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ABSTRACT

The need for salt in Indonesia has increased annually by 5% to 7%. Madura Island has a significant contribution in meeting the needs of salt in Indonesia. One of the companies in Madura engaged in the salt industry is PT Garam, Camplong unit. In the last few periods, PT Garam unit Camplong experienced problems in managing raw materials in the form of sacks with the logo, yarn and iodine where supplies had run out and had reached the point of reordering but procurement had not been carried out. The purpose of this study was to determine the raw material inventory management at PT Garam unit Camplong using the material requirement planning (MRP) method and to determine the effectiveness of inventory comparison between the existing method and the material requirement planning (MRP) method. This study uses the material requirement planning (MRP) method with lot sizing using the economic order quantity with the quantity discount model. The results of this study are the raw materials for sacks with the logo, yarn and iodine. The inventory method with the lowest total inventory cost is using the MRP method, where the number of orders for sacks with the logo using the MRP method is 80,000 pcs and taking a discount price of IDR 4200.00. The number of thread orders using the MRP method was 720 rolls by taking a discount price of IDR 14,200.00 and the number of orders for iodine using the MRP method was 500 Kg by taking a discount price of IDR 671,550.00. The results showed that the MRP method of inventory management was more effective where the ITR was higher than the existing method, while the DOI was lower than the existing method.

Keyword: Raw Material, Days Of Inventory, Inventory Turnover Ratio, Material Requirement Planning.