



**GENERALCARBIDE®**

REDEFINING POSSIBLE

# From Powder to Polish



INDUSTRY'S MOST  
RELIABLE SOURCE FOR  
**FINISHED TOOLING  
& WEAR PARTS**



At General Carbide, two things allow us to stand above other manufacturers of tungsten carbide finished tooling and wear parts: the quality of our products and the quality of our relationships with customers.

Each day, the goal of everyone in our company is to maximize quality and minimize turnaround time on every order. By meeting or exceeding your expectations, we promote a spirit of mutual respect among ourselves, customers like you and our suppliers.

Since my father, the late Premo Pappafava, founded the company in 1968, General Carbide has always adhered to the highest ethical standards. When you deal with us, you always know you're being treated fairly.

Although it would be difficult to find higher quality products and services elsewhere, it would be even more difficult to find a friendlier, more dedicated and better skilled group of people to help you meet your needs for finished tungsten carbide tooling and wear parts.

Mona Pappafava-Ray  
President and CEO

## YOUR RELIABLE SOURCE FOR FINISHED TOOLING & WEAR PARTS

General Carbide is an ISO-certified manufacturer of finished tooling and wear parts used in a wide range of applications, including:

- Ammunition
- Automotive
- General Metalforming
- Powder Metallurgy
- Severe Service
- WEDM

From powder to polish, we maintain complete control of the manufacturing process. In doing so, we ensure that all of our products meet the highest standards for toughness and offer superior resistance to corrosion, erosion, abrasion and impact. General Carbide tooling is ideal for withstanding corrosive wear from

chemical or mechanical causes, erosive wear from friction and abrasive wear from impact with hard objects or surfaces.

To serve a growing base of customers around the world, we also manufacture a variety of tungsten carbide grades.



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## SHIPPING COMPLETE TO THE AUTOMOTIVE INDUSTRY

With nearly 70,000 square feet dedicated to the production of specialty preforms and 50,000 square feet for finishing operations, we manufacture a wide range of tooling for Tier 1 and Tier 2 suppliers, including:

- Stamping/Lamination
- General Metalforming
- Specialized Fastener Tooling

Because our finished tooling is made from proprietary grades of tungsten carbide, General Carbide automotive tooling offers extended wear life, reduced downtime, increased productivity, along with superior toughness and resistance to:

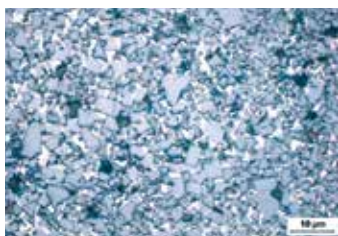
- Abrasion
- Compression
- Corrosion

- Deflection
- Erosion
- Torsional Stress
- Wear

Our in-house application expertise allows us to work with you in formulating the ideal carbide grades for your specific applications, including Hammer Dies for drive lines and Spline Dies used to make gears.

As a vertically integrated manufacturer that's flexible and responsive, General Carbide is prepared to meet all of your automotive tooling requirements.





***We help you improve productivity at the metallurgical level.***

**CLASS 10  
FFL**

## PREMIUM GRADE TOOLING FOR AMMUNITION DIES & PUNCHES

For ammunition tooling and components that help you achieve superior productivity and outstanding resistance to wear, galling and corrosion, depend on General Carbide for:

- Draw Dies
- Profile Dies
- Swaging Dies
- Cold Forged Tooling
- Sizing Dies
- Profile Stems
- AP Cores

Key features of our ammunition tooling are:

- Available in Standard & Specialty Tungsten Carbide Grades
- Outstanding Fracture Toughness for Heavy-Impact Applications
- Fully Finished In-House to Achieve Superior Quality & Turnaround

As holder of a Type 10 Federal Firearms License, we're qualified to serve manufacturers of:

- Firearms
- Ammunition
- Ammunition Components

Our in-house application expertise allows us to work with you in formulating the ideal carbide grades for your specific applications, including GC-613CT for Bullet Dies, GC-813CT and GC0004 for Draw Dies and GC-425CT for High Impact Dies.

We also collaborate with customers on R&D projects that test for a variety of properties related to strength and resistance.

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## WEDM BLOCKS THAT WITHSTAND THE HARSHTEST CONDITIONS

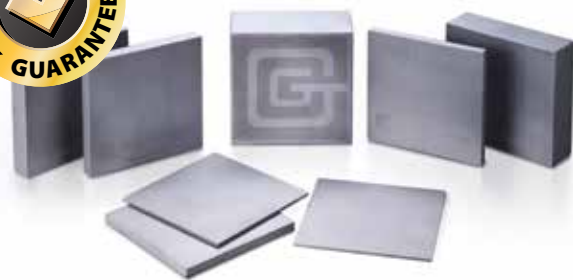
We offer more than 40 sizes of EDM blocks for a wide range of stamping and fabricating applications. Besides having the industry's largest selection of grades and sizes, we process your orders in sinter-HIP furnaces to ensure the highest metallurgical quality and give you the necessary confidence for wire-cutting parts that meet the most demanding specifications.

Key features of our WEDM blocks include:

- Ability to Withstand Moderate Impact Loads
- Anti-Galling Properties
- Resistance to Binder Leaching

We add value to your purchase with:

- Custom Formulations & Sizes
- Quick Delivery
- Durable Packaging
- Shipment Tracking



## UNBREAKABLE PM COMPACTION TOOLING

As a major supplier of tooling to the powder metals industry, our grades feature high wear resistance and fracture toughness.

Applications include:

- Molding Dies
- Sizing Dies
- Cores

Besides producing standard grades, we offer a premium selection that delivers enhanced performance due to the grades' crystalline structures.

That difference in toughness, corrosion and anti-galling properties results from additives to our proprietary formulations.



## THE ONLY SUPPLIER YOU NEED FOR FINISHED SEVERE SERVICE WEAR PARTS

When it comes to meeting demands of the most challenging severe service applications, General Carbide offers a comprehensive selection of tungsten carbide wear parts, and carbide steel assemblies and components that meet the tightest tolerances. The wear parts we fabricate include:

- Cages
- Chokes
- Fixed Cutter Bit Substrates
- Mud Nozzles
- Plugs
- Seats
- Stabilizer Rings
- Valves & Valve Assemblies
- Wear Sleeves

The industries in which our components and assemblies are mostly used include:

- Oil & Gas
- Petrochemical
- Power (Ash Valves, Wear Strips, Plates, Centrifuge Tiles)
- Pulp & Paper

The high strength, toughness and hardness of our tungsten carbide wear parts make them ideal for withstanding high pressures and temperatures, and corrosion in the harshest environments.

## GENERAL METALFORMING

As a vertically integrated manufacturer of extrusion dies and other finished and semi-finished tooling for a wide range of industrial wear and metalforming applications, we can make parts with diameters up to 15.75" OD, and as long as 24".



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## ISO-CERTIFIED TO MEET YOUR QUALITY REQUIREMENTS

At General Carbide, we've invested in the quality systems and processes needed to be ISO-certified. That's because we're committed to meeting the highest standards in everything we do. We achieve a superior level of quality by using:

- CAD/CAM systems that add speed and accuracy to the early stages of production
- CNC machines that allow us to make complex shapes with superior dimensional control
- Inspections throughout production using coordinate measuring machines
- Failure analysis tests
- Engineering expertise to recommend the best grades of tungsten carbide tooling based on application criteria

- Packaging systems that help to ensure your shipment arrives in perfect condition

Our quality policy is simple, yet powerful, and consists of:

- Meeting or exceeding customers' requirements for quality and performance
- Manufacturing and shipping zero-defect products on-time
- Promoting a culture of continuous improvement

Whether your tooling requirements are complex or straightforward, our engineering expertise, modern manufacturing equipment, quality control and competitive pricing combine to give you a distinct advantage. By choosing us as your preferred supplier of tungsten carbide tooling, assemblies or components, you're putting your trust in a longtime industry leader.

**At General Carbide Corporation, "WE CAN!"**

**Work Together as a Cohesive Team**

**Exceed our Customers' Expectations for Quality & Performance**

**Continually Improve Our Products & Processes**

**Always Deliver On Time**

**No Defects!**



## SETTING THE STANDARD FOR EXCELLENCE IN TUNGSTEN CARBIDE TOOLING

General Carbide is a vertically integrated manufacturer of finished tooling for a wide range of industrial wear and metalforming applications. The company also produces many grades of tungsten carbide and shapes, sinters and finish-grinds the material to customers' specifications. We employ more than 200 highly-skilled professionals in our production operations. They enable us to sell our products throughout the United States, Canada, Mexico, Europe and Asia. The company was established in 1968 and is headquartered in Greensburg, PA, near Pittsburgh.

As a woman-owned business, General Carbide has achieved certification from the Women's Business Enterprise National Council (WBENC).



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**USA**

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