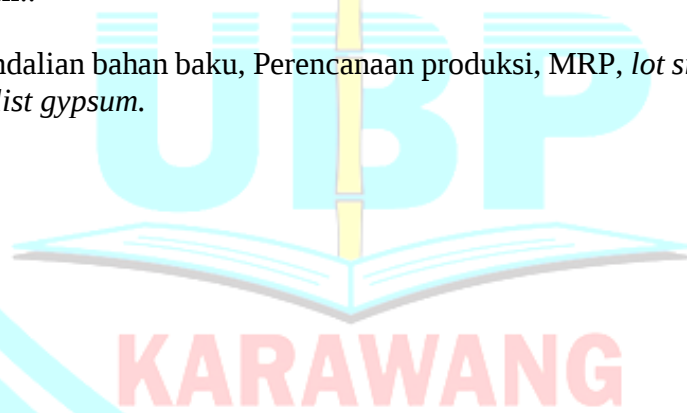


ABSTRAK

Penelitian ini bertujuan untuk meningkatkan efisiensi pengendalian dan perencanaan bahan baku *list gypsum* pada UD Bagus Profil. Sebelumnya, usaha ini mengalami kendala kekurangan bahan baku akibat perencanaan yang kurang tepat. Penelitian ini menerapkan metode *Material Requirements Planning* (MRP) dengan tiga jenis *lot sizing* yaitu *lot for lot*, *Economic Order Quantity* (EOQ), dan *Period Order Quantity* (POQ). Hasil penelitian menunjukkan bahwa metode *single moving average* 2 periode memberikan hasil peramalan yang paling akurat. Total permintaan *list gypsum* diperkirakan sebesar 3850 pcs dalam 12 periode, yang setara dengan kebutuhan bahan baku casting 6930 Kg, semen putih dan serat fiber masing-masing 770 Kg. Implementasi metode *lot for lot* menghasilkan biaya persediaan terendah sebesar Rp. 32.776.044 karena pemesanan bahan baku dilakukan sesuai dengan jumlah permintaan aktual. Penelitian ini menyimpulkan bahwa penerapan metode MRP dengan *lot sizing lot for lot* mampu mengatasi permasalahan kekurangan bahan baku dan meningkatkan efisiensi biaya persediaan pada UD Bagus Profil..

Kata Kunci: Pengendalian bahan baku, Perencanaan produksi, MRP, *lot sizing*, *lot for lot*, EOQ, POQ, *list gypsum*.



ABSTRACT

This research aims to enhance the efficiency of raw material control and planning for gypsum boards at UD Bagus Profil. Previously, the company faced challenges due to insufficient raw materials caused by inadequate planning. This study implements the Material Requirements Planning (MRP) method with three types of lot sizing: lot for lot, Economic Order Quantity (EOQ), and Periodic Order Quantity (POQ). The results show that the two-period single moving average method provides the most accurate forecasting. The total demand for gypsum boards is estimated to be 3850 pieces in 12 periods, equivalent to 6930 kg of casting material, 770 kg of white cement, and 770 kg of fiber. The implementation of the lot-for-lot method results in the lowest inventory cost of Rp. 32.776.044 because raw material orders are made according to the actual demand. This research concludes that the application of the MRP method with lot-for-lot sizing is able to overcome the problem of raw material shortages and improve inventory cost efficiency at UD Bagus Profil.

Keywords: Raw material control, Production planning, MRP, lot sizing, lot for lot, EOQ, POQ, gypsum list

