

ABSTRACT

Rumah Tempe Zanada (RTZ) is a Small and Medium Enterprises (SMEs) producing tempe. RTZ is a subsidiary of Rumah Tempe Indonesia. RTZ produces tempeh using dry process of tempe production. According to company data on the dry process of tempeh production there is a defect of 14.5%. Defect is the largest defect of soybeans broken into powder in the process of solving soybeans. This research uses Taguchi method to minimize the defect of soybean into powder. The Delphi method is applied to identify the root cause of defect in the soy-breaking process. The Taguchi method is a Design of Experiment approach for parameter optimization of a process. The purpose of this study is to determine the optimum parameters and the most influential parameters in the process of soybean breakdown in the dry process of tempeh production. Determination of parameters and levels, objective functions, orthogonal arrays, signal-to-noise ratios, and will be done in this study to improve the performance of the soy-breaking process. Approach. The objective function used in applying the Taguchi method is smaller-the-better. Orthogonal array used is a combination of 3 factors with each having 3 levels with the number of experiments 9 conducted 3 times trial.

Keywords: Production of Tempe, Delphi, Design Of Experiment, Taguchi, Defect Soy broke into powder