

INTISARI

Penelitian ini bertujuan untuk menganalisis pelaksanaan pengendalian kualitas produk dalam upaya peningkatan kualitas produk dengan menggunakan *Statistical Process Control* (SPC). Obyek dalam penelitian ini adalah proses produksi *Crude Palm Oil* (CPO) mulai dari pengadaan bahan baku sampai kepada proses akhir dan subyek penelitian ini adalah pihak dari PT. Kalimantan Sanggar Pusaka. Data dianalisis dengan menggunakan *Statistical Process Control* (SPC) meliputi peta kendali-*p*, peta kendali-*x*, diagram pareto dan diagram sebab-akibat.

Analisis penerimaan bahan baku menggunakan peta kendali-*p* didapatkan hasil bahwa pengendalian kualitas penerimaan bahan baku masih dalam batas kendali. Berdasarkan hasil analisis diagram pareto, kerusakan yang paling dominan adalah banyak terdapat buah dengan fraksi F0/buah mentah (53%), berdasarkan analisis diagram sebab-akibat hal ini berasal dari faktor metode, manusia, umur tanaman, dan teknik budidaya.

Analisis proses produksi CPO pada *Oil Production* menggunakan peta kendali-*x* didapatkan hasil bahwa kualitas MOIST dan DIRT terdapat titik-titik yang masih di luar batas kendali. Berdasarkan hasil analisis diagram pareto, kerusakan yang paling dominan adalah tingginya kadar MOIST (39%), berdasarkan analisis diagram sebab-akibat hal ini berasal dari faktor metode, lingkungan, bahan baku, dan mesin.

Analisis produk akhir CPO pada *Storage Tank* menggunakan peta kendali-*x* didapatkan hasil bahwa kualitas MOIST dan DIRT terdapat titik-titik yang masih di luar batas kendali. Berdasarkan hasil analisis diagram pareto, kerusakan yang paling dominan adalah tingginya kadar MOIST dan DIRT dengan masing-masing persentase 50%, berdasarkan hasil analisis diagram sebab-akibat hal ini berasal dari faktor metode, lingkungan, bahan baku, dan mesin.

Kata Kunci : Pengendalian Kualitas, Kerusakan Produk, *Statistical Process Control* (SPC).

ABSTRACT

This research aim to analyze the implementation of quality control product in order to improve product quality by using Statistical Process Control (SPC). Object in this research is the production process of Crude Palm Oil (CPO) from the procurement of raw materials to the end of the process and the subject is PT. Kalimantan Sanggar Pusaka. Data were analyzed using Statistical Process Control (SPC) such as control p-chart, control x-chart, Pareto charts and diagrams cause and effect.

Analysis of raw materials by using control-p chart showed that the quality control is still under control. Based on Pareto diagram analysis, the most dominant damage occurs because there are many pieces FO / raw fruit (53%), based on analysis of cause-effect diagram this condition comes from many factors such as method, human, plant age, and cultivation techniques.

Analysis production process of CPO in Oil Production by using control x-chart showed that the quality MOIST and DIRT are still out of the control limits. Based on Pareto diagram analysis, the most dominant damage occurs because the high levels of MOIST (39%), based on analysis of cause-effect diagram this condition comes from many factors such as methods, environment, raw materials, and machine.

Analysis of the final product at the Storage Tank CPO by using map control-x showed that the quality MOIST and DIRT are still out of the control limits. Based on Pareto diagram analysis, the most dominant damage occurs because the high levels of DIRT and MOIST with respective percentages of 50%, based on the results of the analysis of cause-effect diagram this condition comes from many factors such as methods, environment, raw materials, and machine.

Keywords : Quality Control, Product Defect, Statistical Process Control (SPC)