ABSTRACT

The plastic industry is one of the industries that drives the economy in Indonesia. The increasingly advanced and developing industrial world makes companies producing goods and services compete to produce quality products. However, in every process there are bound to be cases of failure or product failure caused by the materials used, errors or faults in the machine that cannot be avoided. Therefore, quality control is to determine the appropriateness of product quality based on predetermined control limits to reduce the presence of defective or damaged production results.

This research aims to determine the factors that cause the highest afval to immediately improve and analyze the application of six sigma to identify afval products at PT Sinar Mulia Plasindo Lestari so that they can prepare recommendations for improvement using the kaizen method. Data on defects in waring sacks and plastic sacks for the period June – November 2023.

Based on the research results, it was obtained to define quality problems using the Six Sigma quality control system for the final product of waring sacks, there are 2 types of causes, namely human crumpled sacks and torn sacks which are thought to be due to 4 factors causing damage to waring sacks, namely, factors, methods, machines, materials and environment. The resulting DPMO value is 91,374 with a sigma value of 2.83, which is the average level for Indonesian industry.

Keywords: Quality Control, Six Sigma, Karung Waring, Kaizen