Abstract

In order to studying the factors are instrumental to the incremental deformation process is to identify the most importance factors, namely, (feed rate, stepover, forming angle), study and statement of its impact on the (surface roughness , time work and thickness distribution) As for the factors remaining have been installed such as{(thickness(0.85mm), tool path(spiral), speed(1000revlmin), tool radius(7mm), metal type(AL-1060), the type of operation(SPIF), oiling(engine oil) .... etc.). The analysis is performed using the method of conducting Taguchi (9) the experiences of mixed type as shown in the table 2.were analyzed using averages and Signal to Noise (S/N) ratio and analysis of variance(ANOVA) to study and understand the impact of factors on the cone minus product. Through analysis of variance results showed that the effect of parameters on (surface roughness and time work) was the stepover is parameter has large effect and is followed by feed rate and angle respectively. While the effect of parameter on thickness distribution was the angle is parameter that has large effect where they effect on the final thickness of the product contribution rate (92.74%) and is followed by stepover and feed rate.