

ABSTRAK

This final project study was conducted at PT. Perusahaan Logam Bima Bandung which is one of the manufacturing company which produce various kinds of household utensils. The quality of the production process at PT. Perusahaan Logam Bima Bandung still not able to produce products with good quality stockpot it is evidenced by the emergence of defects in the product stockpot due to the occurrence of a potential failure in the production process. By looking at the phenomenon then the goals to be achieved in this research is to identify the types of potential failures that often occur in the production stockpot, causing defects in the product stockpot and find the root cause to provide recommendations or proposals of corrective actions that must be done by the company to reduce failures in the process production stockpot.

Failure Mode and Effect Analysis (FMEA) is a method that can be used to identify, establish improvement priorities and eliminate potential failure modes that occur in the production process. Prioritization of improvement of production processes shall be based on risk periority number (RPN) for each process. Value risk periority number (RPN) is obtained by multiplying the value severity ranking (weight refers to the magnitude of the serious impact arising from a potential failure mode), the occurrence ranking (weight refers to how many frequency potential failure happens), and the value of detection ranking (weight refers to the possibility of the method in detecting potential failure mode). To perform the sorting value risk priority number (RPN) from the largest scale to the smallest scale, then use the Pareto diagram.

Based on identification that has been done by using the approach of Failure Mode and Effect Analysis (FMEA) showed that there are six types of potential failure, the priorities and the most in need of remedial action is in the process of polishing / polisher with a value of RPN of 448 (16%), the final check to the value of the RPN of 392 (14%), the process of assembling the value of the RPN of 336 (12%), the process of packaging the value RPN of 336 (12%), the calibration value RPN of 245 (9%) and process annealing with RPN score of 210 (8%).

Kata Kunci: Failure Mode and Effect Analysis, Pareto Diagram, Fisbone Diagram, Operation Process Chart, Quality Control Chart (P-Chart)