ABSTRACT

This study is a case study of a grinding ball manufacturer. The company is facing the problem of increasing aging inventory (the batch item that stays in inventory for more than six month as aging stock that requires quality assurance attention) and non-production related delay shipment at the end of year 2013. The paper observes and tries to find the root causes of this problem by using fishbone analysis. Once the root causes is identified, the study then recommends the new approach by applying a concept of inventory classification by nature of demand and automated warehouse management system to solve the problem found and improve warehouse efficiency.

Using a computerized warehouse management system has great benefit toward warehouse operation process. It is proved in many studies that technology is able to improve utilization of space, eliminate or reduce paper work; reduce clerical overhead, provide stock location control and greater stock accuracy. At the same time, improve warehouse service levels and provide more management information. With the help of inventory classification, a new to-be process is studied and proposed. The methods help the worker to eliminate extra handling, reduce time, and First-In, First-Out can be maintained.