

ABSTRACT

CV. XYZ is a company engaged in the luggage and bag industry. The product with the highest defect rate is women's leather bags, with production data showing that defects produced nearly every period exceed the company's tolerance limit of 1%. One problematic process is the leather skiving process, which does not meet the required standards, resulting in outputs that do not align with company specifications. Root cause analysis using fishbone diagrams and the 5 Whys method revealed that the main cause is the use of blunt machine knives, as they are not sharpened by the operator. To address the issues in the leather skiving process and reduce defect frequency, a timer alarm integrated with the skiving machine was designed to alert the operator to sharpen the machine knives after 66 minutes of use. This design employs the Reverse Engineering method, which involves developing a product by replicating an existing product as a basis for designing a new, similar product with improved functionality to meet user needs. With the integrated timer alarm, it is expected that defects in the leather skiving process will be minimized, and process capability will improve from a sigma level of 4.291 to 4.297. The estimated cost for implementing this timer alarm tool is approximately Rp509.790.

Keywords: Women's Leather Bags, Leather Skiving, Blunt Knives, Reverse Engineering, Timer Alarm