Application Guide Trouble Shooter - HSS Drills





Co	de	Problem							
1		Breaking of drill							
2		Outer corner breaks down							
3		Cutting edges chip							
4		Lands chip							
5		Drill splits up centre							
6		Drill will not enter work							
7		Hole rough							
8		Hole oversize							
9		Tang Breaks							
1			3 4 5 6 7 8 9 Solution						
					•				Dull point
•									Drill has front taper due to wearing
•				•	•				Insufficient lip clearance on point
•		•							Lip clearance too great
•									Drill in incorrectly point ground
•	•								Flutes clogged with chips
•									Spring or backlash in drill press, fixture or work
•		•		•		•			Feed too heavy
	•								Cutting speed too high
	•					•			Dry cutting, no lubricant at cutting edges
	•								Hard spots in workpiece material
			•						Oversize jig bushing
					•				Drill web (core) diameter too big
						•			Fixture/Clamping not rigid
							•		Unequal angle or Uneven length of cutting edges
							•		Spindle run-out/Loose spindle
								•	Bad fit between shank taper & socket. The drive & alignment is controlled by the taper fit.