

### **Abstract**

*Aluminum is metal much used for raw materials automotive components because it is lightness and ease processed. Besides owning excellence, aluminum also weaknesses that is easy deformation and it has value violence and endurance worn out low . One way to escalating violence of metal aluminum the anodizing process , in which this process is the process of coating electric conductivity on a metal surface of aluminum undergoing oxidation . Process anodizing can increase resistance to corrosion, increase the resistant to abrasion and can administer staining to aluminum. Research aims to understand the stream and influence meeting time soaking to the process anodizing. In this study the type of anodizing used was sulfuric acid anodize with temperature 10°C, process anodisasi done with varying meeting the currents 1.4, 1.6, 1.8 Ampere and times 30,40,50 minutes. After anodizing process is complete, the surface hardness test will be using 200g.f micro vickers indentation. The highest value of hardness occurs in strong current and time variations 1,6 ampere and 30 minutes, the hardness value is 264,4 VHN, the middle value of hardness occurs in electric current and time variations 1,4 ampere and 30 minutes, the hardness value is 233,3 VHN. and the lowest value of hardness occurs in electric current and time variations 1,8 ampere and 30 minutes, the hardness value is 159,2 VHN.*

**Keywords :** *Anodizing, time, electric current, surface hardness, Aluminium 6061*