

## عنوان مقاله:

The Multi-item capacitated lot-sizing problem with limited outsourcing

## محل انتشار:

کنفرانس بین المللی پژوهشهای نوین در مدیریت و مهندسی صنایع (سال: 1394)

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## خلاصه مقاله:

The production planning problems encountered in real- life situations are generally intractable due to a number of practical constraints. The decision maker has to find a good feasible solution in a reasonable execution time rather than an optimal one. The objective is to satisfy the requirements in the production plan with minimum costs over a multi-period planning horizon. This paper proposes a new mixed integer programming model for multi-item capacitated lot-sizing problem with setup times, safety stock and demand shortages. The problem is NP-hard and to solve it, a harmony search (HS) approach is used. To verify and validate the efficiency of the HS algorithm, the results are compared with those of the Lingo 8 software. Results suggest that the HS algorithm have good ability of solving the problem, especially in the case of large and medium-sized problems for which Lingo 8 cannot produce solutions

## کلمات کلیدی:

Lot-sizing, Safety stocks, Harmony search, Safety stock

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/435077>

