ABSTRACT

PT. XYZ is a manufacturing company that produces and sells various kinds of pipeline accessories.The main product that produced by PT. XYZ is pipeline protector. The production process of pipeline protector is divided into 2 stages, injection and threading. The threading process produces finished products, manufactured with a make to order strategy. The production of pipeline protectors are adjusted to the customer demand due to each customer has thread specification on their own, so that excess products may not be sold. In its production PT. XYZ exceeds the number of protector that produced by 3% of the demand so the company does not have to do production to meet the emergency purchase order. The storage of pipeline protector products can not exceed 1 year because the quality of the product will decreases so the product can not be sold and must be recycled.

The emergency purchase order demand data of pipeline protector product does not have a certain data distribution so inventori tak tentu berisiko terkendali *method is used to determine the inventory policy on each product.*

Based on the calculation using inventori tak tentu berisiko terkendali *method, PT. XYZ can determine the optimal inventory amount for each pipeline protector product. The selection of* inventori tak tentu berisiko terkendali *method provides a decrease in total inventory cost by 8%.*

Keywords: Inventory, Inventori Tak Tentu Berisiko Terkendali *Method, Overstock, Emergency Purchase Order.*