The test of present day machining industries is for the most part centred on the accomplishment of high calibre, in term of work dimensional precision, surface wrap up. Surface is worried about the geometric irregularities. The nature of a surface is altogether essential factor in evaluating the profitability of machine tools and machined parts. The surface roughness of machined parts is a critical impact on some practical properties of parts, for example, contact causing surface friction, wearing, light reflection, capacity of distributing and furthermore holding lubricant, stack bearing limit, covering and opposing fatigue. Manufacturers mindful on the quality and profitability of the item.

There are many components which influence the surface roughness and material removal rate i.e. cutting conditions, tool variables and work piece factors. Cutting conditions incorporate speed, feed and depth of cut and furthermore cutting tool variables and cutting tool material, nose radius, rake angle, cutting tool geometry, cutting tool vibration, tool overhang, tool point angle and so forth and work piece variable include hardness of material and mechanical properties. It is extremely hard to take every one of the parameters that control the surface roughness and material removal rate for a specific procedure. In a turning operation, it is exceptionally hard to choose the machining parameters to accomplish the high surface roughness and material removal rate.

The present work is carried out to investigate the maintain temperature of cutting fluid use in CNC machine. Due to temperature effect which type of effect produce on measuring parameters of work piece, effect on tool life, consumption of cutting fluid at lower temperature, effect of deviation in dimension.