

ABSTRACT

PT.XYZ Karawang is a single distributor for the products from PT.ABC. The location warehouse is placed in Karawang which distributes many types of tile. As a single distributor, PT.XYZ should distribute the tile not only to 19 branches in Indonesia, but also to end customer. There are two types of tile, floor tile and wall tile.

In determining inventory policies, PT.XYZ has not using standard calculation. It makes PT.XYZ purchases excess the tile which causing overstock. This condition makes the total inventory cost in PT.XYZ become very high.

This research aims of providing inventory policies of floor tile 40x40 so that the total inventory cost can be minimized. Inventory policies proposal is the result from calculation using joint replenishment and P model, where the tile is purchased together over a certain interval of time. The result of this research are inventory policies variables which are interval review, reorder point, maximum inventory level and safety stock.

The result of calculation inventory policies for floor tile 40x40 reduce the total inventory cost to 45.80% or Rp473,495,683. From the result, it needed the implementation of inventory policies in PT.XYZ, so that the total inventory cost can be minimized.

Keywords – Overstock, Inventory, Joint Replenishment, P Model