

批量分割對零工式生產系統之影響

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摘要

近年來，批量分割或稱之為批量流的觀念已成為生產規劃與排程的重要工具之一，其目的就是將處理批量分割成幾個轉運批，使同一處理批量能在不同的製程上同時生產，以縮短生產該處理批量的總時間。雖然批量分割思考邏輯的概念，已被廣泛的應用在實務上，而且成效良好，然而，到目前為止有關批量分割的相關文獻卻相當的少，且大都只說明最佳化生產技術使用上的概念而已。本研究旨在對批量分割的發展及內容做一有系統的探討，針對零工式生產系統在批量分割上撰寫一套啟發式演算法，其目標為總懲罰值最小化；隨後，透過實驗設計分析的方式，探討各種不同之批量分割方式之時間效益及懲罰值的改善程度，所獲得之結論可提供產業界進行批量分割決策時之參考。

關鍵詞：批量分割、批量流、處理批、轉運批、最佳化生產技術、零工式生產系統、啟發式演算法、總懲罰值最小化

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