

**Penerapan Metode *Failure Mode And Effect Analysis* (FMEA) Pada
Produksi Roti Tawar Di *Tefa Bakery* Politeknik Negeri Jember (Application
of the Failure Mode And Effect Analysis (FMEA) Method on the Production of
Bread at Tefa Bakery, Jember State Polytechnic)**

Didiek Hermanuadi (Pembimbing I)

Naufalidz Dzakin Najib
Study Program of Food Engineering Technology
Majoring of Agricultural Technology
Program Studi Teknologi Rekayasa Pangan
Jurusan Teknologi pertanian

ABSTRACT

One of the food industry markets that are currently in tight competition is the bread industry. Teaching Factory (Tefa) Bakery Politeknik Negeri Jember develops white bread products and always strives to maintain product quality, but there is still data in the field that shows product defects in bread which cause the product to be unfit for sale. Product defects that occur during the production process are quite large, namely 27%. This study aims to Politeknik Negeri Jember, especially in the production process of bread. The research methods include research preparation (observation, and literature review), problem identification, analysis data, and collection data, analysis data using the Failure Mode and Effects Analysis (FMEA) method. The results of the FMEA analysis of the failure mode "Too long during the fermentation process in the proofing machine" has the highest RPN value of 64, then the failure mode "Unclean equipment" has the second highest RPN value of 34. Recommendations for improvement for the failure mode "Too long during processing fermentation in the proofing machine" means that the proofing machine is given an alarm so that when the dough enters the machine and performs fermentation, the workers immediately set an alarm and wait for the alarm to sound and the recommendation for improvement for the failure mode "Unclean equipment" is to make a more regular schedule for cleaning the pan.

Key words: Bread, Defect product, FMEA, and Production