

Pengendalian Kualitas Produksi *Safety Shoes* Menggunakan Metode *Statistical Process Control* Pada PT. Seho Makmur Industri

Ditulis Oleh :
Muhammad Hafizha Akbar F

Pembimbing :
Maya Irjiyanti, SE., MBA., PhD

ABSTRAK

PT. Seho Makmur Industri merupakan sebuah perusahaan yang memproduksi *safety shoes*. Pada saat proses produksi perusahaan masih banyak mengalami kecacatan produk diantaranya yaitu cacat jahit, cacat lem, dan cacat buffing. Tujuan dari penelitian ini adalah untuk mengetahui pengendalian yang dilakukan, faktor-faktor yang menyebabkan produk cacat, dan penerapan *Statistical Process Control* di PT Seho Makmur Industri. Metode yang digunakan adalah metode deskriptif. Data yang dikumpulkan menggunakan metode observasi dan wawancara. Pengolahan data menggunakan alat bantu check sheet, diagram sebab akibat, diagram histogram, dan diagram kendali p.

Berdasarkan hasil penelitian dari alat bantu histogram yang dilakukan ditemukan bahwa jenis cacat yang paling sering terjadi adalah jenis cacat jahit dengan jumlah produk cacat sebanyak 1129 pasang atau sebanyak 52,76% dari total produk cacat *safety shoes*, dan yang paling sedikit adalah jenis cacat *buffing* dengan jumlah produk cacat sebanyak 256 pasang atau sebanyak 11,96 %.. Berdasarkan hasil diagram kendali p yang dilakukan, rata-rata UCL adalah sebesar 2,87, CL sebesar 1,87, dan LCL sebesar 1,33. ditemukan terdapat titik-titik yang berada di luar batas kendali (UCL dan LCL). Garis yang ditunjukkan oleh $\bar{p}$ -bar (CL) dengan nilai 1,87%, batas kendali atas (UCL) dengan nilai 2,87%, dan batas kendali bawah (LCL) dengan nilai 1,33%. diketahui bahwa pada awal tahun 2023 khususnya bulan Januari nilai UCL berada jauh diatas nilai CL yaitu sebesar 3,51%, ini menunjukkan pada bulan tersebut tingkat kerusakan yang terjadi sangat tinggi.

Berdasarkan hasil analisis perusahaan harus melakukan tindakan perbaikan kualitas dengan melakukan pengawasan terhadap pegawai yang kurang teliti dan tidak berhati-hati.

Kata Kunci: Pengendalian Kualitas, *Statistical Process Control* (SPC), Diagram Kendali p.

Quality Control of Safety Shoes Production Using the Statistical Process Control Method at

PT. Seho Makmur Industri

Written by :

Muhammad Hafizha Akbar F

Preceptor :

Maya Irjiyanti, SE., MBA., PhD

ABSTRACT

PT. Seho Makmur Industri is a company that produces safety shoes. During the production process, the company still experienced many product defects, including sewing defects, glue defects, and buffing defects. The purpose of this study is to find out the control carried out, the factors that cause defective products, and the implementation of Statistical Process Control at PT Seho Makmur Industri. The method used is a descriptive method. The data collected was using observation and interview methods. Data processing uses check sheets, cause and effect diagrams, histogram diagrams, and control chart.

Based on the results of the research from the histogram aids carried out, it was found that the most common type of defect was the type of sewing defect with the number of defective products as many as 1129 pairs or as much as 52.76% of the total defective safety shoe products, and the least was the type of buffing defect with the number of defective products as many as 256 pairs or as much as 11.96%. Based on the results of the p control diagram carried out, the average UCL was 2.87, CL was 1.87, and LCL was 1.33. It was found that there were points that were outside the control limit (UCL and LCL). The line is indicated by the $\bar{p}$ -bar (CL) with a value of 1.87%, the upper control limit (UCL) with a value of 2.87%, and the lower control limit (LCL) with a value of 1.33%. It is known that at the beginning of 2023, especially in January, the UCL value was far above the CL value, which was 3.51%, this shows that the level of damage that occurred in that month was very high.

Based on the results of the analysis, the company must take action to improve quality by supervising employees who are not inspect and not careful.

Keyword: Check Sheets, Cause and Effect diagrams, Histogram Diagrams, Control Chart.