

Evaluation of MRR after WEDM Depending on the Resulting Surface

Katerina Mouralova, Josef Bednar, Jiri Kovar, Jindrich Mach

Faculty of Mechanical Engineering, Brno University of Technology, Technicka 2896/2, 616 69 Brno, Czech Republic.

E-mail: mouralova@fme.vutbr.cz, bednar@fme.vutbr.cz, kovar@fme.vutbr.cz, mach@fme.vutbr.cz

The aim of this article is to evaluate the material removal rate (MRR) after wire electrical discharge machining (WEDM) and subsequent characteristics of the machined surface. For efficient processing, the aim is to achieve the highest MRR values but with regard to the preserving of required quality and functional characteristics of the surface. During the electrical discharge of material removal craters occur on the workpiece surface and due to diffusion process here premixed and melted material of fodder and wire electrodes cling. As a result of melting and fast cooling down of the workpiece material microcracks may occur on its surface.

Keywords: WEDM, Electrical Discharge Machining, Design of Experiment, SEM, Aluminium alloy

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