عنوان مقاله:

Developed a new fuzzy approach for solving two-machine flow shop scheduling problems under fuzziness

نویسنده:

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خلاصه مقاله:

The current study investigates a two-machine Flow Shop Scheduling (FSS) problem with piecewise quadratic fuzzy processing time. It is illogical to consider that the processing time is exact but uncertain because it varies due to human factors. One of the most popular approximate intervals, namely, close interval approximation for the Piecewise Quadratic Fuzzy Number (PQFN), is introduced. A solution method with the help of Johnson's algorithm [۱], the close interval approximation of PQFNs, and the modified McCahon and Lee's algorithm [۲] is developed to determine the minimization of the expected makespan. Numerical experimentation is performed to demonstrate the effectiveness of the suggested methodology.

کلمات کلیدی:

Optimization problems, Production scheduling, Two-machine flow shops problem, Piecewise quadratic fuzzy numbers, Decision Making, Close interval approximation, Expected makespan, Optimal Sequence

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