DETEKSI DAN PENANGANAN CACAT PRODUK MEBEL DI CV LIMASE LARAS, YOGYAKARTA

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INTISARI

Industri mebel CV Limase Laras, Yogyakarta, menghadapi tantangan tingginya tingkat kecacatan produk yang berdampak pada penurunan kualitas, peningkatan biaya produksi, dan berkurangnya daya saing di pasar ekspor. Permasalahan utama meliputi variasi mutu bahan baku kayu bongkaran, belum optimalnya pengendalian mutu di setiap tahapan proses produksi, keterampilan tenaga kerja yang bervariasi, serta belum adanya pemetaan menyeluruh terkait jenis, jumlah, dan lokasi terjadinya cacat. Penelitian ini bertujuan untuk mengidentifikasi jenis, jumlah, lokasi, dan penyebab cacat produk mebel, serta memberikan rekomendasi penanganan yang tepat pada proses produksi.

Penelitian ini menggunakan metode kuantitatif dan kualitatif dengan data primer dan sekunder. Data primer diperoleh melalui observasi langsung ke lokasi, wawancara, serta pencatatan waktu dan hasil produksi. Data sekunder berasal dari laporan produksi selama 21 hari untuk produksi meja teras dan bangku untuk ekspor. Analisis dilakukan dengan memanfaatkan *Seven Tools of Quality (Check Sheet, Defect Concentration Diagram, Pareto Diagram, Histogram, Scatter Diagram, Control Chart, dan Fishbone Diagram)* serta *Statistical Process Control* (SPC) untuk memantau kestabilan proses.

Hasil penelitian menunjukkan bahwa lima jenis cacat utama permukaan kasar, keropos, kayu pecah, lubang bekas serangga, dan sambungan tidak seragam menyumbang lebih dari 75% total cacat, terutama pada tahap pembahanan, pemotongan, dan perakitan. Analisis *fishbone* dan *Five Whys* mengungkap bahwa penyebab cacat berasal dari faktor tenaga kerja, metode, bahan baku, mesin, dan lingkungan, dengan dominasi pada kurangnya pelatihan, SOP yang tidak konsisten, serta kualitas bahan dan perawatan mesin yang rendah. Scatter diagram menunjukkan hubungan lemah antara jumlah produksi dan cacat, sementara *control chart* menunjukkan proses masih terkendali namun tidak stabil. Penerapan *Seven Tools* dan SPC terbukti efektif dalam menganalisis cacat secara terstruktur. Rekomendasi perbaikan meliputi pelatihan rutin, peninjauan SOP, seleksi bahan baku, perawatan mesin, dan penerapan 5S untuk meningkatkan efisiensi produksi dan daya saing CV Limase Laras di pasar ekspor.

Kata kunci: pengendalian kualitas, Seven Tools of Quality, Statistical Process Control, cacat produk, mebel.

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DETECTION AND HANDLING OF FURNITURE PRODUCT DEFECTS AT CV LIMASE LARAS, YOGYAKARTA

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ABSTRACT

The furniture industry, CV Limase Laras, in Yogyakarta, faces the challenge of a high product defect rate, which results in decreased quality, increased production costs, and reduced competitiveness in the export market. Key issues include variations in the quality of raw materials from unpacked wood, suboptimal quality control at every stage of the production process, varying workforce skills, and the lack of comprehensive mapping of the types, number, and locations of defects. This study aims to identify the types, number, location, and causes of furniture product defects and provide recommendations for appropriate management in the production process.

This study used quantitative and qualitative methods using primary and secondary data. Primary data was obtained through direct on-site observation, interviews, and recording of production times and output. Secondary data came from 21-day production reports for patio tables and benches for export. Analysis was conducted using the Seven Tools of Quality (Check Sheet, Defect Concentration Diagram, Pareto Diagram, Histogram, Scatter Diagram, Control Chart, and Fishbone Diagram) and Statistical Process Control (SPC) to monitor process stability.

The results showed that five main types of defects: rough surfaces, holes, split wood, insect holes, and uneven joints contributed more than 75% of the total defects, especially in the material processing, cutting, and assembly stages. Fishbone and Five Whys analyses revealed that the causes of defects stemmed from labor, methods, raw materials, machines, and environmental factors, with the dominant factors being lack of training, inconsistent SOPs, and low material quality and machine maintenance. Scatter diagrams showed a weak relationship between production volume and defects, while control charts indicated that the process was still under control but unstable. The implementation of Seven Tools and SPC proved effective in analyzing defects in a structured manner. Recommendations for improvement include regular training, SOP reviews, raw material selection, machine maintenance, and the implementation of 5S to improve production efficiency and CV Limase Laras' competitiveness in the export market.

Keywords: *quality control, Seven Tools of Quality, Statistical Process Control, product defects, furniture.*

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