

## ABSTRACT

*In company which is in form of manufaktur, production planning is one of the very important matter to be conducted. One of the production planning is determination of amount of production that influence the amount of finished goods inventory. Where finished goods inventory require to be controlled so that harmless by expense of and quality of pruduk. Therefore, each company wish the optimal of amount of production so that inventory can be controlled*

*In this final project will be conducted Logic Fuzzy implementation to determine the amount of production and assist in decision making, this fuzzy logic implementation is precisely conducted for the data of owning uncertainty value. So that can be implemented at above problems because demand varibel is uncertainty value. this Process Logic Fuzzy first step by doing culstering fuzzy at past data for all variable aim to group every data in variable into some certain fuzzy gathering that is ver little, a little, middle, many, a lot of. Then will be continued with fuzzy gathering that is fuzzification and membership function to obtaing degree of membership for each test data. Then System fuzzy inferensi be continued by using Mamdani method, that is implication function application , order composition and defuzzification, in which in defuzzyfication used COG method to obtain crisp value of amount of production.*

*Result of conducted data processing is result of defuzzification that is obtained by output value of amount of production influencing inventory. Finally , we get conclusion that this Logic Fuzzy can be used to model system in determining the amount of production to control the amount of inventory that is influenced by request and inventory. To obtain more accurate result can use more input variable , also by adding past data for the optimalization of fuzzy gathering.*

**Key words :** Fuzzy Logic, Fuzzy Clustering, Fuzzification, Defuzzification, amount of Production.