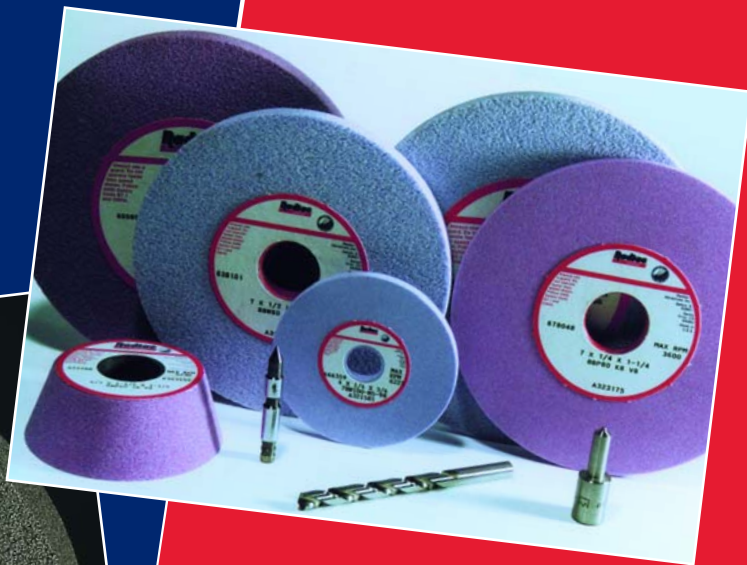


# High Performance Grinding Wheels...



## For Tool Room Applications



# Radiaac<sup>®</sup>

Abrasives

Precision Engineered Grinding Wheels

# Tell us your needs. . . We'll Meet Them!

## Grind with a team

Radiac offers an unparalleled selection of materials to help manufacturing companies. No other organization can match the resources and support enjoyed by



# Precision Engineered

Radiac Abrasives offers more than 30,000 precision built products of high quality, performance and repeatability, for virtually every conceivable manufacturing specific area. These vast resources are presented via Vitrified Bond, Resinoid Bond, Rubber Bonded, Diamond and CBN products. An unrivaled track record, working with many leading-edge companies, serves as testimony to the expertise offered by Radiac Abrasives.

**32A**

- \* GOOD MULTI-PURPOSE ABRASIVE
- \* VERY VERSATILE
- \* GOOD FORM HOLDING
- \* LIGHT TO MEDIUM STOCK REMOVAL .001" - .003" per pass
- \* GRAY IN COLOR

**WA**

- \* COOL CUTTING
- \* GOOD FOR FINISH GRINDING
- \* GOOD FOR HEAT SENSITIVE MATERIALS
- \* LIGHT STOCK REMOVAL .001" or less per pass
- \* WHITE IN COLOR

**9A**

- \* COOLEST CUTTING
- \* EXCELLENT ON HEAT SENSITIVE PARTS
- \* LIGHT STOCK REMOVAL .001" or less per pass
- \* WHITE IN COLOR

**WRA**

- \* GOOD MULTI-PURPOSE ABRASIVE
- \* VERY VERSATILE
- \* GOOD FORM HOLDING
- \* MEDIUM STOCK REMOVAL .002" - .003" per pass
- \* MIXTURE OF WA (WHITE) AND RA (RUBY) ABRASIVES

**RA**

- \* TOUGH ABRASIVE
- \* EXCELLENT FORM HOLDING
- \* GOOD FOR ROUGH GRINDING
- \* HEAVY STOCK REMOVAL .005" plus per pass
- \* RUBY IN COLOR

**RAA**

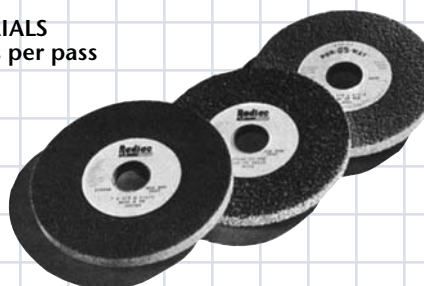
- \* COOL CUTTING
- \* GOOD FOR HEAT SENSITIVE MATERIALS
- \* EXCELLENT ON EXOTIC MATERIALS
- \* LIGHT TO MEDIUM STOCK REMOVAL .001" - .002" per pass
- \* PINK IN COLOR

**CERAMIC**

- \* LONGER WHEEL LIFE
- \* EXCELLENT FORM HOLDING
- \* GOOD ON HARD TO GRIND MATERIALS
- \* HEAVY STOCK REMOVAL .005" plus per pass
- \* BP - BLUE AND PINK IN COLOR
- \* BW - BLUE AND WHITE IN COLOR

**GC**

- \* FAST, COOL CUTTING
- \* FOR CARBIDE GRINDING
- \* CAN BE USED FOR DIE STEEL
- \* FINISHING APPLICATIONS
- \* GREEN IN COLOR
- \* SILICON CARBIDE ABRASIVE



Other Sizes and Specifications Available from Stock

WHEEL SIZE	WHEEL TYPE	32A ABRASIVES GRAY
6 X 1/2 X 1 1/4	T-1	32A46-K5-VE A325047 32A60-J8-VE A322101
7 X 1/4 X 1 1/4	T-1	32A46-I8-VE A320695 32A60-I8-VE A320695 32A60-J8-VE A320697 32A80-I8-VE A322108 32A80-J8-VE A322109
7 X 1/2 X 1 1/4	T-1	32A46-G8-VE A320724 32A46-G14-VE K325050 32A46-H8-VE A320700 32A60-G8-VE A329671 32A60-H8-VE A320703 32A60-I8-VE A320704
8 X 1/2 X 1 1/4	T-1	32A46-G8-VE A329676 32A46-G14-VE K322151 32A46-H8-VE A320710 32A60-I8-VE A320712
10 X 1 X 3	T-1	32A46-H8-VE A325054 32A60-I8-VE A322173
12 X 1 X 3	T-1	32A46-H14-VE K322176 32A46-H8-VE A322177 32A60-I8-VE A322181
12 X 1 X 5	T-1	32A46-I8-VE A322182 32A60-I8-VE A325056
12 X 2 X 5 REC 2/S 7-1/2 x 1/2	T-7	32A46-H14-VE N329686
14 X 1 X 5	T-1	32A46-I8-VE A329687

Always grind safely. Be sure grinding wheels and machine are in good condition. Machine guards are for your protection.

† Limited Quantities Available

... that knows how. . . . . We'll measure your performance . . . . .

... of products, services and  
... organizations address their require-  
... offer the experience, spirit,  
... Radiac clients.

World-class organizations understand the increasing importance of pro-  
ducing quality products. Radiac Abrasive's Engineering Group offers  
comprehensive testing, application experience and understanding. It is  
quality product performance that can help your business grow.

# Red Grinding Wheels for Too

<b>WA/9A ABRASIVES WHITE</b>	<b>WRA ABRASIVES RUBY/WHITE</b>	<b>RA ABRASIVES RUBY</b>	<b>RAA ABRASIVES PINK</b>	<b>CERAMIC ABRASIVES BLUE/PINK/WHITE</b>	<b>GC ABRASIVES GREEN</b>
WA60-J8-V8 A102954	WRA60-K8-V8 A795798	RA46-H800-VOS K299757 RA46-J8-V8 A098779 RA60-H800-VOS K299759 RA60-J8-V8 A098795	RAA462-I2(H800)-VOS ★★★ RAA60-I2(H800)-VOS ★★★	8BP46-G800-VOS ★★★ 8BP46-H800-VOS ★★★ 8BP60-G800-VOS ★★★ 8BP60-H8-V8 ★★★	GC60-I5-VL A107689 GC60-J5-VL A008931 GC80-J5-VL A107700 GC120-J5-VL A107719
9A46-H2(G800)-VOS K250 WA46-H8-V8 A326361 9A60-I2(H800)-VOS K249 WA60-I8-V8 A319272 WA80-K5-V8 A103543 WA120-K8-V8 A329728	WRA46-J5-V8 A788996 WRA60-I5-V8 A862649 WRA60-K5-V8 A755036 WRA80-J5-V8 A672173 WRA120-K6-V8 A761974	RA46-H800-VOS K299775 RA46-J5-V8 A105023 RA60-J5-V8 A205036 RA80-J5-V8 A099082 RA100-J5-V8 A099104	RAA60-H2(G800)-VOS K569 RAA100-I2(H800)-VOS K497	8BP60-I8-V8 A323176 8BP60-J8-V8 A329742	GC60-J5-VL A016721 GC120-J5-VL A107930
9A46-H2(G800)-VOS K006 WA46-H8-V8 A103721 9A60-H2(G800)-VOS K007 9A60-I2(H800)-VOS K082 WA60-I8-V8 A103772 WA60-J8-V8 A103780 WA120-K8-V8 A329732	WRA46-H8-V8 A752240 WRA46-I8-V8 A751685 WRA60-H8-V8 A618489 WRA60-I5-V8 A618497	RA46-H800-VOS K286951 RA46-H8-V8 A100129 RA60-H800-VOS K286955 RA60-H8-V8 A100153	RAA462-I2(H800)-VOS K095 RAA60-H2(G800)-VOS K084 RAA60-I2(H800)-VOS K009	8BP46-G800-VOS K329743 8BW46-H8-V8 A327004 8BP46-H800-VOS K323163 8BP60-G800-VOS K329745 8BP60-H8-V8 A329746 8BP60-H800-VOS K323158	GC60-I5-VL A107948 GC60-J5-VL A107964 GC80-J5-VL A107999 GC120-I5-VL A108014 GC120-J5-VL A108022
9A46-H2(G800)-VOS K092 WA46-H8-V8 A104035 WA46-I8-V8 A264373 9A60-H2(G800)-VOS K106 WA60-H8-V8 A307635 WA60-I8-V8 A329739	WRA46-H8-V8 A859710 WRA46-I5-V8 A796760 WRA60-H8-V8 A622834 WRA60-J8-V8 A765031	RA46-H800-VOS K292567 RA46-H8-V8 A100366 RA60-H800-VOS K289028 RA60-H8-V8 A200395	RAA46-H2(G800)-VOS K026 RAA46-I2(H800)-VOS K014 RAA60-I2(H800)-VOS K015	8BW46-H8-V8 A325935 8BP46-H800-VOS K323164 8BP60-H800-VOS K323165	GC60-J5-VL A108120 GC120-J5-VL A353888
9A46-H2(G800)-VOS K901 WA46-H8-V8 A295691 9A60-J3(H800)-VOS K335 WA60-J8-V8 A142212	WRA46-H8-V8 A800805 WRA60-J8-V8 A672238	RA46-H8-V8 A100790 RA60-J8-V8 A100927	RAA46-H2(G800)-VOS K319 RAA46-I2(H800)-VOS K247	8BP46-H800-VOS K324839	GC60-J5-VL A919713
9A46-H2(G800)-VOS K495 WA46-H5-V8 A004847 WA60-I8-V8 A313381†	WRA46-H8-V8 A650617 WRA60-H8-V8 A978639	RA46-G800-VOS K277795 RA46-H8-V8 A101249 RA60-J8-V8 A101370	RAA46-H2(G800)-VOS K330 RAA46-J2(H+800)-VOS K189 RAA60-I2(H800)-VOS K771	8BP46-H8-V8 A329751 8BP46-H800-VOS K322836 8BP60-G800-VOS K329752	
WA46-J8-V8 A198323 WA60-J5-V8 A595993	WRA46-K8-V8 A913634 WRA60-K5-V8 A753378	RA46-H800-VOS K268837 RA60-J8-V8 A101389	RAA46-I2(H800)-VOS K050	8BP46-H8-V8 A329754 8BP60-G800-VOS K329756	GC60-J5-VL A108510
WA46-I5-V8 G301403		RA46-J8-V8 G172669			
9A46-H2(G800)-VOS K557 WA60-H8-V8	WRA60-H8-V8 A795496	RA46-G800-VOS K299795	RAA46-J1(I+800)-VOS K302	8BP46-H800-VOS K323152 8BP60-I8-V8	GC60-J5-VL A108600

# ... we improve your productivity.

POR-OS-WAY® RA-RAA Wheel, very open structure allows flow through coolant.

- Precision cool cutting, faster, with superior chip clearance.
- Unique open structure - Heavy duty stock removal - Wet or dry grinding.
- Specialized grains and bonds for absolute repeatability in performance.

# Room use



GC GRAIN SELECTION		
GRIT SIZE	MATERIAL	APPLICATION
60	CEMENTED OR TUNGSTEN CARBIDE	ROUGH
80	CEMENTED OR TUNGSTEN CARBIDE	MEDIUM
120	CEMENTED OR TUNGSTEN CARBIDE	FINISH



GRIT SELECTION		
GRIT SIZE	RADIUS	FINISH RMS
46	Over .020	Over 32
60	.016-.020	15 - 20
80	.010-.020	12 - 18
100	.008-.010	10 - 15
120	.005-.008	8 - 12

HARDNESS SELECTION			
MATERIAL	SOFT	MEDIUM	HARD
HARDNESS	<50 Rc	50-57 Rc	>57 Rc
WHEEL GRADE			
H			
I			
J			

GRAIN TYPE SELECTION						
ABRASIVE	STOCK REMOVAL PER PASS				APPLICATION	
	.001 or LESS	.001-.002 LESS	.003-.004	.005 or MORE	FORM GRINDING	GENERAL PURPOSE
32A GRAY						
9A WHITE						
WA WHITE						
WRA RUBY/WHITE						
RA RUBY						
RAA PINK						
CERAMIC						

AISI STEEL TYPES		
AISI Steel Types	Grindability	Grain Type
L1 to L7, 01, 02, 06, 07, H10 to H19, W1 to W7, S1 to S6, A2 to A6, A8, A9, H20 to 26	High Easy to Grind	RA, 32A
H41 to H43, M1, M2, M8, M10, M20, M25, M30, M33, M42, T1, T2, T4, T7, T8, F1 to F3, D1 to D6	Medium Hard to Grind	WRA, 32A, RAA, 8BP
D7, M3, M6, M7, M34 to M36, M40, M50, T3, T5, T6, M4, M15, T9, T12, T15, T20, A7, Ottawa 60	Low Hard to Grind	WA, RAA 9A, 8BW

**Wheel Type Use**

**Type 1:** Wheels are used on surface grinders, cylindrical grinders and tool and cutter grinders.

**Type 7:** Wheels are used on surface grinders.

Radiac Tool Room Wheels are used for precision grinding of high speed steel or carbide broaches, chases, milling cutters, threading dies, drills, reamers, taps and other cutting tools, to restore a keen cutting edge or the exact cutting angle.

- Grind Faster & Cooler
- Last Longer
- Fewer Dressings



## TOOL AND CUTTER GRINDING

WHEEL DIMENSIONS	WHEEL TYPE and BLUEPRINT	32A ABRASIVE GRAY	WA ABRASIVE WHITE	WRA ABRASIVE RUBY/WHITE	RA ABRASIVE RUBY	CERAMIC ABRASIVE BLUE/PINK
3 1/2 X 1 X 1 1/4 1/4 RIM 3/8 BACK	T-11 B/P 1958 FLARED CUP	32A60-K5-VEQ F322192	WA60-J5-V8 F141836 WA60-K5-V8 F102547†	WRA46-K5-V8 F816698 WRA60-J5-V8 F753548	RA60-J5-V8 F098345	
4/3 X 1 1/2 X 1 1/4 1/4 RIM 1/2 BACK	T-11 B/P 2012 FLARED CUP	32A46-J5-VEQ F320717 32A60-J5-VEQ F320719	WA46-J5-V8 F102733 WA60-J5-V8 F102768	WRA46-J5-V8 F671908 WRA60-J5-V8 F671924	RA46-J5-V8 F098540 RA60-J5-V8 F098574	8BP60-J8-V8 F323155 8BP60-L8-V8 F323156
5 X 1 1/2 X 1 1/4 3/8 RIM 3/8 BACK	T-6 STRAIGHT CUP		WA60-K5-V8 F102890	WRA46-K5-V8 F584282 WRA60-J5-V8 F618608	RA46-J5-V8 F156744 RA60-J5-V8 F098680	
5/3/4 X 1 3/4 X 1 1/4 1/4 RIM 1/2 BACK	T-11 B/P 2014 FLARED CUP	32A46-J5-VEQ F320722	WA46-J5-V8 F880213 WA60-J5-V8 F103020	WRA46-J5-V8 F734349 WRA60-J5-V8 F713554	RA46-J5-V8 F024791 RA60-J5-V8 F098701	8BP60-K8-V8 F323157
6 X 1 1/2/5/16 X 1 1/4	T-12 B/P 2005 DISHED WHEEL	32A46-K5-VEQ F322194 32A60-K5-VEQ F322195	WA46-K5-V8 F903191 WA60-J5-V8 F103179	WRA46-K5-V8 F812226 WRA60-J5-V8 F767182	RA46-J5-V8 F098833 RA60-J5-V8 F098868	
6 X 3/4/3/8 X 1 1/4	T-12 B/P 2006 DISHED WHEEL		WA46-J5-V8 F300772 WA60-J5-V8 F103284	WRA60-K5-V8 F638447	RA46-J5-V8 F099015 RA60-J5-V8 F098884	
6 X 1 1/2 X 1 1/4 1/2 RIM 1/2 BACK	T-6 STRAIGHT CUP		WA60-J5-V8 F050326	WRA46-K5-V8 F817600 WRA60-K5-V8 F817619	RA46-J5-V8 F098949 RA60-J5-V8 F098957	

† Limited Quantities Available

TOOL AND CUTTER	HARDNESS GUIDE		GRIT SELECTION	
	J	K	46 GRIT	60 GRIT
<b>DRILL SHARPENING</b>				
DRILLS 1/4" DIA. and LARGER				
DRILLS LESS THAN 1/4"				
<b>SAW SHARPENING</b>				
COARSE TEETH				
FINE TEETH				
<b>CUTTERS, REAMERS AND BROACHES</b>				
SMALL CONTACT AREA				
LARGE CONTACT AREA				

**Type 6** - Wheels are used on tool and cutter grinders.

**Type 11** Wheels are used on tool and cutter grinders for resharpening high speed steel cutters.

**Type 12** Wheels are used on tool and cutter resharpening high speed steel carbide cutters.

# Bench and Pedestal Grinding Wheels

Industrial Quality, Multi-Purpose,  
Aluminum Oxide

- Great Value
- Fast Cutting
- Long Lasting
- Versatile
- Sizes to fit all Popular Grinders
- Available in Coarse, Medium & Fine

Sizes provided offer a wide range of specifications and grinding applications.



## BENCH AND PEDESTAL WHEELS

WHEEL SIZE	WHEEL TYPE	36 GRIT COARSE	46 GRIT COARSE/MEDIUM	60 GRIT MEDIUM/FINE	80 GRIT FINE
6 X 1/2 X 1 1/4	T-1			A60-M5-V1 A003271	A80-M5-V1 A001643
6 X 3/4 X 1 1/4	T-1	A36-M5-V1 A089850	A46-M5-V1 A089982	A60-M5-V1 A090158	A80-M5-V1 A090018
6 X 1 X 1 1/4	T-1	A36-M5-V1 A090140	A46-M5-V1 A090166	A60-M5-V1 A090352	A80-M5-V1 A090247
7 X 3/4 X 1 1/4	T-1	A36-M5-V1 A290548	A46-M5-V1 A090557	A60-M5-V1 A090573	
7 X 1 X 1 1/4	T-1	A36-M5-V1 A090638	A46-M5-V1 A090611	A60-M5-V1 A090719	A80-M5-V1 A090670
8 X 3/4 X 1 1/4	T-1		A46-M5-V1 A090972	A60-M5-V1 A066397	
8 X 1 X 1 1/4	T-1	A36-M5-V1 A085626	A46-M5-V1 A087416	A60-M5-V1 A091243	A80-M5-V1 A091260
10 X 1 X 1 1/4	T-1	A36-M5-V1 A091936	A46-M5-V1 A091952	A60-M5-V1 A092126	A80-M5-V1 A091995
10 X 1 1/4 X 1 1/4	T-1	A36-O5-V1 A092045	A46-M5-V1 A092142	A60-M5-V1 A092150	
10 X 1 1/2 X 1 1/4	T-1	A36-M5-V1 A092223	A46-M5-V1 A092274	A60-M5-V1 A092320	
12 X 1 1/2 X 1 1/4	T-1	A36-O5-V1 A092835	A46-M5-V1 A092983	A60-M5-V1 A092932	
12 X 2 X 1 1/4	T-1	A36-M5-V1 A093114	A46-M5-V1 A093335	A60-M5-V1 A093378	

## Performance Guarantee

*We believe that Radiac Grinding Wheels will give you performance and cost savings exceeding that provided by the products you are currently using.*

*If you feel that the Radiac wheels you have purchased are not a better value than the product you are currently using, we will give you credit based upon the performance received.*

Radiac Abrasives, Inc.  
1015 S. College Avenue  
P.O. Box 1410  
Salem, Illinois 62881

Tel: 800-851-1095 • 618-548-4200  
Fax: 888-244-8234 • 618-548-4207

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



Precision Engineered Grinding Wheels

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MADE



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An Authorized Radiac Distributor



MEMBER

