

ABSTRAK

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Program Studi : Teknik Industri
Judul : ANALISA PENGENDALIAN KUALITAS UNTUK MENGURANGI CACAT PRODUK PADA PERUSAHAAN PERCETAKAN DENGAN METODE SEVEN TOOLS DAN PENDEKATAN SIX SIGMA DI PT SARANA KATA GRAFIKA

Dosen Pembimbing : Ir. Yenny Widianty, M.T., IPU., ASEAN Eng

PT. Sarana Kata Grafika merupakan salah satu industri manufaktur. PT Sarana Kata Grafika bergerak dibidang percetakan buku dan mencetak beberapa jenis produk antara lain kalender, brosur, poster, undangan pernikahan, spanduk dan sebagainya. Perusahaan ini menghadapi tantangan dalam menjaga kualitas produk, yang tercermin dari tingginya tingkat cacat produk. Tujuan dari penelitian ini adalah untuk menganalisis faktor-faktor yang mempengaruhi terjadinya cacat produk dan memberikan usulan perbaikan untuk meningkatkan kualitas produksi. Metode yang digunakan dalam penelitian ini adalah analisis data produksi dan penerapan Seven Tools, seperti Lembar Periksa, Stratifikasi, Diagram Pareto, Diagram Tulang Ikan, pendekatan Six Sigma, dan usulan perbaikan menggunakan metode *5W+1H* untuk mengidentifikasi akar permasalahan yang menyebabkan cacat produk. Data yang digunakan dalam penelitian ini mencakup periode bulan Maret-Mei 2023 & Agustus-November 2023, dengan total produksi sebanyak 694.793 unit dan total jumlah cacat yang mencapai 74.956 unit. Dari jumlah tersebut, teridentifikasi 16 jenis cacat, termasuk kesalahan, Blanko, Cetakan kering, Cetakan berbayang, Salah susun halaman, Cetakan bercak-bercak, Halaman/katern Sobek, Cover rusak spot, Cetakan keriput, Halaman kepotong, Cetakan botak, Double halaman, Kurang halaman, Cetakan lari, Cover kepotong, Cover warna belang, Cetakan kotor. Hasil penelitian ini diperoleh melalui stratifikasi yang mengklasifikasikan jenis cacat Blanko dengan jumlah kecacatan sebanyak 23.869 unit, Cetakan Kering dengan jumlah kecacatan sebanyak 15.472 unit, Cetakan Berbayang dengan jumlah kecacatan sebanyak 12.258 unit, Salah Susun Halaman dengan jumlah kecacatan sebanyak 9.945 unit, Cetakan Bercak-bercak dengan jumlah kecacatan sebanyak 4.945 unit, Halaman/katern Sobek dengan jumlah kecacatan sebanyak 1.848 unit, Cover Rusak Spot dengan jumlah kecacatan sebanyak 1.072 unit, Cetakan Keriput dengan jumlah kecacatan sebanyak 1.014 unit, Halaman Kepotong dengan jumlah kecacatan sebanyak 943 unit, Cetakan Botak dengan jumlah kecacatan sebanyak 933 unit, Double Halaman dengan jumlah kecacatan sebanyak 833 unit, Kurang Halaman dengan jumlah kecacatan sebanyak 730 unit, Cetakan Lari dengan jumlah kecacatan sebanyak 453 unit, Cover Kepotong dengan jumlah kecacatan sebanyak 289 unit, Cover Warna Belang dengan jumlah kecacatan sebanyak 230 unit, Cetakan Kotor dengan jumlah kecacatan sebanyak 122 unit. Hasil penelitian juga diperoleh dari checksheet yang dimana Total memproduksi cetak buku mencapai 694.793 unit dengan jumlah produk cacat sebanyak 74.956 unit. Diagram pareto juga menunjukkan persentase kecacatan terbesar Blanko 32%, Cetakan Kering 21%, Cetakan Berbayang 16%, Salah susun halaman 13%, Cetakan Bercak-bercak 7%. Usulan perbaikan yang dapat dilakukan untuk PT Sarana Kata Grafika perusahaan perlu meningkatkan pemeliharaan mesin secara berkala, mengadakan pelatihan karyawan, dan monitoring lebih ketat terhadap proses produksi.

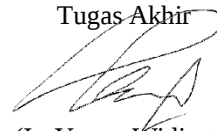
Kata Kunci: Pengendalian kualitas, Produk cacat, 7 Tools, Six Sigma, Industri Manufaktur

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Serpong, 02 Agustus 2024
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ABSTRACT

Name : Hanif Bayan Lazuardi
Courses : Industrial Engineer
Heading : **QUALITY CONTROL ANALYSIS TO REDUCE PRODUCT DEFECTS IN PRINTING COMPANIES WITH SEVEN TOOLS METHOD AND SIX SIGMA APPROACH AT PT SARANA KATA GRAFIKA**

Supervisor : Ir. Yenny Widianty, M.T., IPU., ASEAN Eng

PT. Sarana Kata Grafika is one of the manufacturing industries. PT Sarana Kata Grafika is engaged in book printing and printing several types of products including calendars, brochures, posters, wedding invitations, banners and so on. This company faces challenges in maintaining product quality, which is reflected in the high level of product defects. The purpose of this study is to analyze the factors that influence the occurrence of product defects and provide suggestions for improvements to improve production quality. The method used in this study is production data analysis and the application of Seven Tools, such as CheckSheet, Stratification, Pareto Diagram, Fishbone Diagram, Six Sigma approach, and suggestions for improvements using the 5W + 1H method to identify the root causes of product defects. The data used in this study covers the period March-May 2023 & August-November 2023, with a total production of 694,793 units and a total number of defects reaching 74,956 units. Of these, 16 types of defects were identified, including errors, Blanks, Dry molds. Ghosted print, Misaligned pages, Stained print, Torn pages/cartons, Spotted cover, Wrinkled print, Cut pages, Bald print, Double pages, Missing pages, Runaway print, Cut cover, Discolored cover, Dirty print. The results of this study were obtained through stratification that classifies the types of defects Blank with the number of defects as many as 23,869 units, Dry Printing with the number of defects as many as 15,472 units, Shaded Printing with the number of defects as many as 12,258 units, Misaligned Pages with the number of defects as many as 9,945 units, Spotted Printing with the number of defects as many as 4,945 units, Torn Pages/Patterns with the number of defects as many as 1,848 units, Spot Damaged Cover with the number of defects as many as 1,072 units, Wrinkled Printing with the number of defects as many as 1,014 units, Cut Pages with the number of defects as many as 943 units, Bald Printing with the number of defects as many as 933 units, Double Pages with the number of defects as many as 833 units, Lack of Pages with the number of defects as many as 730 units, Run Print with the number of defects as many as 453 units, Cut Cover with the number of defects as many as 289 units, Striped Color Cover with the number of defects as many as 230 units, Dirty Printing with the number of defects as many as 122 units. The results of the study were also obtained from the checksheet where the total production of printed books reached 694,793 units with the number of defective products as many as 74,956 units. The Pareto diagram also shows the percentage of the largest defects Blank 32%, Dry Print 21%, Ghost Print 16%, Misaligned pages 13%, Spotted Print 7%. Proposed improvements that can be made for PT Sarana Kata Grafika, the companies need to improve machine maintenance regularly, conduct employee training, and monitor the production process more closely.

Keywords: Quality control, Defective products, 7 Tools, Six Sigma, Manufacturing Industry

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