

VITRIFIED WHEELS

Norton vitrified toolroom wheels have set the standard for generations — leading the way with technological improvements to maximize performance and productivity. Depend exclusively on Norton wheels for all your toolroom needs.

TYPICAL APPLICATIONS

- Surface grinding
- Tool and cutter grinding
- Drill sharpening
- Cylindrical grinding

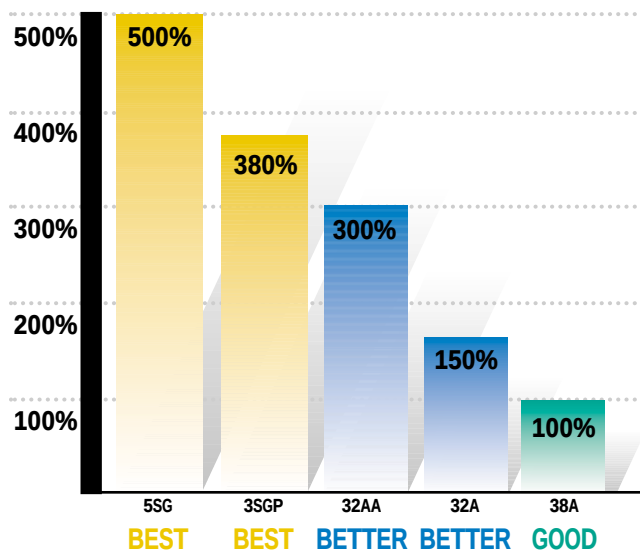


NORTON SG

Norton SG vitrified toolroom wheels are the world's best, and available only from Norton Company. They are designed for maximum productivity and versatility. SG wheels will work on your current equipment and will lower your total-per-part grinding costs.

BEST	SG
FEATURES	BENEFITS
• High performance proprietary seeded gel ceramic aluminum oxide abrasive	• Fast stock removal, cool superior cutting • 3 - 5 times more life than aluminum oxide wheels, for maximum productivity • Double (2X) rough stock removal rate compared to conventional abrasives
• Self-sharpening abrasive	• Less burn, less dressing; most consistent performing wheel
• High performance VH, VS, and VSP bonds	• Versatile, exceptional form holding
• 5SG — most durable SG and aluminum oxide blend	• Highest stock removal rates, maximum productivity, longest wheel life, lowest overall grinding costs
• 3SGP — an economical blend of SG and aluminum oxide	• Strong performance/price value when the full benefits of 5SG cannot be measured

Abrasive Life and Cut Rate: Relative Performance Chart



Refer to the “Diamond Tool” and “Dressing Sticks” sections for truing and dressing products.

TechTips

Wheel dressing - SG wheels

- Use our specially designed Norton SG diamond tools when dressing Norton SG wheels.
- Halve (1/2) dress increment.
- Increase diamond dressing tool traverse rate.

SG wheel bonds:

- Choose VSP bond when grinding on wide contact areas where heat is an issue.
- Choose VS and VH bonds for longer life or when grinding tight tolerances or radii.



It is the user's responsibility to refer to and comply with ANSI B7.1

VITRIFIED WHEELS

32AA

A Norton exclusive blend of TG, Norton's second generation ceramic aluminum oxide grain and 32A.



★ Made in U.S.A.

BETTER 32AA	
FEATURES	BENEFITS
• Advanced proprietary TG abrasive grain • VTR bond system • VTRP semi-porous bond	• 2X more life than 32A; increased productivity • Draws less power, free cutting, less burn, broad versatility • Better part tolerance and form holding, across a broad range of materials and applications • Freer cutting; less burn on wider contact areas

32A

Norton 32A is the benchmark in the toolroom. Its versatility and performance increase your productivity when compared to other aluminum oxide products.



★ Made in U.S.A.

BETTER 32A	
FEATURES	BENEFITS
• Sharp monocrystalline grain • Proven VBE and VBEP (porous) bond technology	• Outstanding form holding, free cutting • Consistent wheel to wheel • Excellent balance and form holding • You choose your optimum porosity (see Vitrified Wheel Spec Check page T145)

38A

Norton 38A is the value-priced wheel for cool, fast tool reconditioning. This is the choice for light grinding applications on all tool steels.



★ Made in U.S.A.

GOOD 38A	
FEATURES	BENEFITS
• Friable abrasive grain • Consistent quality	• Cool and burn-free cutting • Excellent balance and dimensional accuracy time after time

57A

The economical alternative for general purpose steel grinding.



★ Made in U.S.A.

57A	
FEATURES	BENEFITS
• Extremely durable aluminum oxide abrasive grain	• Excellent for steels and steel alloys • Economical; ideal for numerous general purpose applications

GLOBAL

Norton Global toolroom wheels are an outstanding value when initial wheel price is the main consideration. They deliver Norton technology from our ISO 9001 certified plants worldwide. These wheels are engineered and manufactured to produce consistent performance wheel-to-wheel.



GOOD	Global
FEATURES	BENEFITS
Global White	
Friable, white aluminum oxide grain	Economical; ideal for light grinding of heat sensitive tool steels
Global Black	
Sharp, silicon carbide grain	Economical; durable; engineered for grinding non-steels and dressing diamond and CBN wheels

37C (BLACK) AND 39C (GREEN)

The ideal choice when grinding nonferrous metals, carbides and cast iron.



Made in U.S.A.

37C (Black) and 39C (Green)	
FEATURES	BENEFITS
• 37C - Sharp silicon carbide abrasive grain	• Superb for use on stainless steels, irons and nonferrous metals (aluminum, brass, bronze, copper) and non-metallic material (stone, marble, rubber, ceramics and glass)
• 39C - Extremely sharp, high-purity silicon carbide abrasive	• Engineered for use on titanium, plasma sprayed materials, cemented carbide-tipped tools, and metal matrix composites

SpecCheck



TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	CORRECTION
Not holding form	Incorrect wheel dressing Wheel too coarse Wheel too soft Worn machine bearings Wrong wheel structure	Dress wheel finer Use finer grit Use harder grade Check for run-out and correct Use non-porous wheel
Burning of workpiece	Worn dressing tool Poor coolant flow Wheel acting hard Work speed too slow Infeed too fast	Inspect, rotate or replace dressing tool Increase/direct coolant flow to contact area Dress wheel coarser, use softer wheel grade, or use a porous wheel Increase work speed Reduce stock removed per pass or upgrade to 32AA or 5SG
Poor surface finish or quality of grind	Incorrect wheel dressing Worn dressing tool Dirty coolant Wheel too coarse Wheel too hard	Redress more frequently or increase/decrease dress traverse rate Inspect, rotate, or replace dressing tool Filter coolant or replace with new Use finer grit Use softer grade

STEEL APPLICATIONS

For all types of tool steel grinding. See “Vitrified Wheels Spec Check” on page T145 for specification recommendations.

			BEST		BETTER		GOOD		
SIZE D X T X H	MAX. RPM.	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT									
3 X 1/4 X 1/2	10,825	20/-			32A60-KVBE	66243528696			
3 X 1/2 X 3/8	10,825	20/-			32A60-KVBE	66243528825	20/-	38A60-JVBE	66243529032
3 X 1/2 X 1/2	10,825	20/-			32A60-KVBE	66243528828			
3 X 1 X 1/2	10,825						1/10 25/25	38A60-MVBE 38A80-MVBE GLOBAL WHITE 60-MV GLOBAL WHITE 80-MV	66243529145 66243529146 66243521360 66243521361
4 X 1/4 X 1/2	6,210 8,120	1/10			32AA60-KVTR 32A60-KVBE	66243529870 66243529532	1/10	38A60-KVBE 38A100-IVBE	66243529777 66243529782
4 X 1/4 X 3/4	8,120	1/10			32A60-KVBE 32A120-KVBE	66243529736 66243529833	1/10	38A80-KVBE 38A120-KVBE 38A150-MV	66243529753 66243529785 66243529772
4 X 1/2 X 1/2	8,120	1/10			32A46-KVBE	66243529845	1/10	38A60-KVBE 38A100-KVBE	66243529947 66243529954
4 X 1/2 X 3/4	8,120	1/10			32AA60-KVTR 32A60-KVBE 32A80-KVBE	66243529872 66243529849 66243529850	1/10	38A60-KVBE	66243529961
4 X 1 X 1/2	8,120						1/10	38A60-MVBE	66243530126
4-1/2 X 1/2 X 1-3/8	8,120						1/10	38A46-HV	66252830531
5 X 1/4 X 1/2	4,970	1/10			32A60-KVBE	66252830572			
5 X 1/2 X 1/2	4,970	1/10			32A60-KVBE	66252830673			
6 X 1/8 X 1-1/4	4,970	1/10			32A60-KVBE 32A80-KVBE	66252835500 66252835361	1/10	38A150-LVBE	66252835506
6 X 3/16 X 1-1/4	4,140	1/10			32A80-LVG	66252835624			
6 X 1/4 X 1/2	4,140	1/10			32A60-KVBE	66252835784	1/10	38A80-KVBE	66252835662
6 X 1/4 X 5/8	4,140	1/10			32A60-KVBE	66252835785			
6 X 1/4 X 1-1/4	4,140	1/10			32AA60-KVTR 32AA80-KVTR 32A46-KVBE 32A60-JVBE 32A60-KVBE 32A80-KVBE	66252835091 66252835092 66252835780 66252835783 66252835786 66252835793	1/10 10/10	38A60-IVBE 38A60-KVBE 38A80-KVBE 38A100-IVBE 38A150-KV 38A220-KV GLOBAL WHITE 80-KV	66252835798 66252835803 66252835807 66252835911 66252835759 66252835765 66252818516
6 X 3/8 X 1/2	4,140						1/10	38A60-JVBE 38A100-JVBE	66252836061 66252836000
6 X 1/2 X 1/2	4,140	1/10			32A60-KVBE	66252836394	1/10	38A60-JVBE 38A60-KVBE 38A80-KVBE	66252836527 66252836530 66252836548
6 X 1/2 X 1-1/4	4,140	1/10	5SG60-KVS	66252803344	32AA46-KVTR 32AA60-KVTR 32A46-IVBE 32A46-KVBE 32A60-IVBE 32A60-KVBE 32A80-JVBE	66252835093 66252835094 66252836375 66252836380 66252836390 66252836396 66252836405	1/10 10/10	38A46-KVBE 38A60-IVBE 38A60-KVBE 38A80-KVBE 38A100-IVBE 38A120-KVBE 38A150-MV GLOBAL WHITE 60-JV GLOBAL WHITE 60-KV GLOBAL WHITE 80-KV	66252836520 66252836525 66252836533 66252836550 66252836557 66252836664 66252836231 66252818513 66252818509 66252818511
6 X 3/4 X 1/2	4,140	1/10			32A60-KVBE	66252837420	1/10	38A80-KVBE	66252837449
6 X 3/4 X 5/8	4,140						1/10	38A60-KVBE	66252837444
6 X 3/4 X 1-1/4	4,140	1/10			32A46-KVBE 32A60-KVBE 32A80-KVBE	66252837414 66252837421 66252837426	1/10	38A60-KVBE 57A60-MVBE	66252837445 66252837613
6 X 1 X 1-1/4	4,140	1/10			32A60-KVBE	66252837921	1/10	57A46-MVBE	66252850400
7 X 1/8 X 1-1/4	3,275 3,600	1/10			32A60-IVBE 32A100-KVBE	66252939112 66252939216	1/10	38A80-IVBE 38A100-KVBE 38A150-LVBE	66252939219 66252939223 66252939226

Refer to the “Diamond Tool” and “Dressing Sticks” sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See “Vitrified Wheels Spec Check” on page T145 for specification recommendations.

			BEST		BETTER		GOOD		
SIZE D X T X H	MAX. RPM.	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT (CONTINUED)					 				
7 X 3/16 X 1-1/4	3,600	1/10			32A60-KVBE	66252939260			
7 X 1/4 X 1-1/4	3,600	1/10	5SG46-IVS	66252940207	32AA46-IVTR	66252938851	1/10	38A46-HVBE	66252939690
			5SG60-IVS	66252939459	32AA46-KVTR	66252938852		38A46-IVBE	66252939691
			5SG60-JVS	66252939460	32AA60-IVTR	66252938853		38A46-JVBE	66252909755
			5SG60-KVS	66252939461	32AA60-JVTR	66252938874		38A60-HVBE	66252939695
			5SG80-IVS	66252939462	32AA80-IVTR	66252938875		38A60-IVBE	66252939696
			5SG80-JVS	66252939463	32AA80-KVTR	66252938876		38A60-JVBE	66252939698
			5SG80-KVS	66252939464	32A46-HVBEP	66252939423		38A60-KVBE	66252939700
			5SG80-LVS	66252939465	32A46-HVBE	66252939543		38A60-LVBE	66252911679
			5SG100-IVS	66252909456	32A46-IVBE	66252939544		38A80-HVBE	66252939707
			5SG100-JVS	66252939467	32A46-JVBE	66252939545		38A80-IVBE	66252939808
			5SG100-KVS	66252939468	32A46-KVBE	66252939862		38A80-JVBE	66252939809
					32A60-HVBE	66252939547		38A80-KVBE	66252939812
					32A60-IVBE	66252939548		38A80-LVBE	66252911680
					32A60-JVBE	66252939549		38A100-HVBE	66252939822
					32A60-KVBE	66252939552		38A100-IVBE	66252939823
					32A60-LVBE	66252909898		38A100-JVBE	66252939826
					32A80-HVBE	66252939557		38A100-KVBE	66252939827
					32A80-IVBE	66252939658		38A100-LV	66252939407
					32A80-JVBE	66252939660		38A100-LVBE	66252939830
					32A80-KVBE	66252939662		38A120-JVBE	66252939833
					32A80-LVBE	66252911689		38A120-KVBE	66252939834
					32A100-HVBE	66252939669		38A120-LVBE	66252911678
					32A100-IVBE	66252939670		38A150-KVBE	66252939838
					32A100-JVBE	66252939672		38A150-LVBE	66252939839
					32A100-KVBE	66252939673		38A150-MV	66252939521
					32A100-LVBE	66252911684		38A220-KV	66252939528
					32A120-IVBE	66252939680		38A220-LV	66252939529
					32A120-JVBE	66252911683		38A220-LVBE	66252939847
					32A120-KVBE	66252939682		38A220-MV	66252939530
					32A120-LVBE	66252911685		38A220-OV	66252939532
					32A150-JVBE	66252939684		38A220-QV	66252939533
					32A150-KVBE	66252911681		53A100-JV	66252939315
					32A150-LVBE	66252911682	10/10	GLOBAL WHITE 46-HV	66252911729
					32A220-LVBE	66252939689		GLOBAL WHITE 46-IV	66252911730
								GLOBAL WHITE 60-HV	66252911731
								GLOBAL WHITE 60-IV	66252911732
								GLOBAL WHITE 60-JV	66252911733
								GLOBAL WHITE 60-KV	66252911734
								GLOBAL WHITE 80-HV	66252911735
								GLOBAL WHITE 80-IV	66252911737
								GLOBAL WHITE 80-JV	66252911739
								GLOBAL WHITE 80-KV	66252911740
								GLOBAL WHITE 100-HV	66252911715
								GLOBAL WHITE 100-IV	66252911716
								GLOBAL WHITE 100-JV	66252911724
								GLOBAL WHITE 100-KV	66252911725
								GLOBAL WHITE 120-JV	66252911726
								GLOBAL WHITE 120-KV	66252911727
								GLOBAL WHITE 150-KV	66252911728
								GLOBAL WHITE 150-LV	66252911741
7 X 3/8 X 1-1/4	3,600	1/10			32A46-HVBE	66252940268	1/10	38A60-IVBE	66252940291
					32A46-KVBE	66252940271		38A60-KVBE	66252940294
					32A60-HVBE	66252940272		38A80-IVBE	66252940297
					32A60-IVBE	66252940273		38A100-IVBE	66252940304
					32A60-KVBE	66252940276			
					32A80-KVBE	66252940284			
7 X 3/8 X 1-1/4 (B FACE)	3,600	1/10			32A60-KVBE	66252940254			

Refer to the “Diamond Tool” and “Dressing Sticks” sections for truing and dressing products.

TechTips

- Use VBE/V bonds for general purpose applications or medium contact areas.
- Use VBEP/VP bonds on wide contact areas where heat is an issue.



It is the user's responsibility to refer to and comply with ANSI B7.1

■ Wheel dressing

- When using a single-point diamond tool, approach the wheel at a 10°–15° angle.
- When using a multi-point diamond tool, approach the wheel at a 0° angle.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See "Vitrified Wheels Spec Check" on page T145 for specification recommendations.

			BEST		BETTER		GOOD		
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT (CONTINUED)									
7 X 1/2 X 1-1/4	3,600	1/10	3SGP46-GVSP	66252911717	32AA46-GVTRP	66252906091	1/10	38A46-GVBEP	66252941323
			3SGP46-HVSP	66252911413	32AA46-HVTRP	66252906092		38A46-GVBE	66252941022
			3SGP46-JVH	66252911699	32AA46-IVTRP	66252906093		38A46-HVBEP	66252941324
			3SGP46-KVH	66252911698	32AA46-IVTR	66252938877		38A46-HVBE	66252941023
			3SGP60-GVSP	66252911721	32AA46-JVTRP	66252906094		38A46-IVBEP	66252911675
			3SGP60-HVSP	66252911720	32AA46-JVTR	66252938878		38A46-IVBE	66252941024
			3SGP60-JVH	66252911696	32AA46-KVTR	66252938879		38A46-JVBE	66252941026
			3SGP60-KVH	66252911695	32AA60-HVTRP	66252906096		38A46-KVBE	66252941028
			5SG46-GVSP	66252940522	32AA60-IVTRP	66252906097		38A60-GVBEP	66252941329
			5SG46-HVSP	66252941130	32AA60-IVTR	66252938880		38A60-HVBEP	66252941330
			5SG46-IVS	66252940193	32AA60-JVTRP	66252906098		38A60-HVBE	66252941035
			5SG46-IVSP	66252940523	32AA60-JVTR	66252938881		38A60-IVBEP	66252911674
			5SG46-JVS	66252940194	32AA60-KVTR	66252938882		38A60-IVBE	66252941036
			5SG46-KVS	66252940195	32AA80-HVTRP	66252906099		38A60-JVBE	66252941038
			5SG60-GVSP	66252940524	32AA80-IVTR	66252938883		38A60-KVBE	66252941041
			5SG60-IVS	66252940196	32AA80-KVTR	66252938884		38A60-LVBE	66252911677
			5SG60-IVSP	66252940525	32A46-FVBEP	66252941203		38A80-HVBE	66252941047
			5SG60-JVS	66252940197	32A46-GVBEP	66252941204		38A80-IVBE	66252941048
			5SG60-KVS	66252940198	32A46-GVBE	66252940862		38A80-JVBE	66252941049
			5SG60-LVS	66252940199	32A46-HVBEP	66252941205		38A80-KVBE	66252941054
			5SG80-IVS	66252940200	32A46-HVBE	66252940863		38A80-LVBE	66252941056
			5SG80-IVSP	66252940527	32A46-IVBEP	66252941206		38A100-HVBE	66252941162
			5SG80-JVS	66252940201	32A46-IVBE	66252940864		38A100-IVBE	66252941163
			5SG80-KVS	66252940202	32A46-JVBE	66252940865		38A100-JVBE	66252941165
			5SG80-LVS	66252940203	32A46-KVBE	66252940867		38A100-KVBE	66252941168
			5SG100-JVS	66252940204	32A46-LVBE	66252940869		38A100-LVBE	66252941169
			5SG100-KVS	66252940205	32A54-IVBE	66252940873		38A120-JVBE	66252941174
			5SG100-LVS	66252940206	32A60-FVBEP	66252941312		38A120-KVBE	66252941175
					32A60-GVBEP	66252941313		38A120-LVBE	66252911676
					32A60-HVBEP	66252941314		38A150-JVBE	66252941179
					32A60-HVBE	66252940879		38A150-MV	66252940595
					32A60-IVBE	66252940880		38A220-QV	66252940605
					32A60-JVBEP	66252941316	10/10	GLOBAL WHITE 46-HV	66252911692
					32A60-JVBE	66252940882		GLOBAL WHITE 46-IV	66252911693
					32A60-KVBE	66252940885		GLOBAL WHITE 46-JV	66252911694
					32A60-LVBE	66252940888		GLOBAL WHITE 46-JVP	66252911714
					32A60-MVBE	66252940891		GLOBAL WHITE 46-KV	66252911697
					32A80-GVBEP	66252941319		GLOBAL WHITE 60-HV	66252911700
					32A80-HVBE	66252940894		GLOBAL WHITE 60-IV	66252911701
					32A80-IVBE	66252940895		GLOBAL WHITE 60-JV	66252911707
					32A80-JVBE	66252940897		GLOBAL WHITE 60-KV	66252911709
					32A80-KVBE	66252940899		GLOBAL WHITE 80-HV	66252911710
					32A80-LVBE	66252940900		GLOBAL WHITE 80-IV	66252911711
					32A100-HVBE	66252940906		GLOBAL WHITE 80-JV	66252911712
					32A100-IVBE	66252940907		GLOBAL WHITE 80-KV	66252911713
					32A100-JVBE	66252941008		GLOBAL WHITE 100-IV	66252911691
					32A120-JVBE	66252941016			
					32A120-LVBE	66252941018			
7 X 1/2 X 1-1/4 (B FACE)	3,600	1/10			32A60-KVBE	66252940485			
7 X 5/8 X 1-1/4	3,600	1/10			32A60-IVBE	66252941762			
7 X 3/4 X 1-1/4	3,600	1/10	5SG46-IVS	66252942304	32A46-GVBEP	66252942070	1/10	38A46-HVBE	66252941950
			5SG46-KVS	66252942305	32A46-HVBEP	66252942071		38A46-KVBE	66252941954
			5SG60-JVS	66252942307	32A46-HVBE	66252941930		38A60-IVBE	66252942207
			5SG60-KVS	66252942308	32A46-IVBE	66252941931		38A60-KVBE	66252942060
					32A46-KVBE	66252941935		38A80-KVBE	66252942061
					32A60-IVBE	66252941938		38A100-IVBE	66252942063
					32A60-KVBE	66252941943	10/10	GLOBAL WHITE 46-GVP	66252911742
					32A80-IVBE	66252941946			
					32A80-KVBE	66252941948			
7 X 1 X 5/8	3,600	1/10			32A60-KVBE	66252942528			
					32A80-KVBE	66252942532			
7 X 1 X 1-1/4	3,600	1/10	5SG60-JVS	66252942429	32A46-HVBE	66252942513	1/10	38A46-HVBE	66252942534
			5SG60-KVS	66252942430	32A46-JVBE	66252942268		57A60-MVBE	66252950410
					32A60-IVBE	66252942524			
					32A60-KVBE	66252942709			
8 X 1/8 X 1-1/4	2,865						1/10	38A60-IVBE	66253043288

Refer to the "Diamond Tool" and "Dressing Sticks" sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See “Vitrified Wheels Spec Check” on page T145 for specification recommendations.

			BEST		BETTER		GOOD			
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.	
TYPE 01 STRAIGHT (CONTINUED)										
8 X 1/4 X 1-1/4	+	1/10	5SG60-KVS	66253043351	32AA60-IVTR	66253038889	1/10	38A46-HVBE	66253013789	
	3,600		5SG60-LVS	66253043352	32AA60-KVTR	66253038890		38A60-IVBE	66253043431	
	3,600		5SG80-KVS	66253043353	32AA80-KVTR	66253038891		38A60-JVBE	66253043432	
	+				32A46-HVBE	66253043412		38A60-KVBE	66253010825	
	+				32A46-IVBE	66253043310		38A80-IVBE	66253043437	
	3,600				32A46-KVBE	66253043413		38A80-JVBE	66253043439	
	3,600				32A60-HVBE	66253043415		38A80-KVBE	66253043461	
	3,600				32A60-IVBE	66253043416		38A100-IVBE	66253043445	
	3,600				32A60-JVBE	66253043417		38A100-KVBE	66253043447	
	3,600				32A60-KVBE	66253043399		38A120-KVBE	66253043450	
	3,600				32A80-IVBE	66253043421		38A150-KVBE	66253043451	
	3,600				32A80-KVBE	66253043458		38A150-MV	66253043305	
	3,600				32A80-LVBE	66253043425		GLOBAL WHITE 60-IV	66253013828	
	3,600				32A100-IVBE	66253043426		GLOBAL WHITE 80-IV	66253013831	
	3,600				32A100-KVBE	66253043428		GLOBAL WHITE 80-KV	66253013829	
	3,600							GLOBAL WHITE 100-IV	66253013830	
	3,600							GLOBAL WHITE 100-KV	66253013827	
8 X 3/8 X 1-1/4	3,600	1/10			32A60-KVBE	66253043565				
8 X 1/2 X 1-1/4	3,105	1/10	3SGP46-GVSP	66253011504	32AA46-GVTRP	66253007160	1/10	38A46-GVBEP	66253013788	
	3,105		3SGP46-HVSP	66253011505	32AA46-HVTRP	66253007161		38A46-HVBEP	66253043891	
	+		3SGP46-JVH	66253013796	32AA46-IVTRP	66253007162		38A46-HVBE	66253043746	
	+		3SGP46-KVH	66253013795	32AA46-IVTR	66253038892		38A46-IVBE	66253043749	
	3,600		3SGP60-JVH	66253013794	32AA46-KVTR	66253038893		38A46-JVBE	66253043752	
	3,600		3SGP60-KVH	66253013793	32AA60-IVTRP	66253007165		38A46-KVBE	66253043762	
	+		5SG46-GVSP	66253043649	32AA60-IVTR	66253038894		38A60-HVBEP	66253043612	
	+		5SG46-HVSP	66253043915	32AA60-JVTR	66253038895		38A60-HVBE	66253043756	
	+		5SG46-IVS	66253044089	32AA60-KVTR	66253038896		38A60-IVBE	66253043757	
	+		5SG46-IVSP	66253043650	32AA80-KVTR	66253038897		38A60-JVBE	66253043858	
	+		5SG46-JVS	66253044090	32A46-FVBEP	66253013791		38A60-KVBE	66253043861	
	+		5SG46-KVS	66253044091	32A46-GVBEP	66253043882		38A80-IVBE	66253043866	
	+		5SG60-GVSP	66253043651	32A46-HVBEP	66253043883		38A80-JVBE	66253013787	
	+		5SG60-IVS	66253044092	32A46-HVBE	66253043712		38A80-KVBE	66253043869	
	+		5SG60-IVSP	66253043652	32A46-IVBE	66253043713		38A100-KVBE	66253043877	
	+		5SG60-JVS	66253044093	32A46-JVBE	66253043715		38A120-GVBE	66253043802	
	+		5SG60-KVS	66253044094	32A46-KVBE	66253043716		10/10	GLOBAL WHITE 46-HVP	66253013826
	+		5SG80-IVSP	66253043653	32A60-FVBEP	66253043886			GLOBAL WHITE 46-HV	66253013815
	+		5SG80-JVS	66253044096	32A60-GVBEP	66253043887			GLOBAL WHITE 46-IV	66253013816
	3,600		5SG80-KVS	66253044097	32A60-HVBEP	66253043888			GLOBAL WHITE 46-JV	66253013817
	3,600				32A60-HVBE	66253043724			GLOBAL WHITE 46-KV	66253013818
	3,600				32A60-IVBE	66253043725			GLOBAL WHITE 60-HV	66253013819
	3,600				32A60-JVBE	66253043727			GLOBAL WHITE 60-IV	66253013820
	3,600				32A60-KVBE	66253043729			GLOBAL WHITE 60-JV	66253013821
	3,600				32A60-LVBE	66253043731			GLOBAL WHITE 60-KV	66253013822
	3,600				32A80-HVBE	66253043733			GLOBAL WHITE 80-IV	66253013823
	3,600				32A80-IVBE	66253043734			GLOBAL WHITE 80-KV	66253013824
	3,600				32A80-JVBE	66253043736				
	3,600				32A80-KVBE	66253043737				
	3,600				32A80-LVBE	66253043739				
	3,600				32A100-IVBE	66253043740				
	3,600				32A100-KVBE	66253043742				
	3,600				32A100-LVBE	66253043743				
8 X 3/4 X 1-1/4	+	1/10	3SGP46-JVH	66253013792	32AA46-HVTRP	66253007166	1/10	38A46-HVBE	66253044175	
	3,105		5SG46-IVS	66253044098	32AA46-IVTRP	66253007167		38A46-IVBE	66253044177	
	3,600		5SG46-JVS	66253044099	32AA46-JVTR	66253043655		38A46-KVBE	66253044180	
	3,600		5SG60-IVS	66253044101	32AA60-IVTRP	66253007168		38A60-IVBE	66253044184	
	3,600		5SG60-JVS	66253044102	32AA60-JVTR	66253043657	10/10	GLOBAL WHITE 46-KV	66253013833	
	+		5SG60-KVS	66253044103	32A46-GVBEP	66253044195		GLOBAL WHITE 60-GVP	66253013832	
	3,105				32A46-HVBEP	66253044196				
	3,105				32A46-HVBE	66253044159				
	3,105				32A46-IVBE	66253044215				
	3,600				32A46-JVBE	66253044161				
	3,600				32A46-KVBE	66253044165				
	3,105				32A60-GVBEP	66253044198				
	3,600				32A60-HVBE	66253044168				
	3,600				32A60-IVBE	66253044169				
	3,600				32A60-JVBE	66253044171				
	3,600				32A60-KVBE	66253044173				
	3,600				32A80-KVBE	66253044064				
8 X 1 X 3/4	3,600	1/10			32A46-KVBE	66253044621				
	3,600				32A60-KVBE	66253044628				

+ REFER TO THE TECH TIPS ON THE NEXT PAGE.

Refer to the “Diamond Tool” and “Dressing Sticks” sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See “Vitrified Wheels Spec Check” on page T145 for specification recommendations.

			BEST		BETTER		GOOD		
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT (CONTINUED) 									
8 X 1 X 1-1/4	+ + 3,600 3,600 3,600	1/10	5SG46-KVS	66253002588	32A46-HVBE	66253044616	1/10	38A46-IVBE	66253044636
			5SG60-IVS	66253002639	32A46-IVBE	66253044617		38A60-IVBE	66253044456
			5SG60-KVS	66253002628	32A46-KVBE	66253044622		57A60-MVBE	66253044270
					32A60-IVBE	66253044624			
					32A60-KVBE	66253044629			
10 X 1/4 X 3	2,485						1/-	38A80-KVBE	66253149572
10 X 3/8 X 1-1/4	2,485	2/-			32A46-MVBE	66253149588			
10 X 1/2 X 1-1/4	2,485	2/-			32A46-KVBE	66253149739			
					32A60-KVBE	66253149731			
10 X 1/2 X 3	2,485	2/-			32A46-JVBE	66253149721	1/-	38A60-KVBE	66253149859
					32A60-JVBE	66253149729		38A80-KVBE	66253149865
					32A60-KVBE	66253149834	5/5	GLOBAL WHITE 60-KV	66253111778
					32A80-LVBE	66253149733		GLOBAL WHITE 80-KV	66253111777
10 X 3/4 X 1-1/4	2,485	1/-			32A46-KVBE	66253160029			
10 X 3/4 X 3	2,485	1/-			32A46-GVBEP	66253160283	1/-	38A46-JVBE	66253160158
					32A46-IVBE	66253160024		38A46-KVBE	66253160161
					32A46-KVBE	66253160031		38A60-IVBE	66253160163
					32A60-IVBE	66253160137	5/5	GLOBAL WHITE 46-JV	66253111779
					32A60-KVBE	66253160143		GLOBAL WHITE 60-IV	66253111780
					32A80-KVBE	66253160147			
10 X 1 X 3/4	2,485	1/-			32A46-KVBE	66253160340			
10 X 1 X 1	2,485	1/-			32A60-KVBE	66253160342			
10 X 1 X 1-1/4	2,485	1/-			32A60-KVBE	66253160774			
10 X 1 X 2	2,485	1/-			32A46-HVBE	66253160746	1/-	38A46-IVBE	66253160887
					32A46-IVBE	66253160749			
					32A46-JVBE	66253160752			
10 X 1 X 3	2,485	1/*	3SGP46-GVSP	66253111796	32AA46-HVTRP	66253106257	1/-	38A46-HVBEP	66253111781
			3SGP46-HVSP	66253111795	32AA46-IVTR	66253138903		38A46-HVBE	66253111782
			3SGP46-JVH	66253111785	32AA60-IVTR	66253149157		38A46-IVBE	66253160889
			3SGP60-KVH	66253111784	32A46-GVBEP	66253160932		38A46-JVBE	66253160892
			5SG46-GVSP	66253160494	32A46-HVBEP	66253161034		38A46-KVBE	66253160895
			5SG46-HVSP	66253102742	32A46-HVBE	66253160747		38A60-IVBE	66253160898
			5SG46-IVS	66253160400	32A46-IVBE	66253160750		38A60-KVBE	66253160900
			5SG46-JVS	66253160401	32A46-JVBE	66253160754	5/5	GLOBAL WHITE 46-JV	66253111775
			5SG46-KVS	66253160402	32A46-KVBE	66253160758		GLOBAL WHITE 46-KV	66253111764
			5SG60-GVSP	66253160495	32A60-IVBE	66253160769		GLOBAL WHITE 60-IV	66253111776
			5SG60-IVS	66253160403	32A60-KVBE	66253160777			
			5SG60-JVS	66253160404	32A60-LVBE	66253160778			
			5SG60-KVS	66253160405	32A80-KVBE	66253160782			
10 X 1-1/2 X 3	2,485	1/-			32A46-IVBE	66253161521			
12 X 1/2 X 1-1/4	2,070	2/-			32A46-JVBE	66253262133			
12 X 1/2 X 3	2,070	2/-			32A46-GVBEP	66253262235			
					32A46-IVBE	66253262096			
					32A60-JVBE	66253262134			
					32A80-KVBE	66253262110			
12 X 1/2 X 5	2,070	2/-			32A60-KVBE	66253262107	1/-	38A80-KVBE	66253262129
					32A60-LVBE	66253262108			
					32A80-KVBE	66253262111			

*BEST (5SG, 3SGP) STD. PKG. = 3 WHEELS

TechTips

- 8" Type 01 Vitrified Toolroom Wheels' Maximum Operating Speeds
- 46 grit, J grade and harder = 3600 RPMs
- 54 grit, I grade and harder = 3600 RPMs
- 60 grit & finer, H grade and harder = 3600 RPMs
- all others specifications = 3105 RPMs



It is the user's responsibility to refer to and comply with ANSI B7.1

Refer to the “Diamond Tool” and “Dressing Sticks” sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See “Vitrified Wheels Spec Check” on page T145 for specification recommendations.

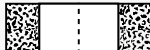
			BEST		BETTER		GOOD		
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT (CONTINUED)									
12 X 3/4 X 3	2,070	1/*	5SG46-IVS	66253262204	32A46-GVBEP	66253262392	1/-	38A46-HVBE	66253214981
			5SG46-KVS	66253262205	32A46-HVBEP	66253262393		38A46-IVBE	66253262280
			5SG60-IVS	66253262206	32A46-HVBE	66253262260	38A46-JVBE	66253262281	
					32A46-IVBE	66253262261	38A60-IVBE	66253262385	
					32A46-KVBE	66253262264	GLOBAL WHITE 46-IV	66253215040	
				32A60-IVBE	66253262270				
				32A60-KVBE	66253262273				
12 X 1 X 1-1/4	2,070	1/-			32A46-KVBE	66253262570			
12 X 1 X 3	2,070	1/*	3SGP46-JVH	66253215045	32AA46-HVTRP	66253207703	1/-	38A46-GVBEP	66253214990
			5SG46-HVSP	66253262488	32AA46-IVTR	66253262054		38A46-HVBEP	66253214982
			5SG46-IVS	66253262500	32AA60-IVTR	66253262078	38A46-HVBE	66253262700	
			5SG46-JVS	66253262501	32A46-GVBEP	66253262840	38A46-IVBE	66253262702	
			5SG46-KVS	66253262502	32A46-HVBEP	66253262842	38A46-JVBE	66253262704	
			5SG60-GVSP	66253262593	32A46-HVBE	66253262562	38A46-KVBE	66253214985	
			5SG60-IVS	66253262503	32A46-IVBE	66253262564	38A60-HVBE	66253262711	
			5SG60-IVSP	66253262519	32A46-JVBE	66253262567	38A60-IVBE	66253262713	
			5SG60-JVS	66253262504	32A46-KVBE	66253262572	38A60-JVBE	66253214983	
			5SG60-KVS	66253262505	32A60-FVBEP	66253262847	38A60-KVBE	66253262718	
					32A60-GVBEP	66253262849	GLOBAL WHITE 46-HV	66253214995	
					32A60-HVBEP	66253262850	GLOBAL WHITE 46-IV	66253214996	
					32A60-HVBE	66253262580	GLOBAL WHITE 46-JV	66253214998	
					32A60-IVBE	66253262581	GLOBAL WHITE 60-KV	66253214999	
					32A60-JVBE	66253262684			
					32A60-KVBE	66253262689			
					32A80-KVBE	66253262532			
12 X 1 X 5	2,070	1/*	3SGP46-GVSP	66253215028	32AA46-IVTR	66253262077	1/-	38A46-IVBE	66253262703
			3SGP46-HVSP	66253215027	32AA60-JVTRP	66253207705		38A60-JVBE	66253262717
			3SGP46-JVH	66253215002	32A46-GVBEP	66253262841	38A60-KVBE	66253262719	
			5SG46-GVSP	66253262594	32A46-HVBE	66253262563	57A60-KVBE	66253262731	
			5SG46-HVSP	66253262489	32A46-IVBE	66253262565	GLOBAL WHITE 46-IV	66253215000	
			5SG46-IVS	66253262508	32A46-KVBE	66253262573	GLOBAL WHITE 46-JVP	66253215035	
			5SG46-JVS	66253262509	32A60-HVBE	66253262734	GLOBAL WHITE 60-KV	66253215037	
			5SG46-KVS	66253262510	32A60-IVBE	66253262582			
			5SG60-GVSP	66253262595	32A60-JVBE	66253262686			
			5SG60-IVS	66253262511	32A60-KVBE	66253262691			
			5SG60-JVS	66253262512	32A60-LVBE	66253262692			
			5SG60-KVS	66253262513	32A80-JVBE	66253262696			
			5SG80-JVS	66253262515	32A80-KVBE	66253262697			
12 X 1-1/4 X 3	2,070	1/-			32A46-IVBE	66253262301			
12 X 1-1/2 X 1-1/4	2,070	1/-			32A46-KVBE	66253263146			
12 X 1-1/2 X 3	2,070	1/*	5SG46-IVS	66253202820	32AA46-HVTRP	66253207706			
					32A46-HVBEP	66253263132			
					32A46-HVBE	66253263143			
					32A46-IVBE	66253263144			
					32A60-JVBE	66253263123			
12 X 1-1/2 X 5	2,070	1/*	3SGP60-GVSP	66253215030	32AA46-HVTRP	66253207707	1/-	38A46-IVBE	66253214987
			5SG46-IVS	66253202842	32AA60-GVTRP	66253207708		38A46-JVBE	66253214986
			5SG60-GVSP	66253262596	32A46-GVBEP	66253263192			
					32A46-HVBE	66253263128			
					32A46-IVBE	66253263145			
					32A46-JVBE	66253263120			
					32A60-HVBE	66253263149			
				32A60-KVBE	66253263034				
12 X 2 X 1-1/4	2,070	1/-			32A46-KVBE	66253263461			
					32A46-MVBE	66253263463			
12 X 2 X 3	2,070	1/-			32A46-IVBE	66253263459			
12 X 2 X 5	2,070	1/-			32A46-HVBE	66253263403			
					32A46-IVBE	66253262302			
					32A60-KVBE	66253263465			
14 X 1/2 X 5	1,800	1/*	5SG80-KVS	66253363814	32A60-KVBE	66253363761			
14 X 3/4 X 5	1,800	1/-			32A60-KVBE	66253363772			
14 X 1 X 3	1,800	1/*	5SG46-IVS	66253363960	32A46-HVBE	66253363912			
			5SG46-KVS	66253363961	32A46-IVBE	66253363914			
					32A46-JVBE	66253363917			
					32A60-IVBE	66253363927			

* BEST (5SG, 3SGP) STD. PKG. = 3 WHEELS

Refer to the “Diamond Tool” and “Dressing Sticks” sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See “Vitrified Wheels Spec Check” on page T145 for specification recommendations.

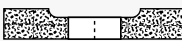
			BEST		BETTER		GOOD		
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT (CONTINUED)									
14 X 1 X 5	1,800	1/*	3SGP46-HVSP 3SGP46-JVH 5SG46-GVSP 5SG46-HVSP 5SG46-IVS 5SG46-JVS 5SG46-KVS 5SG60-IVS 5SG60-IVSP 5SG60-JVS 5SG60-KVS 5SG60-LVS 5SG80-JVS 5SG80-KVS	66253313992 66253313974 66253364108 66253313990 66253363970 66253363971 66253363972 66253363974 66253363871 66253363975 66253363976 66253363977 66253363979 66253364003	32AA46-HVTRP 32AA60-JVTRP 32A46-GVBEP 32A46-HVBE 32A46-IVBE 32A46-JVBE 32A46-KVBE 32A60-GVBEP 32A60-HVBE 32A60-IVBE 32A60-JVBE 32A60-KVBE 32A60-LVBE 32A80-JVBE 32A80-KVBE	66253306788 66253306789 66253364074 66253363913 66253363915 66253363919 66253363921 66253364077 66253363926 66253363928 66253363930 66253363932 66253364035 66253364038 66253364039	1/-	38A46-HVBE 38A46-KVBE 38A60-HVBE 38A60-IVBE 38A60-JVBE 38A60-KVBE 38A80-KVBE 57A60-KVBE 57A60-LVBE 57A80-MVBE	66253364043 66253364049 66253313966 66253363947 66253364051 66253364053 66253364058 66253364065 66253364066 66253364070
14 X 1 X 8	1,800	1/-			32A60-IVBE	66253363887			
14 X 1-1/4 X 5	1,800	1/-			32A60-KVBE	66253364214			
14 X 1-1/2 X 5	1,800	1/*	3SGP46-GVSP 3SGP46-HVSP 3SGP46-JVH 3SGP46-KVH 3SGP60-JVH 5SG46-GVSP 5SG46-HVSP 5SG46-IVS 5SG46-IVSP 5SG46-JVS 5SG46-KVS 5SG60-IVS 5SG60-IVSP 5SG60-JVS 5SG60-KVS 5SG80-JVS 5SG80-KVS	66253306780 66253307025 66253313976 66253313977 66253313975 66253364320 66253302625 66253364097 66253302498 66253364098 66253364099 66253364100 66253364258 66253364101 66253302160 66253305074 66253363815	32AA46-GVTRP 32A46-GVBEP 32A46-HVBEP 32A46-HVBE 32A46-IVBE 32A46-JVBE 32A46-KVBE 32A60-HVBE 32A60-IVBE 32A60-JVBE 32A60-KVBE 32A80-JVBE	66253306790 66253364238 66253364243 66253364335 66253364336 66253364337 66253364339 66253364340 66253364239 66253364341 66253364342 66253364246	1/-	38A46-HVBEP 38A46-HVBE 38A46-IVBE 38A46-JVBE 38A60-IVBE	66253313969 66253313968 66253364090 66253364240 66253364247
14 X 2 X 5	1,800	1/*	3SGP60-JVH 5SG60-JVS	66253313973 66253364414	32A46-IVBE 32A46-JVBE 32A46-KVBE 32A60-KVBE	66253364323 66253364508 66253364509 66253364510			
TYPE 02 CYLINDER									
5 X 1 X 3-1/2 RIM 3/4" PLATE A50937	4,200						1/10	57A80-IVBE	66252850391
6 X 1 X 4 RIM 1" PLATE A47466	3,600	1/5			32A46-KVBE 32A60-JVBE	66252838308 66252838309	1/5	38A46-KVBE 38A80-HVBE	66252838312 66252838314
8 X 2 X 5-1/2 RIM 1-1/4" PLATE A50831	2,865						1/5	53A46-KVBE	66253044942
10 X 2 X 7 RIM 1-1/2" PLATE A83831	2,295	1/-			32A46-KVBE	66253161673			
10 X 2 X 7-1/2 RIM 1-1/4" (ME62845) PLATE A110170	2,295	1/-			32A54-JVG	66253161687	1/-	53A60-KVG	66253161701
11 X 5 RIM 1" (ME33437) TAPE WOUND	1,910	1/-			32A30-HVBE	66253161800			
11 X 5 RIM 1" (ME52726) TAPE WOUND	1,740 1,910 1,910	1/-			32A36-EVBEP 32A36-GVBEP 32A46-HVBE	66253161780 66253161808 66253161893	1/-	38A46-GVBE	66253161807
14 X 4 X 11 RIM 1-1/2" (ME62806) PLATE A52814 TAPE WOUND	1,640						1/-	38A46-KVBE	66253364652

* BEST (5SG, 3SGP) STD. PKG. = 3 WHEELS

Refer to the “Diamond Tool” and “Dressing Sticks” sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

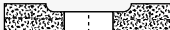
For all types of tool steel grinding. See "Vitrified Wheels Spec Check" on page T145 for specification recommendations.

			BEST		BETTER					GOOD	
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.		
TYPE 02 CYLINDER (CONTINUED)											
18 X 5 RIM 1-1/2" (ME15536) TAPE WOUND	1,065	1/-			32A30-E12VCP	66253465142					
18 X 5 RIM 1-1/2" (ME52719) TAPE WOUND	1,170	1/-			23A30-G12VCP	66253465129					
18 X 5 RIM 1-1/2" (ME52719) TAPE WOUND INCLUDES STRIPS	1,170	1/-			23A30-F12VCP	66253465235					
20 X 5 RIM 1-3/4" (ME58559) TAPE WOUND INCLUDES STRIPS	1,050	1/-			23A30-G12VCP	69078665769					
TYPE 05 RECESSED ONE SIDE											
6 X 1 X 1-1/4 REC 1/S 3 X 1/2	4,140						1/10	38A60-KVBE	66252838199		
7 X 3/4 X 1-1/4 REC 1/S 2-3/4 X 1/4	3,600	1/10	3SGP46-IVH 5SG46-IVS 5SG60-IVS	66252911704 66252941976 66252942312	32AA46-IVTR	66252938885	1/10 10/10	38A46-IVBE	66252942222		
					32A46-GVBEP	66252941958		38A60-IVBE	66252942225		
					32A46-HVBE	66252942209		GLOBAL WHITE 46-KV	66252911743		
					32A46-IVBE	66252942211		GLOBAL WHITE 60-IV	66252911744		
					32A46-JVBE	66252942213					
					32A60-IVBE	66252942217					
					32A60-JVBE	66252942218					
32A60-KVBE	66252942205										
7 X 1 X 1-1/4 REC 1/S 2-3/4 X 1/2	3,600	1/10	5SG46-IVS 5SG46-JVS 5SG60-JVS 5SG60-KVS	66252942318 66252942427 66252942431 66252942432	32AA46-HVTRP	66252906101	1/10 10/10	38A46-HVBE	66252942707		
					32AA46-IVTR	66252938887		38A46-IVBE	66252942809		
					32A46-GVBEP	66252942826		38A46-KVBE	66252942793		
					32A46-HVBEP	66252942828		38A60-IVBE	66252942815		
					32A46-HVBE	66252942688		38A60-JVBE	66252942816		
					32A46-IVBE	66252942691		38A60-KVBE	66252942817		
					32A46-KVBE	66252942708		38A80-IVBE	66252942794		
					32A60-GVBEP	66252942800		GLOBAL WHITE 46-GVP	66252911688		
					32A60-HVBE	66252942697		GLOBAL WHITE 46-HV	66252911686		
					32A60-IVBE	66252942699		GLOBAL WHITE 46-IV	66252911687		
					32A60-JVBE	66252942701		GLOBAL WHITE 60-IV	66252911690		
					32A60-KVBE	66252942703					
7 X 1 X 1-1/4 REC 1/S 3 X 1/2	3,600	1/10	5SG60-IVS	66252906907	32A46-GVBEP	66252942825	1/10 10/10	38A46-HVBE	66252942707		
					32A46-HVBE	66252942689		38A46-IVBE	66252942809		
					32A46-IVBE	66252942690		38A46-KVBE	66252942793		
					32A46-KVBE	66252942696		38A60-IVBE	66252942815		
					32A60-IVBE	66252942686		38A60-JVBE	66252942816		
7 X 1 X 1-1/4 REC 1/S 4 X 1/2	3,600	1/10			32A46-HVBE	66252942770	10/10	38A60-KVBE	66252942817		
								38A80-IVBE	66252942794		
								GLOBAL WHITE 46-GVP	66252911688		
								GLOBAL WHITE 46-HV	66252911686		
								GLOBAL WHITE 46-IV	66252911687		
7 X 1-1/4 X 1-1/4 REC 1/S 2-3/4 X 5/8	3,600	1/5			32A46-HVBE	66252942833	10/10	GLOBAL WHITE 60-IV	66252911690		
					32A46-IVBE	66252942834					
					32A60-IVBE	66252942859					
					32A60-JVBE	66252942835					
7 X 1-1/2 X 1-1/4 REC 1/S 2-3/4 X 3/4	3,600	1/5			32A46-IVBE	66252942843	10/10				
					32A60-IVBE	66252942844					
7 X 2 X 1-1/4 REC 1/S 2-3/4 X 1	3,600	1/5			32A46-HVBE	66252942873					
8 X 3/4 X 1-1/4 REC 1/S 3-1/4 X 1/4	3,105	1/10			32A46-IVBE	66253044213	1/10	38A46-HVBE	66253044305		
	3,600				32A46-JVBE	66253044212					

Refer to the "Diamond Tool" and "Dressing Sticks" sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See "Vitrified Wheels Spec Check" on page T145 for specification recommendations.

			BEST		BETTER				
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 05 RECESSED ONE SIDE (CONTINUED) 									
8 X 1 X 1-1/4 REC 1/S 3-1/4 X 1/2	3,105	1/10	3SGP46-IVH	66253013801	32A46-HVBEP	66253044530			
	3,105		5SG46-IVS	66253013543	32A46-IVBE	66253044790			
	3,600		5SG46-JVS	66253003301	32A46-JVBE	66253044382			
	3,600		5SG60-IVS	66253002615	32A60-IVBE	66253044753			
	3,600		5SG60-KVS	66253011692	32A60-KVBE	66253044810			
10 X 3/4 X 2 REC SIDE A 5 X 3/16 FACE BEV SIDE A 75 DEG FROM 1/8" FLAT	2,485	1/-			32A60-JVBE	66253160189			
10 X 1-1/2 X 3 REC 1/S 5-1/4 X 1/2	2,485	1/-			32A46-IVBE	66253161540			
12 X 3/4 X 3 REC 1/S 5-1/4 X 1/4	2,070	1/-			32A46-JVBE	66253262449			
12 X 1-1/2 X 3 REC 1/S 6 X 1/2	2,070	1/-			32A46-IVBE	66253263186			
12 X 1-1/2 X 5 REC 1/S 7-1/2 X 1/2	2,070	1/*	3SGP46-GVSP	66253215026	32A46-HVBEP	66253263180	1/- 2/2	38A46-IVBE GLOBAL WHITE 46-IV	66253263175 66253214989
			3SGP46-HVSP	66253215046	32A46-HVBE	66253263164			
			3SGP46-JVH	66253215011	32A46-IVBE	66253263166			
			5SG46-GVSP	66253263127	32A46-JVBE	66253263169			
			5SG46-IVS	66253202883	32A46-KVBE	66253263170			
			5SG46-JVS	66253202830	32A60-KVBE	66253263172			
14 X 1-1/2 X 5 REC 1/S 8 X 1/2	1,800	1/*	3SGP46-JVH	66253313978	32A46-HVBE	66253364359			
			5SG46-IVS	66253364102	32A46-IVBE	66253364300			
			5SG46-JVS	66253364103	32A46-KVBE	66253364362			
			5SG60-IVS	66253364104	32A60-JVBE	66253364364			
			5SG60-JVS	66253364105	32A60-KVBE	66253364365			
14 X 2 X 5 REC 1/S 8 X 1	1,800	1/-			32A60-KVBE	66253364390			
					32A60-LVBE	66253364525			
TYPE 06 STRAIGHT CUP 									
3-1/2 X 1-1/2 X 1/2 RIM 1/2" BACK 1/2"	6,550						1/10	38A60-KVBE	66243529372
100 MM X 50 MM X 20 MM RIM 10 MM BACK 13 MM	6,550						1/10	38A80-JVBE	66243530429
4 X 1-1/2 X 1/2 RIM 1/2" BACK 1/2"	5,730	1/10			32A60-KVBE	66243530218			
4 X 1-1/2 X 1-1/4 RIM 1/2" BACK 1/2"	5,730						1/10	38A60-KVBE	66243530221
4 X 2 X 20 MM RIM 3/8" BACK 1/2"	5,730						1/10	38A80-JVBE	66243530523
5 X 1-1/2 X 1-1/4 RIM 3/8" BACK 3/8" FACE Y (ME19243)	4,585	1/10			32A46-KVBE	66252830832	1/10	38A46-KVBE 38A60-KVBE	66252830842 66252830846
					32A60-IVBE	66252830836			
					32A60-JVBE	66252830837			
					32A60-KVBE	66252830838			
5 X 2 X 5/8 RIM 1/2" BACK 1/2"	4,585	1/10			32A60-JVBE	66252830987			
6 X 1-1/2 X 1/2 RIM 1" BACK 1/2"	3,820	1/10			32A46-KVBE	66252838458	1/10	53A70-JVBEP	66252838400
6 X 2 X 1-1/4 RIM 1/2" BACK 1/2"	3,820	1/10			32A46-IVBE	66252838544	1/10	38A60-KVBE	66252838486
					32A60-JVBE	66252838538			
7 X 2 X 1-1/4 RIM 1/2" BACK 1/2"	3,275	1/8			32A46-JVBE	66252942856			

* BEST (5SG, 3SGP) STD. PKG. = 3 WHEELS

Refer to the "Diamond Tool" and "Dressing Sticks" sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See "Vitrified Wheels Spec Check" on page T145 for specification recommendations.

			BEST		BETTER					GOOD	
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.		
TYPE 06 STRAIGHT CUP (CONTINUED)											
9-1/2 X 1-1/2 X 1-1/2 RIM 1-1/2" BACK 5/8" (ME203)	2,415	1/-			32A46-LVBE	66253149163	1/-	53A46-LVBE	66253149136		
10 X 4 X 1-1/2 RIM 1-1/4" BACK 1" TAPE WOUND	2,295						1/-	38A46-IVBE	66253161797		
12 X 2-1/2 X 7 RIM 1-1/2" BACK 7/8" (ME19909)	2,070	1/			32A46-LVBE	66253263614					
TYPE 07 RECESSED TWO SIDES											
12 X 2 X 3 REC 2/S 5-1/2 X 3/8	2,070	1/-			32A46-IVBE	66253263588					
12 X 2 X 3 REC 2/S 7-1/4 X 1/2	2,070	1/-			32A46-HVBE 32A46-JVBE	66253263590 66253263348	1/-	38A46-HVBE	66253214984		
12 X 2 X 5 REC 2/S 7-1/4 X 1/2	2,070	1/-			32A46-IVBE	66253263594					
12 X 2 X 5 REC 2/S 7-1/2 X 1/2	2,070	1/*	3SGP46-JVH 5SG46-JVS 5SG46-KVS	66253215010 66253209930 66253206670	32AA46-GVTRP 32A46-HVBEP 32A46-HVBE 32A46-JVBE 32A46-KVBE 32A60-IVBE	66253207709 66253263603 66253263591 66253263483 66253263596 66253263597	1/- 2/2	38A46-IVBE GLOBAL WHITE 46-IV	66253263600 66253215039		
TYPE 11 FLARING CUP											
3/2-1/4 X 1-1/4 X 3/4 RIM 1/4" BACK 3/8" FACE Z (ME21560)	7,640	1/10			32A60-JVBE 32A60-KVBE	66243529183 66243529187	1/10	38A60-JVBE	66243529197		
3-1/2/2-3/4 X 1-1/2 X 1-1/4 RIM 1/4" BACK 3/8" FACE Z (ME24327)	7,640	1/10			32A46-KVBE 32A60-JVBE 32A60-KVBE	66243529349 66243529356 66243529358	1/10	38A60-IVBE 38A80-KVBE	66243529471 66243529362		
4/3 X 1-1/2 X 5/8 RIM 1/4" BACK 1/2" FACE Z (ME19237)	5,730	1/10			32A60-KVBE	66243530258					
4/3 X 1-1/2 X 3/4 RIM 1/4" BACK 1/2" FACE Z (ME19237)	5,730	1/10	5SG60-KVS	66243530416							
4/3 X 1-1/2 X 1-1/4 RIM 1/4" BACK 1/2" FACE Z (ME19237)	5,730	1/10	3SGP46-KVH 5SG46-IVSP 5SG46-KVS 5SG60-JVS 5SG60-LVS 5SG80-JVS 5SG80-KVS 5SG80-LVS	66243521328 66243530127 66243503342 66243530415 66243530417 66243530419 66243530420 66243530421	32AA46-KVTR 32AA60-JVTR 32AA60-KVTR 32A46-IVBE 32A46-KVBE 32A60-JVBE 32A60-KVBE 32A80-KVBE 32A120-KVBE	66243529874 66243529875 66243529876 66243530240 66243530246 66243530256 66243530361 66243530368 66243530370	1/10 10/10	38A46-JVBE 38A46-KVBE 38A60-JVBE 38A60-KVBE 38A80-JVBE 38A80-KVBE 38A100-KVBE GLOBAL WHITE 46-KV GLOBAL WHITE 60-JV GLOBAL WHITE 60-KV GLOBAL WHITE 80-JV	66243530374 66243530378 66243530387 66243530390 66243530393 66243530395 66243530398 66243521363 66243521364 66243521366 66243521367		
4-1/2/3-3/4 X 2 X 1-1/4 RIM 1/4" BACK 1/2" (ME20115)	5,730	1/10			32A46-JVBE 32A46-KVBE	66252830538 66252830539					
5/3-3/4 X 1-3/4 X 1-1/4 RIM 1/4" BACK 1/2" FACE Z (ME21563)	4,585	1/10	3SGP60-LVH 5SG60-KVS 5SG60-LVS	66252818479 66252830737 66252830736	32AA46-KVTR 32AA60-JVTR 32A46-IVBE 32A46-JVBE 32A46-KVBE 32A60-JVBE 32A60-KVBE 32A80-KVBE	66252830787 66252830788 66252830856 66252830858 66252830859 66252830962 66252830964 66252830966	1/10 10/10	38A46-JVBE 38A46-KVBE 38A60-JVBE 38A60-KVBE GLOBAL WHITE 46-JV GLOBAL WHITE 46-KV GLOBAL WHITE 60-IV GLOBAL WHITE 60-JV GLOBAL WHITE 60-KV	66252818473 66252830971 66252830973 66252830975 66252818506 66252818501 66252818507 66252818504 66252818503		

* BEST (5SG, 3SGP) STD. PKG. = 3 WHEELS

Refer to the "Diamond Tool" and "Dressing Sticks" sections for truing and dressing products.

STEEL APPLICATIONS (CONTINUED)

For all types of tool steel grinding. See "Vitrified Wheels Spec Check" on page T145 for specification recommendations.

			BEST		BETTER				
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.	SPEC	UPC NO.	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 11 FLARING CUP (CONTINUED)									
6/4-1/2 X 2 X 1-1/4 RIM 3/8" BACK 1/2" FACE Z (ME19241)	3,820	1/10			32A46-IVBE 32A46-JVBE 32A46-KVBE 32A60-JVBE	66252838490 66252838491 66252838528 66252838492	1/10	38A46-KVBE 38A60-KVBE	66252838495 66252838497
7/5 X 2 X 1-1/4 RIM 3/4" BACK 1/2" (ME19242)	3,275	1/8			32A46-JVBE	66252942959	1/8	38A46-HVBE 38A60-JVBE	66252942963 66252942968
TYPE 12 DISH									
3 X 1/2 X 1/2 (ME19224)	8,280	20/50			32A60-KVBE	66243529046			
3-1/2 X 1/2 X 3/4 (ME19225)	7,095						1/10	38A60-KVBE	66243529334
4 X 1/2 X 1/2 (ME19226)	6,207						1/10	38A80-KVBE	66243530084
4 X 1/2 X 3/4 (ME19226)	6,207	1/10			32AA60-KVTR 32A60-JVBE 32A60-KVBE	66243529873 66243530066 66243530067	1/10	38A60-KVBE	66243530082
6 X 1/2 X 1-1/4 (ME19229)	4,140	1/10	3SGP60-LVH 5SG60-LVS 5SG80-KVS	66252818478 66252836574 66252836575	32AA46-KVTR 32AA60-KVTR 32A46-JVBE 32A60-JVBE 32A60-KVBE 32A80-KVBE	66252835095 66252835096 66252836860 66252836966 66252836967 66252836969	1/10 10/10	38A46-JVBE 38A60-JVBE 38A60-KVBE 38A80-KVBE GLOBAL WHITE 46-JV GLOBAL WHITE 60-JV GLOBAL WHITE 60-KV GLOBAL WHITE 80-KV	66252836972 66252836977 66252836982 66252836988 66252818515 66252818508 66252818510 66252818514
6 X 3/4 X 1-1/4 (ME19230)	4,140	1/10	3SGP60-KVH 5SG60-KVS	66252818477 66252837771	32A46-KVBE 32A60-JVBE 32A60-KVBE	66252837732 66252837734 66252837735	1/10	38A46-KVBE 38A60-KVBE	66252837743 66252837750
7 X 1/2 X 1-1/4 (ME13717)	3,600	1/10			32A46-KVBE 32A60-KVBE 32A80-KVBE	66252941644 66252941647 66252940481	1/10 10/10	38A60-JVBE GLOBAL WHITE 60-JV	66252941649 66252911706
7 X 3/4 X 1-1/4 (ME10759)	3,600	1/10			32A46-JVBE 32A60-JVBE 32A60-KVBE	66252942237 66252942240 66252942241			
8 X 3/4 X 1-1/4 (ME19231)	3,600						1/10	38A60-KVBE	66253044319
10 X 1 X 1 (ME38702)	2,485	1/-			32A54-JVBE	66253161196			
10 X 1 X 1-1/4 (ME38702)	2,485	1/-			32A54-JVBE	66253161197			
TYPE 13 SAUCER									
7 X 5/8 X 1-1/4 FACE B (ME12608)	3,274	1/10			32A703-IVBE	66252941780			
TYPE 20 CONCAVE ONE SIDE									
10 X 1 X 3	2,485	1/-			32A60-KVBE	66253160371			
12 X 1-1/2 X 5	2,070	1/-			32A60-LVBE	66253263184			
14 X 1-1/2 X 5	1,800	1/-			32A60-JVBE 32A60-KVBE 32A60-LVBE	66253364250 66253364332 66253364375	1/-	57A60-LVBE	66253364331
TYPE 35 PLATE MOUNTED DISC									
9 X 2 X 4-15/16 RIM 2-1/32" (ME31130) PLATE A47248	2,550	1/-			32A46-MVBE 32A60-J25VCF2 32A70-JVBEP	66253049115 66253006557 66253049112			

VITRIFIED WHEELS

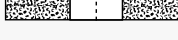
NON-STEEL APPLICATIONS

Use 39C (green silicon carbide) for cemented carbides, titanium, metal matrix composites and plasma sprayed materials. Use 37C (black silicon carbide) on 300 series stainless steels, irons, non-ferrous metals (aluminum, brass, bronze and copper) and non-metallic materials (stone, marble, rubber, ceramics and glass).

			GOOD	
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT				
3 X 1/2 X 1/2	10,825	20/-	37C60-MVK	66243529041
3 X 1 X 1/2	10,825	1/10	37C60-MVK	66243529166
			37C80-HVK	66243529170
			37C80-MVK	66243529171
			37C100-HVK	66243529172
			37C100-MVK	66243529070
		25/25	GLOBAL BLK SC60-MV	66243521354
			GLOBAL BLK SC80-HV	66243521375
			GLOBAL BLK SC80-MV	66243521355
66243521373				
3-1/2 X 1-1/2 X 7/8 (ME622)	7,095	1/10	37C24-SVK	66243529339
			37C30-SVK	66243529338
4 X 1/2 X 1/2	8,120	1/10	37C60-MVK	66243529960
			39C60-IVK	66243530062
			39C100-IVK	66243530064
6 X 1/4 X 1-1/4	4,140	1/10	39C120-IVK	66252835669
6 X 1/2 X 1-1/4	4,140	1/10	39C60-IVK	66252836706
			39C80-IVK	66252836816
			39C100-IVK	66252836827
			39C120-IVK	66252836836
6 X 3/4 X 1-1/4	4,140	1/10	39C60-IVK	66252837584
			39C80-IVK	66252837598
			39C100-IVK	66252837717
			39C120-IVK	66252837724
6 X 1 X 1-1/4	4,140	1/10	39C60-IVK	66252838161
			39C80-IVK	66252838173
7 X 1/4 X 1-1/4	3,600	1/10	39C80-JVK	66252940007
			39C100-IVK	66252940109
			39C120-IVK	66252940111
7 X 1/2 X 1-1/4	3,600	1/10	37C46-JVK	66252941488
			37C60-OVK	66252941498
			39C60-IVK	66252941609
			39C60-JVK	66252941611
			39C60-KVK	66252941613
			39C80-IVK	66252941617
			39C80-JVK	66252941618
			39C100-HVK	66252941622
			39C100-IVK	66252941624
			39C120-IVK	66252941632
7 X 3/4 X 1-1/4	3,600	1/10	39C80-JVK	66252942096
			39C100-JVK	66252942104
7 X 1 X 1-1/4	3,600	1/10	39C60-IVK	66252942666
			39C80-IVK	66252942413
			39C120-IVK	66252942416
8 X 1/2 X 1-1/4	3,600	1/10	39C60-IVK	66253044013
			39C100-IVK	66253044017
8 X 3/4 X 1-1/4	3,600	1/10	39C60-JVK	66253044312
			39C100-IVK	66253044314
8 X 1 X 1-1/4	3,600	1/10	39C60-JVK	66253044770
			39C80-IVK	66253044425
			39C100-IVK	66253044379
10 X 3/8 X 2	2,485	2/-	39C60-JVK	66253149692
10 X 3/4 X 3	2,485	1/-	39C60-IVK	66253160319
10 X 1 X 3	2,485	1/-	39C60-JVK	66253160348
10 X 1-1/2 X 2	2,485	1/-	39C60-JVK	66253161640



Made in U.S.A.

			GOOD	
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT (CONT'D)				
12 X 1 X 3	2,070	1/-	39C60-IVK	66253262985
12 X 1 X 5	2,070	1/-	39C60-IVK	66253262884
			39C80-JVK	66253262988
			39C100-HVK	66253262531
14 X 1 X 5	1,800	1/-	39C60-JVK	66253364206
			39C80-JVK	66253364208
14 X 1-1/2 X 5	1,800	1/-	39C60-JVK	66253364242
14 X 2 X 5	1,800	1/-	39C60-JVK	66253364322
TYPE 02 CYLINDER				
6 X 1 X 4 RIM 1" PLATE A47466	3,600	1/5	39C60-IVK	66252838322
			39C60-JVK	66252838324
			39C80-IVK	66252838327
			39C100-HVK	66252838328
			39C100-IVK	66252838330
			39C120-IVK	66252838193
6 X 1-1/4 X 4 RIM 1" PLATE A47466	3,600	1/5	39C60-IVK	66252838345
6 X 1-1/2 X 4 RIM 1" PLATE A47466	3,600	1/5	39C60-JVK	66252838472
7 X 1-1/2 X 5 RIM 1" PLATE A39027	3,600	1/5	39C60-IVK	66252942848
10 X 2 X 7 RIM 1-1/2" PLATE A83831	2,100 2,295 2,295	1/-	39C60-HVK	66253161675
			39C60-JVK	66253161678
			39C120-IVK	66253161784
14 X 4 X 11 RIM 1-1/2" PLATE A52814 TAPE WOUND	1,640	1/-	39C60-JVK	66253364657
TYPE 05 RECESSED ONE SIDE				
14 X 1-1/2 X 5 REC 1/5 8 X 1/2	1,800	1/-	39C60-IVK	66253364328
TYPE 11 FLARING CUP				
3-1/2 / 2-3/4 X 1-1/2 X 1-1/4 RIM 1/4" BACK 3/8" FACE Z (ME24327)	7,640	1/10	39C60-IVK	66243529492

VITRIFIED WHEELS

BENCH AND PEDESTAL WHEELS

Norton precision engineered bench and pedestal wheels are made of the highest quality aluminum oxide and silicon carbide abrasive and utilize our most versatile bond systems. Select from a wide range of grits and grades to suit your various applications.



BENCH



PEDESTAL



★ Made in U.S.A.

ALUMINUM OXIDE – STEEL APPLICATIONS

57A — Used for grinding carbon steel, iron forgings, stainless or other alloys.

			BETTER	
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT				
6 X 3/4 X 1/2	4,140	1/10	57A46-MVBE	66252837456
7 X 1 X 5/8	3,600	1/10	57A46-KVBE 57A46-MVBE 57A60-MVBE	66252950405 66252942555 66252950407
10 X 1 X 3/4	2,485	1/-	57A60-MVBE	66253160921
10 X 1 X 7/8	2,485	1/-	57A46-MVBE 57A60-MVBE	66253160913 66253160933
10 X 1 X 1	2,485	1/-	57A36-OVBE	66253149140
10 X 1 X 1-1/4	2,485	1/-	57A60-OVBE	66253149142
10 X 1-1/4 X 7/8	2,485	1/-	57A36-MVBE 57A46-MVBE 57A60-MVBE	66253149143 66253149145 66253161361
10 X 1-1/2 X 1-1/4	2,485	1/-	57A46-MVBE	66253149149
10 X 2 X 1-1/4	2,485	1/-	57A36-OVBE	66253149152
12 X 1 X 1-1/4	2,070	1/-	57A46-MVBE	66253249153
12 X 1-1/2 X 1-1/4	2,070	1/-	57A36-OVBE	66253262523
12 X 2 X 1-1/4	2,070	1/-	57A24-OVBE 57A24-QVBE 57A30-MVBE 57A36-OVBE 57A46-MVBE 57A46-OVBE 57A60-MVBE	66253262524 66253262526 66253262527 66253263471 66253263473 66253263488 66253263475
12 X 3 X 1-1/4	2,070	1/-	57A36-MVBE	66253262605
14 X 2 X 1-1/4	1,800	1/-	57A24-QVBE 57A36-OVBE	66253362606 66253362597
14 X 2 X 1-1/2	1,800	1/-	57A46-MVBE	66253362598
14 X 2-1/2 X 1-1/4	1,800	1/-	57A46-MVBE	66253362600
14 X 2-1/2 X 1-1/2	1,800	1/-	57A24-QVBE	66253362607
14 X 3 X 1-1/4	1,800	1/-	57A36-OVBE	66253362609

SILICON CARBIDE – NON-STEEL APPLICATIONS

39C/37C — Used for grinding carbides, cast iron and all nonferrous materials.

			BETTER	
SIZE D X T X H	MAX. RPM	MIN./STD. PKG.	SPEC	UPC NO.
TYPE 01 STRAIGHT				
6 X 3/4 X 1/2	4,140	1/10	39C60-IVK	66252837580
7 X 3/4 X 5/8	3,600	1/10	39C60-IVK	66252942086
10 X 1 X 3/4	2,485	1/-	39C60-KVK	66253161076
10 X 1 X 7/8	2,485	1/-	39C60-IVK	66253161068
			39C60-JVK	66253161073
			39C80-IVK	66253161080
10 X 1-1/2 X 7/8	2,485	1/-	39C60-IVK	66253161636
12 X 2 X 1-1/4	2,070	1/-	39C60-KVK	66253263487
14 X 2 X 1-1/4	1,800	1/-	37C24-RVK	66253364518
14 X 2 X 1-1/4	1,800	1/-	39C60-JVK	66253364520

See "Vitrified Wheel Spec Check" on page T145 for specification recommendations.

See our "Metal Fabrication Bench and Pedestal Wheel" section for more options.

SpecCheck

PRODUCTIVITY	DURABILITY	ABRASIVE	GRIT	GRADE	BOND	POROUS BOND	DRESSING TOOL
Maximum ↕ Standard	More Durable ↕ More Friable	5SG 3SGP 32AA 32A 38A	46 (Coarse) ↕ 220 (Fine)	F (Soft) ↕ Q (Hard)	VS VH VTR VBE V/VBE	VSP VSP VTRP VBEP VBEP	SG Tool (BCSG) SG Tool (BCSG) SG Tool (BCSG) Standard Tool Standard Tool

HOW TO USE THIS SPEC CHECK:

Abrasive: Select abrasive type based on required performance, stock removal rate and material type.

Grit Size: Select the grit size depending on finish required and stock removal rate needed.

Grade: Selection based on bond selected and contact area.*

Bond: Select the appropriate bond based on the abrasive selected and the contact area.*

ABRASIVE:

- SG:** Norton seeded gel abrasives are exceptionally durable and cool cutting on all high speed tool steels, especially the most difficult to grind. Norton SG abrasives should be the abrasive of choice when the highest productivity is your objective
- 5SG:** The most durable SG blend available. For use on the most demanding applications for the highest level of performance on moderate to very heavy stock removal applications.
- 3SGP:** An economical blend that delivers superior life and cut rate when compared to conventional abrasives. For use on demanding applications where the full performance and value of 5SG cannot be optimized.
- 32AA:** 32A abrasive blended with TG; Norton's second generation ceramic abrasive, is more durable than 32A. It can offer a cooler cut and higher stock removal rate with up to twice the life over 32A. For all tool steels requiring moderate to heavy stock removal rates.
- 32A:** A strong, sharp, very versatile abrasive for a wide range of applications. For all tool steels requiring moderate stock removal rates.
- 38A:** The most friable abrasive for light grinding applications on all tool steels. Offers outstanding coolness of cut in light to medium stock removal applications.
- 57A:** Extremely durable abrasive used for heavy stock removal on all carbon steels.
- Global White:** Imported friable white aluminum oxide abrasive grain for use on light grinding of heat sensitive tool steels.
- 37C:** Sharp silicon carbide abrasive used on stainless steels, cast irons, nonferrous metals, and non-metallic materials (stone, marble, rubber, ceramic and glass).
- 39C:** Extremely sharp, high purity silicon carbide abrasive used on metal matrix composites, titanium, plasma sprayed materials and cemented carbide tipped tools.
- Global Black:** Imported sharp silicon carbide abrasive grain for use on nonferrous steels and the dressing of diamond & CBN wheels.

GRIT:

- 46:** For general purpose roughing, finishes rougher than 32 Ra.
- 60:** Typically for commercial finish, 32 Ra or better.
- 80:** Fine finish, 20 Ra or better, corner/form holding applications.

BOND:

- VS & VH:** 5SG & 3SGP (Blue): High stock removal; narrow/medium* contact area; roughing/finishing; less burn; cool cutting.
- VSP:** 5SG & 3SGP (Blue): Porous bond; high stock removal; medium/wide* contact area; cool cutting; less burn than VS; high chip clearance.
- VTR:** 32AA (Gray): Designed for versatility and engineered for a wide range of materials and applications; for narrow/medium* contact area.
- VTRP:** 32AA (Gray): Semi-porous bond; medium/wide* contact area; cool cutting; less burn than VTR; high chip clearance; improved form holding; high stock removal.
- VBE:** 32A (Gray), 38A (White) and 57A (Dark Gray): General purpose; narrow/medium* contact area; versatile; economical.
- VBEP:** 32A (Gray) and 38A (White): Porous bond; medium/wide* contact area; cool cutting; less burn than VBE; high chip clearance; high stock removal.
- V:** 38A (Orange): For fine grit; form/corner holding applications; narrow* contact area.
- VK:** 37C (Black) and 39C (Green). Designed specifically for silicon carbide abrasives; medium to narrow area of contact.

GRADE:

- I-K:** VS bond – "I" grade to start for general purpose; narrow/medium* contact area.
- K, L:** VS bond – for narrow* contact area or form/corner holding applications.
- F-I:** VSP bond – "G" grade to start; medium/wide* contact area.
- I-K:** VTR bond – "I" grade to start, general purpose; narrow/medium* contact area.
- K, L:** VTR bond – For narrow* contact area or form/corner holding applications.
- G-J:** VTRP bond – "H" grade to start; medium/wide* contact area.
- H-K:** VBE bond – "I" grade to start, general purpose; narrow/medium* contact area.
- K, L:** VBE bond – narrow* contact area; corner holding applications.
- M-Q:** VBE bond - Bench and Pedestal applications. Grit size will determine grade.
- F-H:** VBEP bond – "G" grade to start; medium/wide* contact area.
- I-K:** VK bond - "I" grade to start; general purpose; narrow to medium* contact area.

*DEFINITIONS OF CONTACT AREA:

- Wide:** The contact area of the grind is greater than 50% of the wheel width or over 1/2" wide.
- Medium:** The contact area of the grind is 25%–50% of the wheel width or 1/4"–1/2" wide.
- Narrow:** The contact area of the grind is less than 25% of the wheel width or less than 1/4" wide.

For additional information, see the "Vitrified Wheels Troubleshooting Guide".

Refer to "Grinding Wheel Selection Guide" poster, form # 7505. This poster will help you determine grinding wheel specifications and common solutions to grinding problems. Call 1 800 446-1119 for a copy.