



Code	Problem										Possible reason
1	Poor Workpiece Finish										Cutting edge wear, cutter radial run-out
2	Splintering of workpiece edge										Unsuitable cutting conditions, unsuitable shape of cutting edge
3	Non-parallel or uneven surface										Low stiffness of the cutter or of the workpiece (loose)
4	Extreme flank wear										Unsuitable cutting conditions, unsuitable shape of cutting edge
5	Extreme crater wear										
6	Breaks and shelling due to thermal shock										
7	Formation of built-up edges										
8	Poor chip clearance, chip blockage										
9	Lack of Rigidity										Difficult cutting conditions, clamping of the workpiece
10	End mill cutter breaks										Unsuitable cutting conditions, flute length of the cutter
1	2	3	4	5	6	7	8	9	10	Solution	
●						●	●			Increase cutting speed	
			●	●				●		Reduce cutting speed	
						●	●			Increase feed rate	
●	●	●		●	●		●	●	●	Reduce feed rate	
●	●	●		●	●			●	●	Reduce cutting depth	
							●	●	●	Change cutter diameter and cut width	
●			●	●		●	●			Check use of cooling lubricant, flush swarf away	
	●	●	●	●	●	●	●	●		Increase clearance angle (Radial relief)	
	●			●	●					Increase wedge angle (Rake angle)	
	●									Increase number of teeth	
		●					●	●	●	Reduce number of teeth	
							●			Select larger chip space (Cutter)	
●	●	●	●		●					Change shape of minor cutting edge	
		●			●					Cutter - change radial run-out	
	●	●			●			●	●	Change cutter stiffness, flute length (l/D ratio)	
	●	●			●			●		Select machine with higher power and stiffness	