

ABSTRACT

**PRODUCT QUALITY CONTROL ANALYSIS USING SIX SIGMA METHOD
IN BIKINBAJU.TEAM TASIKMALAYA CONVECTION COMPANY**

By:

FAKHRY AZHARY NASHIRUDDIN RAHMATULLOH

(NPM. 163402150)

Under Guidance:

R. Lucky Radi Rinandiyana

Dian Kurniawan

This study aims to determine and analyze the quality control carried out during the production process, the implementation of Six Sigma in product quality control, and the factors causing the occurrence of defective products in the Bikinbaju convection company.team Tasikmalaya

The research method used in this research is descriptive quantitative research method. The analytical technique used in this study is the DMAIC method of Six Sigma (6) which consists of Define, Measure, Analyze, Improve, and Control. Assisted with Seven tools in Quality Control.

Based on the results of the research, it is known that the quality control implemented by the convection company Bikinbaju.team Tasikmalaya uses two inspection stages, namely the QC Cutting stage and the QC thread removal stage. Critical To Quality that is formed from defects consists of untidy stitches, damaged sarong, inappropriate embroidery, and perforated fabric. The result of Sigma calculation of the convection company Bikinbaju.team Tasikmalaya is 4.327 σ and has the appropriate process capability. Factors that cause defects are based on the categories of the cause and effect diagram/Ishikawa diagram, which consist of man, machine, method, and material.

Keywords: Quality Control, Six Sigma (6 σ), DMAIC

ABSTRAK

ANALISIS PENGENDALIAN KUALITAS PRODUK DENGAN MENGUNAKAN METODE SIX SIGMA PADA PERUSAHAAN KONVEKSI BIKINBAJU.TEAM KABUPATEN TASIKMALAYA

Oleh:

FAKHRY AZHARY NASHIRUDDIN RAHMATULLOH

(NPM. 163402150)

Dibawah Bimbingan:

R. Lucky Radi Rinandiyana

Dian Kurniawan

Penelitian ini bertujuan untuk mengetahui dan menganalisis pengendalian kualitas yang dilakukan selama proses produksi, penerapan Six Sigma pada pengendalian kualitas produk, dan faktor penyebab terjadinya produk cacat pada perusahaan konveksi Bikinbaju.team Tasikmalaya

Metode penelitian yang digunakan dalam penelitian ini adalah metode penelitian kuantitatif deskriptif. Teknik analisis yang digunakan dalam penelitian ini yaitu metode DMAIC dari Six Sigma (6σ) yang terdiri *Define, Measure, Analyse, Improve, and Control*. Dibantu dengan *Seven tools* dalam *Quality Control*.

Berdasarkan hasil penelitian diketahui bahwa pengendalian kualitas yang diterapkan oleh perusahaan konveksi Bikinbaju.team Tasikmalaya menggunakan dua tahap inspeksi yaitu tahap QC Cutting dan QC buang benang. *Critical To Quality* yang terbentuk dari *defect* terdiri dari jahitan jahitan tidak rapi, sabron rusak, bordir tidak sesuai, dan kain bolong. Hasil perhitungan Sigma perusahaan konveksi Bikinbaju.team Tasikmalaya adalah sebesar $4,327\sigma$ dan memiliki kapabilitas proses yang telah sesuai. Faktor penyebab *defect* berdasarkan katagori dari diagram *cause and effect* diagram/Ishikawa yaitu terdiri dari *man, machine, method, and material*.

Kata Kunci: Pengendalian Kualitas, Six Sigma (6σ), DMAIC