

Multistage-based Scheduling Optimization Using Adaptive Genetic Algorithm

YoungSu Yun

ysyun@chosun.ac.kr

Division of Business Administration, Chosun University

375 Seosuk-dong, Dong-gu, Gwangju 501-759, South

062-230-6243

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- Abstract -

In this paper, we propose an adaptive genetic algorithm (aGA) approach to effectively solve multistage-based scheduling problems in flexible manufacturing system (FMS) environment. The proposed aGA approach uses an adaptive scheme for automatic regulation of GA parameters in order to enhance the performance of genetic search process.

In numerical experiment, we present a simple example of multistage-based scheduling problems to compare the performance of the proposed aGA with conventional competing algorithms. Experimental results show that the proposed aGA outperforms the conventional algorithms.