

ABSTRAK

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Judul Laporan Akhir : Analisis Parameter *Cosmetic Check*, dan *Measurement* dalam Proses *Buy off* terhadap Kualitas Produk

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Proses *Buy off* merupakan tahapan pemeriksaan yang dilakukan untuk memastikan bahwa produk telah memenuhi standar kualitas dan spesifikasi yang ditetapkan sebelum memasuki tahap *trial run* maupun *mass production*. Dalam pelaksanaannya, terdapat beberapa parameter yang digunakan sebagai acuan untuk menilai kesesuaian produk terhadap standar perusahaan. Penelitian ini bertujuan untuk mengetahui hasil pengujian parameter *Buy off* yang meliputi *Cosmetic Check*, *Strain Test*, *Measurement*, dan *Pressure Test*, serta mengetahui kesesuaian hasil pengujian tersebut terhadap standar kualitas yang telah ditetapkan perusahaan. Penelitian dilakukan pada proses *Buy off* produk baterai di PT Navitasys Technology Indonesia dengan menggunakan data hasil pengujian selama pelaksanaan kegiatan magang. Data yang diperoleh dianalisis dengan membandingkan hasil pengujian terhadap spesifikasi perusahaan. Pada parameter kosmetik, pemeriksaan visual menunjukkan tidak ditemukan cacat seperti *dent*, *scratch*, *stain*, maupun ketidaksesuaian pada *printing* dan *barcode*. Pada parameter *strain*, seluruh nilai regangan berada di bawah batas maksimum yang dipersyaratkan, yaitu $\leq 500 \mu\text{E}$. Parameter dimensi dianalisis menggunakan metode *Process Capability Index* (Cpk) dan menunjukkan kemampuan proses yang baik dalam menghasilkan produk sesuai spesifikasi secara konsisten. Sementara itu, hasil pengujian tekanan menunjukkan bahwa *claw pressure* berada di bawah 500 g, *contact area* Aluminium Tab $\geq 75\%$, dan *contact area* Nickel Tab $\geq 50\%$, sehingga seluruhnya memenuhi standar perusahaan. Berdasarkan hasil penelitian, seluruh parameter *Buy off* dinyatakan PASS. Dengan demikian, proses *Buy off* dapat digunakan sebagai metode verifikasi untuk memastikan kualitas dan kesiapan proses produksi sebelum produk dilanjutkan ke tahap *trial run* maupun *mass production* serta membantu meminimalkan risiko ketidaksesuaian produk.

Kata kunci: *Buy off*, kualitas produk, *Cosmetic Check*, *Strain Test*, *Measurement*, *Pressure Test*.

ABSTRACT

Analysis of Cosmetic Check, Strain Test, Measurement, and Pressure Test Parameters in the Buy off Process on Product Quality

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The Buy off process is an inspection stage carried out to ensure that products meet the quality standards and specifications established by the company before entering the trial run or mass production stage. In its implementation, several parameters are used as references to evaluate product conformity with the company's standards. This study aims to determine the results of Buy off parameter testing, including Cosmetic Check, Strain Test, Measurement, and Pressure Test, as well as to determine the conformity of the test results with the quality standards established by the company. The research was conducted on the Buy off process of battery products at PT Navitasys Technology Indonesia using test data obtained during the internship period. The data were analyzed by comparing the test results with the company's specifications. For the cosmetic parameter, visual inspection showed no defects such as dents, scratches, stains, or inconsistencies in printing and barcodes. For the strain parameter, all strain values were below the maximum required limit of $\leq 500 \mu E$. The dimensional parameter was analyzed using the Process Capability Index (Cpk) method and showed that the production process had good capability to consistently produce products within the specified requirements. Meanwhile, the pressure test results showed that the claw pressure was below 500 g, the Aluminium Tab contact area was $\geq 75\%$, and the Nickel Tab contact area was $\geq 50\%$, indicating that all requirements met the company's standards. Based on the research results, all Buy off parameters were declared PASS. Therefore, the Buy off process can be used as a verification method to ensure product quality and production readiness before proceeding to the trial run and mass production stages, while also helping minimize the risk of product non-conformities.

Keywords: Buy off, Product Quality, Cosmetic Check, Strain Test, Measurement, Pressure Test.