

عنوان مقاله:

Effect of the Tool Electrode Geometry on Material Removal Rate in Micro-EDM Process

محل انتشار:

اولین کنگره ملی کاربرد مواد و ساخت پیشرفته در صنایع (سال: 1396)

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خلاصه مقاله:

Micro-electro discharge machining (EDM) has a crucial role in the fabrication of parts such as molds. One of the most challenging aspect of EDM process relates to flushing of debris. Increasing the material removal rate causes significant enhancement in EDM process. In this paper, the effect of cross section of tool electrode on flushing of debris is investigated. For this matter, three different type of cross section is proposed: 1- Circular, 2-Triangular and 3- Rectangular section. In order to survey the influence of the parameter finite volume simulation is applied. Dielectric Fluid flow between electrode and work piece is studied. The best geometry section according to the velocity of fluid in this area is presented.

کلمات کلیدی:

Micro-EDM, Debris Flushing, Electrode Geometry, Numerical Simulation

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