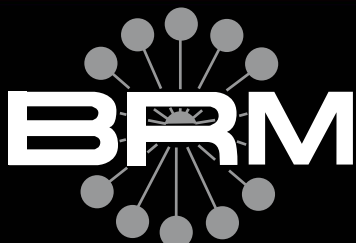
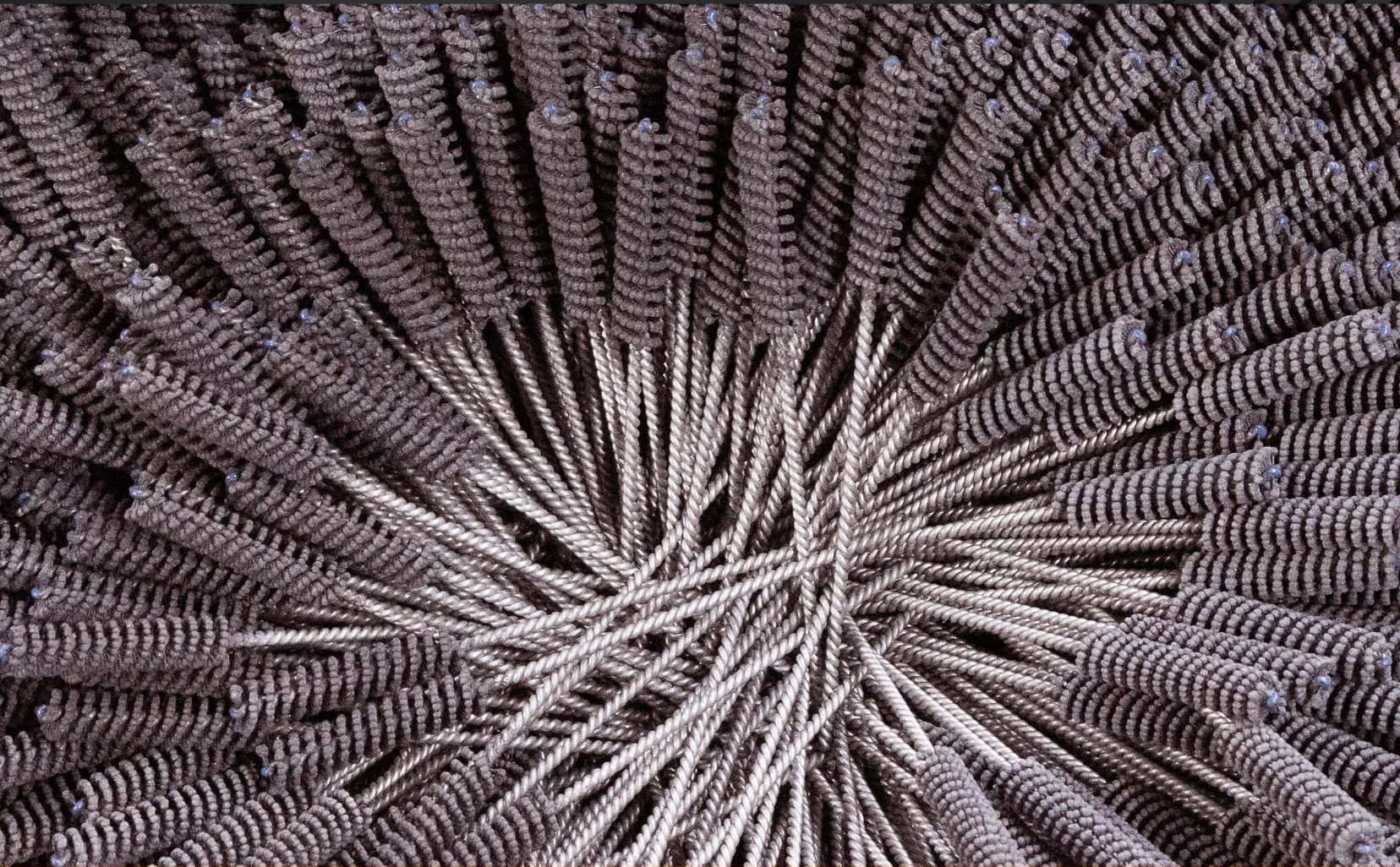
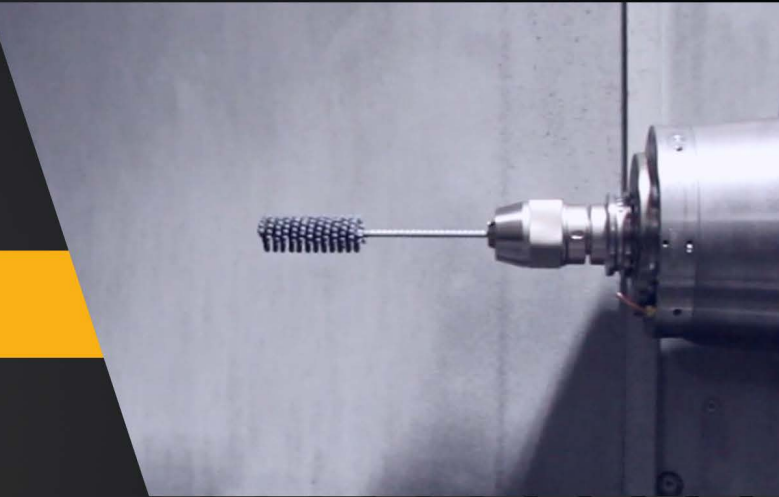


INNOVATORS IN BRUSH TECHNOLOGY

# CBN FLEX-HONE<sup>®</sup>

Finish High Nickel Alloy Steels

FOR HARD TO FINISH MATERIALS



BRUSH RESEARCH  
MANUFACTURING

For difficult to finish materials like high Nickel alloy steels, Brush Research introduces a new line of Flex-Hone tools using Cubic Boron Nitride (CBN) abrasive. CBN combines the highest hardness with excellent toughness to provide the optimum surface finish. The Flex-Hone tool is a low pressure, low temperature finishing tool making it ideal for finishing applications in Nickel alloy steels. The tool reduces the work hardened layer produced by machining operations without imparting thermally induced distortion. The resulting surface is less prone to oxidation and stress induced cracking. 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)

# CBN FLEX-HONES



Nickel alloy steels, or Superalloys, offer a combination of excellent corrosion resistance, strength, toughness, metallurgical stability and weldability. They offer outstanding heat and corrosion properties making them an ideal choice for applications requiring chemical resistance and strength at elevated temperatures. The machining characteristics of these materials vary but all have properties in common which affect their machinability. Nickel alloy steels exhibit properties of high ductility and work hardening that produce a gummy machining behavior. Common suggestions include keeping cutting pressure and temperature low to avoid work hardening. **CBN Flex-Hones combines the highest hardness with excellent toughness to provide the optimum surface finish.**

## QUALITY TOOLS - MADE IN USA

BORE DIAMETER		PART NUMBER		
MILLIMETERS (MM)	INCHES	170/200 MESH COATED	800 MESH COATED	2500 MESH COATED
4	0.157"	BC4M170200CCBN	BC4M800CCBN	BC4M2500CCBN
4.5	0.177"	BC45M170200CCBN	BC45M800CCBN	BC45M2500CCBN
4.76	0.187"	BC316170200CCBN	BC316800CCBN	BC3162500CCBN
5	0.197"	BC5M170200CCBN	BC5M800CCBN	BC5M2500CCBN
5.5	0.217"	BC55M170200CCBN	BC55M800CCBN	BC55M2500CCBN
6	0.236"	BC6M170200CCBN	BC6M800CCBN	BC6M2500CCBN
6.4	0.250"	BC64M170200CCBN	BC64M800CCBN	BC64M2500CCBN
7	0.276"	BC7M170200CCBN	BC7M800CCBN	BC7M2500CCBN
8	0.315"	BC8M170200CCBN	BC8M800CCBN	BC8M2500CCBN
9	0.354"	BC9M170200CCBN	BC9M800CCBN	BC9M2500CCBN
9.5	0.375"	BC95M170200CCBN	BC95M800CCBN	BC95M2500CCBN
10	0.394"	BC10M170200CCBN	BC10M800CCBN	BC10M2500CCBN
11	0.433"	BC11M170200CCBN	BC11M800CCBN	BC11M2500CCBN
12	0.472"	BC12M170200CCBN	BC12M800CCBN	BC12M2500CCBN
12.7	0.500"	BC12170200CCBN	BC12800CCBN	BC122500CCBN
14	0.552"	BC14M170200CCBN	BC14M800CCBN	BC14M2500CCBN
16	0.625"	BC58170200CCBN	BC58800CCBN	BC582500CCBN
18	0.709"	BC18M170200CCBN	BC18M800CCBN	BC18M2500CCBN
19	0.750"	BC34170200CCBN	BC34800CCBN	BC342500CCBN
20	0.787"	BC20M170200CCBN	BC20M800CCBN	BC20M2500CCBN
* 22	0.875"	BC78170200CCBN	BC78800CCBN	BC782500CCBN
* 23.8	0.938"	BC1516170200CCBN	BC1516800CCBN	BC15162500CCBN
* 25.4	1.000"	BC100170200CCBN	BC100800CCBN	BC1002500CCBN
* 29	1.125"	BC118170200CCBN	BC118800CCBN	BC1182500CCBN
* 31.8	1.250"	BC114170200CCBN	BC114800CCBN	BC1142500CCBN
* 35	1.375"	BC138170200CCBN	BC138800CCBN	BC1382500CCBN
* 38	1.500"	BC112170200CCBN	BC112800CCBN	BC1122500CCBN



\*Sizes Available on Special Order

## APPLICATIONS

Due to nickel alloys immense strength at extremely high temperatures, resistance to oxidation and corrosions, low expansion at severe temperatures and creep resistance under high stress conditions make them an ideal choice for a variety of demanding applications such as:

GAS TURBINES

AEROSPACE COMPONENTS

MEDICAL

OIL & GAS

THERMAL PROCESSING

PETROCHEMICAL AND REFINING

## COMMON NICKEL ALLOYS

- MONEL®
- INVAR®
- INCONEL®
- RENE®
- INCOLOY®
- HASTELOY®



CBN

FLEX-HONE