

Manufacturers of Diamond Tools Since 1952



BRUCE DIAMOND CORPORATION



Single Layer Brazed Products

ABOUT BRUCE DIAMOND CORPORATION

Family-owned and operated for over 50 years, engraving, dressing and grinding are continuous functions at Bruce Diamond Corporation. Known for our high volume, precision superabrasive products since 1952, we have been producing industrial diamond tools for the aerospace, automotive, bearing, semiconductor, engraving, electronics and fiber optic industries. With the acquisition of Permattach Diamond Tool, we have enhanced our product line to include super abrasive tooling and high volume production to our manufacturing processes. Our expanded product lines include single point tools, scribes, particle dressers, rotary dressers, brazed and electroplated products, metal bond products, surface measurement and engraving tools.

Our goal is to develop and manufacture the most innovative and highest quality diamond tools available. With our superior bonding to diamond and CBN (cubic boron nitride), we are always exploring new and better quality tooling solutions. Let our skillful engineers and experience guide you as we develop new techniques to help you achieve greater success.

BRUCE DIAMOND HAS CUSTOM CAPABILITIES

For more than half a century Bruce Diamond has serviced a multitude of industries with a full array of custom designed tools for many applications. Super abrasive dressing, grinding, scribing, engraving and surface measuring tools are but a few types our engineers have unrivaled experience in designing. We can help you determine the best product for your application, and offer complete design and engineering support, competitive pricing and lead times.



1. Brazed Products
2. Particle & Cluster Tools
3. Rotary Dressers
4. Finest Quality Single Points
5. Metal Bond Core Drills

SERVING SEMICONDUCTOR, AEROSPACE, AUTOMOTIVE, BEARING, FIBER OPTICS, CERAMIC AND METAL WORKING INDUSTRIES

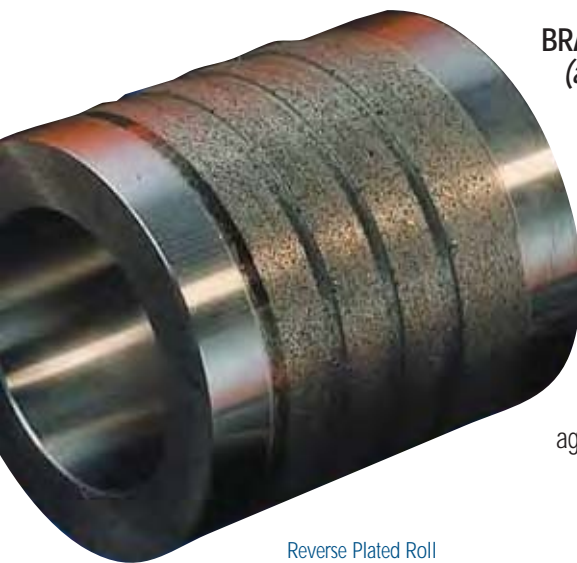
SINGLE POINT TOOLS (*automotive, aerospace, bearing, tool room*)

We have a wide selection of diamond types and grades defined by the application. Our specialty is in small stones in both sintered and vacuum brazed settings. A brazed setting provides a more permanent bond particularly suitable for applications in the bearing industry. For larger stones, we typically use a powdered metal setting to allow for optional resetting.

BRAZED AND ELECTROPLATED TOOLS (*aerospace, glass and composite grinding*)

We offer brazed CBN and diamond tools and have a variety of braze alloys to allow for maximum cutting ability. Our brazed tools are used in applications from dressing to rough form grinding.

Our capabilities in electroplated tools far exceed other plating manufacturers in engineering options. We offer electrolytic and electroless plating and can achieve varied concentrations. We also maintain tight tolerances and have aggressive cutting ability.



Reverse Plated Roll



CUSTOM DESIGNED AND STOCK TOOLS

PARTICLE, CLUSTER AND BLADE DRESSER TOOLS (automotive, aerospace, bearing, tool room)

The integral design of our grit tools allows you to achieve the most consistent dress possible with uniform distribution and exposure of the diamond throughout. Cluster tools are created using powdered metal or vacuum brazed natural, synthetic, PCD or mono crystal diamonds.

ROTARY DRESSERS (automotive, aerospace, bearing)

Reverse Plated or Sintered rotary dressers can be custom designed to your specifications based on a roll print or reverse engineered from your part print. We offer PCD supported forms and varying degrees of exposure to produce the tightest tolerances available.

METAL BOND PRODUCTS (automotive, aerospace, tool room)

Our metal bond products can be made to your specifications for tools such as reamers and cookie cutters used in the conventional abrasive wheel manufacturing industries. Metal bond is perfect for specialty wheels and core drills as well.



Metal Bond
Pencil Edge Wheel



Brazed Electroplated
Form Wheels



Scribing And Engraving
Tools

SCRIBING AND ENGRAVING TOOLS (semiconductor, fiber optic)

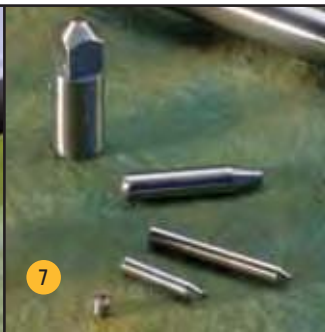
The finish on our scribing tools creates an optimum cutting edge for high accuracy and long life, essential qualities required in the Semiconductor and Fiber Optic markets we serve. We offer diamond, sapphire, ruby and carbide scribes.

Whether you need a stock item or a custom design, our engraving tools produce the best quality and durability. Offering both drag engravers and rotating burnishers, we offer immediate delivery of standard items and reduced lead times on custom work.



Lapped Cones
and Chisels

6. Electroplated Form Wheels
7. Precision Natural Crystal Dressers
8. Metal Bond Products
9. Turbine Root Form Reverse Plated Dresser
10. Particle & Cluster Dressers





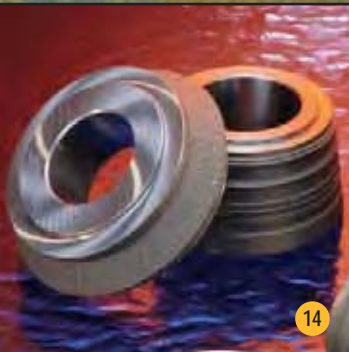
11



12



13



14

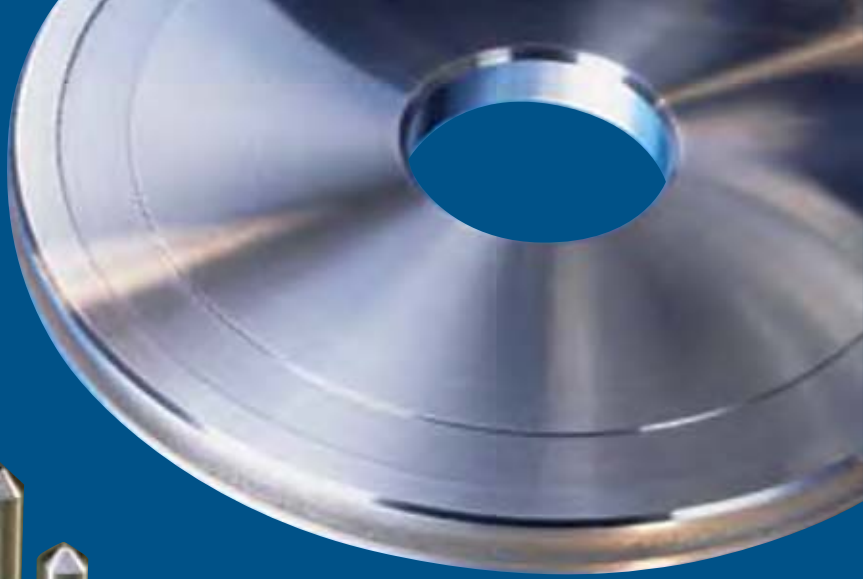


15



16

Metal Bond Wheels



Natural or Lapped
Single Point Tools

CONTACT INFORMATION

For more information, please write, call or email us. Our toll-free numbers, fax number and email address are listed below. Thank you.

Bruce Diamond Corporation
Attleboro Industrial Park
1231 County Street
Attleboro, MA 02703

Call for Additional Information, Design Assistance and Pricing:

800-346-8802

(Toll-Free in the U.S. and Canada)

508-222-3755

(Local/International)

Fax Us at:

800-55-BRUCE (800-552-7823)

(Toll-Free in the U.S. and Canada)

508-222-8403

(Local/International)

Email Us at:

sales@brucediamond.com

www.brucediamond.com



Thread Form
Rotary Dresser



BRUCE DIAMOND CORPORATION