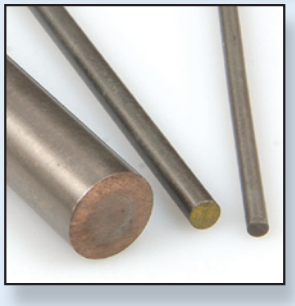

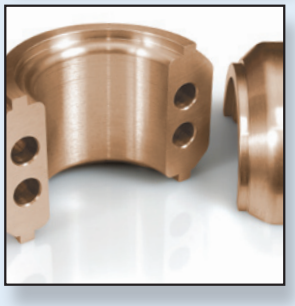

Contact Us

If you need any further information, please do not hesitate to contact us at: 800-624-1895 (317-549-4290) or visit our website: www.mi-techmetals.com

ISO 9001:2000 REGISTERED AS 9100

Machining Tungsten Composites

Our tungsten composite metal machines like gray cast iron. Its low thermal expansion and other characteristics allow you to hold very close tolerances. Coolant is optional, and carbide tools are recommended in most cases.

Turning - Positive rake tooling is suggested. Seco triangle inserts TPG432 or TPG431 grade 883.

Boring - No rake or positive rake tooling is suggested. Seco CPMT grade 883.

Roughing - Cutting depth of .030" to .125" and .008" to .015" feed, at 200 to 300 SFM.

Finishing - .010" to .015"cutting depth and .004" to .010" feed at 250 to 400 SFM.

Tapping - Use high-speed steel, two flute plug spiral point taps. A light tapping fluid is recommended or vegetable oil mist. OSG Sossner premium Exotap is suggested.

Drilling - Carbide tooling is suggested. Increased clearance angles and automatic feeds are often used to avoid binding and seizing. Carbide drills will give a better tool life.

Grinding - Use aluminum oxide or silicon carbide wheels of medium hardness.

Milling - Premium uncoated end mills with a regular spiral made from micrograin carbide, such as SGS. Insert cutters-use square multi-edge or single edge cutters, such as Kennametal grade KC730. Also can use positive rake octagon cutters, such as Seco grade 883.

Roughing - Feeds of .007" to .015" per tooth at speeds of 200 to 400 SFM.

Finishing - Feeds of .003" to .010" per tooth at speeds of 300 to 700 SFM.

Sawing or Cutting - When sawing, use a bi-metal blade; blade pitch should be relative to the thickness of the material. Coarse blades can be run at low speeds, and finer blades run at higher speeds. Coolant can be used. Material can also be cut using high-speed abrasive cutoff wheels.