

限制理論供應鏈補貨機制拉長補貨頻率之可行性評估方法探討

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摘要

The TOC (Theory Of Constraint) Supply Chain Replenishment System (TOC-SCRS) is a periodic replenishment method. The replenishment frequency and replenishment lead time are the two required parameters of TOC-SCRS. When TOC-SCRS is utilized in a plant, the replenishment frequency depends on the set up frequency in this plant. As we know, setup time or some capacity is unavoidably required for a set up. As demand increases, the prolongation of replenishment frequency is an easily and usually method to increase capacity in a plant. This is because the prolongation of replenishment frequency can reduce the set up frequency, and so as to reduce the set up time. However, when the frequency in a plant is determined to be prolonged from higher frequency to lower frequency, in the set up frequency migration process, some goods will be confronted with inventory shortage for their production priority are postponed. A methodology is therefore proposed in this paper to evaluate the inventory shortage impact for prolonged replenishment frequency in a plant. A numeric cases are also utilized to evaluate the application of the proposed method.

關鍵字：Supply Chain Management, Inventory Replenishment, Theory of Constraints (TOC), TOC Supply Chain Replenishment System, Inventory Replenishment Frequency