Scheduling and batching in multi-site flexible flow shop environments
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Abstract
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 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

Indexed keywords
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controlled terms: Competition, Information systems, Machine shop practice, Manufacture
Batching, Flexible flow shop, Flow-shops, Manufacturing environments, Parallel machine

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