



Custom Solutions

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Indexable Milling Custom Solutions

Fast response and superior performance when you need it.

The WIDIA Products Group provides exceptional application and design engineering services. Whether you need tools produced according to a blueprint, a finished part, or a drawing; assistance in process development; or expertise in optimizing an application, our world-renowned Advanced Engineering Team is available.

Our engineering departments are fully integrated with specialized production cells located in our focused factories throughout the world. ISO Certified manufacturing facilities with state-of-the-art CNC equipment, simulation capability, CAD/CAM production, and inspection processes ensure that customers receive the highest quality product with accurate compliance to specifications and repeatability for future production.



Custom Solutions

Custom Solution Services:

- Blueprint specials
- Complex geometries
- Form tools
- Modified standards
- Application engineering and optimization
- Tool design
- Project development

Contact your local Authorized Distributor for more information.



THE POWER OF CUSTOM SOLUTIONS

Superabrasive Precision

Milling Tools and Inserts

WIDIA-ClappDiCo™ brings the power of custom solutions to Indexable Milling, Turning, and Holemaking, further establishing our ability to offer superabrasive cutting tools for all applications.

- Super-feed, fine-pitch cutter maximizes the number of inserts.
- Heat deflected from cutting edge to prevent premature wear.
- PCD-tipped cartridges and inserts enable higher metal removal rates.
- Rigid, wedge-type locking device eliminates movement in the pocket.
- Increased tool life.



To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

THE POWER OF CUSTOM SOLUTIONS



Superabrasive Precision

Holemaking Tools

WIDIA-ClappDiCo™ brings the power of custom solutions to Holemaking, Indexable Milling, and Turning, further establishing our ability to offer superabrasive cutting tools for all applications.

- PCD reamers — diamond segment backed with carbide brazed into carbide or steel body.
- Achieve 500x greater abrasion resistance versus standard carbide reamers.
- Heat deflected from cutting edge to prevent premature wear and extend tool life.
- Available in fine, medium, and coarse grades.
- Resharpening extends tool life and increases tool savings.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

Holemaking Custom Solutions

We specialize in designing and manufacturing the exact drill for your needs.

- Development, design, and production of different types of cutting tools for indexable drilling, solid carbide drilling, reaming, counterboring, and operations.
- Services provided by one engineering department fully integrated with all WIDIA-focused factories.
- Capabilities with all common cutting materials, such as solid carbide, carbide-tipped, cermet, PCD, and CBN, with or without internal coolant.
- Diameters from .118" (3mm) up to 20.000" (500mm), as well as special tool lengths.
- Complete tool competence from one source, from construction, application engineering, development, and production through tool reconditioning services.
- Exceptional consistency and compliance to specifications and tool performance.



Carbide Drill Custom Solutions

Choose WIDIA Custom Solutions for decades of proven performance.

Custom drills from WIDIA are available in carbide-tipped, solid carbide, cermet, and PCD-tipped, enabling you to choose the most effective substrate material for your application. Tools can be produced with or without internal coolant and with all coatings, such as TiN, TiCN, TiAlN, AlTiN, and diamond. Whether it be flat form or subland drills, helical or 4-land drills, WIDIA Custom Solutions have decades of industry-proven capabilities.

Custom Solutions



visit www.widia.com

Reamer Custom Solutions

Obtain the advantages of proven performance with WIDIA Custom Solutions.

With our state-of-the-art CNC equipment and engineering processes, we can design complex geometries for reaming and countersinking. Special countersinks for pre-working and finishing operations minimize machining time and rationalize production. Our custom solution reamers deliver proven performance in applications that demand high surface qualities, narrow fit, alignment tolerances, and long tool life.



visit www.widia.com

PCD-Tipped Custom Solutions

Increase tool life up to 300 times part per tool with PCD solutions!

Our PCD-tipped tools are ideal for machining aluminum and magnesium alloys, copper, and brass, as well as glass-fiber and carbon-fiber reinforced plastics — with a cutting speed between 9,700–117,000 ipm (250–3,000 m/min).

The utilization of polycrystalline diamond (PCD) tipped tooling has expanded rapidly over the past 10 years within multiple industries. These tools have displaced traditional carbide and high-speed steel (HSS-E) tooling. The economic savings of utilizing PCD tooling for machining non-ferrous materials can be categorized in five key areas:

- Longer tool life enabling increased machine utilization and overall increased production.
- Higher productivity through increased metal removal rates.
- Superior surface finishes.
- Precise tolerance control.
- Strong resistance to abrasive wear, even when cutting speeds are extremely high.



Custom Solutions

In most cases where PCD tools have been evaluated against carbide tooling, customers have realized significant increases in tool life up to 300 times part per tool. This dramatic increase in tool life significantly decreases machine downtime, thereby increasing production throughput and lowering overall manufacturing costs per unit.

Global Capabilities and Local Service

PCD Tooling Is Making a Big Impact in Technical Markets

Automotive

An industry segment that utilizes PCD and PCBN tooling in the machining of aluminum, powdered metals, hardened steel, and iron materials.



Telecommunications

A swiftly growing industry that incorporates the usage of PCD in the machining of plastics, fiberboard, bronze, brass, and zinc materials.



Electronics

A growing and competitive industry that incorporates the usage of PCD in the machining of plastics, aluminum, glass, and copper materials.



Aerospace

An industry that has just begun to unlock the economic potential of PCD and PCBN tooling in the machining of target materials such as phenolics, graphite composites, and aluminums.



Contact your local Authorized Distributor for more information.

Outstanding Service and Support Separates WIDIA Products from the Competition

In addition to the outstanding performance we provide with superior tools, the WIDIA Products Group offers the highest quality support and program services as well.

- Our regional Customer Service teams are considered by our Distributors to be the finest in the industry and are experienced and trained to help with orders, quotations, expediting, processing custom solution requests, and connecting with the correct people.
- Our unique Customer Application Support (CAS) teams are available to many parts of the world on a 24/7 basis, helping to select the correct tool, providing technical information and recommended parameters, and identifying item conversions from the competition to WIDIA products.
- Our Advanced Engineering teams, specializing in specific product groups (end mills, drills, reamers, etc.), work with our customers to optimize application productivity and provide development on complex tool designs.
- Our local field application specialists are technical experts who work with our Distributors to assist customers with tool selection, training, tool tests, and productivity gain reporting.
- We offer reconditioning services that provide “like-new” performance unmatched by the competition.
- Our recycling services turn your scrap carbide into cash.

...and that is only the beginning.

The WIDIA Products Group understands that it takes more than great products to earn customer loyalty. We are committed to providing world-class support and program services that will earn, and keep, your business.



WIN WITH WIDIA™

WIDIA 



Best-in-Class *Service and Support*

With WIDIA, you get it all — superior product, reliable performance, and unsurpassed support and program services.

- Highly qualified Customer Service and Customer Application Support (CAS) teams support clients through strong product and market knowledge.
- Advanced Engineering teams specialize in specific product groups to help customers optimize application productivity.
- Field Application Specialists work directly with Distributors to recommend the best tools and provide training and support.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

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