

**APPLICATION OF STATISTICAL PROCESS CONTROL
IN TEMPEH CHIPS QUALITY CONTROL
AT UD ORGANIC HOUSES IN JEMBER REGENCY**
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ABSTRACT

The increasing business development is characterized by increasingly competitive business competition. One of the industrial sectors that requires risk identification in the production process is the tempeh chips industry. One of the tempeh chips industry is UD Rumah Organik which plays a role as a micro, small and medium enterprises (MSMEs). UD Rumah Organik in its production process is inseparable from the various problems faced. This research aims to: 1) identify product quality control, 2) analyze the application of the Statistical Process Control method, and 3) analyze the factors that cause product defects. The methods used include np control maps, process capabilities (Cp), pareto diagrams, and cause-effect diagrams with shape, thickness and color attribute variables. The study was conducted for 20 days of observation. The results of the research on the application of the np control map show that it is still outside the control limit statistically and the value of process capability is still below 1 or the process capability is low. The pareto diagram shows the results on the shape attribute, which is 23,344 grams (35.96%), the thickness attribute is 21,380 grams (32.95%) and the color attribute is 20,153 grams (31.06%). The results of the research obtained on the pareto diagram that have the highest level of defect are the shape attributes with a value of 23,344 grams (35.96%). Based on the cause-effect diagram, the causes of this defect include undercooked raw materials, excessive frying capacity, blunt slicing machine blades, less thorough employees, less optimal machine maintenance and the slicing machine gap setting often changes.

Keywords: *Quality Control, Product Quality, Statistical Process Control, Tempeh Chips, Tempeh*