

Carbide Tooling
Technical Data

Many cutting tool applications are well suited to the use of carbide tooling to achieve maximum performance and productivity.

Compared to high speed steel, carbide taps can offer the following advantages:

- Higher hardness and wear resistance;
- Greater performance at high temperatures through maximum heat resistance;
- Sharper cutting edges over the life of the tap.

Special taps made to your specifications are available upon request. Inquiries concerning specials and non-standard tools can be directed to our Customer Service Dept.

**TAPPING
RECOMMENDATIONS FOR
CARBIDE TAPS**

- Always follow good tapping procedures.
- If possible, use a torque-limiting tapping head or an axial/radial tension-compression holder unless performing rigid tapping.
- Set torque to minimum to cut full thread with new tap plus 5-8%. When a tap will not cut at this setting, the tap is dull and should be sharpened. Increasing torque will cause the tap to break.
- If horizontal tapping is required, reduce overhang to a minimum and use direct drive rather than a tapping head.
- Use full flood coolant directed into the hole. Flooding the surface is not sufficient in most applications. If possible, use coolant-feeding (coolant-through) taps.
- Contact Customer Service about availability of additional tap geometries.

WARNING**CEMENTED CARBIDE PRODUCT
WITH COBALT BINDER
(ALL CARBIDE GRADES)**

The above grades contain Tungsten Carbide and Cobalt, with some grades containing one or more of the following: Tantalum Carbide, Vanadium Carbide, Molybdenum and Nickel.

Tungsten Carbide products are prone to fracture under some conditions. Because cutting tools may shatter or break, government regulations require the use of safety glasses with side shields and other safety equipment at all times in the vicinity of use. Grinding of solid carbide and brazed carbide tools may produce dust and fumes with potentially hazardous ingredients. To avoid adverse health effects utilize adequate ventilation and dust collection procedures and read the Material Safety Data Sheet for carbides as well as for any cutting fluids and other material coming into contact with this product.

Dust from grinding this product can cause nose, throat, skin and eye irritation and temporary or permanent respiratory disease in a small percentage of exposed individuals. Permanent respiratory disease can lead to disability or death. Coolant mist from wet grinding or machining may contain dust.

- Avoid breathing dust or mist.
- Avoid prolonged skin contact with dust or mist.
- Use adequate ventilation when grinding.
- Maintain dust level below OSHA and ACGIH levels.
- Use protective devices as specified in MSDS for this product.
- Wash hands thoroughly after handling, before eating or smoking.
- Dispose of materials according to local, state and/or federal regulations.