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PENYELESAIAN MASALAH PENJADWALAN *FLOWSHOP* FLEKSIBEL 3 TAHAP UNTUK N-*JOB* DENGAN ALGORITMA *OUTER* DAN *INNER GAME*

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Abstract

Flowshop scheduling is production process scheduling of n-job that has equal sequence of production process. There are many techniques to solve this problem, the one is outer and inner game algorithm. This Algorithm give new alternative to solve flowshop scheduling problem. In this research is developed an application system that able to schedule n-job 3-stage flexible flowshop. The flowshop are flexible in the sense that a job can be processed by any of the identical machines at each stage. All of scheduling process are integration of providing outer and inner game algorithm, where outer game consist of job that will be schedule at the system, and inner game consist of job will be reschedule at the system. The result of the test with various processing time show that minimum makespan is depend on a number of job, variation coefficient and range value of processing time. The resulf of scheduling will be optimize if the processing time is homogen, that is the variation coeficient lower than 1.

Keywords: *scheduling, flexible flowshop, outer and inner game algorithm*