

## SOLID SHANK TOOLS

		TURNING	SHARP POINT VEE	FLYCUTTING	BORING	FORM TOOLS
<b>Diamond Types</b>	CVD Pure Diamond (Poly-crystal)	Yes	Yes	Yes	Yes	Yes
	E-diamond synthetic (Dodec 110 orientation)	Yes	Yes	Yes	Yes	No
	MCC synthetic (Dodec 110 orientation)	Yes	Yes	Yes	Yes	No
	Mono-Die synthetic (Dodec 110 orientation)	Yes	Yes	Yes	Yes	No
	Natural (Dodec 110 orientation)	Yes	Yes	Yes	Yes	No
	Sumitomo synthetic (Cubic 100 orientation)	Yes	Yes	Yes	Yes	No
<b>Minimum Radius</b>		1.0 micron*	NA	1.0 mm	< 0.1 mm	60 micron
<b>Maximum Radius</b>		2.0 mm	NA	100 mm	> 100 mm	> 100 mm
<b>Arc</b>		1° to 160°	NA	Diamond Dependent	> 100°	> 180°
<b>Included Angle (Top Angle)</b>		20° to 179°	15° to 179°	NA	30° to 90°	30° to 179°
<b>Rank Angle</b>		+2.5° to -35°	+2.5° to -35°	+2.5° to -35°	+2.5° to -35°	0°
<b>Front Clearance Angle</b>		0° to 40°	0° to 45°	5° std	15°-20°	15°
<b>Cutting Edge Waviness</b>		2.0µm to <50nm	NA	2.0µm	1.0µm	1.0µm
<p align="center"><b>Shank Options</b>            6.35 mm sq x 51.0 mm long (example)            8.05 mm sq x 51.0 mm long (example)            Other sizes available on request            Round shanks 3.0, 3.17, 4.0, 6.0 &amp; 6.35mm Diameter            35.0 mm minimum length recommended</p>						
<b>Tool Shank Material</b>	Steel	Yes	Yes	Yes	Yes	Yes
	Tungsten	Yes	Yes	Yes	Yes	Yes
	Molybdenum	Yes	Yes	Yes	Yes	Yes
	Titanium	Yes	Yes	Yes	Yes	Yes
<b>Tool Shank Types</b>	Square or Rectangular	Yes	Yes	Yes	Yes	Yes
	Round	Yes	Yes	Yes	Yes	Yes
	Other sizes provided upon request	Ask a Contour engineer to design a tool for your application.				

\* CVD Diamond minimum radius dependent on included angle

Other rake angles upon request