

Solution Approaches for Some Scheduling Problems with Learning Effect and Job Dependent Delivery Times

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Abstract : In this paper, we propose two algorithms to optimally solve makespan and total completion time scheduling problems with learning effect and job dependent delivery times in a single machine environment. The delivery time is the extra time to eliminate adverse effect between the main processing and delivery to the customer. In this paper, we introduce the job dependent delivery times for some single machine scheduling problems with position dependent learning effect, which are makespan and total completion. The results with respect to two algorithms proposed for solving of the each problem are compared with LINGO solutions for 50-jobs, 100-jobs and 150-jobs problems. The proposed algorithms can find the same results in shorter time.

Keywords : delivery Times, learning effect, makespan, scheduling, total completion time

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