عنوان مقاله:

Codify a Three echelon inventory control model in terms of inflation with allowed shortage for a deterioration items

نویسندگان:

Mohammad Hassan Damyad - *Department of Industrial engineering, Parand Branch, Islamic Azad University, Parand, Iran*

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

خلاصه مقاله:

In this research initially, trying to find a model for inventory control system in a three-echelon supply chain for one-product system composed of levels of production, warehouse and seller and then will be trying to find optimal point in mentioned model. Model condition has been under inflation and has been considered for a commodity in which shortage is allowed and production has been deteriorating. With assumption be stable lead time and rate of demand and production and deterioration factor, obtain the overall cost function and restrictions for mentioned state. The impact of inflation with exponential function is on the price of units after that because of complex non-linear equation obtained, possibility of solving is impossible through classical methods. So we use MATLAB software for the numerical solution, sometime in numerical cases MATLAB can't solve in routine time or can't solve so we proposed the simulated annealing metaheuristic algorithm for these cases.

کلمات کلیدی:

Inventory control , three-echelon , Allowed shortage , Economic Ordering Quantity , inflation , supply chain , MATLAB software , deterioration , simulated annealing algorithm

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/1273182