

NORZON MOUNTED POINTS – RESIN BOND

Best Tier / Zirconia Alumina



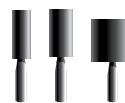
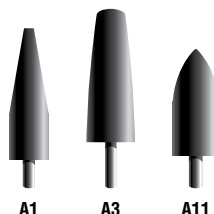
Premium quality mounted points for metal fabricating and foundry applications. 24 grit: snagging castings, smoothing contours, removing fins and parting lines.

FEATURES

- Self-sharpening zirconia alumina abrasive
- Durable resin bond

BENEFITS

- Aggressive, free cut
- 4 times faster stock removal than competitive aluminum oxide products
- Long lasting



A1

A3

A11

W SHAPES

PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
"A" SHAPES						
61463616457	A1	3/4 x 2-1/2	1/4	NZ24-UBXR1	19,800	5/25
61463616459	A3	1 x 2-3/4	1/4	NZ24-UBXR1	16,100	5/25
61463616463	A11	7/8 x 2	1/4	NZ24-UBXR1	19,860	5/25

PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
"W" SHAPES						
61463616465	W189	1/2 x 2	1/4	NZ24-UBXR1	24,000	5/25
61463616467	W197	5/8 x 2	1/4	NZ24-UBXR1	21,000	5/25
61463616471	W208	3/4 x 2	1/4	NZ24-UBXR1	18,750	5/25
61463617520	W220	1 x 1	1/4	NZ24-UBXR1	25,500	5/25
61463616473	W221	1 x 1-1/2	1/4	NZ24-UBXR1	19,120	5/25
61463616475	W222	1 x 2	1/4	NZ24-UBXR1	15,900	5/25

Shank length is 1-1/2". Maximum operating speed based on 1/2" overhang.

CHARGER MOUNTED POINTS – RESIN BOND

Better Tier / Zirconia Alumina



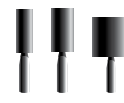
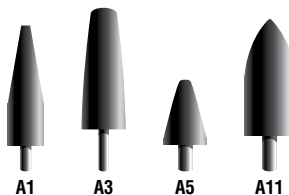
Premium quality mounted points for metal fabricating and foundry applications. 30 grit: deburring, removing weld beads, smoothing and blending welded areas.

FEATURES

- Self-sharpening 30 grit zirconia alumina abrasive
- Specially formulated organic bond

BENEFITS

- 35% faster cut rate than standard aluminum oxide
- An aggressive, free cut
- More parts cleaned in less time to substantially increase productivity
- 5X greater life than ordinary aluminum oxide
- Reduces vibration and wheel chatter



A1

A3

A5

A11

W SHAPES

PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
"A" SHAPES						
61463616458	A1	3/4 x 2-1/2	1/4	Charger	19,800	5/25
61463616460	A3	1 x 2-3/4	1/4	Charger	16,100	5/25
61463616462	A5	3/4 x 1-1/8	1/4	Charger	45,000	5/25
61463616464	A11	7/8 x 2	1/4	Charger	19,860	5/25

PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
"W" SHAPES						
61463616466	W189	1/2 x 2	1/4	Charger	24,000	5/25
61463616470	W207	3/4 x 1-1/2	1/4	Charger	24,000	5/25
61463616472	W208	3/4 x 2	1/4	Charger	18,750	5/25
61463617521	W220	1 x 1	1/4	Charger	25,500	5/25
61463616474	W221	1 x 1-1/2	1/4	Charger	19,120	5/25
61463616476	W222	1 x 2	1/4	Charger	15,900	5/25

Shank length is 1-1/2". Maximum operating speed based on 1/2" overhang.

techtip

- Use "A" shapes for medium- to heavy-duty blending
- Use "W" shapes for offhand and precision grinding of medium to heavy stock



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

FIBER-REINFORCED MOUNTED POINTS – RESIN BOND

Good Tier / Aluminum Oxide



Engineered for blending, polishing, and finishing dies, cavities, etc.

FEATURES	BENEFITS
• Cotton fiber reinforced aluminum oxide	• Ideal for blending and finishing parts without changing geometry
• 80 grit	• For most materials
• 120 grit	• For polishing and stainless steel applications



PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
FOR POLISHING						
61463622664	A11	7/8 x 2	1/4	A80-HBF3	19,860	25/25
61463620242	B52	3/8 x 3/4	1/8	A120-HBF3	45,370	25/25
61463622657	B121	1/2" Ball	1/8	A80-HBF3	45,370	25/25
61463622655	W163	1/4 x 1/2	1/8	A80-HBF3	60,000	25/25
61463622656	W163	1/4 x 1/2	1/8	A120-HBF3	60,000	25/25

PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
FOR POLISHING (CONTINUED)						
61463622654	W176	3/8 x 1/2	1/8	A80-HBF3	45,370	25/25
61463622649	W185	1/2 x 1/2	1/8	A80-HBF3	34,500	25/25
61463622651	W187	1/2 x 1	1/8	A80-HBF3	20,620	25/25
61463622646	W220	1 x 1	1/4	A80-HBF3	25,500	25/25

Shank length is 1-1/2". Maximum operating speed based on 1/2" overhang.

CENTER LAP MOUNTED POINTS – VITRIFIED BOND

Better Tier / Aluminum Oxide Abrasive

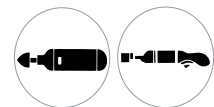


For use on Ex-Cello Center Lap and similar machines to produce accurate centers – precisely angled, truly conical, and free from ridges – for cylindrical grinding.

FEATURES	BENEFITS
• Specially formulated wheel treatment (#5 wood resin)	• Adds lubricity to the point, minimizing risk of metallurgical damage
• Large diameter spindle	• Minimum deflection, rigid support
• Precise dimensional tolerances	• Ensure accurate location of centers

PART #	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
FOR CENTER LAPPING					
61463621421	1/2 x 2**	1/2	A80-VVM	65,000	5/25
61463622926	1 x 2**	1/2	A80-VVM	15,900	5/25

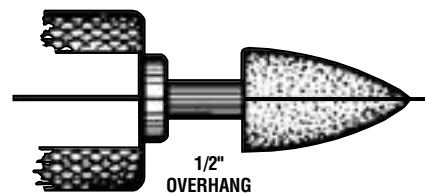
Shank length is 1-1/2". Maximum operating speed based on 1/2" overhang.
** Pointed 60°.



techtip

DESCRIPTION OF OVERHANG

- Overhang is the distance between the grinder chuck and the abrasive on the spindle. The larger the overhang, the lower the maximum safe operating speed.
- Maximum operating speed is based on 1/2" overhang.
- The standard shank length is 1-1/2".



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

GEMINI MOUNTED POINTS – VITRIFIED BOND

Good Tier / Aluminum Oxide

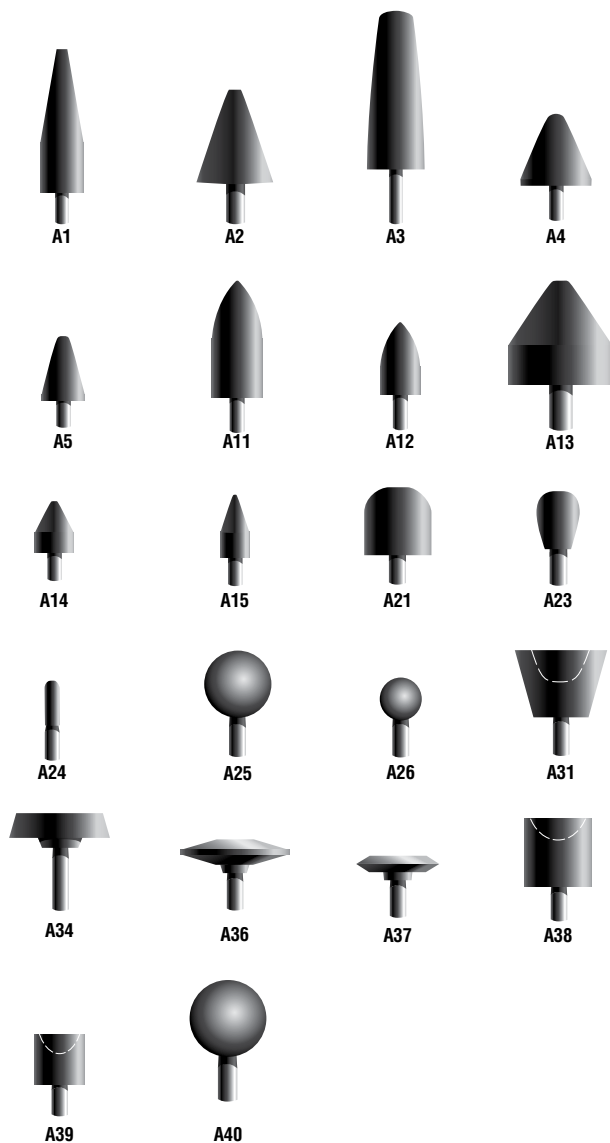


“A” Shape Applications. Ideal for general maintenance applications in metal fabrication plants.

“B” Shape Applications: Ideal for light deburring of machined parts and for finishing/polishing molds and dies.

“W” Shape Applications: Ideal for precision grinding machine parts, molds and dies, involving medium to heavy stock removal.

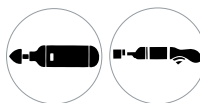
FEATURES	BENEFITS
<ul style="list-style-type: none"> Quality 38A aluminum oxide abrasive – brown color 	<ul style="list-style-type: none"> Cool cutting, less burn
<ul style="list-style-type: none"> Vitrified bond 	<ul style="list-style-type: none"> Long life Consistent form holding
<ul style="list-style-type: none"> Diverse shapes and sizes 	<ul style="list-style-type: none"> Ideal when initial price is the main purchasing consideration Great choice for small job shops



PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
“A” SHAPES – FOR GENERAL MAINTENANCE						
61463624374	A1	3/4 x 2-1/2	1/4	38A36-T	19,800	5/25
61463624375	A1	3/4 x 2-1/2	1/4	38A60-P	19,800	5/25
07660724376	A2	1 x 1/4	1/4	38A60-P	38,200	5/25
61463624377	A3	1 x 2-3/4	1/4	38A36-T	16,100	5/25
61463624378	A3	1 x 2-3/4	1/4	38A60-P	16,100	5/25
61463624380	A4	1-1/4 x 1-1/4	1/4	38A60-P	30,560	5/25
61463624381	A5	3/4 x 1-1/8	1/4	38A36-T	45,000	5/25
61463624382	A5	3/4 x 1-1/8	1/4	38A60-P	45,000	5/25
61463624384	A11	7/8 x 2	1/4	38A36-T	19,860	5/25
61463624385	A11	7/8 x 2	1/4	38A60-P	19,860	5/25
61463624388	A12	11/16 x 1-1/4	1/4	38A60-P	48,000	5/25
61463624389	A13	1-1/8 x 1-1/8	1/4	38A60-P	33,950	5/25
61463624390	A14	11/16 x 7/8	1/4	38A60-P	55,560	5/25
61463624391	A15	1/4 x 1-1/16	1/4	38A60-P	72,750	5/25
61463624392	A21	1 x 1	1/4	38A60-P	34,500	5/25
61463624394	A23	3/4 x 1	1/4	38A60-P	39,370	5/25
61463624395	A24	1/4 x 3/4	1/4	38A60-P	76,500	5/25
61463624396	A25	1" Ball	1/4	38A60-P	35,620	5/25
61463624397	A26	5/8" Ball	1/4	38A60-P	61,120	5/25
61463624399	A31	1-3/8 x 1	1/4	38A60-P	27,780	5/25
61463624402	A34	1-1/2 x 3/8	1/4	38A60-P	25,470	5/25
61463624404	A36	1-5/8 x 3/8	1/4	38A60-P	23,520	5/25
61463624405	A37	1-1/4 x 1/4	1/4	38A60-P	30,560	5/25
61463624406	A38	1 x 1	1/4	38A60-P	34,500	5/25
61463624407	A39	3/4 x 3/4	1/4	38A60-P	47,250	5/25
61463624408	A40	3/4" Ball	1/4	38A60-P	47,250	5/25

Standard shank size is 1/4" x 1-1/2".

Maximum operating speed based on 1/2" overhang.

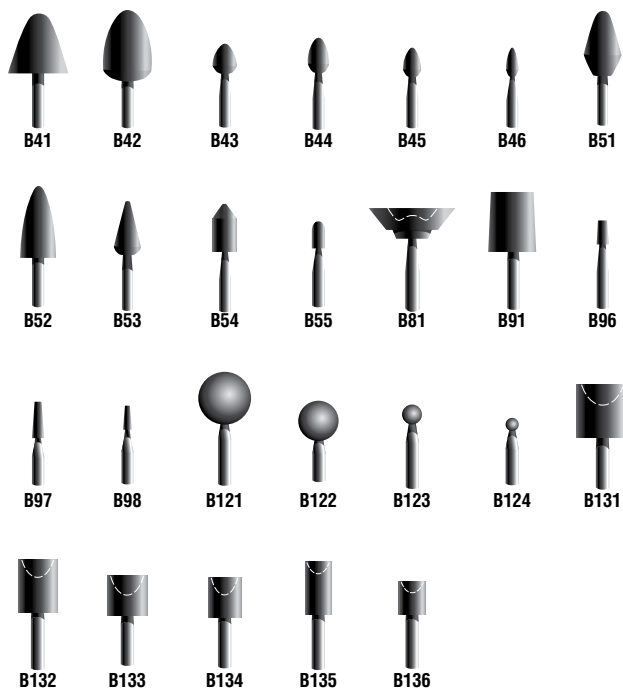


GEMINI MOUNTED POINTS – VITRIFIED BOND [CONTINUED]

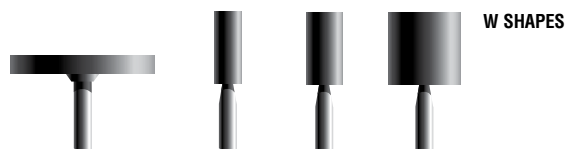
Good Tier / Aluminum Oxide

PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
"B" SHAPES – FOR LIGHT DEBURRING AND FINISHING						
61463624410	B41	5/8 x 5/8	1/8	38A60-P	33,570	5/25
61463624412	B42	1/2 x 3/4	1/8	38A60-P	33,570	5/25
61463624413	B43	1/4 x 5/16	1/8	38A60-P	81,370	5/25
61463624414	B44	7/32 x 3/8	1/8	38A60-P	68,400	5/25
61463624415	B45	3/16 x 5/16	1/8	38A60-P	104,250	5/25
61463624416	B46	1/8 x 5/16	1/8	38A60-P	105,000	5/25
61463624418	B51	7/16 x 3/4	1/8	38A60-P	45,370	5/25
61463624420	B52	3/8 x 3/4	1/8	38A60-P	45,370	5/25
61463624419	B52	3/8 x 3/4	1/4	38A60-P	81,000	5/25
61463624422	B52	3/8 x 3/4	1/8	38A90-Q	45,370	5/25
61463624423	B53	5/16 x 5/8	1/8	38A60-P	60,000	5/25
61463624424	B54	1/4 x 1/2	1/8	38A60-P	60,000	5/25
61463624425	B55	1/8 x 1/4	1/8	38A60-P	105,000	5/25
61463624437	B81	3/4 x 3/16	1/8	38A60-P	50,930	5/25
61463624443	B91	1/2 x 5/8	1/8	38A60-P	34,500	5/25
61463624448	B96	1/8 x 1/4	1/8	38A60-P	105,000	5/25
61463624449	B96	1/8 x 1/4	1/8	38A90-Q	105,000	5/25
61463624451	B97	1/8 x 3/8	1/8	38A60-P	105,000	5/25
61463624452	B98	3/32 x 1/4	1/8	38A60-P	105,000	5/25
61463624466	B121	1/2" Ball	1/8	38A60-P	45,370	5/25
61463624470	B122	3/8" Ball	1/8	38A60-P	61,650	5/25
61463624471	B122	3/8" Ball	1/8	38A90-Q	61,650	5/25
61463624472	B123	3/16" Ball	1/8	38A60-P	104,250	5/25
61463624474	B124	1/8" Ball	1/8	38A90-Q	105,000	5/25
61463624475	B131	1/2 x 1/2	1/8	38A60-P	34,500	5/25
61463624479	B132	3/8 x 1/2	1/8	38A60-P	45,370	5/25
61463624481	B133	3/8 x 3/8	1/8	38A60-P	54,000	5/25
61463624482	B134	5/16 x 3/8	1/8	38A60-P	61,650	5/25
61463624484	B135	1/4 x 1/2	1/8	38A60-P	60,000	5/25
61463624485	B136	1/4 x 5/16	1/8	38A60-P	77,250	5/25

Shank length is 1-1/2". Maximum operating speed based on 1/2" overhang.

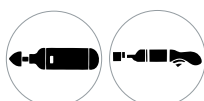


PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
"W" SHAPES – FOR MEDIUM TO HEAVY STOCK REMOVAL						
61463624488	W144	1/8 x 1/4	1/8	38A60-P	105,000	5/25
61463624489	W145	1/8 x 3/8	1/8	38A60-P	105,000	5/25
61463624491	W146	1/8 x 1/2	1/8	38A60-P	105,000	5/25
61463624495	W152	3/16 x 1/4	1/8	38A60-P	105,000	5/25
61463624496	W153	3/16 x 3/8	1/8	38A60-P	80,850	5/25
61463624497	W154	3/16 x 1/2	1/8	38A60-P	70,500	5/25
61463624501	W160	1/4 x 1/4	1/8	38A60-P	81,370	5/25
61463624503	W162	1/4 x 3/8	1/8	38A60-P	64,800	5/25
61463624504	W163	1/4 x 1/2	1/8	38A60-P	60,000	5/25
61463624505	W164	1/4 x 3/4	1/8	38A60-P	45,900	5/25
61463624511	W170	5/16 x 1/2	1/8	38A60-P	52,500	5/25
61463624516	W175	3/8 x 3/8	1/8	38A60-P	54,000	5/25
61463624517	W176	3/8 x 1/2	1/8	38A60-P	45,370	5/25
61463624518	W177	3/8 x 3/4	1/8	38A60-P	33,750	5/25
61463624525	W185	1/2 x 1/2	1/8	38A60-P	34,500	5/25
61463624526	W185	1/2 x 1/2	1/4	38A60-P	61,500	5/25
61463624528	W186	1/2 X 3/4	1/4	38A60-P	51,000	5/25
61463624530	W188	1/2 x 1-1/2	1/4	38A60-P	30,370	5/25
61463624531	W189	1/2 x 2	1/4	38A60-P	24,000	5/25



PART #	SHAPE	SIZE D X L	SPINDLE	GRADING	MAX. RPM	MIN/STD PKG.
"W" SHAPES – FOR MEDIUM TO HEAVY STOCK REMOVAL						
61463624539	W196	5/8 x 1	1/4	38A60-P	35,250	5/25
61463624543	W200	3/4 x 1/8	1/8	38A60-P	50,930	5/25
61463624544	W200	3/4 x 1/8	1/8	38A90-Q	50,930	5/25
61463624549	W204	3/4 x 3/4	1/4	38A60-P	42,750	5/25
61463624550	W205	3/4 x 1	1/4	38A60-P	34,500	5/25
61463624553	W208	3/4 x 2	1/4	38A60-P	18,750	5/25
61463624560	W215	1 x 1/8	1/8	38A60-P	38,200	5/25
61463624562	W216	1 x 1/4	1/4	38A60-P	38,200	5/25
61463624564	W218	1 x 1/2	1/4	38A60-P	38,200	5/25
61463624566	W220	1 x 1	1/4	38A60-P	25,500	5/25
61463624567	W221	1 x 1-1/2	1/4	38A60-P	19,120	5/25
61463624569	W222	1 x 2	1/4	38A60-P	15,900	5/25
61463624578	W230	1-1/4 x 1-1/4	1/4	38A60-P	20,400	5/25
61463624583	W235	1-1/2 x 1/4	1/4	38A60-P	25,470	5/25
61463624585	W236	1-1/2 x 1/2	1/4	38A60-P	25,470	5/25
61463624587	W237	1-1/2 x 1	1/4	38A60-P	22,500	5/25
61463624588	W238	1-1/2 x 1-1/2	1/4	38A60-P	15,600	5/25
61463624592	W242	2 x 1	1/4	38A60-P	19,100	5/25

Shank length is 1-1/2". Maximum operating speed based on 1/2" overhang.



techtip

For best mounted point performance, always run the mounted point at the maximum allowable speed according to ANSI B7.1.

- Use 36 grit for rough grinding.
- Use 60 grit for imparting fine finishes or when grinding on narrow surfaces.



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