

ABSTRAK

ANALISIS PENGENDALIAN KUALITAS PADA PRODUK KERTAS DENGAN METODE *STATISTICAL QUALITY CONTROL* (SQC)

Oleh

Satria Wira Jaya

20416226201192

Program Studi Teknik Industri

Penelitian ini bertujuan untuk menganalisis pengendalian kualitas pada proses cetak nomor seri meterai di PT. Peruri Digital Security menggunakan metode Statistical Quality Control (SQC). Permasalahan utama yang dihadapi adalah tingginya tingkat cacat produksi, khususnya jenis cacat flui dan noise, yang berdampak pada mutu serta efektivitas proses produksi. Data penelitian diperoleh melalui observasi, wawancara, dan dokumentasi, kemudian dianalisis dengan alat SQC berupa check sheet, histogram, peta kendali, diagram pareto, dan diagram fishbone. Hasil analisis menunjukkan bahwa proses produksi belum sepenuhnya terkendali secara statistik, dengan cacat dominan pada bulan November yang melebihi standar perusahaan 0,6%. Faktor penyebab utama berasal dari aspek manusia, mesin, metode, material, dan lingkungan. Berdasarkan temuan tersebut, disusun rekomendasi perbaikan berupa peningkatan pengawasan bahan baku, pemeliharaan mesin secara berkala, serta pelatihan operator. Penerapan metode SQC terbukti membantu mengidentifikasi akar masalah serta menyusun langkah perbaikan yang sistematis untuk menekan tingkat kecacatan.

Kata Kunci: Proses produksi, SQC, pengendalian kualitas

ABSTRACT

ANALYSIS OF QUALITY CONTROL ON PAPER PRODUCTS USING STATISTICAL QUALITY CONTROL METHOD

By

Satria Wira Jaya

20416226201192

Program Studi Industrial Engineering

This study aims to analyze quality control in the serial number printing process of stamp duty paper at PT. Peruri Digital Security using the Statistical Quality Control (SQC) method. The main problem identified is the high defect rate, particularly fluid and noise defects, which significantly affect product quality and production efficiency. Data were collected through direct observation, interviews, and documentation, then analyzed using SQC tools such as check sheets, histograms, control charts, Pareto diagrams, and fishbone diagrams. The results show that the production process is not fully statistically controlled, with the highest defect rate occurring in November, exceeding the company's standard of 0.15%. The dominant causes of defects come from human, machine, method, material, and environmental factors. Based on these findings, improvement recommendations were proposed, including enhanced raw material inspection, regular machine maintenance, and operator training. The application of SQC proved effective in identifying root causes and formulating systematic corrective actions to reduce defect levels.

Keywords: *Production process, SQC, quality control*