ABSTRAK

PT KiyoTech Indonesia merupakan perusahaan yang bergerak di bidang manufaktur pada part elektronik. Beberapa part elektronik yang diproduksi pada komponen mesin fotocopy salah satunya seperti part base assy. Permasalahan yang terjadi yaitu tingginya jumlah produk rework. Berdasarkan data perusahaan dari bulan September 2023 hingga bulan Februari 2024 memiliki permasalahan terkait kualitas yang tidak sesuai spesifikasi. Pada data produk rework selama bulan September 2023 hingga bulan Februari 2024 terdapat rata-rata defect per minggu dengan jumlah 38 pcs dari rata-rata produksi per bulan yaitu 451 pcs dan persentase defect berjumlah 8,36%. Berdasarkan hasil analisis menggunakan diagram pareto terdapat 4 jenis dengan total persentase defect yaitu deform (32%), Dented (26%), Scratch (23%), dan Crack (21%) maka defect deform menjadi priorias pertama dalam upaya pengendalian kualitas. Berdasarkan hasil analisis menggunakan diagram fishbone diketahui faktor yang mempengaruhi jenis defect deform yaitu manusia, mesin, material, metode dan lingkungan. Adapun usulan perbaikan menggunakan metode FMEA maka harus dilakukan improvement, berdasarkan nilai RPN yang paling tinggi dari hasil analisa FMEA yaitu defect deform yang disebabkan oleh faktor metode proses penggunaaan mesin grinding yang salah dengan nilai RPN 252. Maka dilakukan tindakan rekomendasi perbaikan dengan melakukan pengarahan dan training terkait proses grinding dan dibuatkan work instruction di line sending yang mudah dipahami.

Kata Kunci: Kualitas, *Base Assy*, Diagram pareto, Diagram *Fishbone*, *FMEA*

ABSTRACT

PT KiyoTech Indonesia is a company engaged in manufacturing electronic parts. Several electronic parts are produced using photocopier components, one of which is the base assembly part. The problem that occurs is the high number of product reworks. Based on company data from September 2023 to February 2024, there were problems related to quality that did not meet specifications. In the rework product data for September 2023 to February 2024, there is an average defect per week of 38 pcs from the average production per month of 451 pcs, and the defect percentage is 8.36%. Based on the results of the analysis using the Pareto diagram, there are 4 types with a total percentage of defects, namely deform (32%), dented (26%), scratch (23%), and crack (21%), so deform defects are the priority in quality control efforts. Based on the results of the analysis using a fishbone diagram, it is known that the factors that influence the type of deform defect are humans, machines, materials, methods, and the environment. As for the proposed improvements using the FMEA method, improvements must be made based on the highest RPN value from the FMEA analysis results, namely defect deformities caused by incorrect grinding machine use process methods with an RPN value of 252. Recommendations for improvement are then carried out by providing guidance and training. related to the grinding process and made work instructions on the sending line that are easy to understand.

Keywords: *Quality, Base Assy, Pareto Diagram, Fishbone Diagram, FMEA*