**Micro Drilling Machine**

Abstract:

Micro drilling is one of the most fundamental machines technologies and it is moving high precision and high spindle speed application in manufacturing field and increasing productivity and quality. This is a conventional micro drilling processes in order to find the best quality of drilling for different types of work piece material (MS, Aluminum alloy & PCB) to using number of size of drill bit (0.5mm-0.1mm) were performed by different high spindle speed (10,000- 50,000 rpm) and feed at five different levels. The results were analyzed using optimization of process parameters, MRR and comparatives analysis. has been done between accuracy of drilling holes by experimentation.

 Keywords: Micro drilling, MRR, RPM, drill bit, dimensional accuracy.