ABSTRACT

PT Singa Mas Mandiri is an importing company engaged in the sale of hard tools which are included in durable goods. The company distributes products to several regions in Indonesia such as Sumatra, Java, Bali, Sulawesi, Kalimantan, and Papua. The products sold are divided into several brands, namely Tora, Muraku, Lowen, Bosun, Unique Star, and Linz. One of the managed brands, namely Linz, experienced overstock. The existing overstock problem causes high inventory costs to the company.

Through this final project, an integrated design is carried out in the form of a periodic review inventory policy (R, s, S). In this policy there are specified parameters such as review interval (R), reorder point (s) and maximum inventory (S). The determination is obtained through calculations where (R) using the Hadley Within method and (s,S) using the Power Approximation method. Through these two calculations, the optimal parameters are obtained which produce the minimum inventory costs.

The calculations carried out in the inventory policy involve 47 Linz brand products. The results obtained are a decrease in the average number of stocks by 990% from the current situation. This decrease resulted in a decrease in overall inventory costs by Rp133,920,310 from the current condition to only Rp33,870,938. Although the amount of inventory decreased, the service level obtained was close to 100% so that it can be said that demand can be met effectively and efficiently.

Based on these results, it can be concluded that the periodic review proposed inventory policy (R, s, S) can overcome the overstock condition experienced by PT Singa Mas Mandiri.

Keywords— [Durable Goods, Periodic Review, Inventory, Reorder Point, Overstock]