

Single Point Tools

Our Norton line of single point tools is used in straight and simple form dressing applications. It includes: resettable and non-resettable products, tools for all abrasive types (conventional and advanced ceramic grains) and the technology-leading Norton "Indexable" tool design.

WHEEL FORMS DRESSED BY THESE TOOLS



STRAIGHT



TAPERED



CONVEX



SPECcheck

SELECTION GUIDE

Stock Tools for Ceramic Abrasive Wheels

SG/Ceramic Engineered for use on ceramic (SG, NQ, Targa, etc.) wheels but may also provide significant benefits when used on conventional abrasive products. These tools are furnished with top quality specially selected diamonds.

BCSG/Ceramic Economical alternative to an "SG" tool. Best choice when a disposable tool is preferred.

Stock Tools for Conventional Abrasive Wheels

NS Engineered for use on conventional abrasives. These high quality, value-priced tools can be used for a variety of dressing applications.

BC Economical alternative to an "NS" tool. Best choice when a disposable tool is preferred.

SELECTING THE CORRECT SINGLE POINT TOOL:

- Identify the wheel abrasive type: aluminum oxide, silicon carbide, or ceramic
- Determine the wheel diameter – to select the optimum carat weight
- Determine the tool holder size – to select appropriate shank diameter

EXAMPLES OF SINGLE POINT TOOL SELECTION

Conventional Wheel Spec: 32A46-IVBE 7" x 1/2" x 1-1/4"

Customer's machine has a 7/16" tool holder

Tool Selections:

Resettable: NS2M7 or NSUD2 (Indexable)

Non-Resettable: BC2M7 or BCUD2 (Indexable)

Ceramic Wheel Spec:

5SG60-JVS or 5NQ60-IVS 10" x 1" x 3"

Customer's machine has a 3/8" tool holder

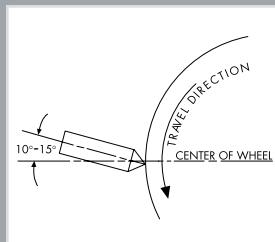
Tool Selections:

Resettable: SG3M6

Non-Resettable: BCSG3M6

TECHtip

- Rigidly mount single point tools at a 10° - 15° angle to the wheel centerline with a line drawn through the center of the wheel, pointing in the direction of wheel travel.
- Point of contact should be slightly below centerline of wheel as shown.
- Use coolant whenever possible.
- Normal infeed is .001" per pass.
- Lead selections range from .002" - .010" per wheel revolution.
- Rotate the tool 1/4 turn periodically to maintain a sharp point.



To optimize applications using ceramic abrasives and/or tools, normal dressing parameters must change. Reduce infeed by 25%. Significant reductions in the amount of infeed and frequency of dress will result in substantially lower cost per part ground.

SINGLE POINT DRESS TRAVERSE RATE

Select a Lead Value based on desired Surface Finish and run the formula below.

FINISH	LEAD VALUE (PER WHEEL REVOLUTIONS)
For Coarse Finish (approx. 64 RMS)	.008" to .010"
For Medium Finish (approx. 32 RMS)	.005" to .009"
For Fine Finish (approx. 16 RMS)	.002" to .004"

LEAD VALUE X WHEEL SPEED (RPM) = TRAVERSE RATE IN INCHES/MINUTE

- Slower traverse rates result in a closed wheel face and lower surface finish readings on the workpiece.
- Faster traverse rates result in an open wheel face that produces greater stock removal and a rougher workpiece finish.



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

Single Point Tools CONTINUED



Single Point Tools for Truing/Dressing Ceramic Abrasives

SG/CERAMIC SINGLE POINT TOOLS

FEATURES

- Specially selected broad-shaped, diamond
- Each diamond is hand selected for stone shape, quality and structural integrity
- Multi-purpose

BENEFITS

- Withstands the increased grinding pressures of ceramic abrasives
- Consistent tool performance
- Accommodate most straight dressing and simple form dressing applications
- Stand up to ceramic (Norton SG, NQ, TG, etc.) abrasive sharpness; can also be used to dress conventional abrasives

RESETTABLE SG/CERAMIC SINGLE POINT TOOLS

FEATURES AND BENEFITS

- Norton high quality diamond and a proactive resetting program will result in the lowest dressing cost per part

NON-RESETTABLE BCSG/CERAMIC SINGLE POINT TOOLS

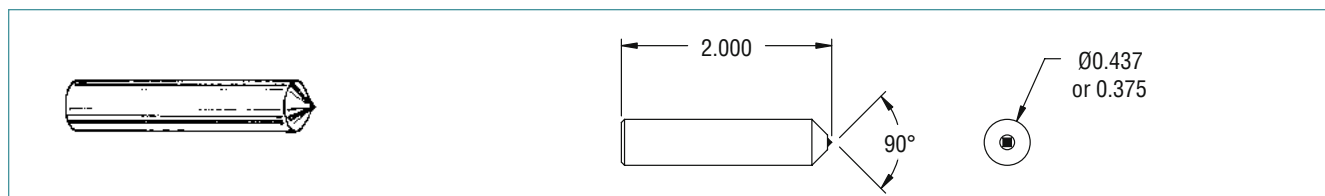
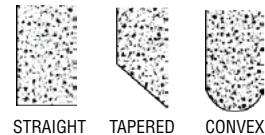
FEATURES AND BENEFITS

- The best selection when a resetting program is not feasible or low initial cost is the primary purchasing consideration

WHEEL DIAMETER	TOOL CARAT WEIGHT	TOOL DIAMETER	TOOL LENGTH	BEST		GOOD	
				PRODUCT NO.	3 SETTABLE PTS (2 RESETS) PART NO.	PRODUCT NO.	NON-RESETTABLE PART NO.
Stock Single Point Tools for Truing/Dressing Ceramic Abrasives							
Up to 7"	1/4 (.25)	3/8"	2"	SG2M6	66260195365	BCSG2M6	66260157007
		7/16"	2"	SG2M7	66260195366	BCSG2M7	66260156905
8" to 10"	1/3 (.33)	3/8"	2"	SG3M6	66260195367	BCSG3M6	66260157008
		7/16"	2"	SG3M7	66260195368	BCSG3M7	66260156906
11" to 14"	1/2 (.50)	3/8"	2"	SG5M6	66260195369	BCSG5M6	66260157009
		7/16"	2"	SG5M7	66260195370	CSG5M7	66260156907
15" to 20"	3/4 (.75)	3/8"	2"	SG7M6	66260195371		
		7/16"	2"	SG7M7	66260195372	BCSG7M	66260156908
21"+	1 (1.00)	7/16"	2"			BCSG10M7	66260157010

STANDARD PACKAGE = 1 TOOL

WHEEL FORMS DRESSED BY THESE TOOLS

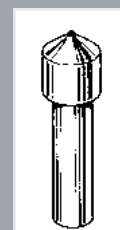


TECHtip

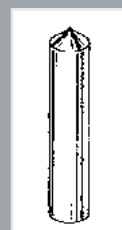
STOCK SINGLE POINT TOOL MARKING SYSTEM

DIAMOND QUALITY	DIAMOND SIZE	SHANK DESIGN	SHANK DIAMETER
SG/Ceramic	1 = 1/5 (.20) carat	M	6 = 3/8"
BCSG/Ceramic	2 = 1/4 (.25) carat	J	7 = 7/16"
NS	3 = 1/3 (.33) carat		
BC	5 = 1/2 (.50) carat		
	7 = 3/4 (.75) carat		
	10 = 1 carat		

EXAMPLE: NS 2 M 6



SHANK J



SHANK M