Abstract

Recent development of technology create a tight competition among companies. Most of companies are competing to reach maximum benefit with low production cost. Unfortunately the high profit acquired by the company is not supported by the quality of the product itself. Increasing productivity in a company can be achieved in many ways. One of them is to build a team which competen in productivity. The function of this team is to provide ideas related improvement productivity. If the offering idea is accepted, the team will get reward. The obstacle is several members of the group don’t understand the concept of productivity. The concept of lean manufacturing aims to be the solution of the obstacle.

The concept of lean manufacturing can be applied to identify problem encountered by the company. Identification was conducted by spreading questionnaire to productivity team which include the employee and supervisor. The questionnaire aims to measure whether the employee understand about the concept of lean manufacturing. Type of waste in which related to lean manufacturing is also being identified. After the waste is identified, then the performance of MPPO production process is
identified using fuzzy logic. Fuzzy logic is used to determine the limit values of each determined parameters.

Waste that occurs in the company can not be eliminated at all, but it can be reduced gradually. The application of lean manufacturing can reduce the waste that occurs in the company. Therefore, the employees are expected to understand the concept of lean manufacturing, so the productivity will also increasing. For the conclusion, the MMPO production line is being in good parameter and improvement is needed especially on product defect and unnecessary motion.

**Keywords**: Lean Manufacturing, Productivity, Fuzzy Logic