

**USULAN PENGENDALIAN KUALITAS MESIN *PRESS STAMPING* PADA
PRODUKSI *SPOT BRACKET* DENGAN METODE *SIX SIGMA* DI PT.KYODA MAS
MULIA**

Nama : Indra Septiawan
NRP : 1131500032
Program Studi : Teknik Industri

ABSTRAK

PT. Kyoda Mas Mulia merupakan perusahaan manufaktur yang bergerak dalam industri produksi spare part mobil dan motor, Dimana target produksi masih belum tercapai akibat dari banyaknya kecacatan pada produk yang dihasilkan. masalah yang terjadi yaitu pada proses produksi *spot bracket* . Peningkatan kualitas merupakan hal terpenting dalam meningkatkan kepuasan pelanggan.

Dalam penelitian ini menggunakan metode *Six Sigma* yang meliputi lima tahapan analisis yaitu *Define, Measure, Analyze, Improve* dan *Control* Untuk mengetahui pengendalian kualitas. kegiatan penelitian ini dilakukan dengan cara observasi kelapangan perusahaan secara langsung. Pengumpulan data penelitian ini dilakukan dengan cara mengambil data historis pada perusahaan tersebut agar dapat memberikan usulan dan membandingkan peningkatan kualitas yang didapat sebelum maupun sesudah penelitian.

Permasalahan pada penelitian ini yaitu CTQ (*Critical to Quality*) didapatkan cacat terbesar yaitu Keropos dengan persentase (11%), dan Karat dengan persentase (10%).dari kedua jenis *defect* yang berpengaruh besar terhadap penurunan Yield dan peningkatan kualitas tersebut.

Berdasarkan perhitungan Sigma kapabilitas sigma perusahaan saat ini adalah sebesar 3,90 dengan nilai DPMO (*Defect Per Mililion Opprtunity*) adalah sebesar 8265.831 serta didapat nilai yield sebesar 92,561 %. Dalam perhitungan target sigma yang diperoleh yaitu nilai DPMO (*Defect Per Mililion Opprtunity*) adalah sebesar 1577.700. Sedangkan untuk nilai kapabilitas sigma perusahaan saat ini adalah sebesar 4,45. didapat nilai yield sebesar 98.580%. Berdasarkan pengolahan data diperoleh penurunan *Yield* dan *Defect* yang sangat signifikan didapat selisih sigma sekarang dan target sebesar 0,11 dan target nilai yield sekarang dengan target sebesar 5,44%.

Kata Kunci : Peningkatan Kualitas, DMAIC, metode *Six Sigma*, *Critical to Quality* (CTQ),

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Ketua Program Studi Teknik Industri

Dra. Ni Made Sudri MM, MT.

ABSTRACT

Name : Indra Septiawan
Study Program : Industrial Engineering
Title : *PROPOSED CONTROL OF QUALITY PRODUCT PRESS STAMPING MACHINE IN BRACKET SPOT PRODUCTION USING SIX SIGMA METHOD IN PT. KYODA MAS MULIA.*

PT. Kyoda mas mulia is a manufacturing company engaged in the manufacture of automobile and motorcycle spare part. Where the production target is still not achieved due to the many defects in the products produced. PT. Kyoda mas Mulia, is a company that maintains the quality of its products in order to be able to compete with other companies, therefore PT. Kyoda mas mulia made improvements, especially in the field of product quality produced to meet consumer expectations. PT. Tirta Intimizu Nusantara faces a problem that is the occurrence of many product defects in the production process of the bracket spot.

In this study the data analysis used is the Six Sigma method which includes five stages of analysis namely Define, Measure, Analyze, Improve and Control. Analysis of the results of the study using the Six Sigma method to determine quality control through several stages.

Based on data processing obtained two types of defects that have a large effect on the decrease in yield and a very significant increase in rework defects are leaked Porous and rust, with the percentage of 11% and 10%

. Based on the calculation of Sigma, the company's current sigma capability is 3,90 with a DPMO (Defect Per Milestone Opprtunity) value of 8265.831 and a yield value of 92,561 %. In calculating the sigma target obtained, the DPMO (Defect Per Milestone Opprtunity) value was 1577.700. Whereas the value of the company's sigma capability at present is 4,45. obtained yield value of 98.580%. Based on data processing, there are two processes that have a large effect on the reduction of yield and defects which have a very significant effect on the process. The present sigma difference and the target are 0.11 and the target value is now with a target of 5.44%. The next step is improving by making SOPs at each work station, conducting briefings before doing work, providing pressure gauges on the installation of valves at each work station, and the latter providing rewards to diligent and disciplined operators. The last step is control by performing a 5R check and making a control chart.

Keywords: Quality Control, Process Failure Mode and Effect (PFMEA), Critical to Quality (CTQ), Six Sigma, DMAIC, Defect