

INNOVATORS IN BRUSH TECHNOLOGY

# DIAMOND FLEX-HONE®



For Finishing

- Carbide
- Ceramic
- Hardened Tool Steel



BRUSH RESEARCH  
MANUFACTURING

Brush Research Manufacturing presents the newest innovation in the continuing evolution of our Flex-Hone® technology: Diamond Flex-Hones. These new tools are designed for deburring, edge blending and surface finishing in hard materials like carbide, ceramic and aerospace steel alloys. Our diamond tools are made with premium coated diamond abrasive which aids in heat dissipation and improves bond retention. Sizes from 4mm to 20mm are standard in three different mesh sizes. Additional diameters and mesh selections are available on special order.

[www.brushresearch.com](http://www.brushresearch.com)

# DIAMOND FLEX-HONE

## Applications Include:

- Carbide Wear Parts
- Guide and Drill Bushings
- Ceramic Cylinders
- Heat Treated Steel
- High Nickel Stainless Steel
- MMX Aluminum Alloys
- Chromed and Plated Bores
- Aerospace Components
- Medical Parts
- EDM Recast Layer

We have engineered our Diamond Flex-Hones using resin bond diamond crystals that have high friability. A crystal with high friability creates self sharpening edges. The result is a tool that is free cutting with a rapid cut-rate that produces an optimal finish. Brush Research has been in the business of solving difficult finishing and deburring problems with brushing technology since 1958. You can count on Brush Research to develop innovative solutions.

A manufacturer of carbide wear rings was having difficulty achieving their required surface finish. In this instance, the Diamond Flex-Hone was used in progressively finer grits to create a near mirror finish lowering Ra from 0.7 to 0.05  $\mu\text{m}$ .



## Stocked Sizes

Bore Diameter		170/200 MESH COATED	800 MESH COATED	2500 MESH COATED
Millimeters	Inches	Catalog Number	Catalog Number	Catalog Number
4	0.157	BC4M170200CD	BC4M800CD	BC4M2500CD
4.5	0.177	BC45M170200CD	BC45M800CD	BC45M2500CD
4.76	0.187	BC316170200CD	BC316800CD	BC3162500CD
5	0.197	BC5M170200CD	BC5M800CD	BC5M2500CD
5.5	0.217	BC55M170200CD	BC55M800CD	BC55M2500CD
6	0.236	BC6M170200CD	BC6M800CD	BC6M2500CD
6.4	0.25	BC64M170200CD	BC64M800CD	BC64M2500CD
7	0.276	BC7M170200CD	BC7M800CD	BC7M2500CD
8	0.315	BC8M170200CD	BC8M800CD	BC8M2500CD
9	0.354	BC9M170200CD	BC9M800CD	BC9M2500CD
9.5	0.375	BC95M170200CD	BC95M800CD	BC95M2500CD
10	0.394	BC10M170200CD	BC10M800CD	BC10M2500CD
11	0.433	BC11M170200CD	BC11M800CD	BC11M2500CD
12	0.472	BC12M170200CD	BC12M800CD	BC12M2500CD
12.7	0.5	BC12170200CD	BC12800CD	BC122500CD
14	0.552	BC14M170200CD	BC14M800CD	BC14M2500CD
16	0.625	BC58170200CD	BC58800CD	BC582500CD
18	0.709	BC18M170200CD	BC18M800CD	BC18M2500CD
19	0.75	BC34170200CD	BC34800CD	BC342500CD
20	0.787	BC20M170200CD	BC20M800CD	BC20M2500CD

## Sizes Available on Special Order

Millimeters	Inches	Catalog Number	Catalog Number	Catalog Number
22	0.875	BC78170200CD	BC78800CD	BC782500CD
23.8	0.938	BC1516170200CD	BC1516800CD	BC15162500CD
25.4	1	BC100170200CD	BC100800CD	BC1002500CD
29	1.125	BC118170200CD	BC118800CD	BC1182500CD
31.8	1.25	BC114170200CD	BC114800CD	BC1142500CD
35	1.375	BC138170200CD	BC138800CD	BC1382500CD
38	1.5	BC112170200CD	BC112800CD	BC1122500CD

Order Flex-Hones by Bore Size

## Carbide Rings



Before Diamond Flex-Hone

After Diamond Flex-Hone



An ISO 9001:2008 Certified Company

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