

ABSTRACT

Material Requirements Planning (MRP) is a systematic and measurable method to assist companies in managing their inventory. Through this method companies can find out what is needed in the production process, how much, and when to produce, so that through this method inventory costs can be reduced, the result is production costs can be minimized and productivity can be increased. This study aims to determine whether the application of the Material Requirements Planning (MRP) method at CV. Seventyfour.co in streamlining inventory costs has a pretty good influence.

Material requirements planning using the MRP method in this paper uses the Lot Sizing method, where the Lot Sizing methods used are Lot for lot and Part Balance Period.

CV. Seventyfour.co in carrying out the raw material inventory control process based on orders from consumers (Job Orders). The total cost of raw material inventory for Zip Hoodie materials issued by the company is Rp. 50,855,160. While using the MRP method, the total cost incurred is the Lot for lot method of Rp. 40,372,298. and the Part Period Balance method of Rp. 22,305,820. Of the two MRP methods, it can be seen that the Part Period Balance method has the lowest total inventory cost, meaning that the company can make inventory costs efficient by 43.86%. So that it is proven that one of these MRP methods can play a role in streamlining the cost of raw material inventory at the company.

Keywords: *Material Requirements Planning (MRP), Lot Sizing, Lot for lot, Part Period Balance*