## ABSTRACTION

Abstract: Production capacity does not escape from the production process it passes, the production process is strongly influenced by the method or its implementation. In the implementation of the production process to achieve the desired capacity is greatly influenced by how much time the process goes through. The production process time for fabric zibda products is 929 minutes per batch. The current production process time is very high due to the stages of the process so much that it is unable to meet the demand of consumers or buyers, by 2015 loss sale of 3,779,965 yard and opportunity loss of Rp7,370,931,750. With the large number of loss sale this, after done some evaluation needed improvement by reducing the process time is by combining several processes that impact on the reduction of the process stage. The merging process is by using the Design Of Experiments method (DOE) Completely Randomize Design. This completely randomize design experiment can test how many factors affect the quality parameters to be tested. Factors that have an effect on the quality of the greatest zibda fabric is the dose of coustic medicine. The result of the experiment on the influencing factor must be done by ANOVA calculation. The average test was performed by orthogonal contrast stages with different test of hypothesis F aimed to know whether there was any significant difference of result from the whole experiment. Newman range test - Keuls is meant to know which group influence is better. The Scheffe test is meant to compare the mean pairs of treatments and comparisons not only in pairs but the linear combinations of treatments. Confidence boundaries for the average will show the confidence interval values of each treatment very strong, strong and weak. The results of this testing stage can prove how big the factors that affect the new production speed without changing the product specifications and the quality of the fabric zibda products. The results of this experiment can produce a new operating process map with the same product quality as the current one.

Keywords: Production Capacity, Process Time, Loss Sale, Design Of Experiments, Completely Randomize Experiment Design, ANOVA.