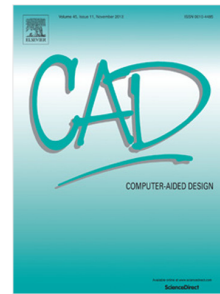


## Accepted Manuscript

Efficiency-optimal iso-planar tool path generation for five-axis finishing machining of freeform surfaces

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**Highlights**

- 1). A scalar field EMRR\* is proposed to represent the machining efficiency.
- 2). The machine's kinematic constraints are reflected in the proposed EMRR\*.
- 3). Efficiency-optimal iso-planar tool path is generated based on EMRR\*.
- 4). B-spline based tool orientation optimization method is proposed.
- 5). Effectiveness of the proposed methods is tested from experiments.

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