

ABSTRAK

Nama : Restu Prambudi
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Program Studi : Teknik Industri
Judul Laporan Skripsi : Analisis Pengendalian Kualitas Produk
Part *Handle Comp 28D* Dengan
Menggunakan Metode *DMAIC*
Pada Industri Manufaktur Otomotif.
Pembimbing : Ir. Indra Almahdy, M.Sc

PT. CNC merupakan perusahaan yang bergerak dibidang industri manufaktur otomotif dalam bisnis logam stamping, welding. Permasalahan yang terjadi dalam bidang press weld adalah menjaga kualitas produknya terutama saat proses assembling dikarenakan masih terjadi hasil proses yang menyebabkan banyaknya *output* cacat, Berdasarkan data bulan Januari - Desember 2022 dari *voice of customer*, part handle comp menjadi problem tertinggi. salah satunya proses cacat tertinggi adalah pembuatan *part handle comp 28D* dengan 96pcs problem dan persentase 0.63%. dengan cacat (Nut Collar Lepas, Stay Mirror Karat, Lecet Handling, Peel Off, Marking Geser). Dan yang menjadi penyumbang cacat tertinggi dengan permasalahan Nut Collar Lepas dikarenakan alur flow proses yang banyak, Oleh karena itu perlu dilakukan analisis perbaikan dan pengendalian kualitas disetiap prosesnya dengan menggunakan metode *Define, Measure, Analyze, Improve, Control (DMAIC)* untuk mengurangi cacat produk pada saat proses dan inspeksi agar produk cacat tidak kelolosan hingga ke customer. Setelah dilakukan analisis serta *uji saigent test* untuk memperkuat analisis, didapatkan bahwa penyebab dari cacat disebabkan oleh factor manusia, metode dan mesin dan dilakukan tindakan perbaikan dengan melakukan edukasi ulang, merevisi standart kerja, dan pembuatan *pneumatic poyakoke* proses welding, dan didapatkan untuk hasil level sigma sebelum perbaikan 4.52 setelah perbaikan menjadi 4.88 nilai level sigma, serta melakukan kontrol setelah perbaikan dengan menjalankan program *BIQ (Build In Quality)*.

Kata Kunci : Pengendalian Kualitas, *DMAIC*, *Handle Comp*, *Saigent Test*.

ABSTRACT

Name : Restu Prambudi
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Study Program : *Industrial Engineering*
Title Internship Thesis : *Analysis Quality Control Product Part
Handle Comp 28D Using DMAIC Method
In The Automotive Manufacturing Industry.*
Counsellor : Ir. Indra Almahdy, M.Sc

PT. CNC is a company sector in the automotive manufacturing industry in the business of metal stamping, welding. The problem that occurs in the press weld sector is maintaining the quality of the product, especially during the assembling process because the process results still occur which cause a lot of defective output. Based on data from January - December 2022 from voice of customers, the comp handle part is a non-conformity problem. highest defect quality standards. one of the processes with the highest defects is making part handle comp 28D with 96 problems and a percentage of 0.63%. with defects (Loose Collar Nut, Stay Mirror Rust, Handling Scratches, Peel Off, Sliding Marking). And the highest contribution defects is the Loose Nut Collar problem due to the many process flow paths. Therefore, it is necessary to do improvement analysis and quality control in each process using the Define, Measure, Analyze, Improve, Control (DMAIC) method to reduce product defects during processing and inspection so that defective products do not pass through to customers. After carrying out analysis and Saigent tests to strengthen the analysis, it was found that the causes of defects were caused by human factors, methods and machines and corrective action was taken by carrying out re-education, revising work standards, and making pneumatic poyakoke welding processes, and obtained sigma level results before improve 4.52 after improve becomes 4.88 sigma level value, and carry out control after improve by aandctivity BIQ (Build In Quality) program.

Keywords : *Quality Control, DMAIC, Handle Comp, Saigent Test.*