International Journal of Computer Integrated Manufacturing ›
Volume 22, 2009 - Issue 4: The Challenges of Manufacturing in the Globally Integrated Economy. Guest Editor: Robin G. Qiu

Articles

The search for the optimal number of kanbans in unstable assembly-tree layout systems under intensive loading conditions

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Pages 315-324 | Received 07 Dec 2007, Accepted 04 May 2008, Published online: 06 Apr 2009

Cite this article https://doi.org/10.1080/09511920802206427

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of the number of kanbans depends both on the management method chosen at each stage of the process as well as on the fluctuation of operative variables. This study deals with the problem of choosing the optimal number of kanbans in a multi-stage productive environment organised in an assembly-tree layout. In particular, this paper proposes a heuristic procedure to determine the number of kanbans and compares it with the traditional methods applied in manufacturing contexts.

Keywords:

just-in-time system kanban simulation

A new heuristic method for mixed model assembly line balancing problem
Source: Computers & Industrial Engineering
A comparative analysis of sequencing heuristics for solving the Toyota Goal Chasing problem
Source: Robotics and Computer-Integrated Manufacturing
The relationship between JIT practices and type of production system
Source: Omega
An overview of design and operational issues of kanban systems
Source: International Journal of Production Research
The production performance benefits from JIT implementation
Source: Journal of Operations Management
Simulation analysis of a pull-push system for an electronic assembly line
Source: International Journal of Production Economics
Algorithms for the car sequencing and the level scheduling problem
Source: Journal of Scheduling
Sequencing method for products in consideration of assembly time
Source: International Journal of Production Economics
A simulated annealing approach to mixed-model sequencing with multiple objectives on a just-in-time line
Source: IIE Transactions
The optimization of number of kanbans with genetic algorithms, simulated annealing and tabu search
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