## ABSTRACT

PT XYZ is a manufacturing company that has been established since 1982 that is engaged in various kinds of wood processing, one of which is 11.6 mm plywood. In carrying out the production process of 11.6 mm plywood, PT XYZ sets critical to quality (CTQ) standards on products that must be met. If these standards are not met, then the product can be said to be defective. Based on data on the production of 11.6 mm plywood in the period from February 2022 to April 2022, the defective products produced exceeded the percentage of tolerance for defective products that had been set at 5%, so it could be said that the production process had not gone well. The glue spreader process is the process with the highest number of defects in the period February 2022 to April 2022, with the appearance of 3 types of defects, peeling face or back, glue dirt, and lacking face or back.

At the problem identification stage, a problem analysis was carried out using 5 Why's and FMEA. It was found that the problem that occurred in the glue spreader process was that there was no information about the viscosity level of the glue during the production process, so to overcome these problems, a tool was designed as a solution for improving the glue spreader process. using the Quality Function Deployment (QFD) method. Quality Function Deployment (QFD) is a product development method to fulfill the desired needs by clearly determining the customer's wishes. The design of the viscosity level monitoring tool based on the selected alternative concept resulted in a product with components including viscolite D15 as a viscosity level sensor, an Omron PLC controller, an 85 dB flash buzzer (yellow light), a power button switch, and an aluminum control panel box. The design of assistive devices can help the operator of the glue viscosity level as a form of prevention so that the possibility of peeling face/back defects that occur can be reduced or eliminated by looking at the assumption of an average increase in sigma of 3.827 sigma, which is an increase from the average sigma level of 3.7 sigma.

Keyword: Plywood, Glue Spreader, Viscosity, QFD