



Superabrasives

PRECISION GRINDING WHEELS & TOOLS FOR INDUSTRIAL APPLICATIONS



INNOVATIVE SUPERABRASIVE SOLUTIONS FOR COMPLEX APPLICATIONS

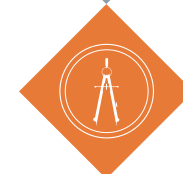
Abrasive Technology specializes in engineering and manufacturing advanced superabrasive grinding solutions for the industry's most demanding applications. Our expertise lies in solving complex geometries and tight-tolerance challenges with consistent, repeatable precision.



**SUPERABRASIVE
EXPERIENCE** EST. 1971



+140 PATENTS



**CUSTOM-TAILORED
SOLUTIONS**



ISO 9001 CERTIFIED
AND OTHER CERTIFICATIONS



WORLD HEADQUARTERS

- LEWIS CENTER, OH USA -



**SERVICING
CLIENTS
WORLDWIDE**





INDUSTRIES WE SERVE



**AEROSPACE
& DEFENSE**



AUTOMOTIVE



**CONCRETE
& STONE**



FOUNDRY



**MARINE
& MILITARY**



**MEDICAL
& DENTAL**



OIL & GAS



**RENEWABLE
ENERGY**



OUR APPROACH



CUSTOMER COLLABORATION

Our team works with your team to understand your desired goals.



APPLICATION PROCESS

We review your entire process from material removal to machining parameters.



ENGINEERED SOLUTION

We customize a tailored solution to meet your desired requirements.



QUALITY INSPECTION

Every part goes through stringent quality checks to exceed your standards.

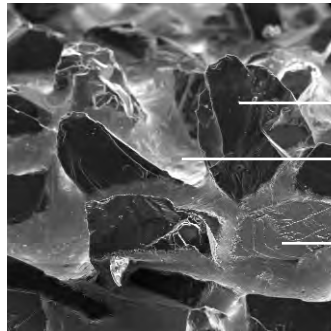


Superabrasives



P.B.S.® BRAZE

First patented in 1975, this proprietary brazed bond process promotes maximum diamond exposure and will not strip or peel during use, providing increased productivity and consistency.



THE SCIENCE OF P.B.S.® BRAZE

- **PROMOTING HIGH DIAMOND EXPOSURE.**
- **CREATES CHANNELS FOR QUICK SWarf AND COOLANT REMOVAL.**
- **CREATES PERMANENT BOND BETWEEN DIAMOND LAYER AND THE SUBSTRATE.**

CAPABILITIES:

- **PRODUCT SIZE RANGE:** 1/32" - 22" Diameter
- **ABRASIVE SIZE RANGE:** 20 - 325 Mesh
- Ideal for machining tough-to-cut materials where fast stock removal and deep cuts are required.
- Minimizes uncut fibers, fiber tear out and delamination in composite materials.
- Strip and Replate Capabilities.
- Compatible for CNC and hand-held operations.

PRODUCTS

DIAMOND BURS
CORE DRILLS
DIAMOND FILES
DIAMOND DISCS
GRINDING WHEELS
ROUTERS
SAWS/MTD SAWS
MOUNTED WHEELS
CUSTOM PRODUCTS

MATERIALS

BALLISTIC FOAM
CAST IRON
COMPOSITES CFRP/GFRP
CEMENT BOARD
CERAMICS/CERMETS
FRICTION MATERIALS
FIBERGLASS
GRAPHITE MATERIALS
REINFORCED CERAMIC COMPOSITES

APPLICATIONS

CASTING CLEANUP	OD/ID GRINDING	MILLING
CHAMFERING	EDGING	PRECISION GRINDING
CUTOFF	FORM GRINDING	PRECISION MACHINING
DEBURRING	FLAT GRINDING	ROUTING
DRILLING	FINISHING	SLOTING





ELECTROPLATED

For precision, efficiency, and cost-effectiveness in your grinding applications, Electroplated tools offer a full spectrum of desired material removal solutions.

CAPABILITIES:

- **PRODUCT SIZE RANGE:** 1/32" - 45" Diameter
- **ABRASIVE SIZE RANGE:** 20 - 50,000 Mesh
- 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 OD grinding.
- Strip and Replate Capabilities.
- Compatible for CNC and hand-held operations.



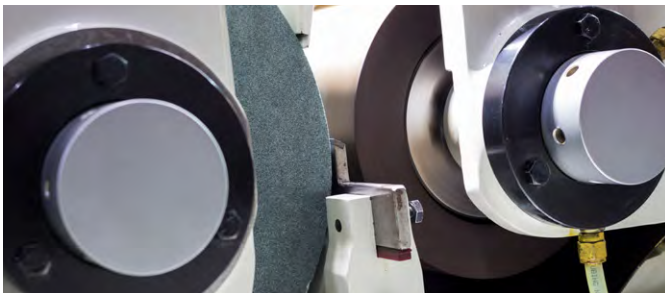
PRODUCTS		MATERIALS	
PRECISION FORM TOOLS		BALLISTIC FOAM	
GRINDING WHEELS		CAST IRON	
ROUTERS		COMPOSITES CFRP/GFRP	
MANDRELS		CEMENT BOARD	
SAW BLADES		CERAMICS/CERMETS	
MOUNTED WHEELS		FRICTION MATERIALS	
CUSTOM PRODUCTS		FIBERGLASS	
		GRAPHITE MATERIALS	
		HARDENED STEEL/HSS	
		REINFORCED CERAMIC COMPOSITES	
		STAINLESS STEEL	
		SUPERALLOYS	
		TUNGSTEN CARBIDE	

APPLICATIONS		
CASTING CLEANUP	OD/ID GRINDING	MILLING
CHAMFERING	EDGING	PRECISION GRINDING
CUTOFF	FORM GRINDING	PRECISION MACHINING
DEBURRING	FLAT GRINDING	ROUTING
DRILLING	FINISHING	SLOTING



CYLINDRICAL GRINDING WHEELS

Signature VFlex® technology sets industry standard for consistent wheel performance, and faster grinding for continuous production.

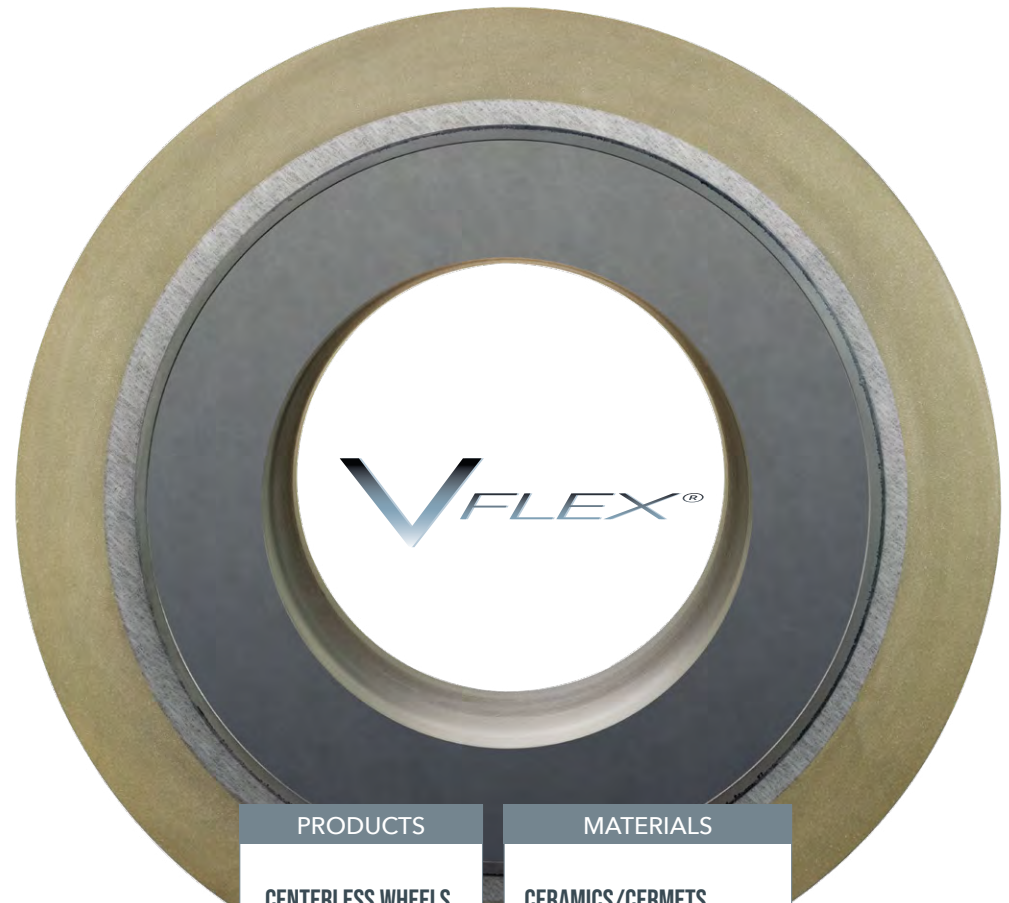


CAPABILITIES:

- **PRODUCT SIZE RANGE:** 10" - 24" OD
- **PRODUCT WIDTH:** > 2"
- **ABRASIVE DEPTH:** 1/4" • 1/2" • 1" • 1-1/4" • 2"

**For available depth and diameter combinations - Contact Us*

- Up to 30% Increased Wheel Life.
- One-piece resin construction delivers uniform diamond concentration across the full wheel width, ensuring consistent performance and minimal dressing.
- VFlex® seamless and uniform wheel design allows for predictable wheel performance.



PRODUCTS

CENTERLESS WHEELS
OD GRINDING WHEELS

MATERIALS

CERAMICS/CERMETS
PDC CUTTERS
POLYCRYSTALLINE DIAMOND
COMPACT
TUNGSTEN CARBIDE

APPLICATIONS

CENTERLESS • OD GRINDING





FLEXIBLE DIAMOND TOOLS

Ideal for surface finishing applications including contouring, shaping, and feathering. Suited for stone and concrete polishing, composite finishing, and textile sueding.

CAPABILITIES:

• PRODUCT SIZE RANGE:

- BELTS: Standard - Custom Sizes
- DISCS: 1" - 22" Diameter
- HAND PADS: 2 1/4" X 4"
- STRIPS & SHEETS: Standard - Custom Sizes

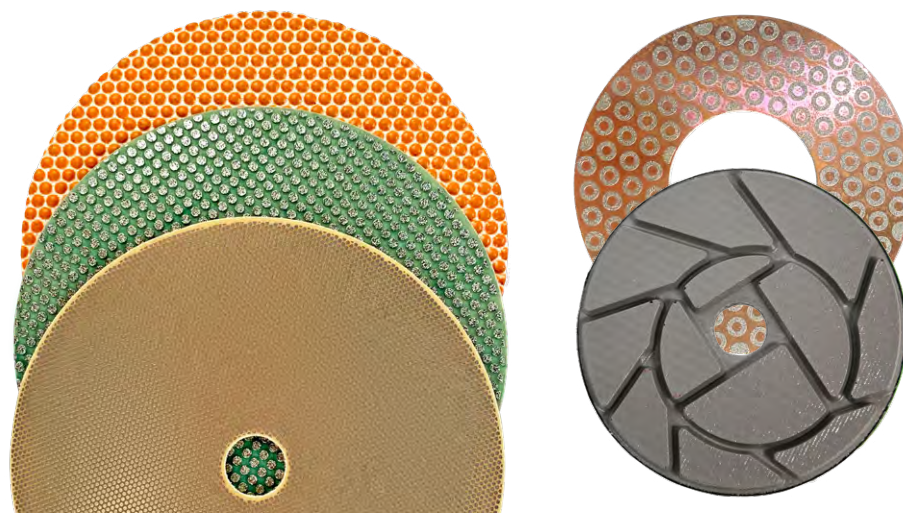
*Available in Quick Connect, PSA, Hook & Loop

• ABRASIVE SIZE RANGE:

ELECTROPLATED: Up to 1,000 Mesh

RESIN: Up to 3,500 Mesh

- 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 composites, stone, and hardend steel operations.
- Compatible for CNC and hand-held operations.



PRODUCTS	MATERIALS
BELTS	CAST IRON
DISCS	COMPOSITES CFRP/GFRP
HAND PADS	CEMENT BOARD
STRIPS	CERAMICS/CERMETS
SHEETS	FRICTION MATERIALS
POLISHING COMPOUND	FIBERGLASS
	GRAPHITE MATERIALS
	HARDENED STEEL/HSS
	STAINLESS STEEL
	STONE/CONCRETE
	SUPERALLOYS



APPLICATIONS
EDGING • FINISHING CONTOURING/BEVELING • POLISHING SUEDING

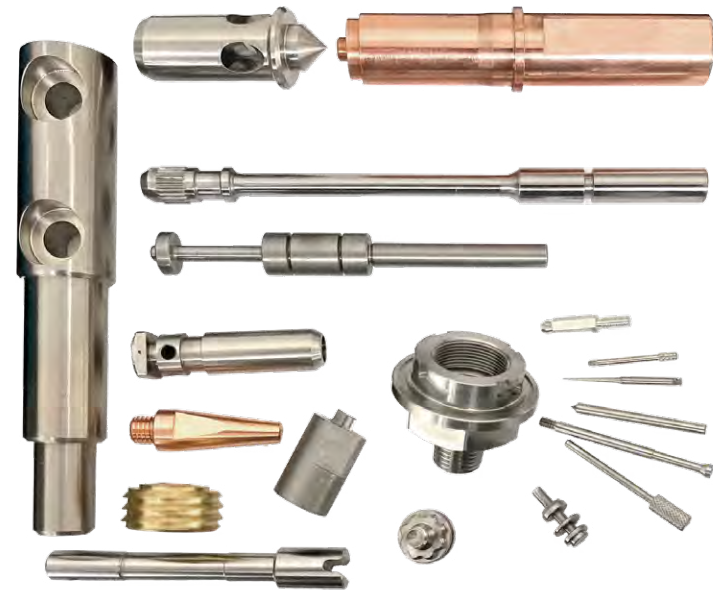


SWISS STYLE PARTS & COMPONENTS

High-precision Swiss-style turned parts and components meet the tightest tolerances through advanced CNC machining. Our expertise lets us hold precision on longer, more complex parts that other machining methods can't accommodate.

CAPABILITIES:

- **PRODUCT SIZE RANGE:** 0.2mm - 152.4 mm
**Including M08*
- **PRODUCT LENGTH:** Up to 26"
- Prototype to high volume part capacity.
- Parts machined from a wide variety of materials.
- Daily tolerance achievement 0.0003" on overturn dental tools.

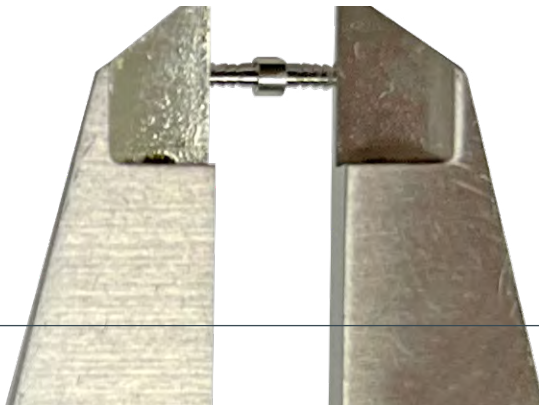
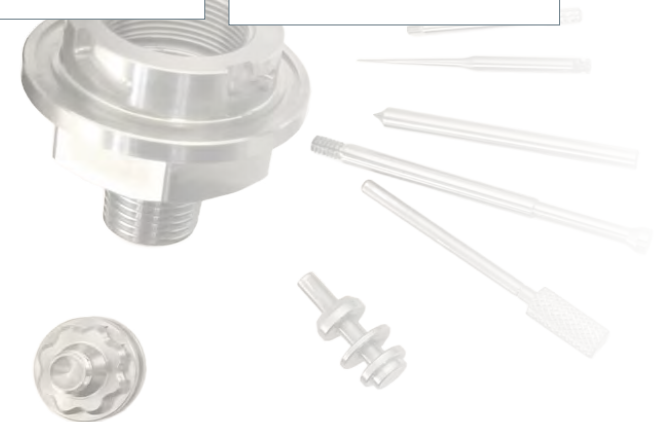


SWISS APPLICATIONS

TURNING
DRILLING
MILLING
TAPPING
THREAD MILLING
5 AXIS MACHINING

MACHINED MATERIALS

ALUMINUM
STEEL
STAINLESS STEEL
SPECIALTY ALLOYS
PLASTICS
NON-FERROUS METALS



PCD & PCBN TOOLING

Precision machined tools are engineered for specific applications across turning, boring, and milling – combining multiple tool operations in a single pass with a high-precision cutting edge to deliver reduced downtime and increased component consistency

CAPABILITIES:

- 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.
- 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.
- Dressing tools for wide variety of applications.

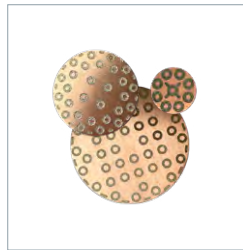
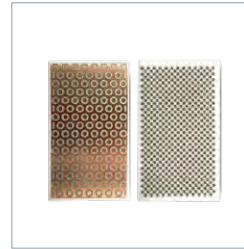


PRODUCTS		MATERIALS	
BORING TOOLS		ALUMINUM	
COMBINATION TOOLS		CAST IRON	
FORM TOOLS		COMPOSITES CFRP/GFRP	
MILLING TOOLS		CEMENT BOARD	
ROUTERS		CERAMICS/CERMETS	
WEAR PARTS		CONCRETE/STONE	
		FRICTION MATERIALS	
		FIBERGLASS	
		GRAPHITE MATERIALS	
		REINFORCED CERAMIC COMPOSITES	

APPLICATIONS			
CHAMFERING	FORM MILLING	PRECISION MACHINING	
DEBURRING	FLAT MILLING	ROUTING	
DRILLING	FINISHING	SLOTING	
OD/ID GRINDING	MILLING		
EDGING	PRECISION MILLING		



QUICK ORDER SOLUTIONS FOR SUPERABRASIVE PRODUCTS



Skip the wait and order instantly! Express Line® delivers standard Abrasive Technology products directly to you. Get the tools you need faster, streamline your workflow, and save time with our ready-to-ship inventory.

SHOP NOW





CONTACT



WORLD HEADQUARTERS **ABRASIVE TECHNOLOGY, LLC**

8400 Green Meadows Dr. N.
Lewis Center, OH 43035 USA

 **1.740.548.4100**



EUROPEAN HEADQUARTERS **ABRASIVE TECHNOLOGY, LTD**

Blackmarsh Road
Mochdre Business Park
Colwyn Bay
Conwy LL28 5HA North Wales

 **+44 (0)1492.540444**



abrasive-tech.com



SHAPING *ENDLESS* POSSIBILITIES



abrasive-tech.com