

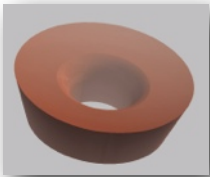
Mil-Tec / Tech-Info

Titanium-6Al-4V



Titanium is a difficult material to machine due to its high strength and low heat transfer characteristics. Titanium also demonstrates a high degree of work hardening when machined. These challenges call for application specific cutting tools that combine high strength and heat resistance, along with a free cutting geometry. **Mil-Tec** High Positive Geometry's, SmoothCoat® and SmoothEdge® hones provide the ideal cutting conditions for successfully machining Titanium!

Recommended Inserts and Speeds & Feeds for the Mil-Tec Freedom Cutter®



Round Power Shear - R-PS-312-12TA / #61012TA

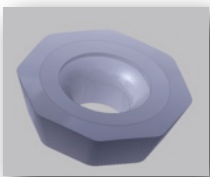
Our round Power Shear insert is ideal for roughing and semi-finishing Titanium. Round inserts offer maximum edge strength and chip thinning. The 12TA grade of cemented carbide features SmoothCoat® TiAlN coating and SmoothEdge®-2 edge prep. This combination results in free cutting conditions and superior edge integrity. Longer tool life and maximum metal removal rates offer superior value!

Speed and Feed Information:

Speed: 250 to 300 SFPM
 Feed: .006 to .012" CPT
 Axial DOC: .050" to .100"
 Coolant: Flood Coolant Recommended



Power Shear Octagon and Square inserts in grade 12AT are also recommended for Titanium. Please consult Mil-Tec for specific Speeds and Feeds.



Octagon Mag-Na-Shear - O-MS-062-12TA / #80012TA

The Mag-Na-Shear is a Chip Breaker design that combines superior cutting edge strength with increased chip control. The Mag-Na-Shear is ideal for general milling of Titanium as well as Stainless Steel and other exotics alloys such as Inconel.

Speed and Feed Information:

Speed: 150 to 250 SFPM
 Feed: .006 to .012" CPT
 Axial DOC: .050" to .100"
 Coolant: Flood Coolant Recommended



For additional technical and application information concerning the machining of Titanium, please contact Mil-Tec at 800-564-5832 or e-mail at sales@miltecusa.com. Visit the Tool Alliance on YouTube to view Mil-Tec application video's. <http://www.youtube.com/user/toolalliance>