ABSTRACT

This study aims to improve the quality of apple cider beverage production defects that occur in the company PT.X Batu. The method used is the statistical methods and tools are seven tools of quality control. Statistical tools used in this study are: Stratified sampling, Check Sheet, Histogram, Scatter Diagram, Control Chart, Pareto diagram, Cause and effect diagram, and RCA (root cause analysis).

Based on the results of intensive search, in the Control Chart method averages the percentage of disability for 12 periods is equal to 5.6%. This suggests that the defect production exceeds the tolerance limits set by management PT.X of 3%. Based on the histogram, the most common defect is a dented cups by 419 units, 354 units of bubbles cups, lid is no tight cups at 336 units, and leaked cups by 246 units. Based on the Pareto diagram, repair priority needs to be done is for the dominant defect type is dented cups (31%), bubbles cups (26%), and lid is no tight cups (25%). Based on the scatter diagram shows a positive correlation between the percentage of disability and the amount of production. Based on the analysis of cause and effect diagram cause defects problem from the human, machine production, methods, materials and the environment itself. So the company can do to prevent and repair to minimize defects and improve product quality.

Keyword: Seven Tools, Root Cause Analysis, and Improvement