

OPTIMIZATION OF REAL TIME DISRUPTION MANAGEMENT FOR A TWO-STAGE BATCH PRODUCTION – FUZZY INVENTORY SYSTEMS WITH RELIABILITY CONSIDERATIONS VIA GEOMETRIC PROGRAMMING

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ABSTRACT

The purpose of this paper is to discuss the fuzzy EOQ model for a two-stage production – inventory system with reliability considerations. In this paper we establish and analyse two Economic order quantities (EOQ) that in this model, some parameters are fuzzy variables. This note is based on inventory models under total cost minimization and profit maximization that have solved via fuzzy geometric programming. (FGP) techniques by A. Kordi (2010). Through FGP and by Zadeh's extension Principle, two main Programs are transformed to a pair of two-level of mathematical programs. The upper bound and lower bound of the objective value are obtained by solving the pair of geometric programs.

KEYWORDS: Inventory, Fuzzy Geometric Programming, EOQ