**Static Structural Analysis Of 3 Axis Cnc Machine Table Using Finite Element Analysis**

**ABSRACT**

A machine table is the component which holds and supports the work piece. To obtain a good finished and accurate work piece on a 3 axis CNC machine, a table should be sufficient rigid and must have good mechanical properties. A finite element analysis gives a systematic study of failure criterion which helps for further development of the 3 axis machine tables. In this paper, Static Analysis is performed on machine table to find out stresses generated in table, deformation of the table due to its weight. The finite element analysis is performed by making 3D geometry in CATIA software and analyse by using ANSYS software.