基因演算法應用於X管制圖經濟設計求解之研究 = A study of applying genetic algorithm to the economic design of X control ..

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摘 要

X-bar管制圖的經濟設計最早由Duncan於1956年提出，主要決定抽樣樣本大小、抽樣時間間隔以及管制界限大小三個參數，並求得損失成本。此模式以近似法求解，但礙於數學模式複雜，求解不易。因此，之後有許多研究以Duncan（1956）模式，進行X-bar管制圖最佳化的參數做求解的研究，例如使用模擬退火演算法與簡化模式等的方法。本研究以基因演算法多點搜尋，增加空間搜尋能力，求得最佳設計參數組合。研究結果發現，基因演算法求得的損失成本相似於其他演算法，甚至更好，並更明顯地優於近似法。

關鍵詞 : 求解方法 ; 管制圖經濟設計 ; 基因演算法

目錄

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