论文

# A HEURISTIC FOR F3/b\_i= b/C\_{ max} AND ITS WORST-CASE ANALYSIS

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摘要 This paper describes a heuristic for solving  $F3/b_i = b/C_{\max}$  scheduling problem. This algorithm first uses the Johnson's algorithm solving F2//C\_{max}, then, presents revised algorithm to solve F3/b\_i = b/C\_{max}. Lastly, an O(n log ▶加入引用管理器 n) time heuristic is presented which generates a schedule with length at most 3/2 times that of an optimal schedule, for even | 复制索引 number n\geq 4, and 3/2 + 1/(2n) times that of an optimal schedule, for odd number n\geq 4. These bounds are tight.

关键词 Two-machine flow shop, three-machine flo

分类号

## A HEURISTIC FOR F3/b\_i= b/C\_{max} AND ITS WORST-CASE **ANALYSIS**

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**Abstract** This paper describes a heuristic for solving  $F3/b_i = b/C_{\max}$  scheduling problem. This algorithm first uses the Johnson's algorithm solving  $F2//C_{max}$ , then, presents revised algorithm to solve  $F3/b_i = b/C_{max}$ . Lastly, an O(n)log n) time heuristic is presented which generates a schedule with length at most 3/2 times that of an optimal schedule, for even number  $n \neq 4$ , and 3/2 + 1/(2n) times that of an optimal schedule, for odd number  $n \neq 4$ . These bounds are tight.

**Key words** Two-machine flow shop three-machine flow shop worst-case analysis automated manufacturing system

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