## **ABSTRACT**

Many companies or industries either a manufacturing company or trading companies face problems or challenges in managing raw materials. The company has to make controlling the supply of raw materials in order to avoid shortage or excess raw materials. This research was conducted at UD Sunda Jaya which is a company that manufactures bottle caps which are made from aluminum. This study aims to determine the number of optimal ordering raw material using Economic Order Quantity (EOQ), to know the great value of total inventory cost of raw materials before and after using Economic Order Quantity (EOQ) and to know when UD Sunda Jaya can make an order back.

This type of research used in this research is quantitative research The method used in this research is the method of economic order quantity (EOQ). The calculation results described later descriptively to determine the optimal order quantity of raw material aluminum at UD. Sunda Jaya.

Based on the results of research conducted by using economic order quantity (EOQ) will produce economic order quantity of 3.875 kg with a frequency of order as much as four times in one year. The total cost of inventory produced using EOQ method is Rp. 4.284.313 while the total company policy inventory cost is Rp. 14.929.855 UD Sunda Jaya can make savings until Rp. 10.645.542 or 71,3%. UD Sunda Jaya can make a reservation back (Reorder point) at the time of the aluminum inventory in the warehouse remaining 300 kg.

Keyword:Inventory, Economic Order Quantity, Reorder Point