

عنوان مقاله:

Application of An Analytical Solution for Thermal Analysis of Flame Bending Process

محل انتشار:

اولین کنفرانس بین المللی و هفتمین کنفرانس ملی مهندسی ساخت و تولید (سال: 1384)

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خلاصه مقاله:

In this paper a new analytical solution is applied to study heat transfer during forming of plates by flame bending process. Heat flux produced by flame, has been modeled with normal Gaussian distribution which moves along predefined paths on plate. Mild steel with constant thermal properties is as selected material. Results of the thermal analyses by this method show good agreement in comparison with experimental data. This method is properly applicable to estimate of flame parameters and useful for thermo-mechanical simulation of the process. Reasonable accuracy of the results and diminishing of model dependency and CPU time required for thermal analyses are the advantages of this solution for the process study.

کلمات کلیدی:

Flame Bending Process, Plate Forming, Thermal Analysis

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