

Abstract

The research purpose for to know the influence deep of cut and cutting speed on the surface roughness of turning AISI 4340. This research purpose to find effect based the treatment was given. The treatment will giving in this research are deep of cut and cutting speed. Deep of cut variation will use are 0,1mm, 0,15 mm, 0,20 mm, 0,25 mm, 0,30 mm. Then the cutting speed variation are 310 mm/min, 320 mm/min, 330 mm/ min, 340 mm/min, 350 mm/min. The rate of feed used constantly is 0,1mm/rev. The optimal value of the process parameters for the desired performance characteristics is obtained by linier regression method. Data will be processing using minitab 19 software after obtaining the data from the machining results with the experimental design.