

## GEAR CUTTING TOOLS

**INCREASING PRODUCTIVITY** THROUGH CARBIDE BLANKS & PREFORMS





hbcarbide.com

## INDUSTRY-LEADING CAPABILITIES AND PERFORMANCE RELIABILITY

HB Carbide specializes in producing high-quality carbide blanks tailored for demanding gear cutting and hobbing applications to enhance cutting lifespan and edge durability, ultimately boosting productivity.

Our fully-integrated capabilities, extensive process knowledge and experienced specialists are committed to helping you in your decision making to achieve optimized solutions—from powder production to finished ground blanks. We ensure inspection and verification are seamlessly integrated at every stage of the process.

#### SUCCESSFUL RESULTS START FROM THE GRADE

We produce a wide variety of grades in differing density, hardness and grain structure to address wide range of materials and applications.



Со	10%
wc	90%
Density	14.5 g/cm <sup>3</sup>
Hardness	91.7 HRA
Grain Structure	Submicron
TRS	550,000psi

Cutting & Wear Resistance Impact & Toughness



Co	12%
WC	88%
Density	14.11 g/cm <sup>3</sup>
Hardness	92.5 HRA
Grain Structure	Ultrafine
TRS	640,000psi

rtting & Wear Resistance Impact & Toughness



Со	10%
WC	90%
Density	14.46 g/cm <sup>3</sup>
Hardness	92.0 HRA
Grain Structure	Submicron
TRS	625,000psi

utting & Wear Resistance Impact & Toughnes





### AMERICAN MADE AND AMERICAN OWNED.



H.B. Carbide, Lewiston, Mich., a global leader in the blank tooling industry, was established in 1983 with the mission to deliver a superior customer experience with industry-leading custom and altered standard carbide blanks that provide consistency, reliability and advanced capabilities for your most demanding applications.

- Manufactured in the USA from raw material to finished ground blank
- Providing consistent quality and reliable service for 40 years
- Comprehensive grade/capability offering specialized to provide solutions to all your business and application challenges

## SPEED, PERFORMANCE, RELIABILITY, CAPABILITY

#### SHAPING TANGIBLE SOLUTIONS

H.B. Carbide preforms are available in just about any shape you require with minimal grind stock. Blanks are available with a variety of features, enabling us to deliver tangible solutions that provide manufacturing process efficiencies, reduced lead times, and overall productivity improvements.

#### **OUR CAPABILITIES**

- Gear Hob Blanks
  - Solid Carbide Hobs, Shank Hobs
  - Spline Hobs, Sprocket Hobs, Special Drive Hobs, Special Form Hobs
  - Shell style with keyway or end drives, and various shank designs
- Power Skiving Blanks
  - Wafer Cutter, Disc Cutter, Shank Cutter
- Milling cutters
- Gear shaper cutters & shaving tools
  - Disc-type, Deep counterbore-type, Shank-type

Customized Hob Shapes can be designed and manufactured to your exact specifications. We provide custom special drive hobs and shank hobs.



#### Hobs

- Preform capabilities Pre-gashed and Pre-threaded, and OD steps
- OD / ID forms
- Shell or shank hobs design capabilities
- Shank hob polished centers, and ground diameter possibilities
- Near net shape tolerances



#### Stick Blades

Preform capabilities including angles

#### **Power Skiving Blanks**

- OD/ID forms
- Pre-fluting is available
- Near net shape Tolerance and specifications



# DISCOVER WHAT THE **H.B. CARBIDE ADVANTAGE**CAN DO FOR YOU

- Responsible corporate citizen social, cultural and environmental responsibilities
- Reliable partner for global supply & support
- Sustainability Environmentally focused, including recycling of carbide scraps
- Focus on customer experience Service Supply & Technical Support
- Material innovation Optimized application specific grade selection
- Advanced production controls and techniques ensuring quality and consistency





