

Micro-Square-Groove Machining by Electrical Discharge Machining Using Jumping and Formed Stepped Electrode

by

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(Received on Sept.29 , 2004 & accepted on Jan.25 , 2005)

Abstract

In a previous paper, a method was proposed for machining a microslit and a square-groove by EDM (Electrical Discharge Machining) using a simply shaped and framed electrode or a plate electrode but a method was not proposed for machining a micro-square-groove. In this paper, a method is proposed for the machining of the micro-square-groove by EDM using a jumping and formed stepped electrode. The following experimental results were obtained. (1) The micro-square-groove can be machined by using a jumping and stepped electrode. (2) The differences in width at the inlet and outlet, the width of the profile and the depth of the machined micro-square-groove are diminished by using a formed stepped electrode.

Keywords: EDM, micro-square-groove, jumping, formed stepped electrode

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