

# Application Guide Troubleshooting - Carbide Drills



Code	Problem													
1	Chisel point wear													
2	Major cutting edge wear													
3	Cutting edge wear													
4	Chamfered edge wear													
5	Cutter breakout													
6	Tip breakout													
7	Chip congestion on drill spine													
8	Tool breaking													
9	Rattling or similar noises													
10	Chip congestion													
11	Workpiece hardening													
12	Fluctuating accuracy													
13	Burr formation at the drill hole exit													
1	2	3	4	5	6	7	8	9	10	11	12	13	Solution	
●													The clearance angle at the drill centre should be greater than the relief (Feed rate)	
●			●	●			●	●			●		Flute length as short as possible	
	●												Enlargement of the clearance angle at the outer cutting edges	
	●	●	●		●								Sharpen more frequently	
						●							Enlarging the point angle	
			●	●		●	●					●	The cutting edge difference should be a maximum of 0.02 mm	
				●								●	The edge prep should be greater	
				●									Clearance angle should be smaller	
						●	●		●				Extension of the groove width	
						●							Smaller point diameter	
						●							Smaller flute helix	
			●	●	●		●	●	●	●			Greater tapering and smaller chamfered edge width	
												●	Smaller edge preparation	
●	●	●		●	●	●	●	●				●	●	Lower feed rate
	●				●	●		●	●		●			Lower cutting speed
									●					Greater feed rate