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Scheduling and batching in multi-site flexible flow shop environments

(Conference Paper)

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Abstract

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Global competition and the customers demand for customized products with shorter due dates, marked the introduction of the Extended Enterprise. In this Extended Manufacturing Environment (EME), lean, virtual, networked and distributed enterprises collaborate to respond to the market demands. In this paper we study the influence of the batch size on Flexible Flow Shop makespan minimization problem $FF_C||C_{max}$ for two multi-sites approaches, the FSBF (Flow Shop Based Factories) and the PMBF (Parallel-Machines Based Factories). The computational study demonstrates how the performance of the PMBF model decreases with the increase of batch size and determines the batch sizes in which the performance is similar. © 2015 AISTI.

Author keywords

Batching Extended Manufacturing Environment Flow Shop Based Factories Multi-Site Flexible Flow Shop Parallel-Machines Based Factories

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