

Penerapan Metode *Statistical Quality Control* Dan *Fault Tree Analysis* Pada Proses Sterilisasi di CV. Pasific Harvest Banyuwangi (Application of statistical quality control methods and fault tree analysis in the sterilization process at CV. Pasific Harvest Banyuwangi) Supervisor: Dr. Elly Kurniawati, S.T.P.,M.P.

Faridatul Jannah

Study Program of Food Engineering Technology

Majoring of Agriculture Technology

Program Studi Teknologi Rekayasa Pangan

Jurusan Teknologi Pertanian

ABSTRACT

The purpose of this research is to find out the application of Statistical Quality Control and Fault Tree Analysis methods to control the types of defects that occur during the sterilization process, find out the causes of their occurrence, and provide suggestions for improvement. The research methods used were research preparation (literature study), field observations, problem solving, interviews, data collection, data processing, and data analysis. Application of the Statistical Quality Control method to control the types of defects that occur by using the seven tools. While the application of the Fault Tree Analysis method is by making a fault tree and determining the minimum cut set then analyzing it quantitatively. The results of the fishbone diagram analysis found that there are 3 factors that cause defects in the sterilization process, namely machines, materials, and humans. Proposed improvements to reduce the level of defects that often occur, namely carrying out daily inspection and maintenance of the machine, the machine must be calibrated, carrying out more thorough checks on cans sent from suppliers, disciplining employees by holding briefings once a week, conducting training on how to handle them properly and correct every 3 months or 6 months to employees, the seamer operator monitors the time during the draining process to the seamer process, checks the seamer machine before using the production process so as not to hinder the can closing process, and performs temperature sensors on a monthly basis.

Keywords : *Defects, Fault Tree Analysis, Statistical Quality Control, Sterilization*