

Potential Experimental Analysis of Electrical Discharge Machine Process Parameters on Stainless Steel ANSI 304 (Book chapter)

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Abstract:

In this research, the effect of electrical discharge machining (EDM) parameters such as pulse-on time (Ton), pulse-off time (Toff), voltage, (V), and current (I) on the material removal rate (MRR) in 304 stainless steel was studied. The experiments are carried out as per design of experiments approach using the L9 orthogonal array. From this study, it is found that different combinations of EDM process parameters are required to achieved higher MRR for 304. The contribution of each cutting parameters towards the MRR is also identified. The results from this study will be useful for manufacturing engineers to select appropriate EDM process parameters to machine stainless steel 304.

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