

ABSTRACT

Material Requirements Planning (MRP) is a systematic and measurable method to help companies manage their inventory. Through this method, companies can determine what is needed in the production process, how much, and when the production time is. Thus, through this method, inventory time is more accurate, the result is that production time can be minimized and productivity can be increased. This study aims to determine whether the application of the Material Requirements Planning (MRP) method at Putra Raksa Sport in streamlining inventory has a fairly good effect. 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. Putra Raksa Sport in carrying out the process of controlling raw material inventory based on orders from consumers (Job Orders). The total cost of Mauser Rifle material inventory incurred by the company is Rp. Rp. 60,670,000. Although it does not result in inventory cost savings, the MRP method provides benefits in improving the accuracy of raw material requirements planning. With a more structured planning, the company can anticipate the occurrence of rejected raw materials and immediately take adjustments without disrupting the production schedule. Thus, it is proven that this MRP method can play a role in streamlining production time.

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