ABSTRACT

In the process of metal cutting, the operator must notice the parameters which influence the cutting results. One of the parameter is cutting speed which directly influences the production time. But this idea needs to be observed forward because the cutting speed will influence the surface.

This observation are done by cutting the 10 mm low carbon steel ST 37 totals 29 metal sheet. Every amount of 9 metal sheets are given 3 different cutting speed i.e. 450 mm/mnt, 485 mm/mnt and 500 mm/mnt. Specimen test for the coarse of the surface is made for each of the metal sheet. The data of the test are gained by measuring the coarse of the surface to 3 spot of each specimen.

The results of the observation explain that longer duration of cutting effecting on the irregular surface of the metal sheets. The 500 mm/mnt cutting speed with 30° bevel angle obtains the smoother surface result.