

## **ABSTRACT**

*PT Chitose International Tbk or CINT is a company engaged in the furniture industry. The products are various, one of which is the Yamato folding chair, The Yamato folding chair is the most produced product. The production process of the Yamato folding chair consists of three processes there are construction process, the nickel-chrome plating process, and the assembly process. In this final project, the researchers focus more on the nickel-chrome plating process because of the highest number of defects found in this process, based on historical data from July 2020 until December 2021. The nickel plating process also has many types. The defects are striped, burning, yellow, and so on. The nickel-chrome plating process uses an electroplating process. In the analysis of the problem there is a process that is not fulfilled using the Ishikawa diagram, 5 whys analysis, and FMEA it is known that the influential factor is the incompatibility of pH levels, to fix the problem, a tool is designed. For the design of the tool using the Quality Function Deployment (QFD) method. Quality Function Deployment (QFD) is a way to improve the quality of products and services by understanding each consumer's needs, then connecting them through technical aspects to produce products or services that are in accordance with consumer needs in each product or service manufacture produced. With the design of a monitoring tool for pH levels, it is expected to minimize defects that occur in the coating process.*

**Keywords: Six Sigma, DMAIC, QFD, electroplating**