

## **ABSTRACT**

*PT. XYZ is a company located in Bandung Regency which is engaged in textiles. The company produces one of which is mosquito net products. From company data and research during the mosquito net production process, there are identified defects in each process, namely the knitting, setting, and printing processes. From the data obtained that the highest defect is in the knitting process with the type of defect, namely perforated defects with a percentage of 43% which exceeds the company's defect tolerance limit of 2%. To find out the main cause of the problem by conducting a 5 why's analysis and fishbone diagram that from several root causes by considering the company, the human factor was chosen with a potential solution, namely to design an automatic glue spray tool in order to prevent human error so that it can minimize the type of perforated defects. The purpose of this final project is to design an automatic glue sprayer using a design method, namely Quality Function Deployment. Quality Function Deployment method to help design the concept of a proposed tool based on problems that have been analyzed based on the company's needs and desires in the knitting process area which are translated into appropriate technical aspects. The result of this design is the design of an automatic spray tool that is equipped with several features such as a spraying time system, so that it can assist the operator in the process of applying glue during the production process and a sound alarm to remind the operator to carry out supervision and is equipped with other specifications. The proposed tool is expected to help companies to prevent delays caused by operators and can minimize the highest types of defects that occur in the knitting process so as to produce quality products.*

**Keywords — Mosquito net, knitting process, Quality Function Deployment**