INDUSTRIAL
SUPERABRASIVE GRINDING WHEELS AND TOOLS

abrasive technology
www.abrasive-tech.com
We specialize in the development and manufacturing of customized superabrasive grinding products. Our engineering experts have extensive experience addressing complex operations and a comprehensive understanding of materials and applications in many markets and industries.

**OUR APPROACH**

- From Customer Service to Sales, and Product Development Application Engineering, our associates work with you every step of the way to improve your specific application and overall bottom line.

- Our flat, process-centered organization promotes collaboration and innovation, and can lead to significantly shorter lead times for custom wheels and tools.

- Globally-connected manufacturing and sales offices for customer support and logistics ensures efficiency and direct communications.

- ISO 9001 certified, Lewis Center, OH Headquarters, North American facilities, and all UK facilities.
P.B.S.® BRAZE SIGNATURE TECHNOLOGY

**ELECTROPLATED**

**GRINDING WHEELS • CORE DRILLS • BURS • ROUTERS**
**MOUNTED SAWS • MOUNTED WHEELS • DISCS**

**P.B.S.® BRAZE**

- First patented in 1975 by AT, this original brazed bond process promotes maximum diamond exposure and will not strip or peel during use, providing increased productivity and part consistency.
- Well-suited for cutting non-metallic materials such as graphite material, FRP, fiberglass, friction material, honeycomb and composites/CFRP/GFRP; in addition to carbide and ceramics.
- Minimizes uncut fibers, fiber tear out and delamination in composite materials.
- Ideal for machining tough-to-cut materials where fast stock removal and deep cuts are required.
- Custom-manufactured tools range from 1/32” to 24” in diameter with many sizes in between.
- Custom tools made complete in house from design through manufacturing.
- Deburring and other hand-held operations.

**PRECISION FORM • GRINDING WHEELS • ROUTERS**
**SAW BLADES • MOUNTED WHEELS**

- Ideal for manufacturing tight-tolerance forms and ability to hold form/profile from first cut to last.
- Freer cutting, resulting in higher material removal rates.
- Recommended for grinding in creep feed or high-speed grinding applications, including nickel and cobalt-based superalloys, engineered ceramics, ferrous alloys, and tungsten carbide.
- Perfect solution for form, face and O.D. grinding operations in large wheel formats.
- Wheel sizes range from 1/32” to 50” in diameter with many sizes in between.
- Custom tools made complete in house from design through manufacturing.
- Deburring and other hand-held operations.
- Ability to strip and replate the core.

From tough materials to aggressive applications, our wide range of superabrasive bonded solutions are **DESIGNED TO YOUR SPECIFICATIONS**.
**RESIN • METAL • HYBRID (RMH)**

- Custom-designed bonds to meet unique application requirements.
- Ideal for the most difficult roughing applications to the finest grinding applications needing a mirror finish.
- Signature VFlex® and DualForce™ technologies set the industry standard for consistent wheel performance, and faster grinding for continuous production.
- Diamond wheels for periphery grinding of carbide, ceramic, and cermet inserts.
- Latest polymer technology for resistance to heat when dry or wet grinding.
- Designed to hold form to increase wheel life allowing for multiple redresses.
- High profile markets include aerospace, automotive, carbide, ceramics, piston rings, optical glass, round tools, and oil & gas.

**PCD • PCBN • DRESSERS**

- Custom developed tools for customers’ specific turning, boring, reaming and milling applications.
- Reduced cycle time due to PCD’s & PCBN’s thermal conductivity and heat resistance.
- Minimizes CFC fiber tear out and delamination, greatly reducing hand finishing requirements.
- Recommended to machine non-ferrous and very abrasive materials with a capacity to out-produce carbide tools.
- Combination tooling, combining several tool operations in one pass, is designed for customers’ specific applications and ensures high component consistency.
- Best uses include aluminium, composites, plastics, friction material and cast iron.
- Dressing tools for wide variety of applications.

**FLEXIBLE**

- Ideally designed for contouring, shaping, and feathering; as well as making delicate adjustments to a formed surface.
- The cool, rapid, even cutting eliminates surface distortion, increasing productivity and reducing costs.
- Reduced dig outs and scallops allow for reduced reworks and eases operator fatigue.
- Best for use in composites, stone, and steel operations.
- Deburring and other hand-held operations.