

ABSTRAK

PT Aksamala Adi Andana adalah perusahaan yang bergerak dalam industri obat tradisional. Produk unggulan yang rutin di produksi di PT Aksamala Adi Andana adalah minyak telon Habbie. PT Aksamala Adi Andana selalu menjaga kepuasan konsumen dengan cara memperhatikan produk yang dihasilkan, namun masih saja ditemukan produk yang cacat. Pada periode Januari hingga Desember 2022, ditemukan produk cacat sebesar 6,25%. Jenis kecacatan yang terjadi pada produk minyak telon Habbie, yaitu cacat botol, cacat tutup botol, volume yang tidak sesuai, cacat stiker label, dan cacat tertinggi *folding box* sebesar 28%. Berdasarkan permasalahan tersebut, penelitian ini bertujuan untuk menurunkan jumlah produk cacat minyak telon Habbie.

Pada penelitian ini digunakan metode *Statistical Process Control* (SPC) untuk menganalisa data dan akan didapatkan data potensial produk cacat, menggunakan metode *Root Cause Analysis* (RCA) untuk menganalisis akar penyebab jenis kecacatan yang terbesar, dan metode *Quality Loss Function* (QLF) untuk menghitung berapa besar kerugian yang ditanggung oleh perusahaan akibat adanya produk cacat.

Berdasarkan penelitian dan implementasi perbaikan yang telah dilakukan, didapatkan hasil persentase semua jenis cacat pada produk minyak telon Habbie menurun. Untuk jenis cacat *folding box* menurun sebesar 1,0215%, jenis cacat botol menurun sebesar 0,8136%, jenis cacat volume tidak sesuai menurun sebesar 0,6414%, jenis cacat stiker label menurun sebesar 0,3933%, dan jenis cacat tutup botol menurun sebesar 0,6675%. Nilai QLF juga mengalami penurunan sebanyak Rp968/*pcs*. Sebelum perbaikan nilai QLF sebesar Rp1.665/*pcs*, sedangkan setelah dilakukan perbaikan menjadi Rp697/*pcs*.

Kata kunci: Pengendalian kualitas, *Statistical Process Control* (SPC), *Root Cause Analysis* (RCA), *Quality Loss Function* (QLF)

Quality Control to Reduce The Number of Defects Using Root Cause Analysis and Quality Loss Function Methods

ABSTRACT

PT Aksamala Adi Andana is a company engaged in the traditional medicine industry. The superior product that is routinely produced at PT Aksamala Adi Andana is minyak telon Habbie. PT Aksamala Adi Andana always maintains customer satisfaction by paying attention to the products it produces, however, defective products are still found. In the period from January to December 2022, 6.25% of defective products were found. Types of defects that occur in minyak telon Habbie products is bottle defects, bottle cap defects, inappropriate volume, sticker label defects, and folding box defects, the highest being 28%. Based on these problems, this study aims to reduce the number of defective minyak telon Habbie products.

In this study, the Statistical Process Control (SPC) method was used to analyze the data and to obtain data on potential defective products, using the Root Cause Analysis (RCA) method to analyze the root cause of the largest type of defect, and the Quality Loss Function (QLF) method to calculate how many large losses borne by the company due to defective products.

Based on the research and implementation of the improvements that have been made, it was found that the percentage of all types of defects in minyak telon Habbie products decreased. For the type of folding box defect decreased by 1.0215%, the type of bottle defect decreased by 0.8136%, the type of volume inappropriate defect decreased by 0.6414%, the type of sticker label defect decreased by 0.3933%, and the type of bottle cap defect decreased by 0.6675%. The QLF value also decreased by IDR 968/pcs. Previously, the QLF value was IDR 1,665/pcs, while after research was done, it was IDR 697/pcs.

Keywords: *Quality control, Statistical Process Control (SPC), Root Cause Analysis (RCA), Quality Loss Function (QLF)*