ABSTRACT

INKABA division of PT Agronesia is a company engaged in manufacturing. Based on research conducted, demand patterns in the INKABA division are probabilistic and has no safety stock. INKABA division order to the supplier of raw materials when receiving orders from customers. Raw material procurement systems like this have a problem if at the time raw materials are ordered delayed delivery.

Another problem experienced INKABA division is often made a purchase of raw materials in large quantities with time is not fixed, while the funds owned by PT Agronesia often not enough because the PT Agronesia not only INKABA divisional only. Therefore, with the inventory control is done, expected the company can reduce inventory costs for raw materials.

In this study, Inventory control is done using the EOQ method of Probability. Based on calculations performed with the method, the total inventory costs incurred by the company amounting to Rp1.146.908.002,-, so that companies can save costs amounting to Rp 95.196.113,- or by 7,66% from the calculation of actual conditions.

In this study also conducted a sensitivity analysis. Sensitivity analysis is performed to determine how big the impact of changes in the variables that affect the total inventory cost criteria. Variable sensitivity calculations performed in this study was the change increase and decrease the impact of raw material ordering and price with the range of 10-20%.

Key words: EOQ Probabilistic, Safety stock, Reorder Point, inventory.