

## ABSTRACT

Abstract ~ Rumah Batik Komar is a company engaged in the clothing business which focuses on the making of batik fabric. One of type of batik that owned by the company is Stamped Batik. Stamped Batik was made by using a table as a stamped then the fabric will be lying on the table. The dimensions of the existing stamping workbench is 79.5 x 135 x 100cm. Based on the posture assessment result of the operator is taken from the average data during a stamping process using a Rapid Upper Limb Assessment (RULA) scores obtained 6. This value indicates that the working posture is at a dangerous position will require further research and improvement soon as possible.

Proposed design table fabric stamping that has been developed by earlier researchers had reached a value Rula 3 and has entered the stage of determining the final specifications. Specifications final proposed design batik fabric printing table obtained from previous studies have flaws roll mechanism in the form of specifications and design detail table that does not result in the end of the specs can not be translated into architecture and prototype products. So in this study will be the design phase of products from design to manufacturing of prototypes and a detailed feasibility study of materials and mechanisms using finite element analysis and feature motion study on software.

The detail design of the last specifications of the previous researchers have produced a list of the components of the prototype products that could be made. Three-dimensional prototype has been created using CAD software has performed a feasibility test material and its mechanism of action against the force exerted on the table when the process of batik stamping.

**Keywords** : *Detail design, Rumah Batik Komar, Stamping Batik, RULA, Finite Element Analysis*