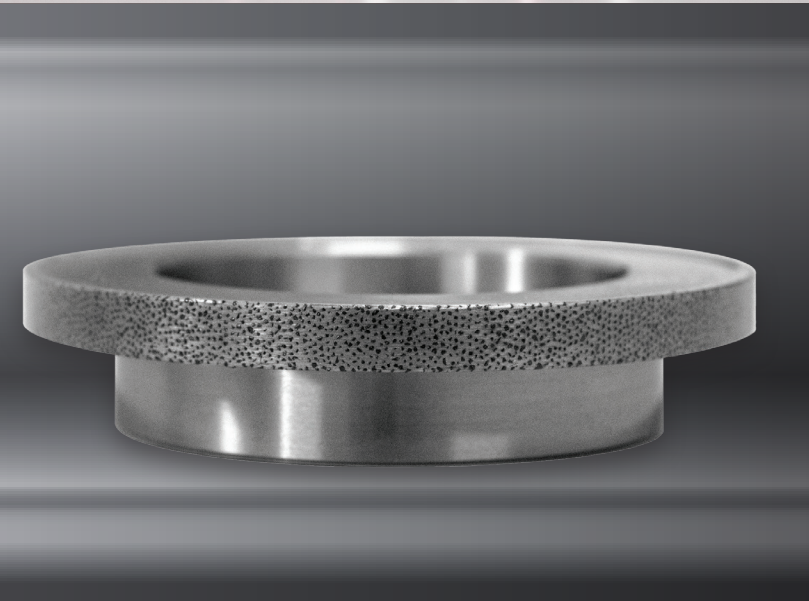




CONTINENTAL DIAMOND TOOL
CORPORATION

METAL BOND DIAMOND AND CBN PRODUCTS



We're setting the new standard.

METAL BOND CBN AND DIAMOND TOOLS

When maximum productivity is paramount, metal bond grinding tools offer the long life and low maintenance you need. Suitable for all levels of both wet and dry grinding from light polishing to aggressive CNC grinding, metal bond abrasive tools are built for endurance and performance.

Metal bonded tools are created from the sintering of powdered metals and other compounds with either Diamond or Cubic Boron Nitride (CBN). This process produces an extremely strong product that holds its shape well during use. Metal Bond maintains a long and useful tool life with a reduction in the frequency of dressing. Generally, Metal Bond wheels have the hardest matrix, therefore it performs best in operations under flood coolant.

One weakness to be aware of with metal bonded grinding wheels is that they are not easily dressed. Unlike resin and vitrified wheels, the bond material can't be cut away to release dull grit and expose new edges.

- Core Drills
- Hole Saws
- Reamers
- Dressing Disks
- Custom Tools

OVER 40 YEARS OF EXPERIENCE

Every superabrasive consists of Diamond or CBN grit held in a supporting matrix material known as the "bond". Of the main bonding systems, Metal Bond is perhaps the best known thanks to its overall utility and length of time it's been available. Metal bonds for Diamond grinding wheels were introduced in the early 1940's. CDT manufactures all types of Metal Bond Diamond tools for many industries. While Metal Bond is well known, it's important to select the bond type most appropriate for the intended use. With over 40 years of manufacturing experience, we can recommend the correct tool and material for your application.



METAL BOND TOOLS PROVIDE:



➤ Long life

Metal bond grinding wheels last longer than those made by other methods. This boosts productivity by cutting down on dressing frequency and wheel changes.

➤ Intricate Designs

Complex forms can be created, and since wear rates are low they last longer than in other types.

➤ Impervious to Alkaline Coolants

Unlike resin grinding wheels which are susceptible to chemical attack — especially at elevated temperatures, metal bond's impervious properties make it well-suited for use with grinding fluids.

➤ Heat quickly dissipates through the metal core

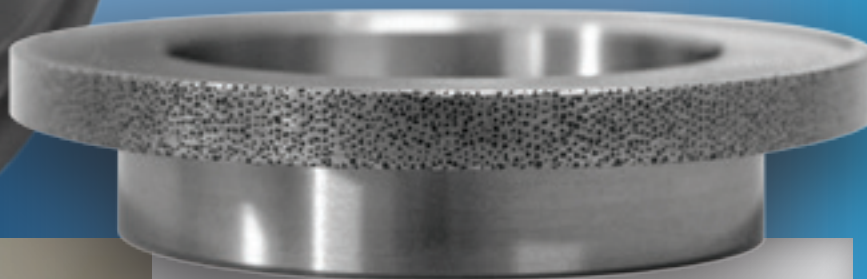
This property makes metal bond appropriate for high material removal rate operations like creep feed grinding, which are also helped by the ability to use coolant.

➤ Superior form holding, impact resistance

With excellent hardness and wheel retention properties, metal bond performs outstanding interrupted cuts while retaining the tool's original dimensions during everything from light polishing to the most aggressive CNC grinding actions including centerless, cylindrical, creep feed, deburring and cutoff applications.

➤ Compatible with many materials

Because metal bond grinding wheels are sintered with cobalt, copper, mill, silver or stannum powder, they work exceptionally well on glass, refractories, ceramics, silicon, semi-conductors, quartz, and a variety of other surfaces.



MATERIALS PROCESSED

- Tungsten Carbide
- Ceramics
- Glass
- Ferrites
- Powdered metals
- Titanium graphite composite

APPLICATIONS

- Metalworking
- Cylindrical
- Surface
- Cutoff
- Tool & Cutter

METAL BOND INDUSTRIES:

➤ AEROSPACE

➤ AUTOMOTIVE

➤ CERAMICS

➤ ELECTRONICS

➤ MEDICAL

➤ OPTICS

➤ STONE



CONTINENTAL DIAMOND TOOL CORPORATION

ELECTROPLATED | RESIMAX RESIN BOND | VITRIFIED | METAL BOND | DRESSERS



Founded in 1973 by Ray Viggiano, Continental Diamond Tool took shape with just 2 employees and 4,500 sq. ft. in New Haven, Indiana. CDT has been providing technically superior precision tooling to a number of industries ever since. After multiple expansions to meet product and customer demand, CDT has set the groundwork with a 180,000 sq. ft. manufacturing facility that will accommodate new product releases and future customer needs. With a motto of "Small Company Values, Large Company Capabilities" CDT has become a worldwide manufacturer of superabrasive grinding wheels and tools. We welcome the opportunity to meet your most critical tooling requirements.

Phone: 260-493-1294

Toll Free: 800-443-6629

Fax: 260-749-7326

Email: info@cdtusa.net

10801 Rose Ave.

P.O. Box 126

New Haven, IN 46774

www.cdtusa.net