



Codify a trihedral inventory control model in terms of inflation in state of non-allowed shortage for an incorruptible commodity

Mohammad Hassan Damyad¹, Davoud Jafari^{2} and Hamed Kazemipour³*

* Department of Industrial engineering, Parand Branch, Islamic Azad University, Parand, Iran

* Department of Industrial engineering, Parand Branch, Islamic Azad University, Parand, Iran

* Department of Industrial engineering, Parand Branch, Islamic Azad University, Parand, Iran

*Corresponding author. E-mail: djafari5071@piaau.ac.ir

Original Article:

Received 10 Oct. 2015 Accepted 10 Aug. 2016 Published 21 Nov. 2016

ABSTRACT

this research seeks to provide a mathematical model for a trihedral inventory control system. This three-level chain, including manufacturing, warehouse and seller. In situations where a specific product is produced under inflation and the impact of inflation with exponential function is on the price of units. also in this model demand rate, production rate and Lead Time are constant. In this model, shortage is non-allowed. With these hypotheses obtains total cost function and determine limitations each of the decision variables then determine optimal order point by using MATLAB software .

6362141070621645

Keyword:

Inventory control, trihedral, Non-Allowed shortage, order economic size, inflation, supply chain, MATLAB software

* Corresponding author: *Davoud Jafari*