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Transporting jobs through a two-machine open shop

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Scheduling incompatible tasks on two machines

Abstract

We consider the two-machine open shop scheduling problem in which the jobs are brought to the system by a single transporter and moved between the processing machines by the same transporter. The purpose is to split the jobs into batches and to find the sequence of moves of the transporter so that the time by which the completed jobs are collected together on board the transporter is minimal. We present a 7/5-approximation algorithm. © 2008 Wiley Periodicals, Inc.

Author keywords

Approximation algorithm; Open shop; Scheduling with transportation

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