ABSTRAK

USULAN PENINGKATAN KUALITAS PRODUK *INNER TUBE* DI PT XYZ DENGAN METODE RCA DAN FMEA

Bambang Ardie Purnawan, M. Derajat Amperajaya
Fakultas Teknik, Universitas Esa Unggul.
Jalan Citra Raya Boulevard, Tangerang
ardiebambang787@gmail.com

Meningkatnya pengguna sepeda motor memberi dampak positif pada industri ban sepeda motor untuk terus berupaya menghasilkan produk yang berkualitas baik agar mampu bersaing ditengah persaingan yang cukup kompetitif. Berdasarkan fungsinya, terdapat dua jenis komponen ban pada kendaraan sepeda motor yaitu *tire* (ban luar), dan *inner tube* (ban dalam). PT XYZ merupakan salah satu perusahaan manufaktur yang memproduksi *tire* dan *inner tube*. Berdasarkan data yang diperoleh, *scrap* departemen produksi *tire* masih berada dibawah batas KPI, sedangkan *scrap* departmen produksi *inner tube* sudah melebihi batas maksimal KPI. Adapun tujuan dari penelitian ini adalah menurunkan pencapaian *scrap finish product inner tube*, menganalisis penyebab-penyebab timbulnya *defect* dan memberikan usulan perbaikan terhadap *defect-defect* yang dominan. Analisa dilakukan dengan metode *cause and effect diagram* dan *root cause analysis* menggunakan tahapan 5 *why.* Upaya perbaikan ini dipaparkan dengan metode FMEA. Berdasarkan hasil pengolahan data jenis *defect* periode Januari 2018 sampai Agustus 2019 menggunakan *diagram pareto*, didapatkan bahwa *defect* dominan yang terjadi pada departemen produksi *inner tube* adalah *defect open splice* dengan presentase sebesar 15% , *lateral crease* sebesar 12%, *dan foreign material* sebesar 12%.

Kata kunci: *Inner* Tube, Pengendalian Kualitas, RCA, FMEA

ABSTRACT

THE PROPOSED IMPROVEMENT OF THE QUALITY OF INNER TUBE PRODUCTS IN PT. XYZ BY RCA AND FMEA METHODS

Bambang Ardie Purnawan, M. Derajat Amperajaya
Fakultas Teknik, Universitas Esa Unggul.
Jalan Citra Raya Boulevard, Tangerang
ardiebambang787@gmail.com

The increase of motorcycle users has a positive impact on the motorcycle tire industry to continue strive to produce good quality products in order to be able to compete amid quite competitive competition. Based on function, there are two types of tire components on motorcycle vehicles, which is tire and inner tube. PT XYZ is a manufacturing company that manufactures tires and inner tubes. Based on the data obtained, the scrap of the production department tire is still below the maximum KPI limit, while the scrap of the production department inner tube has exceeded the maximum KPI limit. The purpose of this study is to reduce the scrap inner tube, analyse the causes of defects, and propose improvements to the dominant defects. The analysis was carried out using the cause and effect diagram method and the root cause analysis using the 5 why stage. This improvement effort is explained by the FMEA method. Based on the data from January 2018 to August 2019 of diagram pareto, the result is the dominant defects that occurred in the inner tube production department were open splice defects with a percentage of 15%, lateral creases by 12%, and foreign material by 12%.

Keywords: *Inner Tube, Quality Control, RCA, FMEA*