

OPERATING PARAMETERS		
TOOL DIAMETER	Vc	
	1500 SFM	3000 SFM
	RPM (n)	
1/16"	45,000	90,000
1/8"	45,000	90,000
3/16"	30,000	60,000
1/4"	23,000	45,000
3/8"	15,000	30,000
1/2"	11,000	22,000
3/4"	7,500	15,000
1"	5,500	10,000

Speeds and Feeds

Carbide burrs typically operate between 1500 and 3000 SFM. Solid carbide burrs that are 1/8" diameter or less can typically be run at speeds up to 75,000 RPM (n). Burrs ranging in size from 3/16" to 3/8" diameter can utilize a 30,000 RPM (n) grinder. Burrs ranging in size from 1/4" to 1/2" diameter can utilize a 22,000 RPM (n) grinder. These are general speed recommendations that may need to be adjusted for optimal performance.

Safety Information

Always wear the appropriate personal protective equipment, such as safety glasses and protective clothing, when using solid carbide or HSS cutting tools. Machines should be fully guarded. Technical data provided should be considered advisory only as variations may be necessary depending on the particular application.

BURR TROUBLESHOOTING OPTIONS	
PROBLEM	POSSIBLE SOLUTIONS
Broken Braze	Excessive Force Heat from rubbing shank Dull tool
Chatter	Improper location in collet Bad grinder bearings Bent shank Unstable control of process Lack of rigid setup
Plugged Flutes	Use coarser burr Working in soft material Use an anti-stick agent Faster RPM Slower RPM Lighter cuts
Excessive Vibration	Improper location in collet Bad grinder bearings Bent shank Unstable control of process Faster RPM Slower RPM Faster feed Slower feed Lack of rigid setup
Poor Finish	Improper location in collet Bad grinder bearings Bent shank Unstable control of process Faster RPM Slower RPM Switch to finer cut Don't use double cut Faster feed Lack of rigid setup
Poor Tool Life	Heat from rubbing shank Improper location in collet Bad grinder bearings Bent shank Unstable control of process Faster RPM Slower RPM Don't use double cut Faster feed Slower feed Cutting abrasive material Lack of rigid setup