16			
1 1/2	1/4	S P E C I F Y	1/8	1/4		4	1/4	S P E C I F Y		
1 1/2	3/8					4	3/8			
1 1/2	1/2					4	1/2			
2	1/8	S P E C I F Y	1/8	1/4				S P E C I F Y		
2	1/4									
2	3/8									
2	1/2									

- 1A1 continued on Page 27

NDL of Texas, Inc.

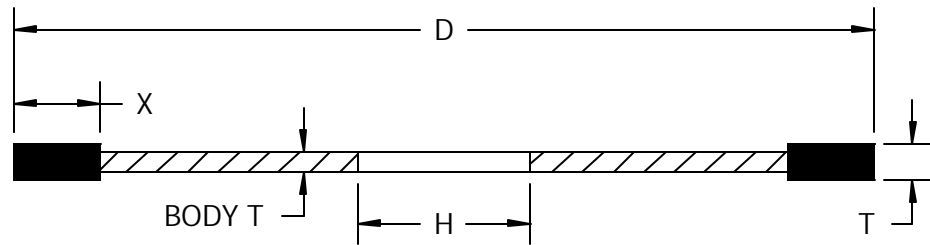


1A1

Straight Wheel

Diamond in Periphery

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	DIAMOND DEPTH X		WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	DIAMOND DEPTH X	
5	1/8	S P E C I F Y	1/8	1/4	8	3/8	S P E C I F Y	1/8	1/4
5	3/16				8	1/2			
5	1/4				8	3/4			
5	1/2				8	1			
6	1/8	S P E C I F Y	1/8	1/4	10	1/4	S P E C I F Y	1/8	1/4
6	3/16				10	3/8			
6	1/4				10	1/2			
6	3/8				10	3/4			
6	1/2				10	1			
6	3/4				12	1/2		1/8	1/4
6	1				12	3/4			
7	3/16	S P E C I F Y	1/8	1/4	12	1	S P E C I F Y		
7	1/4				14	3/8		1/8	1/4
7	3/8				14	1/2			
7	1/2				14	3/4			
7	3/4				14	1			
7	1				16	1/2		1/8	1/4
8	3/16		1/8	1/4	16	3/4			
8	1/4				16	1			

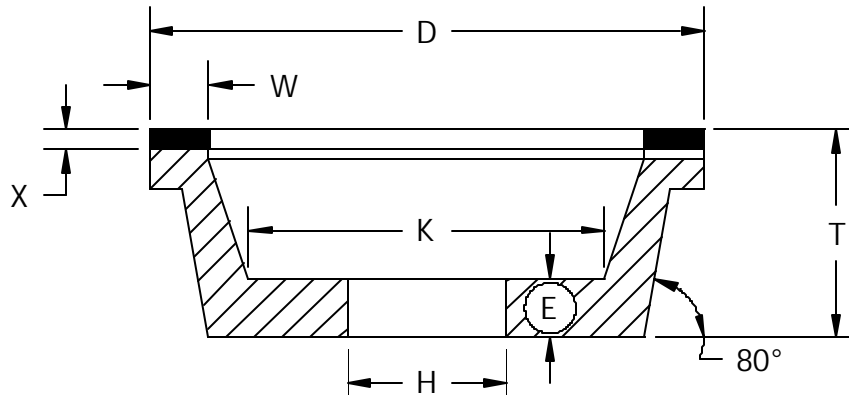


1A1R

Cut-off Steel Center

Diamond in Periphery

WHEEL DIAMETER D	WHEEL THICKNESS T	DIAMOND DEPTH X		WHEEL DIAMETER D	WHEEL THICKNESS T	DIAMOND DEPTH X
2	.020	1/4		6	.030	1/4
2	.025			6	.035	
2	.030			6	.040	
2	.035			6	.045	
2	.040			6	.050	
2	.050			6	.062	
2	.062					
3	.020	1/4		7	.020	1/4
3	.025			7	.025	
3	.030			7	.030	
3	.035			7	.035	
3	.040			7	.040	
3	.045			7	.045	
3	.050			7	.050	
3	.062			7	.062	
4	.020	1/4		8	.020	1/4
4	.025			8	.025	
4	.030			8	.030	
4	.035			8	.035	
4	.040			8	.040	
4	.045			8	.045	
4	.050			8	.050	
4	.062			8	.062	
5	.020	1/4		10	.045	1/4
5	.025			10	.050	
5	.030			10	.055	
5	.035			10	.062	
5	.040					
5	.050			12	.050	1/4
5	.062			12	.055	
				12	.062	
6	.020	1/4		12	.070	
6	.025			12	.080	

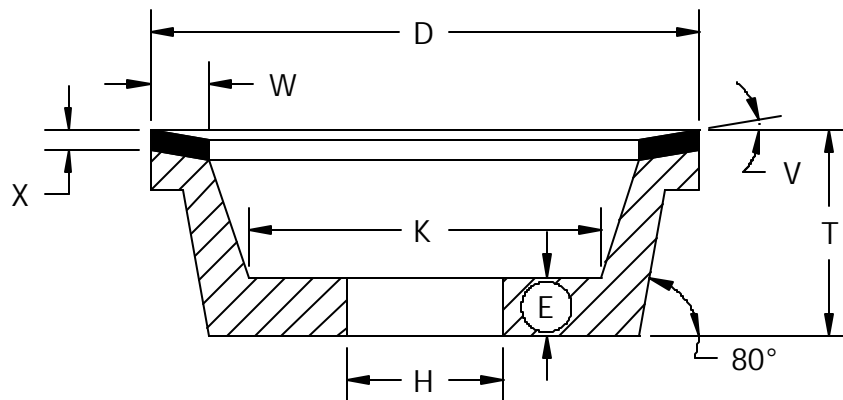


11A2

Flaring Cup

Diamond in Rim

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIA. H	RIM WIDTH W	BACK THICK E	INSIDE FLAT K					DIAMOND DEPTH X	
3	7/8	S P E C I F Y	3/8	3/8	1 3/4					1/8	1/4
3	1 5/16		3/8	3/8	1 3/4						
3 1/2	1 5/16		3/8	3/8	2 1/4					1/8	1/4
4	1 1/4		1/2	1/2	2 1/4					1/8	1/4
5	1 3/4		3/8	1/2	3 1/8					1/8	1/4



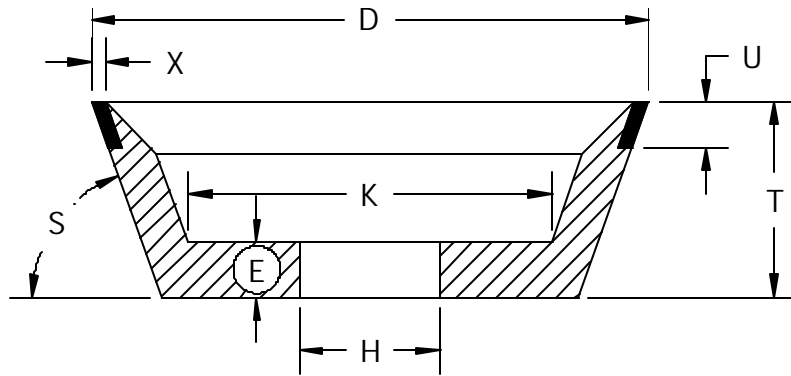
11V4

Flaring Cup

Rim Beveled Inside

Diamond in Rim

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIA. H	RIM WIDTH W	BACK THICK E	INSIDE FLAT K	RIM BEVEL V	DIAMOND DEPTH X			
		S P E C I F Y				(Degree)				
3	7/8		3/8	3/8	1 3/4	10,20	1/16	1/8	1/4	
3 1/2	1 5/16		3/8	3/8	2 1/4	10,20	1/6	1/8	1/4	

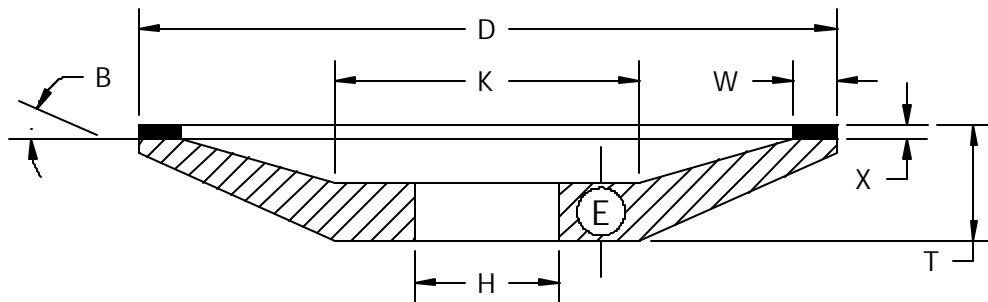


11V9

Flaring Cup

Diamond in Periphery

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIA. H	BACK THICK E	INSIDE FLAT K	BACK ANGLE S (Degree)	INSERT LENGTH U	DIAMOND DEPTH X	
2	1	S P E C I F Y	1/4	1/2	60	1/4	1/16	1/8
3	1 1/4		7/16	2	70	3/8	1/16	1/8
3 3/4	1 1/2		3/8	2 1/4	70	3/8	1/16	1/8
5	1 3/4		1/2	3 1/4	70	7/16	1/16	1/8
6	1 3/4		1/2	4 1/4	70	1/2	1/16	1/8

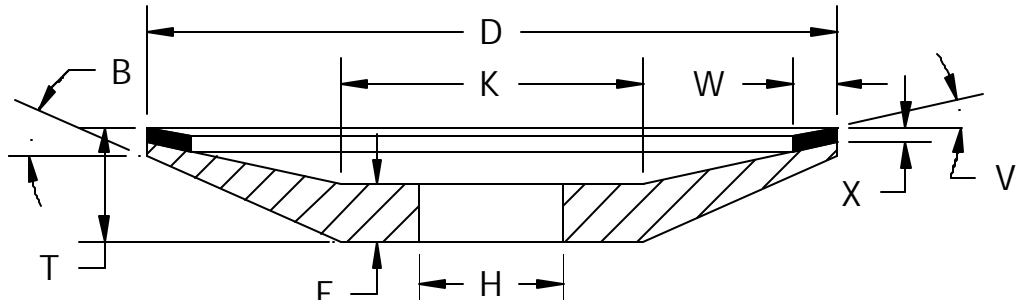


12A2

Dish Wheel

Diamond in Rim

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIA. H	RIM WIDTH W	BACK THICK E	INSIDE FLAT K	DISH ANGLE B (Degree)	DIAMOND DEPTH X	
3	1/2	S P E C I F Y	1/4	5/16	1 3/8	30	1/8	1/4
3	7/8		1/8	3/8	1 3/8	45		
3	7/8		1/4	3/8	1 3/8	45		
3	7/8		3/8	3/8	1 3/8	45		
4	1/2		1/8	5/16	2 1/4	27	1/8	1/4
4	1/2		1/4	5/16	2 1/4	27		
4	1/2		3/8	5/16	2 1/4	27		
6	1		3/16	1/2	2 5/8	30	1/8	1/4
6	1		1/4	1/2	2 5/8	30		
6	1		3/8	1/2	2 5/8	30		

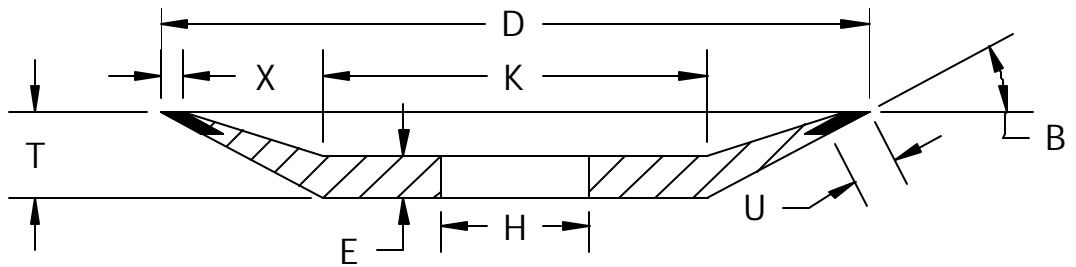


12V4

Dish Wheel

Diamond Beveled Inside

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	RIM WIDTH W	BACK THICK E	INSIDE FLAT K	DISH ANGLE B	RIM BEVEL V	DIAMOND DEPTH X	
						(Degree)			
3	7/8	SPECIFY	1/8	3/8	1 3/8	45	10,20	1/8	1/4
3	7/8		1/4	3/8	1 3/8	45	10,20		
3	7/8		3/8	3/8	1 3/8	45	10,20		
4	1/2		1/4	5/16	2 1/4	27	10	1/8	1/4
6	1		1/8	1/2	2 5/8	30	10	1/8	1/4
6	1		3/16	1/2	2 5/8	30	10		

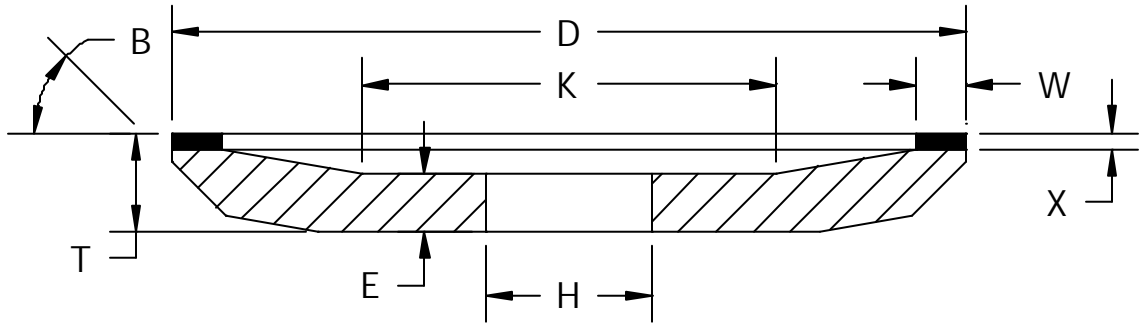


12V9

Dish Wheel

Diamond in Periphery

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	BACK THICK E	INSIDE FLAT K	BACK ANGLE B		INSERT LENGTH U	DIAMOND DEPTH X	
					(Degree)				
3	7/16	SPECIFY	1/4	1 1/2	30		1/4	1/16	1/8
3	7/8		3/8	1	45		3/8		
4	1/2		1/4	2 1/4	30		1/4	1/16	1/8
4	7/8		3/8	2 1/4	45		3/8		
6	3/4		3/8	3 1/4	30		3/8	1/16	1/8

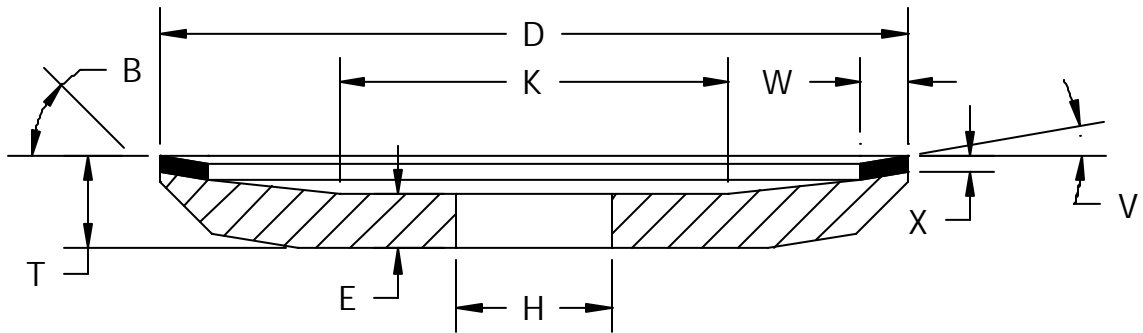


15A2

Dish Wheel

Diamond in Rim

WHEEL DIA. D	WHEEL THICK T	HOLE DIA. H	RIM WIDTH W	BACK THICK E	INSIDE FLAT K	BACK ANGLE B		DIAMOND DEPTH X	
						(Degree)			
6	3/4	S P E C I F Y	1/8	7/16	3 1/8	45		1/16	1/8
6	3/4		3/16	7/16	3 1/8	45			
6	3/4		1/4	7/16	3 1/8	45			
6	3/4		3/8	7/16	3 1/8	45			



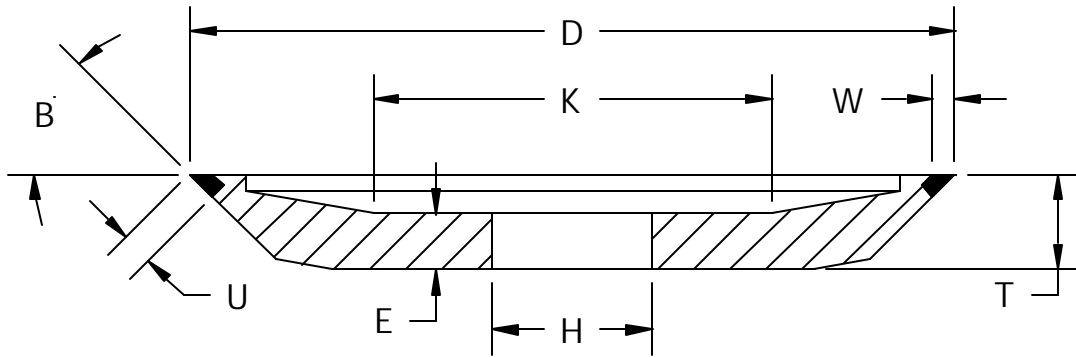
15V4

Dish Wheel

Rim Beveled Inside

Diamond in Rim

WHEEL DIA. D	WHEEL THICK T	HOLE DIA. H	RIM WIDTH W	BACK THICK E	INSIDE FLAT K	DISH ANGLE B	RIM BEVEL V	DIAMOND DEPTH X	
						(Degree)			
6	3/4	S P E C I F Y	1/8	7/16	3 1/8	45	10	1/16	1/8
6	3/4		3/16	7/16	3 1/8	45	10		
6	3/4		1/4	7/16	3 1/8	45	10		
6	3/4		3/8	7/16	3 1/8	45	10		

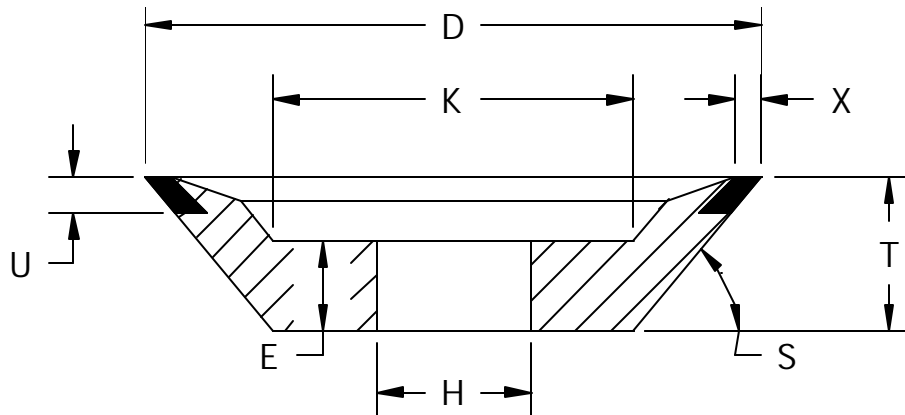


15V9

Dish Wheel

Diamond in Periphery

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	BACK THICK E	INSIDE FLAT K	BACK ANGLE B	INSERT LENGTH U		DIAMOND DEPTH X	
3	1/2	SPECIFY	1/4	1 1/2	(Degree) 45	7/32		1/16	1/8
4	3/4		7/16	2 1/4	45	9/32		1/16	1/8
6	3/4		7/16	3 1/8	45	1/4		1/16	1/8

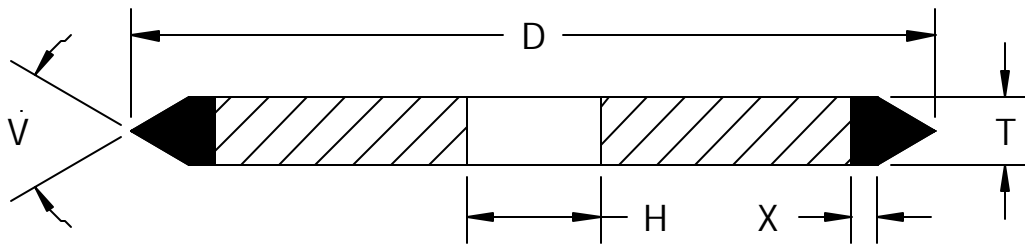


12B

Dish Wheel

Diamond in Periphery

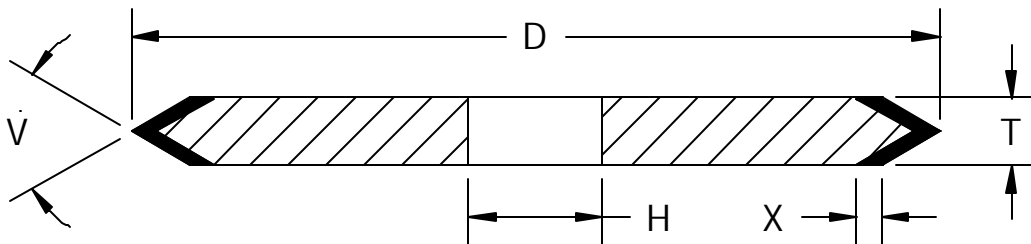
WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H	BACK THICK E	INSIDE FLAT K	DISH ANGLE B	INSERT LENGTH U		DIAMOND DEPTH X	
3	3/4	SPECIFY	7/16	1 3/4	(Degree) 45	1/4		1/16	1/8



1E1

Straight Face Angle
Diamond on Periphery

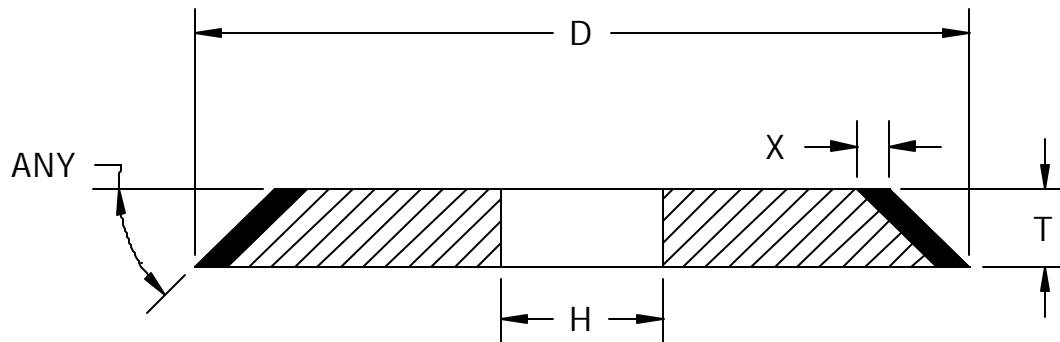
WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H		ENCLOSED ANGLE V	DIAMOND DEPTH X
3	1/16	S		(Degree)	1/4
3	3/32	P		A	
4	1/16	E		N	1/4
4	3/32	C		Y	
6	1/16	I			1/4
6	3/32	F Y			



1EE1

Straight Face Angle
Diamond on Periphery
V Shaped Core

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H		ENCLOSED ANGLE V	DIAMOND DEPTH X	
3	1/8	SPECIFY		(Degree)	1/8	1/4
3	1/4			A	1/8	1/4
4	1/8				1/8	1/4
4	1/4			N	1/8	1/4
6	1/8				1/8	1/4
6	1/4			Y		
7	1/4				1/8	1/4

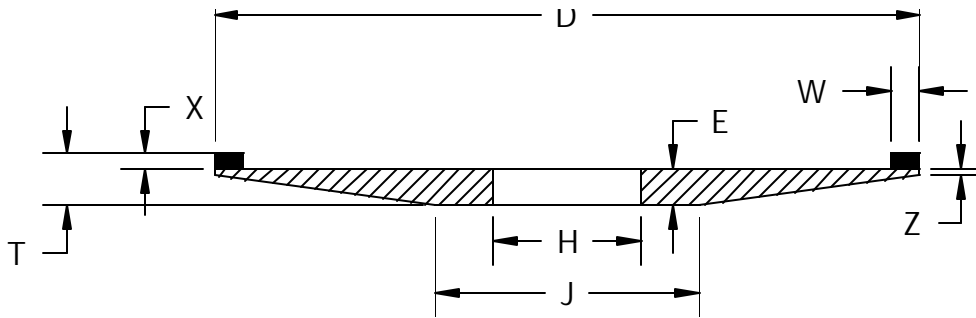


1V1

Straight Face Angle

Diamond in Periphery

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H		ANGLE V	DIAMOND DEPTH X		
3	1/8	SPECIFY		(Degree)	1/8	1/4	
3	1/4			ANY	1/8	1/4	
4	1/8				ANY	1/8	1/4
4	1/4					1/8	1/4
4	3/8			ANY	1/8	1/4	
5	1/8				ANY	1/8	1/4
5	1/4					1/8	1/4
5	3/8			SPECIFY	1/8	1/4	
6	1/8				ANY	1/8	1/4
6	1/4					1/8	1/4
6	3/8			ANY	1/8	1/4	
7	1/4				1/8	1/4	
7	3/8		1/8	1/4			

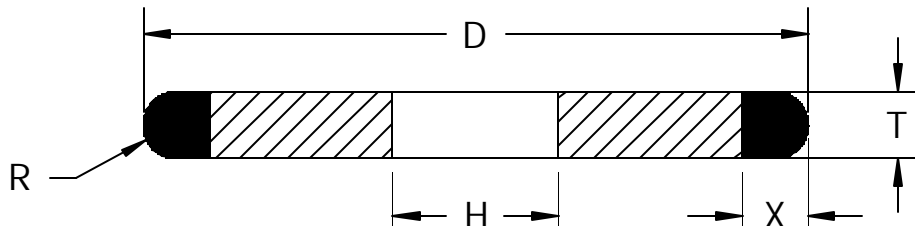


4A2P

Flat Dish

Diamond in Rim

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIA. H	RIM WIDTH W	BACK THICK E	BACK FLAT DIAMETER J	DIAMOND DEPTH X	
6	3/8	S P E C I F Y	1/8	5/16	2 1/4	1/16	1/8
6	3/8		3/16	5/16	2 1/4		
6	3/8		1/4	5/16	2 1/4		
6	3/8		3/8	5/16	2 1/4		
8	3/8	S P E C I F Y	3/16	5/16	4	1/16	1/8
8	3/8		1/4	5/16	4		
10	1/2	S P E C I F Y	3/16	7/16	5	1/16	1/8
10	1/2		1/4	7/16	5		

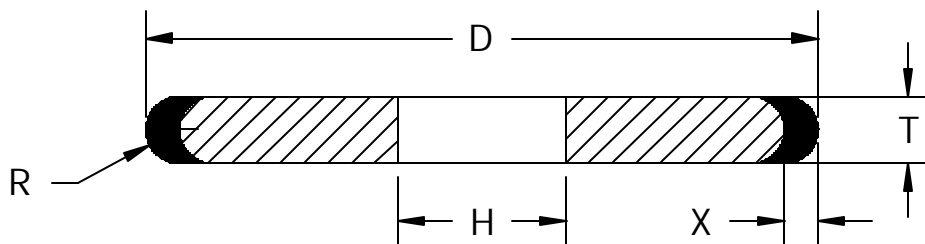


1F1

Straight-Face Radius

Diamond in Periphery

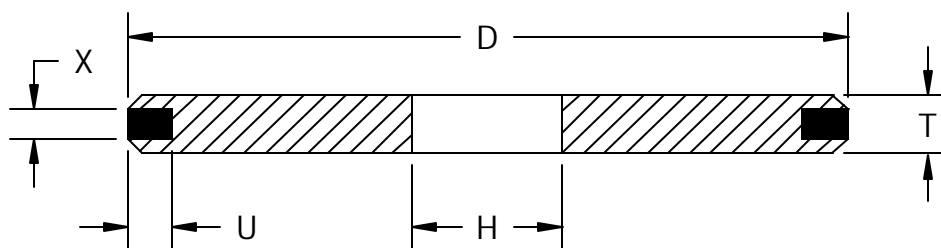
WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIA. H	FACE RADIUS R	DIAMOND DEPTH X	
3	1/16	S P E C I F Y	1/32	1/8	1/4
3	3/32		3/64		
4	1/16		1/32	1/8	1/4
4	3/32		3/64		
6	1/16		1/32	1/8	1/4
6	3/32		3/64		



1FF1

Straight-Face Radius
Diamond on Periphery

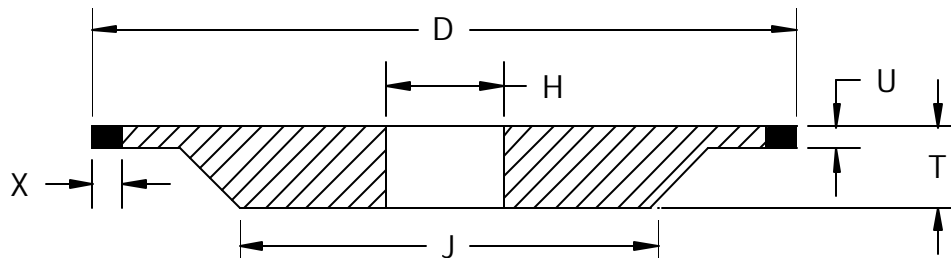
WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H		FACE RADIUS R	DIAMOND DEPTH X
3	1/8	S P E C I F Y		1/16	1/8
3	3/16			3/32	
3	1/4			1/8	
3	3/8			3/16	
4	1/8			1/16	1/8
4	3/16			3/32	
4	1/4			1/8	
4	3/8			3/16	
4	1/2			1/4	
6	1/8			1/16	1/8
6	3/16			3/32	
6	1/4			1/8	
6	3/8			3/16	
6	1/2			1/4	
7	1/8			1/16	1/8
7	1/4			1/8	
7	3/8			3/16	
7	1/2			1/4	
8	1/8			1/16	1/8
8	1/4			1/8	



1A6Q

Straight
Diamond Insert in Periphery

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIAMETER H		INSERT LENGTH U	DIAMOND DEPTH X
6	1/4	S P E C I F Y		1/16	1/4
6	1/4			1/8	
7	1/4			1/16	1/4
7	1/4			1/8	
8	3/8			1/8	1/4
10	3/8			1/8	1/4

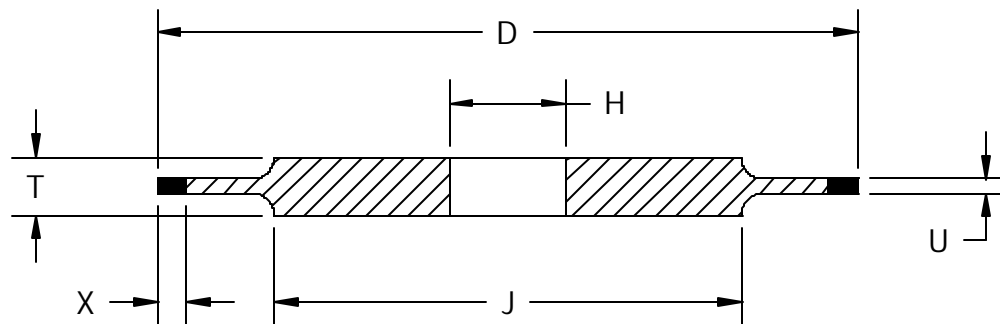


3A1

Straight-Raised Hub

Diamond in Periphery

WHEEL DIAMETER D	FACE THICKNESS U	HOLE DIAMETER H		HUB DIAMETER J	HUB THICKNESS T	DIAMOND DEPTH X
3	1/32	S P E C I F Y		2	1/4	1/8
3	1/16			2		
3	1/8			2		
4	1/32			3	1/4	1/8
4	1/16			3		
4	1/8			3		
5	1/32			4	1/4	1/8
5	1/16			4		
5	1/8			4		
6	1/32			5	1/4	1/8
6	1/16			5		
6	1/8			5		
7	1/32	S P E C I F Y		6	1/4	1/8
7	1/16			6		
7	1/8			6		
8	1/16			7	1/4	1/8
8	1/8			7		

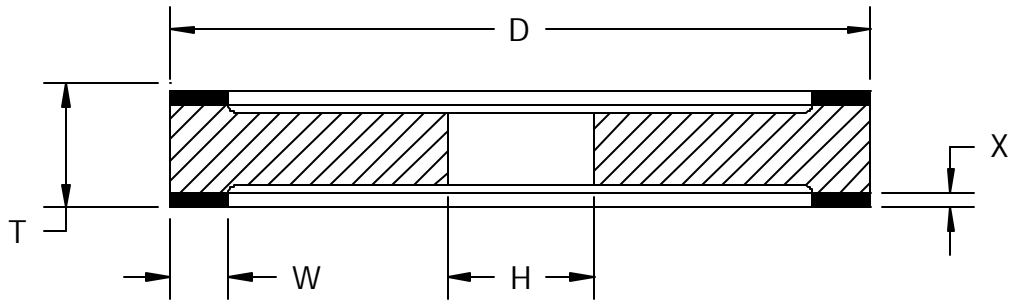


14A1

Straight-Raised Hub

Diamond in Periphery

WHEEL DIAMETER D	FACE THICKNESS U	HOLE DIAMETER H		HUB DIAMETER J	HUB THICKNESS T	DIAMOND DEPTH X
3	1/16	S P E C I F Y		2	3/8	1/8
3	1/8			2		
4	1/16			3	3/8	1/8
4	1/8			3		
5	1/16			4	3/8	1/8
5	1/8			4		
6	1/16			5	3/8	1/8
6	1/8			5		
7	1/16			6	3/8	1/8
7	1/8			6		
8	1/16			7	3/8	1/8
8	1/8			7		

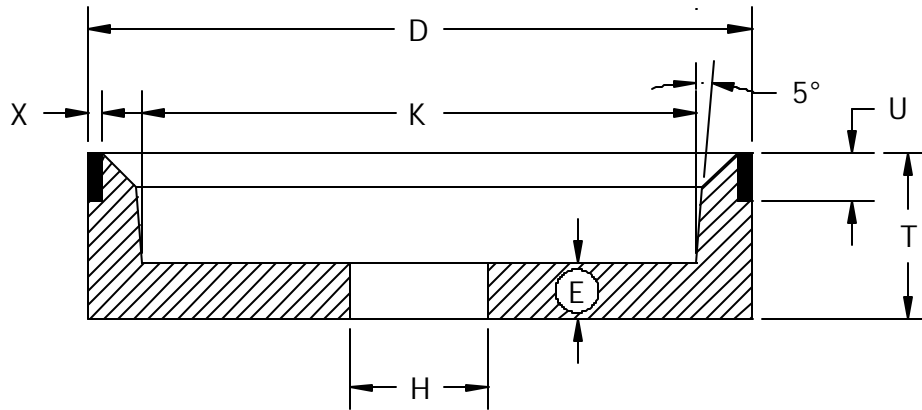


9A3

Double Cup

Diamond in Rims

WHEEL DIA. D	WHEEL THICK T	HOLE DIA. H	RIM WIDTH W	BACK THICK E		DIAMOND DEPTH X	
6	1	SPECIFY	1/4	1/2		1/8	1/4
6	1		3/8	1/2			
6	1		1/2	1/2			
6	1		3/4	1/2			
6	1		1	1/2			
7	1	SPECIFY	1/4	1/2		1/8	1/4
7	1		3/8	1/2			
7	1		1/2	1/2			

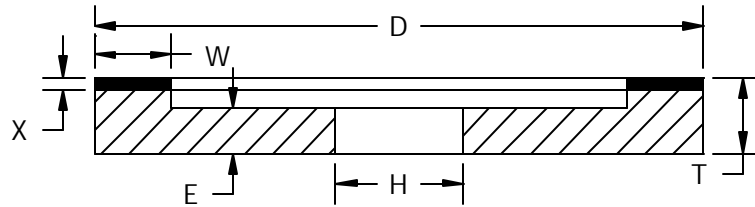


6A9

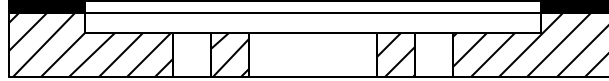
Straight Cup

Diamond in Periphery

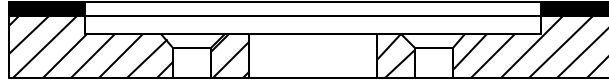
WHEEL DIA. D	WHEEL THICK T	HOLE DIA. H	BACK THICK E	INSIDE FLAT K	INSERT LENGTH U	DIAMOND DEPTH X
3	1 1/2	SPECIFY	3/8	2 1/4	1/2	1/8
4	1 3/4		1/2	3	3/8	1/8
6	1 1/2		1/2	5	7/16	1/8
8	1		1/2	7	3/8	1/8
10	2		3/4	9 1/4	1/2	1/8



6A2H



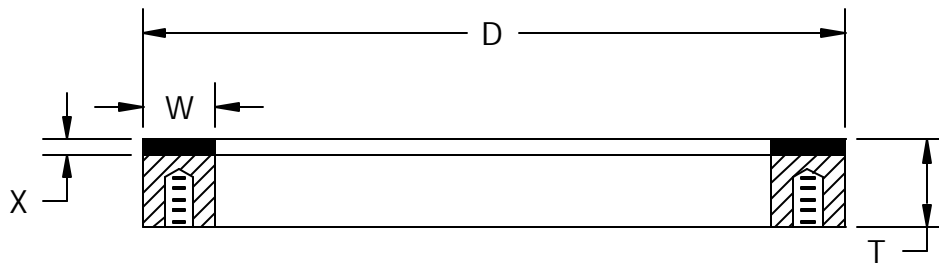
6A2C



6A2

Straight Cup
Diamond in Rim

WHEEL DIAMETER D	WHEEL THICKNESS T	HOLE DIA. H	RIM WIDTH W	BACK THICK E	DIAMOND DEPTH X		Required Hole Diameters for Machines using Type 6A2C Wheels
2	1/2	S P E C I F Y	1/4	1/4	1/8	1/4	
3	3/4		1/4	3/8	1/8	1/4	
4	3/4		1/2	3/8	1/8	1/4	Baldor - 1 1/4"
5	3/4		1/2	3/8	1/8	1/4	Bura-Way - 1 1/4"
5	1		1 1/16	1/2			Carboloy - 1 1/4"
6	3/4	S P E C I F Y	3/16	7/16	1/8	1/4	Criterion - 1 1/4"
6	3/4		1/4	7/16			Delta - 1 1/4"
6	3/4		3/8	7/16			Excello - 1 1/4"
6	3/4		1/2	7/16			6" Hammond - 1 1/4"
6	3/4		3/4	7/16			7" Hammond - 1 1/4"
6	3/4		1	7/16			10" Hammond - 2"
6	1 1/4		3/4	7/16			14" Hammond - 1 1/4"
7	3/4		1/2	3/8	1/8	1/4	Le Maire - 1 1/4"
7	3/4		3/4	7/16			Prosser - 1 3/4"
7	1		1	7/16			6" Sunstrand - 1 1/4"
10	1	S P E C I F Y	3/4	3/4	1/8	1/4	10" Sunstrand - 2"
10	1		1	3/4			Willey's - 1 1/4"
12	1		1	3/4	1/8	1/4	
14	1		1	3/4	1/8	1/4	

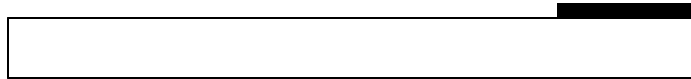


2A2T

Cylinder-Threaded Holes

Diamond in Rim

WHEEL DIAMETER D	WHEEL THICKNESS T	RIM WIDTH W		DIAMOND DEPTH X	
10	3/4	1/4		1/8	1/4
10	3/4	1/2			
10	3/4	3/4			
10	3/4	1			
11	3/4	3/4		1/8	1/4
11	3/4	1			
12	1	1/2		1/8	1/4
12	2	1			
14	3/4	1		1/8	1/4
18	3/4	3/4		1/8	1/4
18	3/4	1			

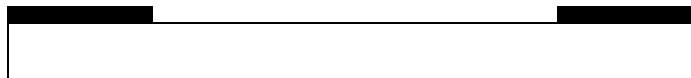


HH1

Hand Hone

Diamond One End

HONE THICKNESS T	HONE WIDTH W	HONE LENGTH L	INSERT LENGTH LI		DIAMOND DEPTH X
3/4	1/8	6	1 1/4		1/8
1/4	1/4	6	1 1/4		
3/8	3/8	6	1 1/4		
1/2	1/2	6	1 1/4		
1/8	3/4	6	1 1/4		



HH2

Hand Hone

Diamond Both Ends

HONE THICKNESS T	HONE WIDTH W	HONE LENGTH L	INSERT LENGTH LI		DIAMOND DEPTH X
3/4	1/8	6	1 1/4		1/8
1/4	1/4	6	1 1/4		
3/8	3/8	6	1 1/4		
1/2	1/2	6	1 1/4		
1/8	3/4	6	1 1/4		

RESIN BOND TECHNICAL INFORMATION

APPROXIMATE PARTICLE COUNT & SIZE OF DIAMOND POWDERS			
MESH (Grit Size)	DIAMETER OF ABRASIVE PARTICLES	NUMBER OF PARTICLES IN ONE CARAT	NORMAL FINISH PRODUCED BY WHEEL THIS GRIT SIZE
60	.0100	3,240	35-50 RMS
80	.0070	10,400	20-30 RMS
100	.0060	17,140	16-24 RMS
120	.0050	20,920	14-20 RMS
140	.0040	49,400	12-17 RMS
170	.0035	83,400	10-15 RMS
200	.0030	140,000	8-12 RMS
240	.0024	252,000	7-11 RMS
270	.0020	384,000	6-10 RMS
325	.0017	660,000	5-9 RMS
400	.0015	1,120,000	4-8 RMS

CONTENT SPECIFICATIONS

National Diamond Lab wheels are manufactured to the following diamond content specifications:

Diamond Wheel Concentration

100
75
50
25

Diamond Content

72 carats per cubic inch
54 carats per cubic inch
36 carats per cubic inch
18 carats per cubic inch

National Diamond Lab guarantees that in the manufacture of our diamond wheels not less than the above concentration has been used.

RPM & SFPM CHARTS ON PAGE 60.

GRINDING SPEEDS

To Find Required RPM:
$$\text{RPM} = \frac{(\text{SFPM}) (12)}{(p) (D)}$$

To Find SFPM at known grinding RPM:
$$\text{SFPM} = \frac{(\text{RPM}) (p) (D)}{12}$$

The following formula may be used to quickly calculate wheel speed: SFPM = wheel speed in RPM x wheel diameter in inches x .262

SFPM = Recommended surface feet per minute

RPM = Revolutions per minute

D = Diameter of Wheel

p = 3.1416 (Pi)

CONVERSIONS:

To convert SFPM to meters per second (M/S)

$$\text{M/S} = (\text{SFPM}) (.005)$$

To convert M/S to SFPM

$$\text{SFPM} = (\text{M/S}) (197)$$

To convert inches (in) to millimeters (mm)

$$\text{mm} = (\text{in}) (.0394)$$

To convert millimeters (mm) to inches (in)

$$\text{in} = (\text{mm}) (25.4)$$

WHEEL SPEEDS:

Never exceed the maximum operating speed marked on the super abrasive wheel being used, typical maximum operating speed by bond types are as follows:

Metal Bond Cut Off

Type 1A1R and 1A1RSS 16,000 SFPM

Metal Bond (all others) 12,000 SFPM

Resin Bond 9,500 SFPM

The proceeding wheel speeds are the recommended speed and not necessarily the most efficient. Super abrasive diamond wheels operate most effectively at speeds lower than the maximum. The following are general recommendations. CBN Wheels in many cases are used effectively on steels at higher speeds.

Metal Bond 4,000 - 6,000 SFPM

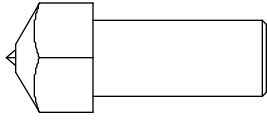
Resin Bond 4,000 - 6,000 SFPM

NDL of Texas, Inc.

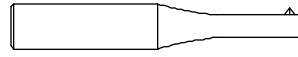
-PAGE 42-

Dressers Index

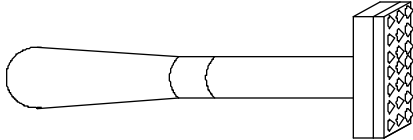
Pg. 44 - Single Point Dressers



Pg. 47 - Rat Tail Radius Dresser



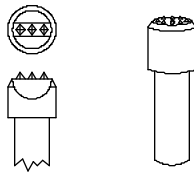
Pg. 45 - Hand Held Cluster Dresser



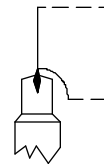
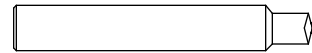
Pg. 48 - Thread Grinding Dresser



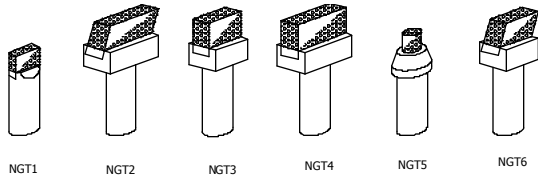
Pg. 45 - Multiple Set Diamond Cluster Dresser



Pg. 48 - Micro Radius Dresser



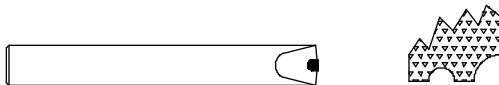
Pg. 45 - Grit Dressers



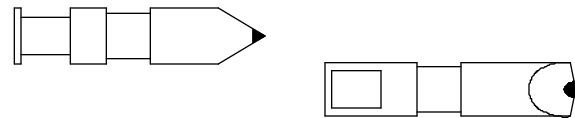
Pg. 48 - Plunge Type Diamond Radius Dresser



Pg. 46 - Chisel Edge Radius Dresser



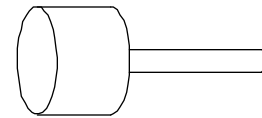
Pg. 49 - Diaform Radius Dresser



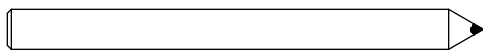
Pg. 46 - Cone Point Dresser



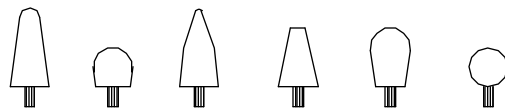
Pg. 49 - Mandrel Mounted Felt Bob



Pg. 47 - Phono Point Dresser



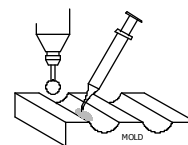
Pg. 50 - Standard Shaped Felt Bob



Pg. 47 - Natural Point Radius Dresser

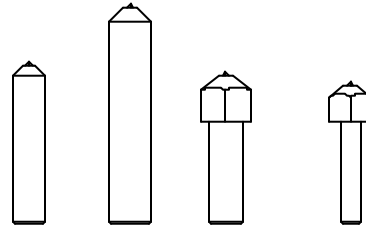


Pg. 50 & 51 - "Luster Lap" Diamond Lapping Compounds



DIAMOND DRESSERS PRICED BY CARAT WEIGHT

CATALOG NUMBER	CARAT SIZE	PRICE	SUGGESTIONS
D25	.250	\$22.00	Internal Grinding
D38	.380	\$27.00	
D50	.500	\$49.00	7"
D75	.750	\$86.00	10" to 14"
D100	1.00	\$137.00	18" to 32"
D125	1.25	\$177.00	18" to 32"
D150	1.50	\$246.00	18" to 32"
D175	1.75	\$280.00	18" to 32"
D200	2.00	\$314.00	18" to 32"



HOW TO ORDER

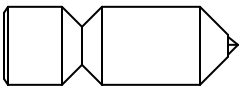
- DRESSER TOOL NUMBER (I E. D75 - N3 = 3/4ct. - 3/8" x 2" shank)
- SPECIFY SHANK DIMENSIONS. NOTE: We can manufacture any shank dimension your machine holder demands
- INDICATE THREAD, HEX, OR TAPER IF NEEDED

RESETTING SERVICE AVAILABLE:

- SINGLE POINT STRAIGHT SHANK DRESSER - \$13.00
- TAPER SHANK DRESSER - \$19.00

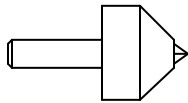
SHANK SIZES MOST COMMONLY USED

N1



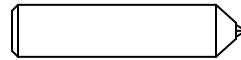
NORTON
7/16" x 1"

N2



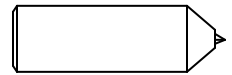
GLEASON
3/8" x 3/8"
3/16" x 5/8"

N3



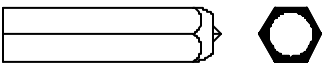
B & D; P & W
3/8" x 2"

N4



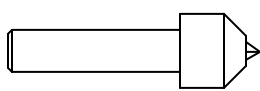
DELTA; B & S; LEMPCO
7/16" x 2"

N5



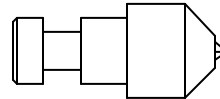
B & D
3/8" HEX; specify left or
right hand thread

N6



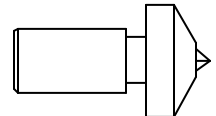
VAN NORMAN; UNION;
GLEASON
3/8" x 3/8" - 1/4" x 1"

N7



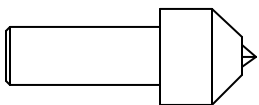
CINCINNATI
5/8" x 5/5"
7/16" x 3/4"

N8



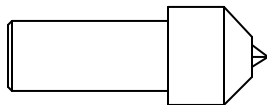
HEALD
5/8" x 5/16"
7/16" x 7/8"

N9



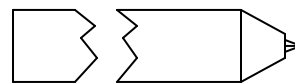
CINCINNATI; NORTON
5/8" x 5/8"
3/8" x 1"

N10



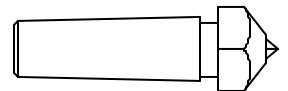
CINCINNATI; NORTON;
LANDIS; B & S; MESTA
5/8" x 5/8" - 7/16" x 1"

N11



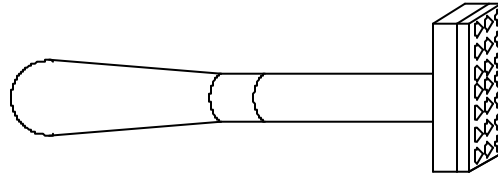
LE BLOND; UNION;
NORTON; DELTA; B & S
7/16" x 6" hand dresser

N12



BERCO
Taper Shank

HAND HELD CLUSTER DRESSER

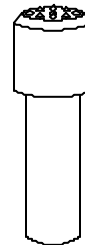


CATALOG NUMBER	SIZE	PRICE
HHC15	3/8" x 1 1/2"	\$64.28

- HAND HELD FOR BENCH GRINDERS

MULTIPLE SET DIAMOND CLUSTER DRESSERS

CATALOG NUMBER	DIAMOND	STONES	PRICE
WC-1	1 CARAT	SPECIFY 3, 5, OR 7 STONES	\$65.00
WC-2	2 CARATS		\$99.00
WC-3	3 CARATS		\$140.00
WC-4	4 CARATS		\$175.00



- SINGLE LAYER SET WITH 3, 5, OR 7 STONES MOST COMMON
- CAN BE SET WITH ANY NUMBER OF DIAMONDS

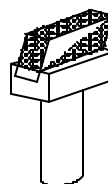
GRIT DRESSERS

GRIT DRESSERS ARE UNIQUE TOOLS USING MANY DIAMOND PARTICLES, UNIFORMLY SPACED THROUGHOUT THE SINTERED METAL BONDED MATRIX, THESE ECONOMY DRESSERS OFFER MANY ADVANTAGES INCLUDING LONG NIB LIFE, COMPLETE USE OF DIAMOND GRITS, SELF-SHARPENING MATRIX, LONGER WHEEL LIFE, INCREASE VERSATILITY, AND A WIDE RANGE OF FINISHES.

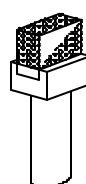
CATALOG NUMBER	PRICE
NGT-1	\$39.00
NGT-2	\$45.00
NGT-3	\$39.00
NGT-4	\$45.00
NGT-5	\$24.00
NGT-6	\$39.00



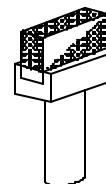
NGT1



NGT2



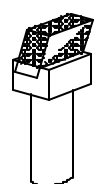
NGT3



NGT4



NGT5

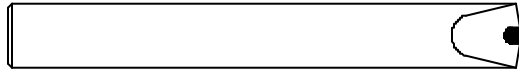


NGT6

- MAKE 4 – 5 PASSES AT .005" IN FEED TO ENSURE FULL FACE CONTACT BETWEEN THE GRIT DRESSER FACE AND WHEEL FACE
- AVAILABLE IN VARIOUS DIAMOND PARTICLE SIZES AND SHANK DESIGNS
- ALSO USED FOR DRESSING BORAZON WHEELS
- BORAZON IS A TRADEMARK OF GENERAL ELECTRIC CO.

Phone: 214-638-1435 Toll Free: 800-395-8665 Fax: 214-638-1436

CHISEL EDGE RADIUS DRESSER



- DESIGNED FOR WORK ON CLOSE TOLERANCES
- POLISHED WITH 40 OR 60 DEGREE INCLUDED ANGLES (other angles available)
- STANDARD CHISELS HAVE A .005" FLAT AT THE END
- OTHER RADII AVAILABLE; PLEASE INQUIRE
- STANDARD SHANK SIZE 1/4" – 1/2"; 3" LONG
- IF YOU REQUIRE A DEAD SHARP CHISEL, PLEASE STATE SO IN ORDER

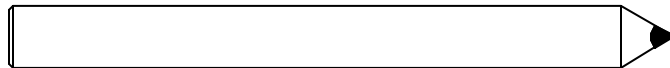
40 DEGREE			
CATALOG NUMBER	CARATS	SHANKS	PRICE
RCH4020	.15 to .20	1/4"	\$94.00
RCH4025	.20 to .25	1/4"	\$108.00
RCH4030	.25 to .30	1/4"	\$119.00
RCH4035	.30 to .35	3/8" to 1/2"	\$134.00
RCH4040	.40	3/8" to 1/2"	\$152.00
RCH4050	.50	3/8" to 1/2"	\$211.00
RCH4062	.62	3/8" to 5/8"	\$259.00
RCH4075	.75	3/8" to 5/8"	\$287.00
RCH4100	1.00	3/8" to 5/8"	\$354.00

60 DEGREE			
CATALOG NUMBER	CARATS	SHANKS	PRICE
RCH6020	.15 to .20	1/4"	\$57.00
RCH6025	.20 to .25	1/4"	\$72.00
RCH6030	.25 to .30	1/4"	\$88.00
RCH6035	.30 to .35	3/8" to 1/2"	\$97.00
RCH6040	.40	3/8" to 1/2"	\$135.00
RCH6050	.50	3/8" to 1/2"	\$169.00
RCH6062	.62	3/8" to 5/8"	\$196.00
RCH6075	.75	3/8" to 5/8"	\$246.00
RCH6100	1.00	3/8" to 5/8"	\$286.00

PRICES FOR LARGER SIZES AVAILABLE UPON REQUEST - RELAPPING SERVICE AVAILABLE

CONE POINT RADIUS DRESSERS

ORDERING INSTRUCTIONS: PLEASE SPECIFY NDL CATALOG NUMBER, SHANK SIZE, AND RADIUS REQUIRED



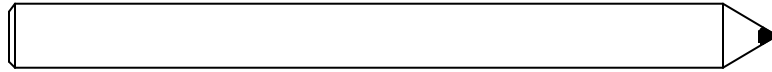
CATALOG NUMBER	ANGLE	SHANK	CARATS	PRICE
RC20	60 Degree	Specify 1/4" or 3/8"	0.15 to 0.20	\$67.00
RC25	60 Degree		0.20 to 0.25	\$78.00
RC35	60 Degree		0.30 to 0.35	\$102.00
RC40	60 Degree		0.40	\$128.00
RC50	60 Degree		0.50	\$140.00

- OTHER ANGLES AVAILABLE
- RELAPPING AVAILABLE

NDL of TEXAS, INC.

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PHONO POINT RADIUS DRESSERS



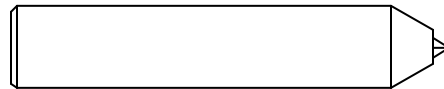
CATALOG NUMBER	SHANK	ANGLE	PRICE
RPP1	1/8"	Natural Pt	\$10.00
RPP2	Phono Pt	60 Degree	\$16.00
RPP3	Phono Pt	90-120 Degree	\$12.00
RPP4	Phono Pt	75 Degree	\$14.00
RPP5	3/16" or 1/4"	90 Degree	\$19.00
RPP6	3/16" or 1/4"	60 Degree	\$28.00

- NOT RESETTABLE

VERY SHARP CRYSTAL FOR OUTSIDE RADII

APPLICATION: For generating a shape or form in an abrasive wheel

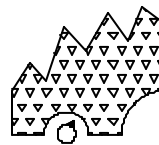
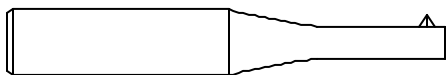
CATALOG NUMBER	FOR RADII	PRICE
RN015	.015"	\$18.00
RN062	.015" to .062"	\$26.00
RN125	.062" to .125"	\$28.00
RN187	.125" to 1.87"	\$31.00
RN500	.250" to .500"	\$50.00



- NON RESETTABLE

RAT TAIL RADIUS DRESSERS

RADIUS DRESSER TO MAKE 180 DEGREE RADUIS



TYPE V	TYPE J	RADIUS	PRICE
RRV032	RRJ032	.032"	PRICE UPON REQUEST
RRV062	RRJ062	.062"	
RRV093	RRJ093	.093"	
RRV125	RRJ125	.125"	

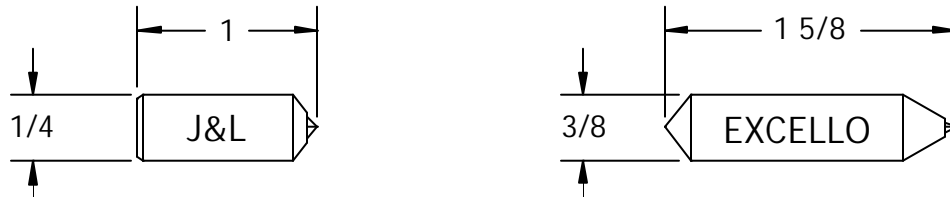
- NOT RESETTABLE

Phone: 214-638-1435

Toll Free: 800-395-8665

Fax: 214-638-1436

THREAD GRINDING RADIUS DRESSERS

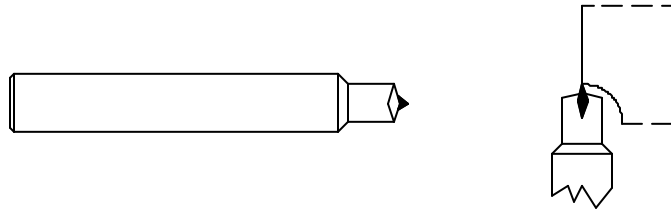


CATALOG NUMBER		CARATS	PRICE
J & L	EXCELLO		
TJ08	TE08	.08	\$20.72
TJ12	TE12	.12	\$24.50
TJ16	TE16	.16	\$32.03

- SET CONCENTRIC WITHIN .001", IF SPECIFIED
- PRICES FOR MORE PRECISE THREAD GRINDERS DEPENDS UPON THE CARAT WEIGHT AND THE SHARPNESS OF THE DIAMOND
- NON RESETTABLE

MICRO RADIUS DRESSER

CATALOG NUMBER	FOR RADIUS	PRICE
RM010	.005" to .010"	\$28.00
RM025	.010" to .025"	\$28.00
RM040	.025" to .040"	\$32.00
RM062	.040" to .062"	\$38.00
RM125	.062" to .125"	\$45.00
RMH	HEAVY DUTY	\$50.00

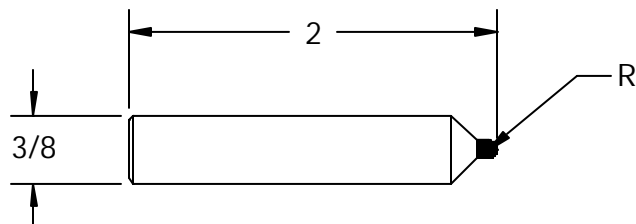


- NON RESETTABLE

PLUNGE TYPE DIAMOND RADIUS DRESSER

(FULL 180 DEGREE RADIUS GENERATED ON DIAMOND)

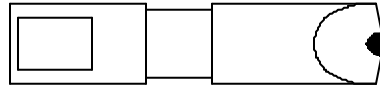
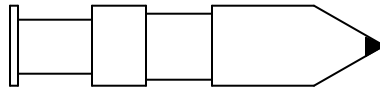
CATALOG NUMBER	RADIUS	PRICE
RPL05	.005"	\$65.00
RPL10	.010"	\$72.00
RPL15	.015"	\$78.00
RPL20	.020"	\$85.00
RPL25	.025"	\$100.00
RPL30	.030"	\$120.00
RPL40	.040"	\$188.00
RPL46	.046"	\$200.00
RPL50	.050"	\$230.00
RPL62	.062"	\$299.00



ROTATING FREQUENTLY WILL MAINTAIN ACCURACY OVER A LONG PERIOD OF USE

- RADIUS CAN BE RELAPPED

DIAFORM RADIUS DRESSER



CATALOG NUMBER	ANGLE	RADIUS	PRICE
RS6005	60 Degree	.005"	\$90.00
RS6010	60 Degree	.010"	\$90.00
RS4005	40 Degree	.005"	\$95.00
RS4010	40 Degree	.010"	\$95.00

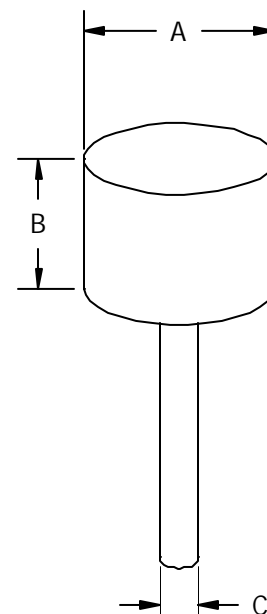
- ORDERING INSTRUCTIONS: SPECIFY CATALOG NUMBER AND SHANK SIZE
- CAN BE RELAPPED

MANDREL MOUNTED FELT BOBS

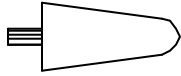
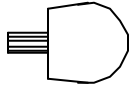

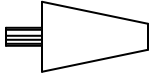
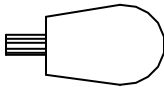
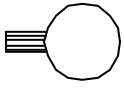
- MADE OF 100% WOOL CAREFULLY SELECTED FROM BOTH DOMESTIC, AS WELL AS FOREIGN SOURCES
- WE USE NO SYNTHETIC FIBERS OR FILLERS
- IDEAL FOR FINISHING IRREGULAR OR HARD-TO-REACH SURFACES
- MANDREL MOUNTED FELT BOBS PROVIDE FLEXIBILITY AND RESILIENCY UNMATCHED BY ABRASIVE WHEELS OR METAL BURRS
- IDEAL WHEREVER PRECISION FINISHING IS REQUIRED, OR FOR POLISHING AND DE-BURRING UNDER CLOSE TOLERANCES

STANDARD PLAIN FELT BOB

CATALOG NUMBER		DIMENSIONS			PRICE
MEDIUM	HARD	A	B	C	
BP01M	BP01H	1/4"	1/4"	1/8"	\$3.00
BP02M	BP02H	1/4"	3/8"	1/8"	\$3.00
BP03M	BP03H	3/8"	3/8"	1/8"	\$3.00
BP04M	BP04H	3/8"	1/2"	1/8"	\$4.00
BP05M	BP05H	1/2"	1/2"	1/8"	\$4.00
BP06M	BP06H	1/2"	3/4"	1/8"	\$4.00
BP07M	BP07H	1/2"	1"	1/8"	\$5.00
BP08M	BP08H	3/4"	3/4"	1/8"	\$5.00
BP09M	BP09H	3/4"	1"	1/8"	\$7.00
BP10M	BP10H	3/4"	1 1/2"	1/4"	\$7.25
BP11M	BP11H	1"	1"	1/4"	\$7.50

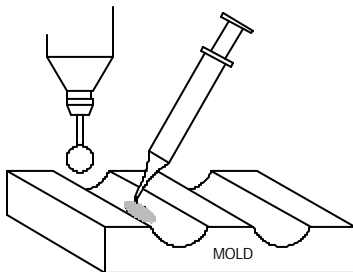


STANDARD SHAPED FELT BOBS

SHAPE	CATALOG NUMBER		DIMENSIONS			PRICE
	MEDIUM	HARD	A	B	C	
	BS13M	BS13H	3/8"	1/2"	1/8"	\$5.00
	BS14M	BS14H	1/2"	1"	1/8"	\$6.00
	BS22M	BS22H	1/4"	1/4"	1/8"	\$4.00
	BS23M	BS23H	3/8"	1/2"	1/8"	\$6.00
	BS24M	BS24H	1/2"	1/2"	1/8"	\$7.00
	BS33M	BS33H	3/8"	1/2"	1/8"	\$5.00
	BS34M	BS34H	1/2"	1"	1/8"	\$6.00
	BS44M	BS44H	1/2"	3/4"	1/8"	\$5.00
	BS53M	BS53H	3/8"	1/2"	1/8"	\$4.00
	BS54M	BS54H	1/2"	3/4"	1/8"	\$5.00
	BS64M	BS64H	1/2"	1/2"	1/8"	\$4.00

"LUSTER LAP" DIAMOND LAPPING COMPOUNDS

- RIGID CONCENTRATION STANDARDS MEAN LESS COST TO YOU FOR ANY APPLICATION
- CAREFULLY GRADED AND LABORATORY TESTED
- PACKAGED IN PLASTIC SYRINGES FOR ECONOMICAL APPLICATION ON INTRICATED DIE AND MOLD SECTIONS



CATALOG NUMBER	LAPPING AGENTS	PRICE
LAP-SUPER	Luster Lap Super Lap-Aid (1 oz.)	\$0.70
LAP-AID	Luster Lap-Aid (1 pint)	\$4.20
LAP-ALLS	Luster Lap All-Solvent (1 oz.)	\$0.70
LAP-ALLX	Luster Lap All-Solvent (1 pint)	\$3.50

WE RECOMMEND THE FOLLOWING LAPPING MEDIA TO BE USED WITH OUR DIAMOND LAPPING COMPOUNDS TO OBTAIN THE HIGHEST POSSIBLE FINISHES:

APPLICATION:
Fast stock removal
Light stock removal & finish
Light finish & super finishing

MEDIA (MATERIALS):
Cast iron or mild steel
Copper or plastic laminated materials
Cotton, felt, or wood

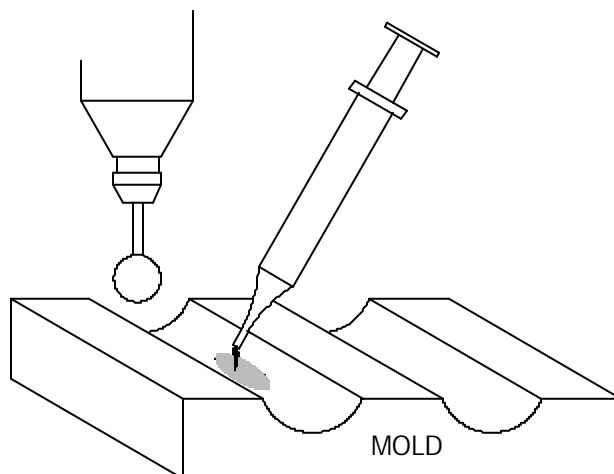
"LUSTER LAP" DIAMOND LAPPING COMPOUND CONTINUED ON PAGE: 51

NDL of TEXAS, INC.

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"LUSTER LAP" DIAMOND LAPPING COMPOUNDS

(CONTINUED)



CATALOG NUMBER	APPLICATION	RANGE	U.S.B.S.	SIEVE SIZE	STRENGTH	5	9	18
L0025S	Superfinishing	0-1/2	N/A	120,000	Strong	\$15.00	\$27.00	\$45.00
L0050S	Metallographic Specimens Extra High Finish	0-1	N/A	60,000	Strong	\$10.00	\$17.00	\$35.00
L0100S	Metallographic Specimens Extra High Finish	0-2	1	14,000	Strong	\$10.00	\$17.00	\$35.00
L0200S	Metallographic Specimens	2-4	2	12,000	Strong	\$13.00	\$23.00	\$45.00
L0200M		2-4	2	12,000	Medium	\$10.00	\$19.00	\$35.00
L0300S	High Finishing or Polishing	1-5	3	8,000	Strong	\$13.00	\$23.00	\$45.00
L0300M		1-5	3	8,000	Medium	\$10.00	\$19.00	\$35.00
L0600S	Fine Finishing	4-8	6	3,000	Strong	\$15.00	\$27.00	\$45.00
L0600M		4-8	6	3,000	Medium	\$12.00	\$22.00	\$40.00
L0800S	Finishing	6-10	8	1,800	Strong	\$17.00	\$28.00	\$46.00
L0800M		6-10	8	1,800	Medium	\$13.00	\$22.00	\$40.00
L1400S	Light Stock Removal	10-20	14	1,200	Strong	\$19.00	\$30.00	\$50.00
L1400M		10-20	14	1,200	Medium	\$14.00	\$23.00	\$40.00
L2500S	Light Stock Removal	20-30	25	600	Strong	\$20.00	\$32.00	\$60.00
L2500M		20-30	25	600	Medium	\$15.00	\$26.00	\$50.00
L4000S	Stock Removal	30-50	40	325	Strong	\$20.00	\$32.00	\$60.00
L4000M		30-50	40	325	Medium	\$15.00	\$26.00	\$50.00
L6000S	Fast Stock Removal	40-70	60	230	Strong	\$20.00	\$32.00	\$60.00
L6000M		40-70	60	230	Medium	\$15.00	\$26.00	\$50.00
L9000S	Fast Stock Removal	60-90	90	170	Strong	\$20.00	\$63.00	\$120.00
L9000M		60-90	90	170	Medium	\$15.00	\$51.00	\$97.00

DRESSERS TECHNICAL INFORMATION

OPTIMUM DIAMOND USAGE IS POSSIBLE IF THE
IDEAS BELOW ARE FOLLOWED:

1. INDEX OR TURN THE DIAMOND IN THE HOLDER.
2. IF A COOLANT IS USED, DON'T SKIMP OR YOU MAY QUENCH DIAMOND. THIS MAY CAUSE CRACKING.
3. REMOVE OR DRESS AWAY FROM .0005" TO .003" – BE CONSERVATIVE.
4. USE A DRAG ANGLE SIMPLY TIP DIAMOND IN DIRECTION OF WHEEL TRAVEL FROM 7° TO 15°. THIS WILL PREVENT WHEEL GOUGING AND DIAMOND SHOCK
5. TOUCH WHEEL ON HIGH SPOT AND CONTINUE DRESSING FROM THERE.
6. MAKE SURE ALL IS SECURE.
7. RESET ONLY WHEN NECESSARY.
8. USE A DIAMOND LARGE ENOUGH FOR THE JOB.
9. KEEP DIAMOND POINT PROTECTED.
10. DO NOT PURCHASE TOO GOOD A DIAMOND, THAT IS AN OCTAHEDRON, WHEN A KNOTTY IRREGULAR WILL DO THE JOB.

CHANGES THAT DECREASE DRESSER LIFE

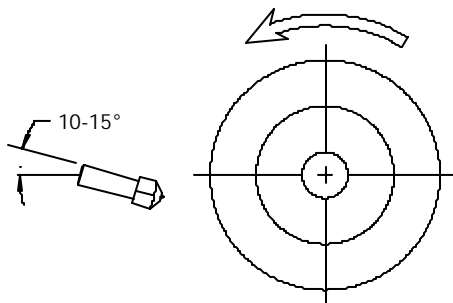
1. WHEEL	2. MACHINE	3. DRESSING CYCLE
A. Diameter increase.	A. Spindle bearings worn	A. Increased dressing depth
B. Grit size increase.	B. Worn slides.	B. Increased traverse speed.
C. Hardness increase.	C. Dresser mounting loose or worn.	C. Increase use of dresser
D. Speed increase.	D. Insufficient cooling of dresser.	D. Mechanical faults.

DIAMOND WEIGHT VS. DIAMETER AND WIDTH OF GRINDING WHEEL

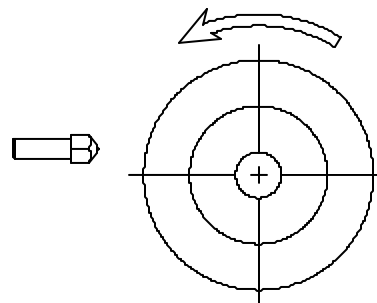
WHEEL DRESSERS		
CARATS	WHEEL DIAMETER	WIDTH
.25	4	1/4
.25	4	3/8
.35	5	1/2
.50	6	1/2
.50-.70	6-7	1/2
.75	8	3/4
1.00	10	1
1.25-2.00	14-20	2
2.50	20-24	3
2.50-3.00	24 & up	3

CONE POINT	
CARAT Size of Diamond	MAXIMUM WHEEL SIZE
PHONO	5 x 1/4
.15	6 x 3/8
.30	6 x 1/2
.50	7 x 1/2

CHISEL EDGE	
CARATS Size of Diamond	MAXIMUM WHEEL SIZE
.20	5 x 1/4
.30	6 x 1/4
.50	6x1/2 to 10x1/2
.75 -1.25	10x1/2 to 14x1/2



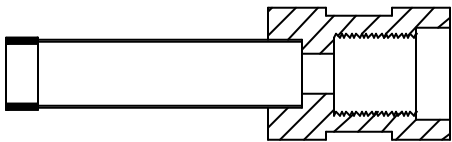
RIGHT



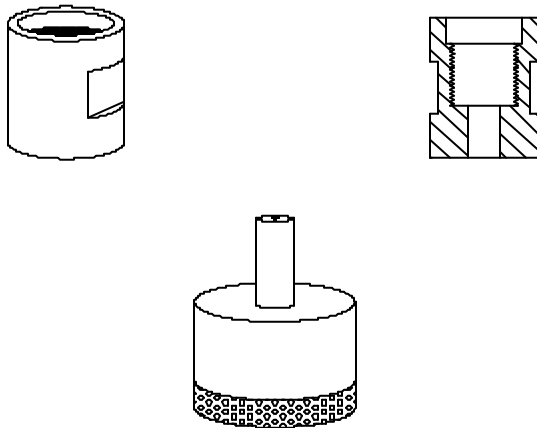
WRONG

METAL BOND INDEX

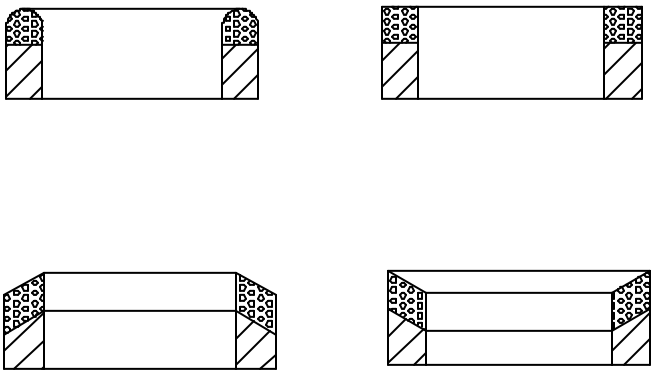
Metal Bond Core Drill - Pg. 54



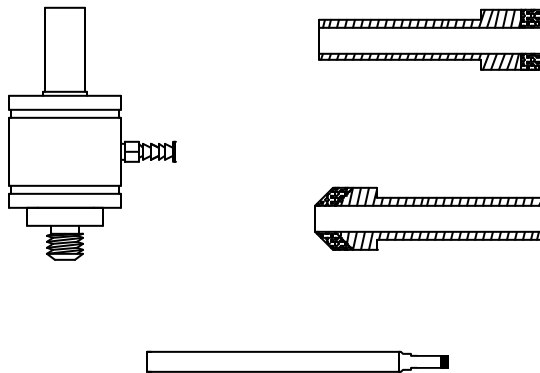
Extra Length Charges, Collets, Shank Mounting - Pg. 55



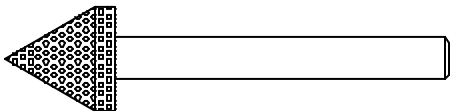
Generator Rings - Pg. 56



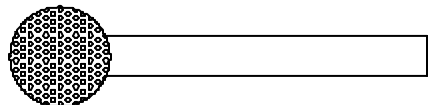
Swivel Assembly, Countersink, Counterbores, Solid Diamond Drills - Pg. 57



Cone Wheel - Pg. 58



Ball Wheel - Pg. 59



METAL BOND DIAMOND CORE DRILLS

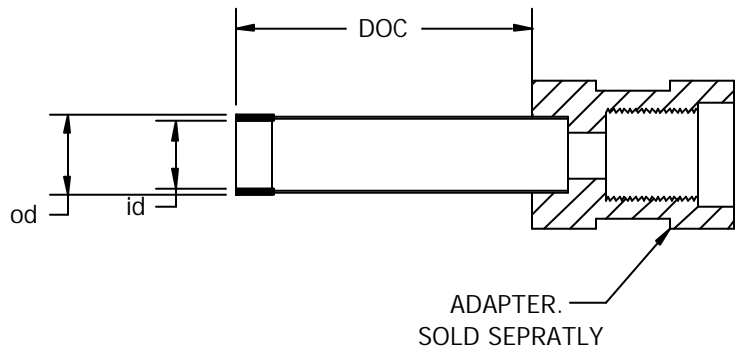
CORE DRILL ORDERING INFORMATION CHECKLIST:

- OUTSIDE OR INSIDE DIAMETER
- WALL THICKNESS
- DEPTH OF DIAMOND
- GRIT SIZE; DIAMOND CONCENTRATION
- MOUNTED OR UNMOUNTED
- OUR ADAPTOR OR CUSTOMERS ADAPTOR
- APPLICATION; DELIVERY

STANDARD DRILLING DEPTHS:

.100" if O.D. is less than .109"

2.000" if O.D. is greater than .125"



STANDARD TOLERANCE O.D. DRILL: Normally up to .003" oversize.

STANDARD TOLERANCE I.D. DRILL: Normally plus or minus .003"; plus or minus .002" available at 5% extra charge.

FOR QUOTES ON TOOLS NOT SHOWN IN THIS CATALOG, PLEASE SEND SKETCH

DEEPER DEPTHS UPON REQUEST

CATALOG NUMBER	O.D.	WALL THINCKNESS	PRICE
CD0050	.0500	.015	\$49.00
CD0055	.0550	.015	\$49.00
CD0062	.0620	.018	\$49.00
CD0070	.0700	.020	\$49.00
CD0078	.0780	.020	\$49.00
CD0085	.0850	.020	\$49.00
CD0093	.0930	.020	\$40.00
CD0109	.1090	.032	\$40.00
CD0125	.1250	.032	\$40.00
CD0130	.1300	.032	\$40.00
CD0140	.1400	.032	\$40.00
CD0156	.1560	.032	\$40.00
CD0187	.1870	.032	\$40.00
CD0250	.2500	.032	\$45.00
CD0312	.3120	.032	\$45.00
CD0375	.3750	.032	\$45.00
CD0437	.4370	.032	\$45.00
CD0500	.5000	.032	\$48.00
CD0562	.5620	.032	\$49.00
CD0625	.6250	.032	\$50.00
CD0687	.6870	.032	\$52.00
CD0750	.7500	.032	\$54.00
CD0812	.8120	.032	\$63.00
CD0875	.8750	.032	\$67.00
CD0937	.9370	.032	\$68.00
CD1000	1.000	.032	\$71.00
CD1062	1.062	.032	\$74.00
CD1125	1.125	.032	\$78.00
CD1187	1.187	.032	\$80.00

CATALOG NUMBER	O.D.	WALL THINCKNESS	PRICE
CD1250	1.250	.037	\$83.00
CD1312	1.312	.037	\$86.00
CD1375	1.375	.037	\$88.00
CD1437	1.437	.037	\$93.00
CD1500	1.500	.037	\$99.00
CD1562	1.562	.042	\$103.00
CD1625	1.625	.042	\$115.00
CD1688	1.688	.042	\$120.00
CD1750	1.750	.042	\$127.00
CD1813	1.813	.042	\$130.00
CD1875	1.875	.042	\$134.00
CD1938	1.938	.042	\$138.00
CD2000	2.000	.042	\$140.00
CD2125	2.125	.048	\$159.00
CD2250	2.250	.048	\$178.00
CD2375	2.375	.048	\$195.00
CD2500	2.500	.048	\$199.00
CD2625	2.625	.048	\$210.00
CD2750	2.750	.048	\$225.00
CD2875	2.875	.048	\$237.00
CD3000	3.000	.052	\$247.00
CD3125	3.125	.052	\$259.00
CD3250	3.250	.052	\$265.00
CD3375	3.375	.052	\$272.00
CD3500	3.500	.052	\$279.00
CD3625	3.625	.052	\$290.00
CD3750	3.750	.052	\$295.00
CD3875	3.875	.052	\$299.00
CD4000	4.000	.052	\$310.00

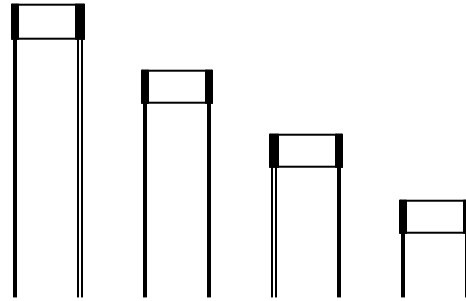
- TECHNICAL INFO ON PAGE

NDL of TEXAS, INC.

-PAGE 54-

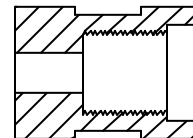
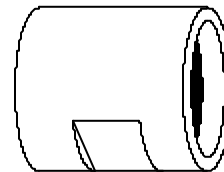
CORE DRILL EXTRA LENGTH CHARGES

O.D.	PRICE PER INCH
1/8" to 1/2"	\$6.00
>1/2" to 1"	\$8.00
>1" to 1 1/2"	\$10.00
>1 1/2" to 2"	\$16.00
>2"	Quote



ADAPTOR NUTS (COLLETS)

CATALOG NUMBER	FOR DRILL DIAMETER	THREAD SIZE	PRICE
CDC1A	1/16" to 1"	5/8-18	\$24.00
CDC1B	1/16" to 1"	3/4-16	\$24.00
CDC2	1" to 1 5/8"	1 1/2-12	\$31.00
CDC3	1 3/4" to 2 3/4"	2 1/2-12	\$48.00
CDC4	3" to 4"	2 1/2-12	\$53.00
CDC5	4 1/4" to 8"	2 1/2-12	Quote

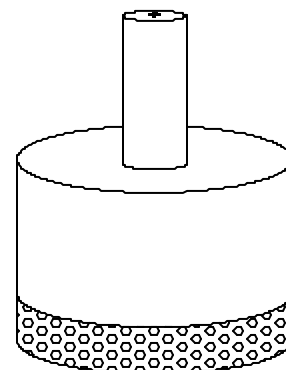


No charge for mounting NDL drill to the CDC nuts

NOTE: Collets may be re-used for the same size drill or larger. To assure running truth of drill, we recommend collets be returned to us for mounting of new drills.

STRAIGHT SHANK MOUNTING

CATALOG NUMBER	SHANK MOUNT DIAMETER	PRICE
CDM1	UP to 1"	\$15.00
CDM2	1 1/16" to 2"	\$22.00
CDM3	2 1/8" to 3"	\$25.00
CDM4	3 1/8" to 4"	\$30.00

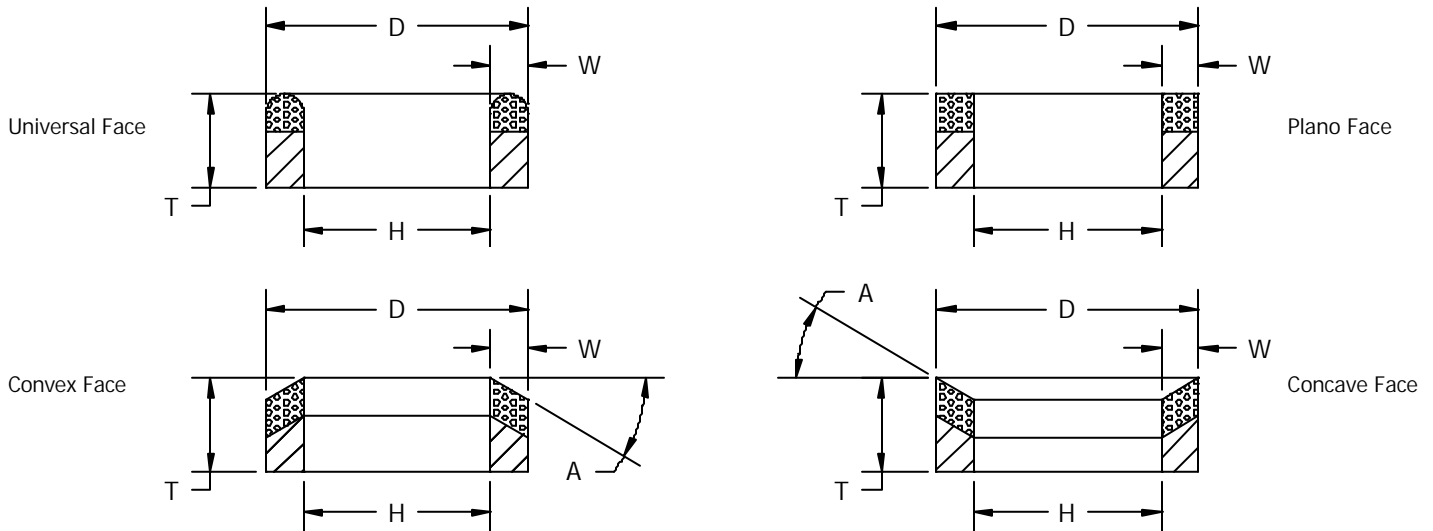


* PRICES INCLUDE SHANK AND MOUNTING

** AVAILABLE IN 1/4", 3/8", 1/2", 5/8", 3/4" AND 1" SHANKS

*** SPECIFY CDM + SHANK MOUNT DIAMETER (i.e. 3/8" x 2 1/4", etc.)

GENERATOR RINGS



50 CONCENTRATION					
CATALOG NUMBER	DIAMETER D	RIM WIDTH W	HOLE H	PRICE 1/8" DEPTH	PRICE 1/4" DEPTH
G042050	.500"	.125"	.250"	\$51.20	\$56.59
G062050	.750"	.125"	.500"	\$66.57	\$76.72
G101050	1.000"	.250"	.875"	\$87.60	\$86.05
G124050	1.250"	.250"	.750"	\$144.42	\$173.72
G144050	1.500"	.250"	1.000"	\$160.36	\$193.76
G164050	1.750"	.250"	1.250"	\$174.44	\$215.98
G204050	2.000"	.250"	1.500"	\$188.61	\$237.80
G224050	2.250"	.250"	1.750"	\$203.34	\$259.85
G304050	3.000"	.250"	2.500"	\$247.78	\$324.90

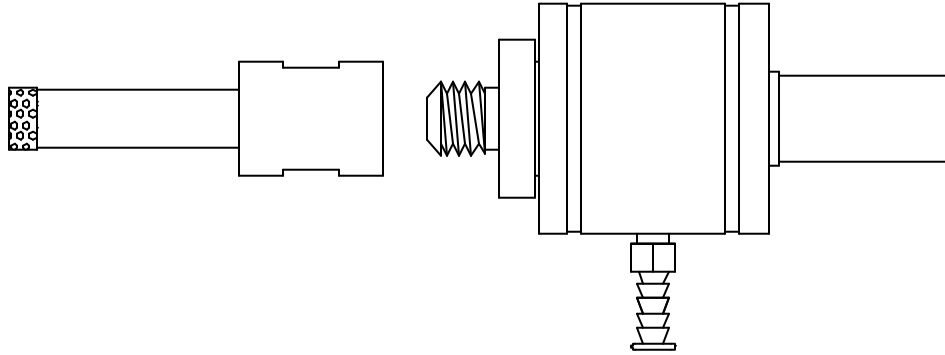
100 CONCENTRATION					
CATALOG NUMBER	DIAMETER D	RIM WIDTH W	HOLE H	PRICE 1/8" DEPTH	PRICE 1/4" DEPTH
G042100	.500"	.125"	.250"	\$56.59	\$67.06
G062100	.750"	.125"	.500"	\$76.72	\$95.31
G101100	1.000"	.250"	.875"	\$86.05	\$99.50
G124100	1.250"	.250"	.750"	\$173.72	\$232.00
G144100	1.500"	.250"	1.000"	\$193.76	\$297.05
G164100	1.750"	.250"	1.250"	\$215.98	\$324.90
G204100	2.000"	.250"	1.500"	\$237.80	\$383.74
G224100	2.250"	.250"	1.750"	\$259.85	\$430.76
G304100	3.000"	.250"	2.500"	\$324.90	\$561.33

GENERATOR ORDERING INFORMATION CHECKLIST:

O.D. - I.D.	CONCENTRATION
FACE WIDTH	TOLERANCE
RADIUS OR ANGEL of FACE	APPLICATION
CONCAVE/CONVEX/PLANO	MOUNTED OR UNMOUNTED
DEPTH of DIAMOND	OUR ADAPTOR/CUSTOMER ADAPTOR
SPECS of ADAPTOR	GRIT SIZE; DELIVERY

NDL of TEXAS, INC.

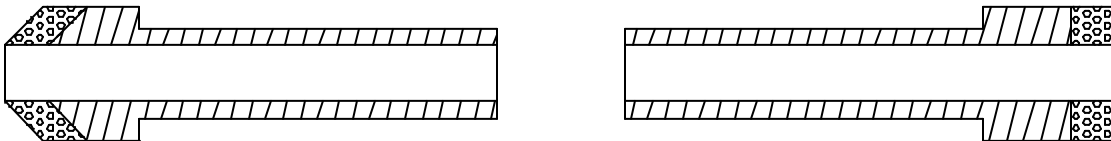
WATER SWIVEL DRILL HEAD ASSEMBLY



CATALOG NUMBER	O.D.	SHANK DIAMETER	PRICE
CDA1	.125" to .750"	.500"	\$210.00
CDA2	.812" to 1.500"	.500"	\$210.00
CDA3	1.625" to 9.500"	.750"	\$210.00

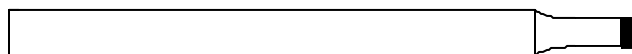
- EXCLUSIVELY DESIGNED TO GIVE WORRY-FREE PERFORMANCE
- COMES WITH A 1/2" SHANK AND 3/4"-16 THREAD SIZE
- LIGHTWEIGHT ALUMINUM BODY
- SEALED BALL BEARING CONSTRUCTION
- HIGH GRADE OIL SEALS FOR NON-LEAKING LONGEVITY

COUNTERSINK AND COUNTERBORES



*Send sketch or print for prices

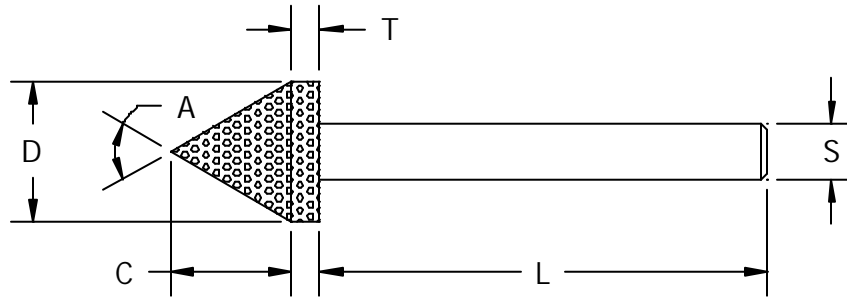
SOLID DIAMOND DRILLS



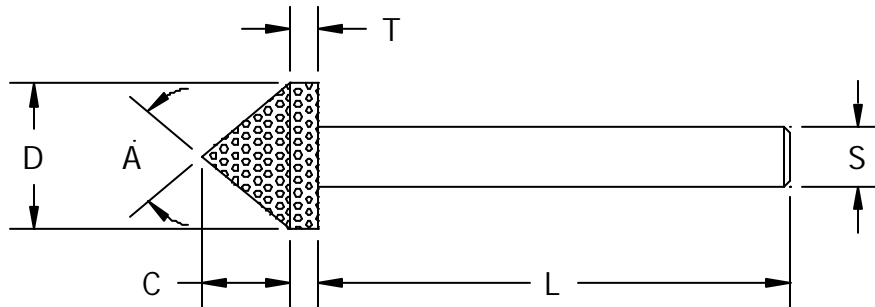
FOR DRILLING HOLES .035" to .125" CALL FOR PRICES

Phone: 214-638-1435 Toll Free: 800-395-8665 Fax: 214-638-1436

CONE WHEELS



CATALOG NUMBER	DIAMETER	ANGLE	SHANK	LENGTH	PRICE
DIAMOND	D	A	S	L	
RCD250-60	1/4"	60	1/4"	2"	\$35.00
RCD375-60	3/8"	60	1/4"	2"	\$49.00
RCD500-60	1/2"	60	1/4"	2"	\$77.00
RCD625-60	5/8"	60	3/8"	2"	\$86.00
RCD750-60	3/4"	60	3/8"	2"	\$96.00
RCD875-60	7/8"	60	3/8"	2"	\$105.00
RCD1000-60	1"	60	3/8"	2"	\$120.00

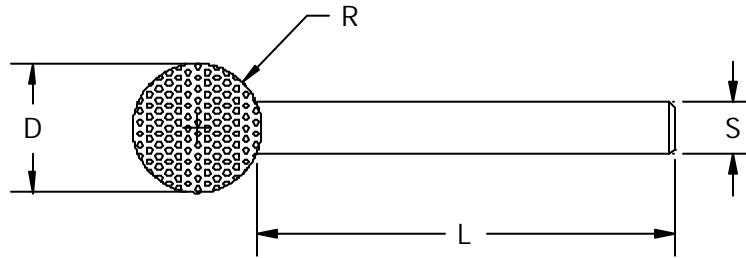


CATALOG NUMBER	DIAMETER	ANGLE	SHANK	LENGTH	PRICE
DIAMOND	D	A	S	L	
RCD250-90	1/4"	90	1/4"	2"	\$35.00
RCD375-90	3/8"	90	1/4"	2"	\$49.00
RCD500-90	1/2"	90	1/4"	2"	\$77.00
RCD625-90	5/8"	90	3/8"	2"	\$86.00
RCD750-90	3/4"	90	3/8"	2"	\$96.00
RCD875-90	7/8"	90	3/8"	2"	\$105.00
RCD1000-90	1"	90	3/8"	2"	\$120.00

ALL CONE WHEELS MADE WITH STEEL SHANKS

- WHEN ORDERING PLEASE INDICATE DIAMOND, GRIT SIZE, OTHER ANGLE (IF NEEDED), SPECIAL DIAMETER, AND/OR SPECIAL INCLUDED ANGLE FOR QUOTE
- CARBIDE SHANKS AVAILABLE FOR RESIN AND METAL BONDED WHEELS FOR THE FOLLOWING SHANK DIAMETERS:
 .125 ADD \$5.00; .250 A
 DD \$8.00

BALL WHEEL



CATALOG NUMBER	DIAMETER	RADIUS	SHANK	LENGTH	PRICE
DIAMOND	D	R	S	L	
MBWD125	1/8"	1/16"	1/8"	2"	\$20.00
MBWD187	3/16"	3/32"	1/8"	2"	\$20.00
MBWD250	1/4"	1/8"	1/4"	2"	\$30.00
MBWD312	5/16"	5/32"	1/4"	2"	\$35.00
MBWD375	3/8"	3/16"	1/4"	2"	\$40.00
MBWD500	1/2"	1/4"	3/8"	2"	\$55.00
MBWD625	5/8"	5/16"	1/2"	2"	\$63.00
MBWD750	3/4"	3/8"	1/2"	2"	\$72.00
MBWD875	7/8"	7/16"	1/2"	2"	\$84.00
MBWD1000	1"	1/2"	1/2"	2"	\$96.00

- NOTE: SHANK DIAMETERS CAN VARY TO HEAD DIAMETERS

METAL BOND TECHNICAL INFO

METAL BONDED DIAMOND CORE DRILLS

MAY ALSO BE USED IN THE FOLLOWING MATERIALS FOR THE CERAMIC INDUSTRY:

ALUMINUM OXIDE	CEREMETS	SILICON CARBIDE
TILE	BERYLLIA	ALUMINUS
GLASS PRODUCTS	PORCELAIN	JET AGE MATERIALS
CERTAIN LAMINATED PLASTICS		

FOR BEST RESULTS, WHEN DRILLING WITH NDL TOOLS, PLEASE CONSIDER THE FOLLOWING SUGGESTIONS:

1. ALWAYS DRILL WITH A COOLANT:

CORE DRILLS: use coolant lead and 30# pressure.
SOLID DRILLS: use submerged, pressure sensitive lead.

2. DRESSING:

SOLID TYPE DRILLS: dress frequently to maintain freedom of cut and to minimize pressure buildup.
CORE DRILLS: in the event that the core drill loads up, apply our aluminum oxide stick.

3. RECOMMENDED OPERATING SPEEDS:

<u>DIAMETER of DRILL</u>	<u>OPERATING SPEEDS</u>
1/32" to 3/32"	7,000 RPM to 10,000 RPM
3/32" to 1/2"	3,000 RPM to 7,000 RPM
9/16" to 1"	1,500 RPM to 3,000 RPM
1" to 2"	750 RPM to 1,500 RPM
2" to 4"	350 RPM to 900 RPM

** NOTE: Core Drills are engineered to minimize dressing **

NDL of TEXAS, INC.

SFPM/SPINDLE RPM CONVERSION TABLE

Select the grinding wheel SFPM you want and read down to find the equivalent RPM across from the diameter of your wheel.

WHEEL SFPM	600	1000	1500	2000	2500	3000	3500	4000*	4500	5000	5500	6000*	6500	7000	7500	8000	8500	9000	9500	10,000	11,000	12,500
1/8	18335	30558	45837	61115	76394	91673	106952	122231	137510	152788	168067	183346	198625	213904	229183	244461	259740	275019	290298	305577	336134	381971
1/4	9167	15279	22918	30558	38197	45837	53476	61115	68756	76392	84032	91672	99212	106952	114591	122231	129870	137510	145149	152788	168067	190985
3/8	6112	10186	15279	20372	25465	30558	35651	40744	46594	50928	56021	61115	66141	71301	76394	81487	86580	91673	96766	101859	112045	127324
1/2	4584	7639	11459	15279	19099	22918	26738	30558	34378	38196	42016	45836	49656	53476	57296	61115	64935	68755	72574	76394	84034	95493
5/8	3682	6136	9204	12272	15341	18409	21477	24545	27502	30557	33615	36669	39865	42954	46022	49090	52158	55226	58294	61362	67498	76703
3/4	3056	5093	7639	10186	12732	15279	17825	20372	22918	25464	28011	30557	33071	35651	38197	40744	43290	45837	48383	50929	56022	63662
7/8	2619	4365	6548	8731	10913	13096	15279	17462	19644	21827	24009	26192	28346	30558	32740	34923	37106	39288	41471	43654	48019	54567
1	2292	3820	5730	7640	9549	11459	13369	15279	17189	19098	21008	22918	24828	26738	28648	30558	32468	34377	36287	38196	42017	47746
2	1146	1910	2865	3820	4775	5730	6684	7639	8594	9549	10504	11459	12414	13369	14324	15279	16234	17189	18143	19098	21008	23873
3	764	1273	1910	2546	3183	3920	4456	5093	5729	6366	7003	7639	8276	8913	9549	10186	10823	11459	12096	12732	14006	15915
4	573	955	1432	1910	2387	2865	3342	3820	4297	4775	5252	5729	6207	6684	7162	7639	8117	8594	9072	9549	10504	11937
5	458	764	1146	1528	1910	2292	2674	3056	3438	3820	4202	4584	4966	5348	5730	6112	6494	6875	7258	7639	8403	9549
6	382	637	955	1273	1592	1910	2228	2546	2865	3183	3501	3820	4138	4456	4775	5093	5411	5730	6048	6366	7003	7958
7	327	546	819	1091	1364	1637	1910	2183	2455	2728	3001	3274	3547	3820	4093	4365	4638	4911	5183	5457	6002	6821
8	286	477	716	955	1194	1432	1671	1910	2148	2387	2626	2865	3103	3342	3581	3820	4058	4297	4536	4775	5252	5968
10	229	382	573	764	986	1146	1367	1528	1719	1910	2101	2292	2483	2674	2865	3056	3247	3438	3629	3820	4202	4775
12	191	318	477	637	796	954	1114	1273	1432	1591	1751	1910	2069	2228	2387	2546	2706	2865	3024	3183	3501	3979
14	164	273	409	546	682	819	955	1091	1228	1364	1500	1637	1773	1910	2046	2183	2319	2456	2592	2728	3001	3410
16	143	239	358	477	597	716	836	955	1074	1194	1313	1432	1552	1671	1790	1910	2029	2149	2268	2387	2626	2984
18	127	212	318	424	531	637	743	849	955	1061	1167	1273	1379	1485	1592	1698	1804	1910	2016	2122	2334	2653
20	115	191	286	382	477	573	668	764	859	955	1050	1146	1241	1337	1432	1528	1623	1710	1814	1910	2101	2387
22	104	174	260	347	434	521	608	694	781	868	955	1042	1128	1215	1302	1389	1476	1563	1649	1736	1910	2170
24	95	159	239	318	398	477	557	637	716	796	875	955	1034	1114	1194	1273	1353	1432	1512	1592	1751	1989
26	88	147	220	294	367	441	514	588	661	734	808	881	955	1028	1102	1175	1249	1322	1396	1469	1616	1836
28	82	136	205	273	341	409	477	546	614	682	750	818	887	955	1023	1091	1160	1228	1296	1364	1501	1705
30	76	127	191	255	318	382	446	509	573	637	700	764	828	891	955	1019	1082	1146	1210	1273	1401	1592
32	72	119	179	239	298	358	418	477	537	597	656	716	776	836	895	955	1015	1074	1134	1194	1313	1492
34	67	112	169	225	281	337	393	449	505	562	618	674	730	786	843	899	955	1011	1067	1123	1236	1404
36	64	106	159	212	265	318	371	424	477	531	583	637	690	743	796	849	902	955	1008	1061	1167	1326
38	60	101	151	201	251	302	352	402	452	503	553	603	653	704	754	804	854	905	955	1005	1108	1256
40	57	95	143	191	239	286	334	382	430	477	525	573	620	668	716	764	812	859	907	955	1050	1194
42	55	91	136	182	227	273	318	364	409	455	500	546	591	637	682	728	773	819	864	909	1000	1137
44	52	87	130	174	217	260	304	347	391	434	477	521	564	608	651	694	738	781	825	868	955	1085
46	50	83	125	166	208	249	291	332	374	415	457	498	540	581	623	664	706	747	789	830	913	1038
48	48	80	119	159	199	239	279	318	358	398	438	477	517	557	597	637	676	716	756	796	875	994
50	46	76	115	153	191	229	267	306	344	382	420	458	497	535	573	611	649	688	726	764	840	955

*Recommended optimum grinding SFPM for diamond and cubic boron nitride wheels: Dry - 4000 SFPM; Wet - 6000 SFPM.

Metric & English Conversion Table

Measures of Length:

1 millimeter (mm)	= 0.03937 inches
1 centimeter (cm)	= 0.39370 inches
1 meter (m)	= 39.37008 inches 3.2808 feet 1.0936 yards
1 kilometer (km)	= 0.6214 miles
1 inch	= 25.4 millimeters (mm) 2.54 centimeters (cm)
1 foot	= 304.8 millimeters (mm) 0.3048 meters (m)
1 yard	= 0.9144 meters (m)
1 mile	= 1.609 kilometers (km)

Measures of Area:

1 square millimeter	= 0.00155 square inches
1 square centimeter	= 0.155 square inches
1 square meter	= 10.764 square feet 1.196 square yards
1 square kilometer	= 0.3861 square miles
1 square inch	= 645.2 square millimeters 6.542 square centimeters
1 square foot	= 929 square centimeters 0.0929 square meters
1 square yard	= 0.9144 meters
1 mile	= 2.5899 square kilometers

Measures of Capacity (*dry*):

1 cubic centimeter	= 0.061 cubic inches
1 liter	= 0.0353 cubic feet 61.023 cubic inches
1 cubic meter	= 35.315 cubic feet 1.308 cubic yards
1 cubic inch	= 16.38706 cubic centimeters
1 cubic foot	= 0.02832 cubic meters 28.317 liters 7.48 gallons
1 cubic yard	= 0.7646 cubic meters

Measures of Capacity (*liquid*):

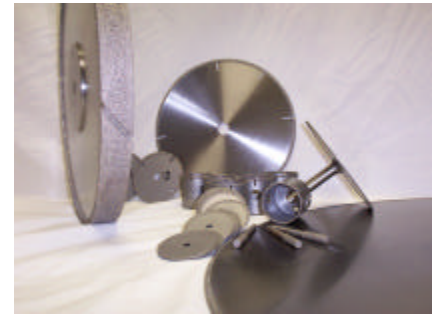
1 liter	= 1000 milliliters 1.0567 U.S. quarts 0.2642 U.S. gallons
1 cubic meter	= 264.2 U.S. gallons
1 gallon	= 4 quarts 3785.4 cubic centimeters 231 cubic inches 3.785 liters 128 ounces 8 pints

Measures of Weight:

1 carat	= 0.2 grams	1 ounce avoirdupois	= 28.35 grams
1 gram	= 15.432 grains 0.03215 ounce troy 0.03527 ounce avoirdupois	1 ounce troy	= 31.103 grams
1 kilogram	= 35.274 ounce avoirdupois 2.2046 pounds	1 pound	= 453.6 grams 0.4536 kilograms
1000 kilograms	= 1 metric ton 1.1023 ton of 2000 pounds 0.9842 ton of 2240 pounds	1 ton of 2240 pounds	= 1016 kilograms 1.016 metric tons
1 gallon	= 8.34 pounds average of H2O at 62°	1 grain	= 0.0648 grams
		1 metric ton	= 0.9842 ton of 2240 pounds 2204.6 pounds

Inch/Decimal/Metric Conversion Chart

Fractions	Decimals	Millimeters	Fractions	Decimals	Millimeters	Fractions	Decimals	Millimeters
-	.003937	- .1	23/64 -	.359375	- 9.1281	9/16 -	.5625	- 14.2875
-	.007874	- .2	3/8 -	.375	- 9.525	37/64 -	.578125	- 14.6844
-	.011811	- .3	25/64 -	.390625	- 9.9219	-	.590551	- 15
1/64 -	.015625	- .3969	-	.393701	- 10	19/32 -	.59375	- 15.0813
-	.015748	- .4	13/32 -	.40625	- 10.3188	39/64 -	.609375	- 15.4781
-	.019685	- .5	27/64 -	.421875	- 10.7156	5/8 -	.625	- 15.8750
-	.023622	- .6	-	.433071	- 11	-	.629921	- 16
-	.027559	- .7	7/16 -	.4375	- 11.1125	41/64 -	.640625	- 16.2719
1/32 -	.03125	- .7938	29/64 -	.453125	- 11.5094	21/32 -	.65625	- 16.6687
-	.031496	- .8	<p>National Diamond Lab's policy is to engineer and manufacture diamond tools that enable the user to produce their product at a lower unit cost. We realize our customers must rely on the experience and the integrity of the Diamond Tool Manufacturer for the value they receive on all Diamond Tooling. For helpful service contact our Technical Sales Dept. at 1-800-395-8665. We will be pleased to help you select the correct wheel for your job, based upon material, finish, and machine plus any factor affecting the choice of wheel.</p>			-	.669291	- 17
-	.035433	- .9				43/64 -	.671875	- 17.0656
-	.03937	- 1				11/16 -	.6875	- 17.4625
3/64 -	.046875	- 1.1906				45/64 -	.703125	- 17.8594
1/16 -	.0625	- 1.5875				-	.708661	- 18
5/64 -	.078125	- 1.9844				23/32 -	.71875	- 18.2562
-	.07874	- 2				47/64 -	.734375	- 18.6531
3/32 -	.09375	- 2.3813				-	.748031	- 19
7/64 -	.109375	- 2.7781				3/4 -	.750	- 19.05
-	.11811	- 3				49/64 -	.765625	- 19.4469
1/8 -	.125	- 3.175				25/32 -	.78125	- 19.8437
9/64 -	.140625	- 3.5719				-	.787402	- 20
5/32 -	.15625	- 3.9688				51/64 -	.796875	- 20.2406
-	.15748	- 4				13/16 -	.8125	- 20.6375
11/64 -	.171875	- 4.3656				-	.826772	- 21
3/16 -	.1875	- 4.7625				53/64 -	.828125	- 21.0344
-	.19685	- 5				27/32 -	.84375	- 21.4312
13/64 -	.203125	- 5.1594				55/64 -	.859375	- 21.8281
7/32 -	.21875	- 5.5563				-	.866142	- 22
15/64 -	.234375	- 5.9531				7/8 -	.875	- 22.2250
-	.23622	- 6				57/64 -	.890625	- 22.6219
1/4 -	.250	- 6.35				-	.905512	- 23
17/64 -	.265625	- 6.7469	15/32 -	.46875	- 11.9063	29/32 -	.90625	- 23.0187
-	.275591	- 7	-	.472441	- 12	59/64 -	.921875	- 23.4156
9/32 -	.28125	- 7.1438	31/64 -	.484375	- 12.3031	15/16 -	.9375	- 23.8125
19/64 -	.296875	- 7.5406	1/2 -	.500	- 12.7	-	.944882	- 24
5/16 -	.3125	- 7.9375	-	.511811	- 13	61/64 -	.953125	- 24.2094
-	.314961	- 8	33/64 -	.515625	- 13.0969	31/32 -	.96875	- 24.6062
21/64 -	.328125	- 8.3344	17/32 -	.53125	- 13.4938	-	.984252	- 25
11/32 -	.34375	- 8.7313	35/64 -	.546875	- 13.8906	63/64 -	.984375	- 25.0031
-	.354331	- 9	-	.551181	- 14	1 -	1	- 25.4



National Diamond Lab

Manufacturers of Industrial Diamond Tools
Dressers, Plated Products, Metal & Resin Bond Products



1435 Round Table Drive
Dallas, Texas 75247

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