

IMPORTANT INSTRUCTIONS FOR SUNNEN® CBN (BORAZON®) HONING STONES

INTRODUCTION

The enclosed honing stone contains cubic boron nitride (Borazon®) and has been especially formulated for honing extremely hard (Rockwell "C" 58 and over), high alloy tool steels.

Soft or annealed tool steel should be honed with conventional abrasive materials. For help in selecting the right stone, call your local Sunnen Field Engineer or write for Stone Selection Chart X-SP-5061.

NOTE: Tungsten Carbide should be honed with Diamond Honing Stones.

TO GET MAXIMUM LIFE AND BEST CUTTING ACTION, PLEASE OBSERVE THE FOLLOWING HINTS AND PRECAUTIONS.

Condition of Hole to be Honed

To reduce unnecessary wear, be sure hole to be honed is reasonably round and free of burrs and roughness. Rough or out-of-round holes should be rough honed or deburred with a hard, coarse grit aluminum oxide stone (example K16-A413).

Honing Pressure

Always ease the pedal down gently to start honing. If cutting action slows down after pedal is all the way down, increase honing pressure slowly until cutting action resumes.

Always use the lowest cutting pressure that will give good cutting action. Increasing pressure, beyond the point that gives good cutting action, will cause excessive stone wear with little corresponding increase in cutting speed.

Truing In

This special Borazon stone has been ground parallel to wedge lugs and will require little or no "truing in." Always use a new mandrel (or new guide shoes) and a new wedge when using a new Borazon stone.

Sharpening or Dressing

If stone becomes dull, it can be sharpened by rubbing it lightly with an LBN-700 Abrasive Dressing Stick or by honing a few strokes in a cast iron truing sleeve.

DO NOT use MAN-700 Diamond Dresser or any other diamond stick for sharpening this stone.

Honing Oil

For best cutting action and longest stone wear, use only Sunnen Industrial Honing Oils - MB-30 or MAN-852. DO NOT dilute or "cut" these oils with other fluids. Avoid accidental dilution with solvents or cleaning fluids.

Spindle Speeds

For best cutting action the following spindle speeds are recommended.

<u>Bore Diameter</u>		<u>RPM</u>	<u>Bore Diameter</u>		<u>RPM</u>
<u>inches</u>	<u>millimeters</u>		<u>inches</u>	<u>millimeters</u>	
.060 - .308	1,5 - 7,8	2500	.619 - .744	15,7 - 18,9	1000
.308 - .338	7,8 - 8,6	2000	.744 - 1.000	18,9 - 25,4	800
.338 - .370	8,6 - 9,4	2000	1.000 - 1.250	25,4 - 31,8	640
.370 - .432	9,4 - 11,0	2000	1.250 - 1.625	31,8 - 41,3	500
.432 - .495	11,0 - 12,6	1600	1.625 - 2.000	41,3 - 50,8	400
.495 - .557	12,6 - 14,1	1270	2.000 - 2.500	50,8 - 63,5	320
.557 - .619	14,1 - 15,7	1270	2.500 - 3.250	63,5 - 82,6	250
			3.250 & Over	82,6 & Over	200

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