

# INVENTORY CONTROL OF CAMPER RAW MATERIALS USING MRP WITH LOT SIZING METHODS AT UD. ADI MEUBEL

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## ABSTRACT

A fundamental problem, namely inventory control, is often experienced by companies, whether large, medium or small companies. One of them is UD. Adi Meubel, who plans to control the wood supply based only on estimates without proper control management planning, so that in certain months there is a large purchase of raw material stock which results in increased costs and decreased wood quality. Sometimes also experiencing stock out which is risky in terms of customer loyalty. This research was conducted to determine the inventory count using the MRP *lot sizing* methods to solve the problems that exist in UD Adi Meubel, which was then conducted to compare the three methods in order to get the optimal results. In this study, it is expected to help inventory control management at UD. Adi Meubel to be more optimal. The results of this study are after a comparison, control of camper wood raw material supplies at UD. ADI MEUBEL is more optimal, that is, it can minimize inventory costs when using the EOQ method where the frequency of purchasing raw materials for camphor wood with the MRP for EOQ method is 2 times, the MRP for the lot for lot model is 12 times, and the MRP for the POQ model is 2 times. While the total inventory cost of the EOQ method is Rp660.000,- the MRP method of the lot for lot model is Rp2.624.000,- and the MRP method of the POQ model is Rp. 2.903.000,-.

**Keywords: Inventory, MRP lot sizing, EOQ, Lot of lot, POQ**