Abstract

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A Cost Optimisation Approach for the Storage of Spare Parts Within an Industrial Environment

In a regular industrial site, the inventory control for spare parts is seldom conducted in a cost optimum way, since the balance between the availability of spare parts and their over storage is usually not achieved. In most of the cases as a reaction to the fear of the non availability of spare parts and to the drastic consequences that may occur at such an occasion, decision makers exaggerate in over-storing spare parts. The literatures include a good deal of models and of algorithms that aim to solve the problem in every complicated and multifaceted means. The more the solution gets complicated the less likely would it be welcomed in industry. The proof for that fact is that some multinational companies showed interest and need for a practically applicable tool for the solution of that problem. In simple terms, Industrial organization continue to waste funds sometimes when, these funds are indeed crucial for their survival. In this paper a mathematically based decision support tool is derived in order to achieve a cost optimal storage policy for spare parts. This work is applied on a satellite assembly site of a multinational giant company working within the automobiles industry.