

### عنوان مقاله:

Numerical Simulation of Temperature Distribution in the Workpiece due to Electrical Discharge Machining (EDM),  
Using Hyperbolic Heat Conduction Model

### محل انتشار:

یازدهمین کنفرانس ملی مهندسی ساخت و تولید ایران (سال: 1389)

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### خلاصه مقاله:

Determination of temperature distribution is reported in the workpiece due to EDM using non-Fourier heat conduction model. The governing equations are expressed in cylindrical coordinates. Equations are solved by deriving the numerical solution. The temperature layers and the profiles of sample calculations show that, it is not acceptable to apply the Fourier heat conduction model for estimating the temperature of workpiece. On the other hand, it can be seen that the numerical solution is in good agreement with the analytical solution that has been presented in the published papers.

### کلمات کلیدی:

Electrical Discharge Machining (EDM) – Non-Fourier Heat Conduction – Numerical Solution - Relaxation Time

### لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/97723>

