

**ANALISIS PENGENDALIAN KUALITAS PRODUK BATIK
TULIS DENGAN METODE *STATISTICAL QUALITY
CONTROL* PADA UMKM A**

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ABSTRAK

Persaingan di dunia bisnis, baik di bidang perdagangan, industri, maupun manufaktur saat ini sangat ketat. Pengendalian kualitas hal penting yang harus diterapkan dalam proses produksi untuk memberikan rasa kepercayaan terhadap konsumen. Untuk dapat bertahan dalam persaingan bisnis, menjaga kualitas produk secara konsisten harus dilakukan oleh industri tekstil. UMKM A merupakan industri yang bergerak dalam bidang usaha produksi batik tulis. Tujuan dilakukan penelitian ini melakukan identifikasi jenis kecacatan paling dominan, mengetahui faktor penyebab terjadinya defect, model hubungan antara faktor penyebab kecacatan dengan kecacatan. serta mengajukan usulan terkait perbaikan pengendalian kualitas produk dengan metode *Statistical Quality Control* (SQC), pendekatan PDCA (*plan, do, check, action*) serta analisis menggunakan *seven tools* dan uji statistik regresi linear berganda yang diolah menggunakan SPSS. Hasil dari penelitian menunjukkan *defect* dominan pada produksi di UMKM A yaitu pada *defect* warna tidak merata total 44%. Adapun faktor penyebab terjadinya *defect* yaitu faktor manusia yang memiliki pengaruh lebih besar daripada faktor lainnya dan didapat pula model regresi linear berganda yang memiliki persamaan $Y = 1,576 + 0,189 X_1 + 0,244 X_2 + 0,313 X_3 + 0,229 X_4 + e$ dengan nilai *R square* . 0,714. Hal ini dapat di minimalisir dengan Pelatihan tenaga kerja, terhadap proses produksi, pembuatan SOP, melakukan *checksheet* list pada produksi serta Membuat standar uji kecacatan dengan alat uji *greyscale* yang merevisi dari SNI-08-0288-1989

Kata Kunci: Kecacatan, Statistik Quality Control, PDCA, Metode Seven Tools, Regresi Linear Berganda

**ANALYSIS QUALITY CONTROL OF BATIK WRITTEN
PRODUCTS WITH STATISTICAL QUALITY CONTROL
METHOD AT UMKM A**

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ABSTRACT

Competition in the business world, both in the fields of trade, industry and manufacturing, is currently very tight. Quality control is an important thing that must be implemented in the production process to give a sense of trust to consumers. To be able to survive in the competition In business, maintaining consistent product quality must be carried out by the textile industry. UMKM A is an industry engaged in the production of written batik. The purpose of this research is to identify the most dominant type of disability, to find out the factors that cause defects, to model the relationship between factors that cause defects and defects. as well as submit suggestions related to improving product quality control with methods Statistical Quality Control (SQC), PDCA approach (plan, do, check, action) as well as analysis using seven tools and statistical tests of multiple linear regression which were processed using SPSS. The results of the research show defect dominant in production at UMKM A, namely at defect total uneven color 44%. The factors that cause it defect namely the human factor which has a greater influence than other factors and also obtained a multiple linear regression model which has the equation $Y = 1.576 + 0.189 X_1 + 0.244 X_2 + 0.313 X_3 + 0.229 X_4 + e$ with a value of R^2 square . 0.714. This can be minimized by training the workforce, on the production process, making SOPs, carrying out checksheets on production and making standard defects tests with test equipment greyscale which revised from SNI-08-0288-1989

Kata kunci: *Defect, Statistic Quality Control, PDCA, Seven Tools Method, Regresi linear Berganda*