



# Trouble Shooting Guide for YES Carbide Drill

Problem		Cause	Remedy
Cutting edge wear	Flank wear	Excessive cutting speed	Reduce cutting speed
	Edge chipping	Vibration or chattering in machine tool, holder or component	Check and adjust machine and tool alignment
		Deflection of tool, part, fixture or machine	Check all rigidity
		Excessive cutting speed	Reduce cutting speed
		Off center set up	Check concentricity not to exceed 0.02mm TIR
	Corner chipping	Excessive cutting speed	Reduce cutting speed
		Insufficient coolant supply	Increase coolant pressure
	Built up edge	Insufficient cutting speed	Increase cutting speed
		Insufficient coolant supply	Increase coolant pressure
		Worn cutting edge	Regrind or replace new drill
	Margin	Improper seating of tool	Check and adjust machine spindle, and fixture
		Rough or angled entry/exit of hole	Reduce feed
		Chip clogging or jamming	Increase coolant pressure and adjust feed to optimize chip-formation
		Insufficient coolant supply	Increase coolant pressure
		Excessive cutting speed	Reduce cutting speed
Long stringy chips		Improper speed and feed	Adjust speed and feed
Tool life too short		Flank wear increase too fast	Reduce cutting speed
Drill breakage		Off center set up	Check set up rigidity of machine, tool, and fixture
		Improper cutting condition	Check cutting parameters, possibly reduce feed
Burrs on exit		Excessive axial force	Reduce the width of edge preparation
Oversize hole		Improper cutting condition	Check cutting data, increase cutting speed
		Clamping chuck	Check fit and clamping of tool
Undersize hole		Tool cooling	Check coolant fluid
		Improper cutting condition	Reduce cutting speed, increase feed