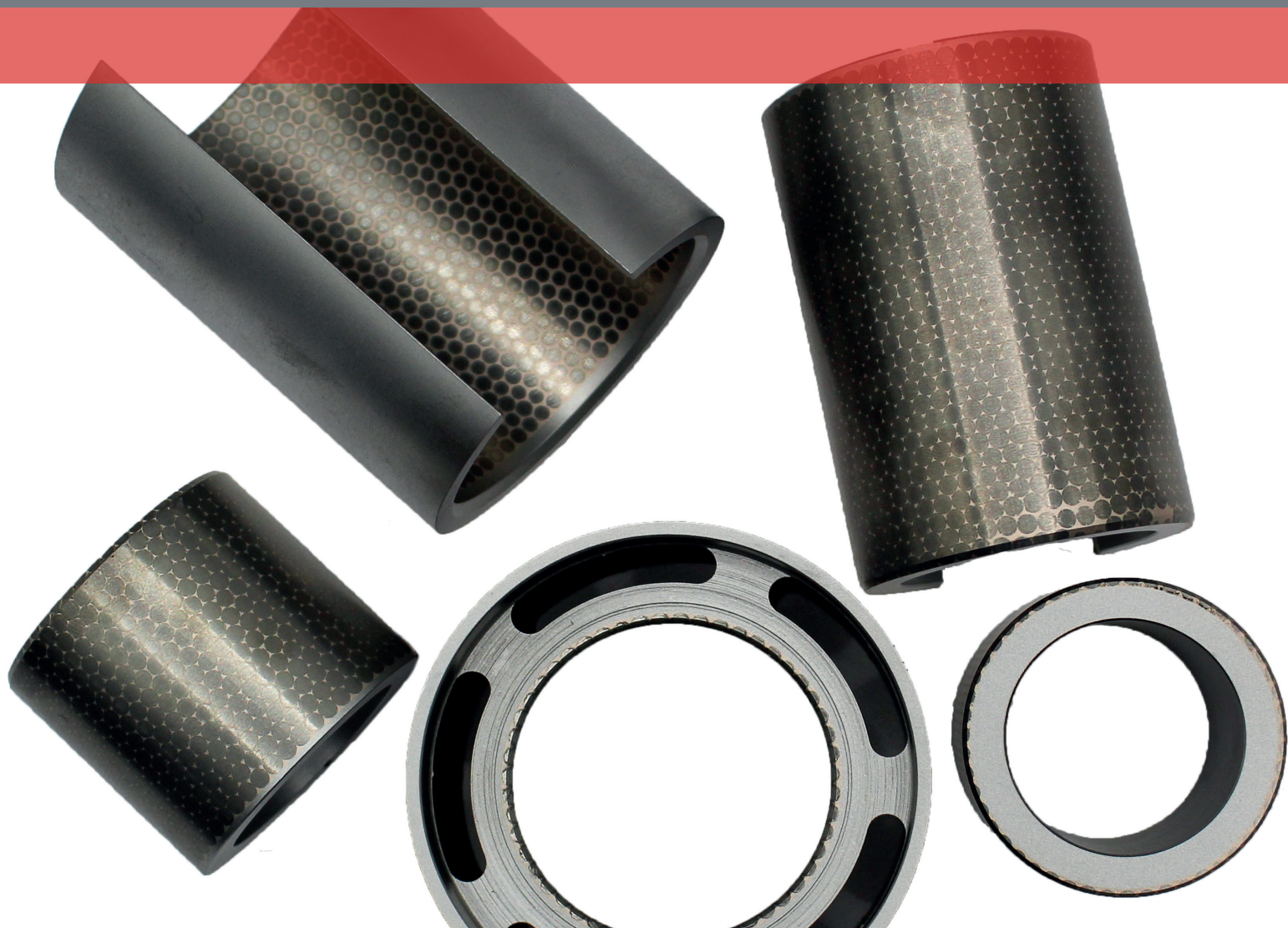


PRECISION COMPONENTS WALLCARB™



WALLCOLMONOY
PRECISION COMPONENTS

SPHERICAL TUNGSTEN CARBIDE COATING FOR MUD MOTOR BEARINGS AND TURBO DRILLS

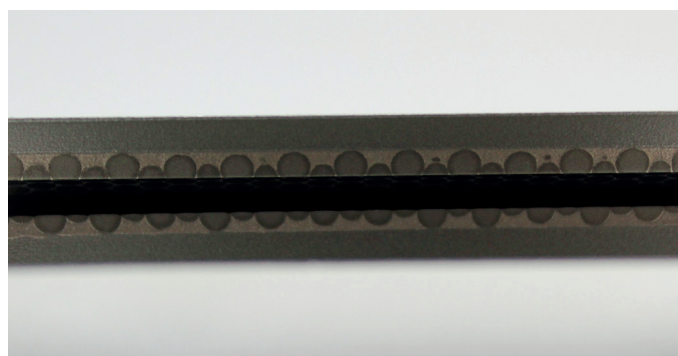
WallCarb™ provides exceptional bearing properties in the harshest of environments by combining the wear resistance of tungsten carbide with a ductile and corrosion resistant matrix.

Based in Wales, Wall Colmonoy Limited (UK) has a state-of-the-art foundry and machining facility that produces castings, heat treatment and full component manufacture - all from one source.

Wall Colmonoy manufactures WallCarb™ via a unique manufacturing technique. The fully adhered spherical tungsten carbide coating with minimal dilution ensures high quality, superior performing WallCarb™ components in the most challenging of environments.



Close-up of WallCarb™ showing spherical carbide particles

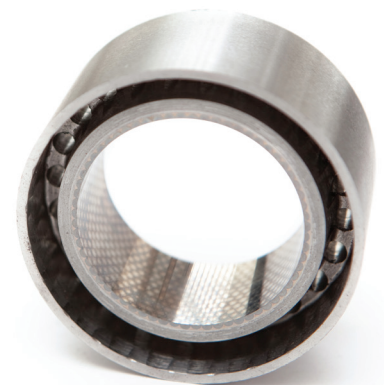


Cross section of tungsten carbide particles embedded in tough matrix

WallCarb™ is a proven solution to extend the lifetime of key components in Oil & Gas, Mining, Geodrilling, Downhole Tools, Offshore Wind, Valves, and Pulp & Paper industries.

Applications include:

- Mud Motor Bearings
- Stabilisers
- Turbo Drills
- Adjusting Rings
- OD & ID Bearing Components
- Bearing Housings
- Drive Shafts
- Mandrels
- Wear Pads

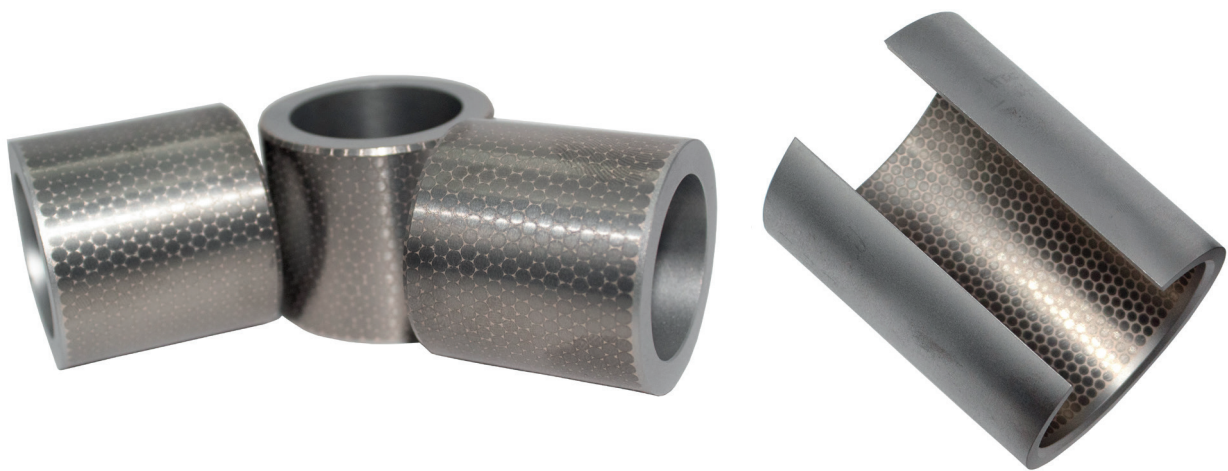


WallCarb™ Bearing for Oil and Gas

HARDNESS & RANGES

WallCarb™ coatings are metallurgically bonded to the substrate, ensuring excellent coating adhesion and no loss of coating during service. Average hardness value for the tungsten carbide ball is 1745 +/- 100 Hv0.5.

WallCarb™ coatings can be coated on the interior and exterior diameter or on flat surfaces. Part sizes range from 1" OD to 12" OD (*sizing assessed on an enquiry-by-enquiry basis*).



PROVEN RESULTS

The success of Wall Colmonoy's WallCarb™ lies in the high packing density of the spherical tungsten carbide particles, which produces a bearing surface with up to 90% tungsten carbide by area. This is significantly higher than coatings produced by Plasma Transferred Arc (PTA), HVOF and Laser Cladding.

Wall Colmonoy's WallCarb™ bearings continue to outlast standard industrial alternatives, with its most recent success being achieved in one of the most challenging drilling sites. Working with OEM manufacturers and users of turbodrill equipment for downhole drilling in hard and abrasive formation, the superior performance of Wall Colmonoy's WallCarb™ bearings have outlasted competitor products ten-fold, with no discernible wear.

For more information visit precisioncomponents.wallcolmonoy.co.uk/wallcarb-components



WALLCOLMONOY

Wall Colmonoy. Making Metals Work Harder Since 1938.

EUROPEAN HEADQUARTERS

Alloy Industrial Estate | Pontardawe Swansea Wales (U.K.) SA8 4HL

Tel + 44 (0) 1792 860677 | Web precisioncomponents.wallcolmonoy.com | Email componentsales@wallcolmonoy.co.uk

MADISON HEIGHTS | LOS LUNAS | CINCINNATI | OKLAHOMA CITY | CANADA | WALES (U.K.) | FRANKLIN | SUZHOU (CHINA)

The information provided herein is given as a guideline to follow. It is the responsibility of the end user to establish the process information most suitable for their specific application(s). Wall Colmonoy assumes no responsibility for failure due to misuse or improper application of this product, or for any incidental damages arising out of the use of this material.