

ABSTRAK

PT. XYZ, perusahaan manufaktur kantong plastik di Jombang yang mengalami kesulitan dalam mengendalikan produk *reject* dari hasil produksi karena melebihi standar perusahaan. Hasil identifikasi berdasarkan *Statistical Process Control* (SPC) diketahui bahwa proses produksi kantong plastik minimarket jenis A belum terkendali. Penyimpangan tersebut disebabkan oleh beberapa faktor seperti manusia karena operator kurang teliti dalam *setting* mesin, mesin karena *error*, bahan baku karena berbeda kualitas, dan metode karena *setting* yang berbeda dari standar. Kecacatan yang terjadi adalah cacat mata ikan sebanyak 339,9 Kg dengan persentase 39,4%, cacat warna sebanyak 228 Kg dengan persentase 26,4%, dan cacat tebal-tipis sebanyak 128 Kg dengan persentase 14,8%. Prinsip 80/20 dalam diagram pareto diartikan 80% kecacatan disebabkan oleh 20% masalah dalam produksi. Analisis *Failure Mode And Effect Analysis* (FMEA) menunjukkan bahwa salah satu penyebab kecacatan adalah bahan kurang sesuai standar dengan nilai RPN 200. Tindakan yang diperlukan untuk memperbaiki kegagalan yang disebabkan oleh bahan kurang sesuai standar adalah perusahaan memilih alternatif *supplier* lain dengan kualitas bahan baku lebih baik dan memperhatikan proses *sampling* saat penerimaan bahan baku agar sampel yang diambil lebih mewakili karakteristik dari keseluruhan bahan baku yang datang.

Kata kunci : kantong plastik, *Statistical Process Control* (SPC), *Failure Mode And Effect Analysis* (FMEA)

ABSTRACT

PT. XYZ, a plastic bag manufacturing company in Jombang that has difficulty in controlling reject products because it exceeds company standards. The results of the identification based on Statistical Process Control (SPC) found that the production process of type A minimarket plastic bags has not been controlled. The deviation is caused by several factors such as humans because the operator is not careful in setting the machine, the machine because of errors, materials because of different qualities, and methods because the settings are different from the standard. The defects that occurred were fish eye defects of 339.9 Kg with a percentage of 39.4%, color defects of 228 Kg with a percentage of 26.4%, and thick-thin defects of 128 Kg with a percentage of 14.8%. The 80/20 principle in the pareto diagram means that 80% of defects are caused by 20% of problems in production. Analysis form Failure Mode And Effect Analysis (FMEA) showed that one of the causes of disability was that the material was not up to standard with a value of RPN 200. The action needed to correct the failure caused by materials that are not up to standard is for the company to choose other alternative suppliers with better raw material quality and pay attention to the sampling process when receiving raw materials so that the samples taken are more representative of the characteristics of the overall raw material that comes.

Keywords : *plastic bag, Statistical Process Control (SPC), Failure Mode And Effect Analysis (FMEA)*