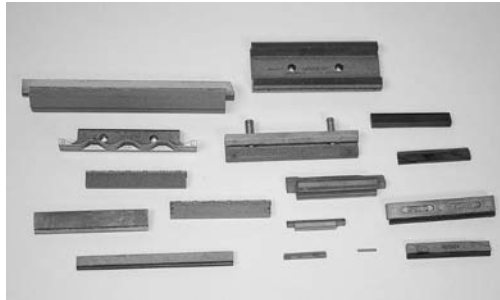


# Abrasives

## For Sunnen Machines and Others

### Abrasives for Sunnen Machines

Sunnen Products Company is the world's foremost authority on honing and has incorporated more than 85 years of experience into research and development of honing abrasives. Sunnen honing abrasives increase performance, whether you use a Sunnen system or other honing equipment. Sunnen's superior line of honing abrasives can be tailored to be compatible with any finishing tools or finishing equipment. Sunnen technicians grade and qualify all honing stones,



before shipping them, to ensure that industries receive honing stones of the most enduring and exacting quality standard in precision honing performance.

### Superabrasives for Sunnen Machines

Sunnen offers the widest range of superabrasive honing stones and diamond plated tools. They outperform ordinary abrasives and overcome the most difficult bore-sizing and finishing problems.

Sunnen offers two basic types of superabrasives:

- 1) Diamond—essential in the honing of glass, quartz, and the many varieties of tungsten carbide and ceramic material; cast iron
- 2) CBN (cubic boron nitride)—resists chemical attrition when honing steel. Essential in honing steel, hardened cast iron, inconel, stellite and titanium

Three types of superabrasive bonds are available: vitrified, metal, and resin. The many combinations of hardness and bond strength enable you to handle virtually any sizing or finishing application with extreme levels of precision and accuracy.

**Increase the quality and consistency of your honing and bore-sizing operations.**

### GSA Non-Captive Abrasive (Genuine Sunnen Abrasives)

**For many types of production honing machines...such as Nagel Barnes, Micromatic, Jones & Shipman, Gehring, Fuji, Kadia, Nissin, Engis, Accucut.**

This line includes unmounted stick abrasives as well as mounted abrasives compatible with non-Sunnen equipment, in a broad range of grit sizes, abrasive types and dimensions.

The GSA line complements our already broad range of honing abrasives—from aluminum oxide and silicon carbide to diamond and CBN. Sunnen offers the industry's largest variety of bond types, grain sizes, and stone configurations. You get exactly what you need, when you need it.

Sunnen has dedicated a 7900 square-meter (85000 sq. ft.) facility to the development, manufacture and distribution of abrasives. The facility provides production economies and the highest level of quality in the industry.

With Sunnen GSA Non-Captive Abrasives, your honing operation can achieve greater levels of precision...quality and consistency.

For more information on how Sunnen GSA Non-Captive Abrasives can help solve your bore-sizing operations, call your Sunnen sales and application engineer.



- STANDARD MANDRELS
- STANDARD TOOLING
- PORTABLE TOOLING
- CUSTOM TOOLING
- ABRASIVES
- MACHINE ACCESSORIES
- GAGING
- FILTERS
- HONING FLUIDS & COOLANTS
- TECHNICAL DATA



# "Micro" Deburring Brushes

STANDARD MANDRELS  
STANDARD TOOLING  
PORTABLE TOOLING  
CUSTOM TOOLING  
ABRASIVES  
MACHINE ACCESSORIES  
GAGING  
FILTERS  
HONING FLUIDS & COOLANTS  
TECHNICAL DATA

Workpiece Minimum Inside Diameter		Part Number	Deburring Brush					
mm	inches		A Brush Diameter		B Brush Length		C Overall Length	
			mm	in	mm	in	mm	in
.762	.030	DB-032	.813	.032	12,7	.50	101,6	4.0
1,143	.045	DB-047	1,194	.047	12,7	.50	101,6	4.0
1,575	.062	DB-064	1,626	.064	19,05	.75	101,6	4.0
1,981	.078	DB-080	2,032	.080	19,05	.75	101,6	4.0
2,388	.094	DB-096	2,438	.096	19,05	.75	101,6	4.0
2,769	.109	DB-111	2,819	.111	25,4	1.0	101,6	4.0
3,175	.125	DB-128	3,251	.128	25,4	1.0	101,6	4.0
4,013	.158	DB-159	4,039	.159	25,4	1.0	127,0	5.0
4,750	.187	DB-191	4,851	.191	25,4	1.0	127,0	5.0
5,537	.218	DB-222	5,639	.222	25,4	1.0	127,0	5.0
6,350	.250	DB-255	6,477	.255	50,8	2.0	127,0	5.0
7,137	.281	DB-288	7,315	.288	50,8	2.0	127,0	5.0
7,925	.312	DB-321	8,153	.321	50,8	2.0	127,0	5.0
8,712	.343	DB-355	9,017	.355	50,8	2.0	127,0	5.0
9,525	.375	DB-389	9,881	.389	50,8	2.0	127,0	5.0
10,31	.406	DB-422	10,72	.422	50,8	2.0	127,0	5.0
11,10	.437	DB-455	11,56	.455	50,8	2.0	127,0	5.0
11,91	.469	DB-489	12,42	.489	50,8	2.0	127,0	5.0
9,5	.375	DB-500	12,7	.500	50,8	2.0	127,0	5.0
11,1	.437	DB-563	14,3	.563	50,8	2.0	127,0	5.0
12,7	.500	DB-625	15,9	.625	50,8	2.0	127,0	5.0
13,4	.531	DB-688	17,5	.688	63,5	2.5	139,7	5.5
14,7	.578	DB-750	19,1	.750	63,5	2.5	139,7	5.5
15,5	.609	DB-813	20,6	.813	63,5	2.5	139,7	5.5
15,9	.625	DB-875	22,2	.875	63,5	2.5	139,7	5.5
16,3	.641	DB-938	23,8	.938	63,5	2.5	139,7	5.5
16,7	.656	DB-1000	25,4	1.000	63,5	2.5	139,7	5.5
18,3	.719	DB-1125	28,6	1.125	101,6	4.0	254,0	10.0
20,2	.797	DB-1250	31,8	1.250	101,6	4.0	254,0	10.0
22,2	.875	DB-1375	34,9	1.375	101,6	4.0	254,0	10.0
23,8	.938	DB-1500	38,1	1.500	101,6	4.0	254,0	10.0
24,6	.969	DB-1625	41,3	1.625	101,6	4.0	254,0	10.0
26,6	1.047	DB-1750	44,5	1.750	101,6	4.0	254,0	10.0
28,6	1.125	DB-1875	47,6	1.875	101,6	4.0	254,0	10.0
29,4	1.156	DB-2000	50,8	2.000	101,6	4.0	254,0	10.0
32,9	1.297	DB-2250	57,2	2.250	101,6	4.0	254,0	10.0
36,9	1.453	DB-2500	63,5	2.500	101,6	4.0	254,0	10.0
40,9	1.609	DB-2750	69,9	2.750	101,6	4.0	254,0	10.0

**Note:** For additional sizes larger than 63,5mm (2.5") refer to PHT brushes on page 145.



## Selection

The proper brush diameter to use for a given part size depends on the purpose of the deburring operation. For general surface conditioning and edge breaking choose a brush with large interference to promote cutting on the sides of the bristles. For an application such as thread deburring, choose a brush with a small amount of interference in the part in order to cut mostly on the bristle tips. Refer to the chart at left for the proper application.

## An inexpensive alternative for micro deburring of threads and bore interruptions.

Sunnen's "DB" Series Deburring Brushes can quickly debur bores from .762 to 63,5 millimeters (.030" to 2.5").

Micro deburring offers many unique advantages in machine shops, manufacturing plants, and automotive engine rebuilding shops.

- Gentle wiping action of bristles produces a slight edge radius across bore interruptions.
- Flexible, nylon bonded, silicon carbide abrasive is effective on most materials.
- Lighter cutting action of brush reduces surface stress on workpieces.
- Mounts in a hand drill or automatic machines.

