## عنوان مقاله:

Multi-objective optimization and analysis of electrical discharge machining process during micro-hole machining of D3 die steel employing salt mixed de-ionized water dielectric


## محل انتشار:

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## خلاصه مقاله:

Correct selection of manufacturing condition is one of the most important aspects which should be considered in the majority of manufacturingprocesses, particularly in the process related to advanced machining processlike electrical discharge machining. In electrical discharge machining (EDM),dielectric fluid plays an important role since machining characteristics are greatly influenced by the nature or characteristics of employed dielectric.Moreover, adding various types of abrasives or salt in the fluid at different concentrations also affect the machining performance because of changingdielectric strength property. The present paper addressed the influence of NaNO3 mixed de-ionized water as a dielectric fluid on micro-hole machiningperformance criteria such as material removal rate (MRR), tool wear rate (TWR), overcut (OC) and taper during machining of D3 die steel plate.



## کلمات کلیدی:

Electric discharge machining, De-ionized water, D3 die steel, Dielectric fluid, Taguchi method