

**VITRIFIED SURFACE GRINDING  
WHEELS**  
STOCK ASSORTMENT | READY TO SHIP

A Tyrolit Company  
[www.radiac.com](http://www.radiac.com)

**Radiac**  
Abrasives

# Vitrified Surface Grinding Wheel Application Guide

Radiac is your partner for vitrified surface grinding wheels. Radiac offers an unparalleled selection of products, services, and materials to help manufacturing organizations address their requirements. When choosing a surface grinding wheel specification for a specific application, it is important to consider many factors. Whether your operation requires rapid stock removal or a fine finished precision ground surface, our team will help you choose the correct wheel. Wheels in a variety of grain types, sizes, and bond structures to suit most applications are stocked in our Salem, Illinois facility.

Contact your Sales Representative or Customer Service today to place your order!



Radiac Abrasives, Salem, Illinois

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
<b>HARDNESS</b>	<50 Rc	50-57 Rc	>57 Rc
<b>Wheel Grade</b>			
<b>H</b>			✓
<b>I</b>		✓	
<b>J</b>	✓		

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, SU33A

GRAIN TYPE SELECTION						
ABRASIVE	STOCK REMOVAL PER PASS				APPLICATION	
	.001 or	.001-.002 or less	.003-.004	.005 or more	Form grinding	General purpose
32A		✓	✓			✓
8BP				✓	✓	
RA				✓		✓
RAA		✓			✓	
9A	✓				✓	
WA	✓					✓
SU33A				✓	✓	
97A		✓				✓
WRA		✓	✓			✓
GC		✓	✓			✓

## RED CENTER REDUCING BUSHINGS FOR TYPE 1 STRAIGHT WHEELS

Radiac has a variety of reducing bushings ranging from 1/2" to 1" internal diameter (ID). These bushings have an outside diameter of 1-1/4" and a thickness of 1/4" to accommodate most tool room applications. The required ID should match the arbor size. In all cases, wheel flange diameters must comply with the minimum size specified in ANSI B7.1 for the given wheel outside diameter. This will ensure that the flanges extend beyond the diameter of the bushing and bear on the sides of the wheel.

WHEEL DIAMETER	WHEEL THICKNESS	AVAILABLE BUSHINGS
6"	1/4" 1/4" to 1-1/2" Incl. Incl.	1", 15/16", 7/8", 3/4", 5/8", 1/2"
7"	1/4" to 1" incl.	1", 15/16", 7/8", 3/4", 5/8", 1/2"
8"	1/4" to 5/8" incl.	1", 15/16", 7/8", 3/4", 5/8", 1/2"
8"	over 5/8" to 1-3/4" incl.	1", 15/16", 7/8", 3/4", 5/8"

# Vitrified Surface Grinding Wheel Grain Types

## 32A - GRAY

- Good multi-purpose abrasives
- Very versatile
- Good form holding
- Light to medium stock removal .001" - .003" per pass

## 8BP - CERAMIC

- Excellent with metal of high chromium content
- Minimal dressing
- Well suited for materials greater than 40 HRC
- Heavy stock removal .005" plus per pass

## RA - RUBY

- Tough abrasive
- Excellent form holding
- Good for rough grinding
- Heavy stock removal .005" plus per pass

## RAA - PINK

- Cool cutting
- Good for heat sensitive materials
- Excellent on exotic materials
- Light to medium stock removal .001" - .002" per pass

## 9A / WA - WHITE

- Cool cutting
- Good for finish grinding
- Good for heat sensitive materials
- Light stock removal .001" or less per pass

## SU33A - STRATO ULTRA

- Reduced grinding times
- Significantly better profile retention
- Cooler grinding
- Increased wheel life

## 97A - BROWN & WHITE

- Good multi-purpose abrasive
- Open structure
- For materials with 45 HRC and below

## WRA - WHITE & RUBY

- Good multi-purpose abrasive
- Very versatile
- Good form holding
- Medium stock removal .002"- .003" per pass

## GC - GREEN SILICON CARBIDE

- Excellent for carbide cutting tools including cemented carbide
- Typically used for nonferrous materials such as glass, brass, aluminum, and titanium
- Die steels such as M2, M4, M42
- Some types of iron such as cast iron, grey iron, white iron, malleable iron, and nodular (or ductile)



# 6 - 8" Surface Grinding Wheels

SIZE	6 x 1/2 x 1-1/4"	6 x 3/4 x 1-1/4"	7 x 1/2 x 1-1/4"	7 x 3/4 x 1-1/4"	7 x 3/4 x 1-1/4"	7 x 1 x 1-1/4"	7 x 1 x 1-1/4"	8 x 1/2 x 1-1/4"	
TYPE	TYPE 1	TYPE 1	TYPE 1	TYPE 1	TYPE 5	TYPE 1	TYPE 5	TYPE 1	
MAXIMUM SPEED	4138 RPM (a)   6500 SFPM   33 m/s			3601 RPM (a)   6600 SFPM   34 m/s				3605 RPM (a) 7550 SFPM 39 m/s	
RECESS SIZE	-	-	-	-	* 2-3/4x1/4" ** 3x1/4" *** 3-1/2x1/4"	-	* 2-3/4x1/2" ** 3x1/2" *** 3-1/2x1/2"		
PACKAGE QUANTITY	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	
32A GRAY	32A46 H14 VEQ		34078832	34135792			34078897 **	34078837	
	32A46 I8 VEQ		34078242	34078251				34078253	
	32A46 J8 VEQ								
	32A60 H8 VEQ								
	32A60 I8 VEQ		34305793	34078246		34078644 *		34078653 **	34078254
	32A60 J8 VEQ	34078262							
	32A80 I8 VEQ			34078249					34078292
8BP CERAMIC	8BP46 G800 VOS		34078852					34078854	
	8BP46 H800 VOS	34138553	34450862	34078845	34313989	34516680 **		34078846	
	8BP46 I800 VOS			34078849				34137519	
	8BP60 G800 VOS			34078853				34078855	
	8BP60 H800 VOS			34078844				34078847	
	8BP60 I800 VOS			34394956				34078848	
	BP46 I8 V8			34078323		34126569 *		34125970 **	34078344
	BP46 J8 V8			34078343					34078326
	BP46 K8 V8			34078327					34078345
	BP60 H8 V8								
	BP60 I8 V8			34078324					34078346
	BP60 J8 V8			34078322	34099980				34078347
	BP60 K8 V8			34078259					34078348
	BP80 I8 V8								
	BP80 J8 V8			34078340					34078349
BP80 K8 V8									
RA RUBY	RA46 G800 VOS						34078896 **		
	RA46 H800 VOS	34078820		34078805		34078895 **		34078811	
	RA60 H800 VOS		34078812	34078807				34078810	
	RA46 J8 V8	34078045	34078047	34078059	34078074		34078582 **	34078071	
	RA60 J8 V8	34078046	34078048	34078193		34078634 **	34078583 **	34078072	
	RA80 J8 V8	34077932		34078062				34078073	
RAA PINK	RAA46 G800F VOS								
	RAA46 G800 VOS			34078769				34078768	
	RAA46 G800C VOS								
	RAA461 G800C VOS								
	RAA46 H800 VOS			34078762				34078765	
	RAA462 H800 VOS			34078787					
	RAA46 H+800 VOS							34078864	
	RAA60 G800 VOS			34078785					
	RAA60 H800 VOS					34078901 ***		34078766	
RAA60 J800 VOS									

# 6-8" Surface Grinding Wheels

SIZE	6 x 1/2 x 1-1/4"	6 x 3/4 x 1-1/4"	7 x 1/2 x 1-1/4"	7 x 3/4 x 1-1/4"	7 x 3/4 x 1-1/4"	7 x 1 x 1-1/4"	7 x 1 x 1-1/4"	8 x 1/2 x 1-1/4"	
TYPE	TYPE 1	TYPE 1	TYPE 1	TYPE 1	TYPE 5	TYPE 1	TYPE 5	TYPE 1	
MAXIMUM SPEED	4138 RPM (a)   6500 SFPM   33 m/s				3601 RPM (a)   6600 SFPM   34 m/s			3605 RPM (a) 7550 SFPM 39 m/s	
RECESS SIZE	-	-	-	-	* 2-3/4x1/4" ** 3x1/4" *** 3-1/2x1/4"	-	* 2-3/4x1/2" ** 3x1/2" *** 3-1/2x1/2"		
PACKAGE QUANTITY	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	PKG QTY 10	
9A / WA WHITE	9A46 G800 VOS			34078758	34078791			34078786	
	9A46 H800 VOS								
	9A46 H+800 VOS			34078764				34516702	
	9A60 G800 VOS			34078759			34078903 ***	34078788	
	9A60 H800 VOS						34078902 ***		
	9A60 H+800 VOS			34078781	34078882			34516703	
	WA46 I8 V8			34078197			34078663 **	34078203	
	WA46 J8 V8	34078107	34101693	34078117				34078129	
	WA60 H8 V8								
	WA60 I8 V8			34078120		34078642 **		34078664 **	34078406
	WA60 J8 V8	34078106	34078109	34078121			34078540		34078130
	WA60 K8 V8			34077922					34077935
	WA80 I8 V8								
	WA80 J8 V8	34078190							34078132
WA80 K8 V8			34077951	34509536				34078407	
SU33A STRATO ULTRA	SU33A46 GG8 VB1								
	SU33A46 I18 VB1								
	SU33A60 GG8 VB1								
	SU33A60 I18 VB1								
97A BROWN & WHITE	97A46 G+800 VOS								
	97A46 G+800C VOS			34078761					
	97A46 H800C VOS							34078867	
WRA WHITE & RUBY	WRA46 H5 V8								
	WRA46 I14 V1								
	WRA46 J8 V8			34078472				34078481	
	WRA60 H8 V8			34078463				34078465	
	WRA60 I8 V8								
	WRA60 J5 V8					34078531			
	WRA60 J8 V8			34078473					
	WRA60 K8 V8	34078509		34078474				34078484	
	WRA80 J8 V8			34078475					
GC GREEN SILICON CARBIDE	GC46 G800 V4								
	GC46 H800F V4								
	GC46 H800 V4			34509531				34509532	
	GC54 G800 V4								
	GC60 J5 VL	641812	34078144	34078152	34078156	34516941 **	34439893 *	34434381	
	GC80 J5 VL			34078153				34082412	

(a) Maximum RPM applies at new wheel diameter (b) Rated for 7087 SFPM [36 m/s] (c) Rated for 8858 SFPM [45 m/s]

# 8-12" Surface Grinding Wheels

SIZE	8 x 3/4 x 1-1/4"	8 x 1 x 1-1/4"	10 x 1 x 3"	12 x 1 x 3"	12 x 1-1/2 x 3"	12 x 1 x 5"	12 x 1-1/2 x 5"	12 x 1-1/2 x 5"
TYPE	TYPE 1	TYPE 1	TYPE 1	TYPE 1	TYPE 5	TYPE 1	TYPE 1	TYPE 5
MAXIMUM SPEED	3605 RPM (a)   7550 SFPM   39 m/s		2483 RPM (a) 6500 SFPM 33 m/s	2069 RPM (a)   3655 SFPM   33 m/s				
RECESS SIZE	-	-		-	* 5x1/2" ** 6x1/2"	-	-	7-1/2 x 1/2
PACKAGE QUANTITY	PKG QTY 10	PKG QTY 10	PKG QTY 5	PKG QTY 5	PKG QTY 4	PKG QTY 5	PKG QTY 4	PKG QTY 4
32A GRAY	32A46 H14 VEQ	34078838		34516678	34078839		34516679	34136379
	32A46 I8 VEQ	34078295		34078300	34078315		34078319	34078387
	32A46 J8 VEQ							
	32A60 H8 VEQ					34129131 **		
	32A60 I8 VEQ						34078367	34420630
	32A60 J8 VEQ							
	32A80 I8 VEQ							
8BP CERAMIC	8BP46 G800 VOS							
	8BP46 H800 VOS			34078850	34078840	34142115 **	34078841	34134526
	8BP46 I800 VOS							
	8BP60 G800 VOS			34171043	34078856			
	8BP60 H800 VOS						34078859	
	8BP60 I800 VOS							34078860
	BP46 I8 V8	34078334		34078354	34078360		34078413	34081360
	BP46 J8 V8							
	BP46 K8 V8							
	BP60 H8 V8							
	BP60 I8 V8				34080156		34078257	34085211
	BP60 J8 V8	34078336		34078357				
	BP60 K8 V8							
	BP80 I8 V8							
	BP80 J8 V8				34086042		34359420	34084414
BP80 K8 V8			34269018					
RA RUBY	RA46 G800 VOS							
	RA46 H800 VOS						34078801	34137362
	RA60 H800 VOS							
	RA46 J8 V8	34078075	34078077	34078085	34078095		34475787	34078223
	RA60 J8 V8		34078175				34078098	34083880
	RA80 J8 V8							34078696
RAA PINK	RAA46 G800F VOS							
	RAA46 G800 VOS							
	RAA46 G800C VOS							
	RAA461 G800C VOS							
	RAA46 H800 VOS							
	RAA462 H800 VOS							
	RAA46 H+800 VOS							
	RAA60 G800 VOS							
	RAA60 H800 VOS							
	RAA60 J800 VOS							

# 8-12" Surface Grinding Wheels

SIZE	8 x 3/4 x 1-1/4"	8 x 1x 1-1/4"	10 x 1 x 3"	12 x 1 x 3"	12 x 1-1/2 x 3"	12 x 1 x 5"	12 x 1-1/2 x 5"	12 x 1-1/2 x 5"	
TYPE	TYPE 1	TYPE 1	TYPE 1	TYPE 1	TYPE 5	TYPE 1	TYPE 1	TYPE 5	
MAXIMUM SPEED	3605 RPM (a)   7550 SFPM   39 m/s		2483 RPM (a) 6500 SFPM 33 m/s	2069 RPM (a)   3655 SFPM   33 m/s					
RECESS SIZE	-	-		-	* 5x1/2" ** 6x1/2"	-	-	7-1/2 x 1/2	
PACKAGE QUANTITY	PKG QTY 10	PKG QTY 10	PKG QTY 5	PKG QTY 5	PKG QTY 4	PKG QTY 5	PKG QTY 4	PKG QTY 4	
9A / WA WHITE	9A46 G800 VOS	34420070		34078877	34078869		34493879		
	9A46 H800 VOS					34078907 *		34134903	
	9A46 H+800 VOS								
	9A60 G800 VOS								
	9A60 H800 VOS			34078862	34516705		34209449	34418476	
	9A60 H+800 VOS	34516704							
	WA46 I8 V8								
	WA46 J8 V8		34078521	34078138	34078140		34078192	34087559	34152959
	WA60 H8 V8								
	WA60 I8 V8			34078408		34516777 **			
	WA60 J8 V8				34077937		34089286	34538131	34187550
	WA60 K8 V8								
	WA80 I8 V8						34099554		
	WA80 J8 V8							34101691	
WA80 K8 V8	34509539		34516706	34516707					
SU33A STRATO ULTRA	SU33A46 GG8 VB1				34516782 (c)		34516786 (c)	34516790 (c)	
	SU33A46 I18 VB1				34516783 (c)		34516787 (c)	34516791 (c)	
	SU33A60 GG8 VB1				34516784 (c)		34516788 (c)	34516792 (c)	
	SU33A60 I18 VB1				34516785 (c)		34516789 (c)	34516793 (c)	
97A BROWN & WHITE	97A46 G+800 VOS			34236996					
	97A46 G+800C VOS								
	97A46 H800C VOS								
WRA WHITE & RUBY	WRA46 H5 V8								
	WRA46 I14 V1								
	WRA46 J8 V8								
	WRA60 H8 V8								
	WRA60 I8 V8								
	WRA60 J5 V8								
	WRA60 J8 V8	34078514							
	WRA60 K8 V8								
	WRA80 J8 V8								
GC GREEN SILICON CARBIDE	GC46 G800 V4								
	GC46 H800F V4						34139776		
	GC46 H800 V4					34509549			
	GC54 G800 V4				34138285				
	GC60 J5 VL	34077941		34097534	34080142	34516942 **	34078169	34098577	34131120
	GC80 J5 VL								

(a) Maximum RPM applies at new wheel diameter (b) Rated for 7087 SFPM [36 m/s] (c) Rated for 8858 SFPM [45 m/s]

# 12-14" Surface Grinding Wheels

SIZE	12 x 2 x 3"	12 x 2 x 5"	14 x 1 x 5"	14 x 1-1/2 x 5"	14 x 1-1/2 x 5"	14 x 2 x 5"	14 x 2 x 5"	14 x 2 x 5"
TYPE	TYPE 7	TYPE 7	TYPE 1	TYPE 1	TYPE 5	TYPE 1	TYPE 5	TYPE 7
MAXIMUM SPEED	2069 RPM (a)   6500 SFPM   33 m/s			1801 RPM (a)   6600 SFPM   34 m/s				
RECESS SIZE	* 2s: 6 x 1/2" ** 2s: 7-1/2 x 1/2"	2s: 7-1/2 x 1/2"	-	-	* 7-1/2 x 1/2" ** 7-1/2 x 3/4" *** 8 x 1/2"	-	* 8 x 1/2" ** 8 x 1"	* 2s: 7-1/2 x 1/2" ** 2s: 8 x 3/8"
PACKAGE QUANTITY	PKG QTY 4	PKG QTY 4	PKG QTY 4	PKG QTY 3	PKG QTY 3	PKG QTY 3	PKG QTY 3	PKG QTY 3
32A GRAY	32A46 H14 VEQ	34078912	34135862	34135114				
	32A46 I8 VEQ	34078713	34078388	34078320	34078717 ***	34081367	34152958 **	34129030 *
	32A46 J8 VEQ							
	32A60 H8 VEQ							
	32A60 I8 VEQ			34105089	34084146			34130322 *
	32A60 J8 VEQ					34106564		
	32A80 I8 VEQ							
8BP CERAMIC	8BP46 G800 VOS	34142307						
	8BP46 H800 VOS		34078842	34078843	761178 **(b)	34135217	34153038 *	34141808 **
	8BP46 I800 VOS							
	8BP60 G800 VOS	34141908 **						
	8BP60 H800 VOS			34137236	34137827			
	8BP60 I800 VOS							34307696 *
	BP46 I8 V8			34078356	34078380			
	BP46 J8 V8							
	BP46 K8 V8							
	BP60 H8 V8				641855			
	BP60 I8 V8			641849			34087262	34502064 *
	BP60 J8 V8							
	BP60 K8 V8							
	BP80 I8 V8			34468701				
	BP80 J8 V8				34516776			
BP80 K8 V8								
RA RUBY	RA46 G800 VOS		34078827					
	RA46 H800 VOS			34078817				
	RA60 H800 VOS							
	RA46 J8 V8	34078703	34078101	34078103	34078699 ***			
	RA60 J8 V8		34078102	34078104	34078706 ***			
	RA80 J8 V8							
RAA PINK	RAA46 G800F VOS			34078880				
	RAA46 G800 VOS							
	RAA46 G800C VOS							
	RAA461 G800C VOS							
	RAA46 H800 VOS							
	RAA462 H800 VOS							
	RAA46 H+800 VOS							
	RAA60 G800 VOS							
	RAA60 H800 VOS							
	RAA60 J800 VOS					34143620 ***		



# 12-14" Surface Grinding Wheels

SIZE	12 x 2 x 3"	12 x 2 x 5"	14 x 1 x 5"	14 x 1-1/2 x 5"	14 x 1-1/2 x 5"	14 x 2 x 5"	14 x 2 x 5"	14 x 2 x 5"
TYPE	TYPE 7	TYPE 7	TYPE 1	TYPE 1	TYPE 5	TYPE 1	TYPE 5	TYPE 7
MAXIMUM SPEED	2069 RPM (a)   6500 SFPM   33 m/s				1801 RPM (a)   6600 SFPM   34 m/s			
RECESS SIZE	* 2s: 6 x 1/2" ** 2s: 7-1/2 x 1/2"	2s: 7-1/2 x 1/2"	-	-	* 7-1/2 x 1/2" ** 7-1/2 x 3/4" *** 8 x 1/2"	-	* 8 x 1/2" ** 8 x 1"	* 2s: 7-1/2 x 1/2" ** 2s: 8 x 3/8"
PACKAGE QUANTITY	PKG QTY 4	PKG QTY 4	PKG QTY 4	PKG QTY 3	PKG QTY 3	PKG QTY 3	PKG QTY 3	PKG QTY 3
9A / WA WHITE	9A46 G800 VOS	34078911 *		34509550	34078876			
	9A46 H800 VOS							
	9A46 H+800 VOS							
	9A60 G800 VOS				34139437			
	9A60 H800 VOS			34509551			34138189	
	9A60 H+800 VOS							
	WA46 I8 V8		34078709		34078227		34081644	34128231 *
	WA46 J8 V8			34078200				
	WA60 H8 V8		34128939					
	WA60 I8 V8							34130637 *
	WA60 J8 V8				642929		34082882	34090147 **
	WA60 K8 V8			34078417				
	WA80 I8 V8							
	WA80 J8 V8				34294364			
WA80 K8 V8			34434898					
SU33A STRATO ULTRA	SU33A46 GG8 VB1			34516794 (c)	34516798 (c)			
	SU33A46 I18 VB1			34516795 (c)	34516799 (c)			
	SU33A60 GG8 VB1			34516796 (c)	34516800 (c)			
	SU33A60 I18 VB1			34516797 (c)	34516801 (c)			
97A BROWN & WHITE	97A46 G+800 VOS							
	97A46 G+800C VOS							
	97A46 H800C VOS							
WRA WHITE & RUBY	WRA46 H5 V8				34078710 *			
	WRA46 I14 V1							
	WRA46 J8 V8							
	WRA60 H8 V8							
	WRA60 I8 V8					34078722 ***		34516814 **
	WRA60 J5 V8						34078723 **	
	WRA60 J8 V8							
	WRA60 K8 V8							
	WRA80 J8 V8							
GC GREEN SILICON CARBIDE	GC46 G800 V4							
	GC46 H800F V4							
	GC46 H800 V4			34091907	34516815		34516816	
	GC54 G800 V4							
	GC60 J5 VL		34129266	34078171	34082041	34128619 ***	34080054	34131372 **
	GC80 J5 VL							34516943 **

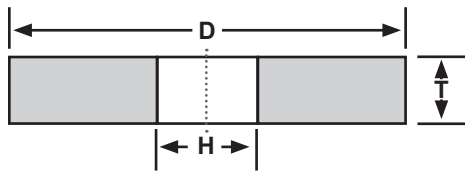
(a) Maximum RPM applies at new wheel diameter (b) Rated for 7087 SFPM [36 m/s] (c) Rated for 8858 SFPM [45 m/s]

# 16-20" Surface Grinding Wheels

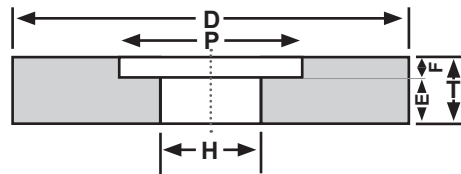
SIZE	16 x 1-1/2 x 5"	16 x 2 x 5"	20 x 2 x 8"	20 x 3 x 8"	20 x 3 x 10"	20 x 4 x 10"	20 x 6 x 10"	20 x 2 x 12"
TYPE	TYPE 1	TYPE 1	TYPE 7	TYPE 7	TYPE 7	TYPE 7	TYPE 7	TYPE 1
MAXIMUM SPEED	1552 RPM (a)   6500 SFPM   33 m/s			1261 RPM (a)   6600 SFPM   34 m/s				
RECESS SIZE			2s: 11-1/2 x 1/2"	2s: 11-1/2 x 1/2"	1s: 12-1/4 x 1" Os: 12-1/4 x 1/2"	2s: 12-1/4 x 1"	1s: 12-1/4 x 2" Os: 12-1/4 x 1"	
PACKAGE QUANTITY	PKG QTY 3	PKG QTY 3	PKG QTY 2	PKG QTY 2	PKG QTY 2	PKG QTY 1	PKG QTY 1	PKG QTY 2
8BP CERAMIC	32A46 I8 VEQ	34084723						
	32A46 J8 VEQ	34089559						
	32A60 J8 VEQ	34081520	34093572					
	32A80 I8 VEQ							
8BP CERAMIC	8BP46 G800 VOS							
	8BP46 H800 VOS	34135355	34224330					
	8BP46 I800 VOS							
	8BP60 G800 VOS							
RAA PINK	RAA46 G800F VOS							
	RAA46 G800 VOS							
	RAA46 G800C VOS			34078915	34078917		34078919	34078920
	RAA461 G800C VOS					34078918		34516701
9A /WA WHITE	9A60 H+800 VOS							
	WA46 I8 V8	34081823	34091656					
	WA46 J8 V8							
	WA60 H8 V8							
	WA60 I8 V8							
	WA60 J8 V8	34084242	34471589					
	WA60 K8 V8							
WA80 I8 V8								
SU33A STRATO ULTRA	SU33A46 GG8 VB1	34516802 (c)	34516809 (c)					
	SU33A46 I18 VB1	34516803 (c)	34516811 (c)					
	SU33A60 GG8 VB1	34516804 (c)	34516812 (c)					
	SU33A60 I18 VB1	34516808 (c)	34516813 (c)					
97A BROWN & WHITE	97A46 G+800C VOS			34078916	34078910		34078921	34078799
	97A46 H800C VOS							
WRA WHITE & RUBY	WRA46 H5 V8							
	WRA46 I14 V1						34078923	
	WRA46 J8 V8							
	WRA60 H8 V8							
	WRA60 I8 V8							
GC GREEN SILICON CARBIDE	GC46 G800 V4							
	GC46 H800F V4							
	GC46 H800 V4	34516817	34516818					
	GC54 G800 V4							
	GC60 J5 VL	34516944	34338552					

(a) Maximum RPM applies at new wheel diameter (b) Rated for 7087 SFPM [36 m/s] (c) Rated for 8858 SFPM [45 m/s]

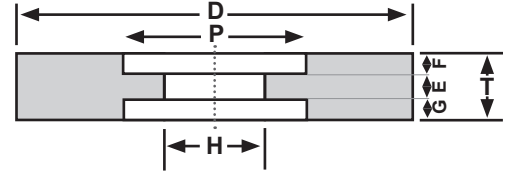
# Wheel Shapes, Guides, and Tips



**Type 1 - Straight**



**Type 5 - Recessed One Side**



**Type 7 - Recessed Two Sides**

## GRINDING PARAMETER GUIDE

	Rough		Finish	
Wheel Speed SFPM	3000	5000	3500	6500
Table Speed IPM	450-600	750-1000	350-525	650-975
DOC inch	0.001 - 0.003		0.0001 - 0.0005	
Table Crossfeed Wheel width 1" and up	3/4 wheel width		1/2 wheel width	
Table Crossfeed Wheel less than 1"	3/8 wheel width		1/4 wheel width	
Dresser Infeed / pass	0.001		0.001	

## TROUBLESHOOTING TIPS

Problem	Cause	Correction
<b>Burn</b>	Wheel too hard	Use softer grade wheel
	Wheel too fine	Use coarser grit wheel
	Poor coolant application	Adjust coolant flow/check concentration
	Grinding rate too fast	Slow grinding rate
<b>Chatter</b>	Poor quality coolant	Check coolant concentration
	Wheel too hard	Use softer grade wheel
	Wheel out of balance	Balance the wheel
	Set up not rigid	Check the clamping
<b>Poor Surface</b>	Dress traverse too fast	Slow dress traverse
	Wheel too soft	Use harder grade wheel
	Grinding rate too fast	Slow grinding rate
<b>Wheel Loading or Glazing</b>	Depth of cut too small	Dress wheel by increasing feed & traverse
	Poor coolant quality	Change coolant or use high detergent type
	Dressing tool worn	Replace diamond and use coarse dress

## GRINDING TRICKS

A softer grinding action can be achieved by increasing table speed first and then secondly increasing the down feed or Depth of Cut.

A harder grinding action or better finish can be achieved by slowing the table down and decreasing down feed.

On newer CNC surface grinders, wheel speed can also be adjusted to create a softer or harder action. Faster wheel speed creates a harder action. Slower wheel speed creates a softer action.

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