

عنوان مقاله:

Simultaneous Lot Sizing and Scheduling in a Flexible Flow Line

محل انتشار:

هفتمین کنفرانس بین المللی مهندسی صنایع (سال: 1389)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

This paper breaks new ground by modelling lot sizing and scheduling in a flexible flow line (FFL) simultaneously instead of separately. This problem, called the 'General Lot sizing and Scheduling Problem in a Flexible Flow Line' (GLSP-FFL), optimizes the lot sizing and scheduling of multiple products at multiple stages, each stage having multiple machines in parallel. The objective is to satisfy varying demand over a finite planning horizon with minimal inventory, backorder and production setup costs. The problem is complex as any product can be processed on any machine but with different process rates and sequence-dependent setup times & costs. The efficiency of two .alternative models is assessed and evaluated using numerical tests

كلمات كليدي:

Lot sizing, Scheduling, Flexible Flow Line, Mathematical Modelling

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