Minimizing Total Completion Time in No-Wait Flowshops with Setup Times

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Abstract : The m-machine no-wait flowshop scheduling problem is addressed in this paper. The objective is to minimize total completion time subject to the constraint that the makespan value is not greater than a certain value. Setup times are treated as separate from processing times. Several recent algorithms are adapted and proposed for the problem. An extensive computational analysis has been conducted for the evaluation of the proposed algorithms. The computational analysis indicates that the best proposed algorithm performs significantly better than the earlier existing best algorithm.

Keywords : scheduling, no-wait flowshop, algorithm, setup times, total completion time, makespan

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